2023

Proposed Capital Improvement Budget Revised as of 10/26/22

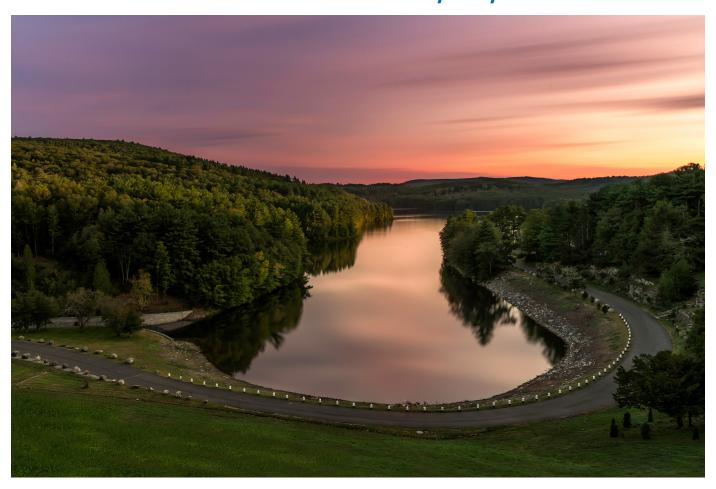




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Summary

Overview

The Capital Improvement Program (CIP) budget is based upon the MDC's comprehensive asset management program for wastewater, water, and combined programs. The program's objective is to ensure the continued safety and efficiency of the District's water mains, sewers, pumping stations, treatment facilities, buildings, and equipment. Asset management programs have been developed to maximize the effectiveness and useful life of our facilities.

The MDC will pursue funding for eligible projects under the State of Connecticut Department of Public Health's Drinking Water State Revolving Fund (water projects), State of Connecticut Department of Energy and Environmental Protection's Clean Water Fund (wastewater projects), and other State and/or Federal funding programs. The actual funding of projects is a condition of priority ranking and fund availability. Participation in such funding agreements is subject to the approval of the Metropolitan District.

In addition, this year we will begin authorizing funding for the Integrated Plan (IP) projects. These projects are in accordance with the MDC's 2018 CSO Long Term Control Plan/Integrated Plan (LTCP/IP), and subsequent supplementary documents submitted to CT DEEP and approved through their Consent Order #COWRMU22002.

Major Capital Improvement Components

Wastewater

The primary projects are improvements and modernization to MDC's wastewater collection system infrastructure and water pollution control facilities. The following are some of next year's major expenditures.

Rocky Hill Water Pollution Control Facility Preliminary and Electrical Upgrades	\$ 13,125,000
WPC Facilities Infrastructure Rehabilitation, Upgrades & Replacement	7,500,000
General Purpose Sewer	5,000,000

Water

This budget will fund improvements to the District's drinking water infrastructure including treatment plants, pipeline, storage facilities and pump stations. The District is targeting 10 miles of new and replacement water main installations in 2023 and listed below are some of the major expenditures demonstrating that level of commitment.

District-wide Water Main Replacement Program	\$ 14,500,000
East Hartford Water Main Replacements	8,570,000
Paving Program & Restoration	5,250,000

Summary

Integrated Plan

This budget will fund improvements to the MDC's wastewater collection system infrastructure and water pollution control facilities, as required to comply with the 2006 USEPA Consent Decree, and 2022 CT DEEP Consent Order. The following are some of next year's major Integrated Plan expenditures:

Large Diameter Sewer Rehabilitation Program	\$ 16,170,000
Various Sewer Pipe Replacement/Rehabilitations - District-wide	8,925,000
Sewer Collection Gates	5,025,000
Hartford Water Pollution Control Facility - Sludge Equalization Facility	5,000,000

Summary

Five-Year Capital Improvement Program

The District has undertaken a comprehensive asset management program which involves a systematic replacement of water and sewer infrastructure in a proactive manner whereby the District will continue to maintain and improve its assets to ensure the safe and efficient operation of service. In addition, it is anticipated that the District will continue to complete projects associated with the Clean Water Project and initiate projects for our Integrated Plan during 2023.

The District submitted an Integrated Plan (IP) to CT DEEP as part of its Consent Order required CSO Long Term Control Plan (LTCP) Update in December 2018. Modifications and an Executive Summary were most recently submitted in May 2020, with LTCP/IP Phase 1 plans submitted in February 2021. Phase 1 represents projects to be completed prior to December 31, 2029. The LTCP/IP was formally approved in September 2022 via the execution of Consent Order COWRMU22002, which supersedes the 2006 Consent Order. The Five-Year Integrated Plan has been modified to reflect this approval.

<u>Wastewater</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
General Purpose Sewer	\$ 5,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000
Various Small Pump Station Rehabilitation	2,000,000	-	2,000,000	-	2,000,000
Island Road Pump Station Rehabilitation	378,000	625,000	-	-	-
Paving Program & Restoration	2,100,000	2,100,000	2,100,000	2,100,000	2,100,000
Sanitary Sewer Easement Program	1,700,000	3,000,000	3,000,000	-	-
Water Pollution Control Facilities Infrastructure Rehabilitation, Upgrades & Replacement	7,500,000	5,000,000	5,000,000	5,000,000	5,000,000
Hartford Water Pollution Control Facility Secondary Electric Upgrades	4,305,000	-	-	-	-
Rocky Hill Water Pollution Control Facility Pre- liminary and Electrical Upgrades	13,125,000	-	-	-	-
Poquonock Water Pollution Control Facility Biological Nitrogen Removal	-	12,500,000	-	-	-
HWPCF Sludge Screen	-	5,600,000	-	-	-
Wastewater Total	\$36,108,000	\$31,825,000	\$15,100,000	\$10,100,000	\$12,100,000

<u>Water</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
General Purpose Water	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000
WTP Infrastructure Rehabilitation, Upgrades & Replacements	4,500,000	600,000	600,000	600,000	600,000
Advanced Meter Reading Program	800,000	1,600,000	1,600,000	1,600,000	1,600,000
East Hartford Water Main Replace- ments	8,570,000	-	-	-	-
Water Main Materials	3,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Paving Program & Restoration	5,250,000	5,250,000	5,250,000	5,250,000	5,250,000
Raw Water Treatment/Transmission Improvements	1,000,000	-	5,000,000	-	-
Levee Protection - Water	263,000	-	-	-	-
District-wide Water Main Replacement Program	14,500,000	-	9,000,000	-	9,000,000
Silas Deane Highway Water Main Replacement	-	14,400,000	-	-	-
Water Main Replacements	-	8,000,000	8,000,000	8,000,000	8,000,000
Water Pump Station & Storage Tank Rehabilitation	-	1,000,000	-	3,000,000	-
Water Master Plan	-	1,000,000	2,000,000	5,000,000	3,000,000
Water Transmission & Control Valve Replacement & Rehabilitation	-	-	-	3,000,000	-
Water Total	\$41,883,000	\$40,850,000	\$40,450,000	\$35,450,000	\$36,450,000

Combined	2023	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
IT Infrastructure Project	\$ 2,100,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
CEM Vehicles	3,040,000	3,000,000	3,000,000	3,000,000	3,000,000
CEM Generators	267,500	-	-	-	-
Facilities	1,050,000	-	1,050,000	-	1,050,000
Engineering Services Staffing	3,645,000	3,645,000	3,645,000	3,645,000	3,645,000
Construction Services Staffing	3,830,000	3,830,000	3,830,000	3,830,000	3,830,000
Technical Services Staffing	4,360,000	4,360,000	4,360,000	4,360,000	4,360,000
Combined Total	\$18,292,500	\$15,835,000	\$16,885,000	\$15,835,000	\$16,885,000

<u>Hydro Rehabilitation</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Goodwin Hydroelectric Controls Upgrade Project	\$ 2,000,250	-	-	-	-
Hydro Total	\$2,000,250	-	-	-	-

Integrated Plan	<u>2023</u>	2024	2025	2026	<u>2027</u>
Various Sewer Pipe Replacement/Rehabilitations - District-wide	\$ 8,925,000	\$ 9,400,000	\$ 9,400,000	\$ 9,800,000	\$ 9,800,000
Large Diameter Sewer Rehabilitation Program	16,170,000	5,300,000	7,100,000	-	10,400,000
Sewer Collection Gates	5,025,000	-	-	-	-
Newington 18 & 19 Sewershed Inflow/ Infiltration Reduction	945,000	4,900,000	-	-	1,000,000
Rocky Hill -2A/B Sewershed Inflow/Infiltration Reduction	1,200,000	-	6,700,000	-	-
I-4 (N-30)	200,000	-	-	-	-
North Branch Park River Drainage Study/ Sep-aration	1,000,000	-	-	-	-
Granby 7 Sewer Separation	1,800,000	-	-	18,000,000	-
Program Management Consultant	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Wethersfield Cove Drop Shaft Connections - Phases 1 & 2	525,000	20,000,000	16,300,000	35,000,000	35,000,000
Hartford Water Pollution Control Facility - Sludge Equalization Facility	5,000,000	-	-	-	-
Private Property Inflow Disconnect/Back Water Valve Program	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
S-8 Combined Sewer Overflow Control	-	13,900,000	500,000	-	15,600,000
Easement Sewer Rehabilitation Program	-	3,300,000	-	6,600,000	-
Wethersfield Trunk Sewer	-	-	-	3,400,000	-
Homestead Avenue Interceptor	-	-	-	-	2,200,000
Integrated Plan Total	\$46,290,000	\$62,300,000	\$45,500,000	\$78,300,000	\$79,500,000

Debt Administration Policy

Capital appropriations require approval by a two-thirds vote of the entire District Board and by a majority of the electors of the District at a referendum with the following exceptions:

- 1. Capital appropriations not exceeding \$24,908,434 indexed for inflation, excluding those portions of an appropriation payable from Federal or State grants for any single item within the capital section of the budget.
- 2. Appropriations for any reason involving not more than \$25,000,000 in any one year for the purpose of meeting a public emergency threatening the lives, health or property of citizens of the District.
- 3. Construction of or leasing headquarters facilities.
- 4. Any public improvement all or a portion of which is to be paid for by assessments of benefits or from funds established to pay for waste or water facilities.

With the exception of the two \$800,000,000 appropriations, and bond authorizations for the District's Clean Water Project approved at referenda in November, 2006 and November, 2012, and two supplemental grant's appropriations totaling \$158,800,000, which are expected to be supported by general obligation bonds, revenue bonds, and clean water fund obligations payable from the Clean Water Project Charge (previously the Special Sewer Service Surcharge), the District has followed a policy of financing capital expenditures by issuing general obligation bonds secured by unlimited taxes levied proportionately upon the Member Municipalities comprising the District.

In addition to taxes, certain water charges, sewer user fees, and assessments are available to repay the general obligation bonds. Sewer bonds are payable from the municipal tax levy on each Member Municipality and from sewer user charges levied on tax-exempt and high-flow users. General obligation water bonds are paid from water sale revenues. Assessable sewer construction bonds are secured by liens against assessments on benefited properties. The receipts from assessments are deposited in a separate fund, and payments for debt service on assessable sewer construction bonds are made from such fund. Hydroelectric bonds are funded from power sales revenue deposited in a separate fund, and payments of the debt service on the Hydroelectric bonds are made from said fund.

Appropriation

The Metropolitan District's Capital Improvement Program budget for 2023 totals \$144,573,750 as reflected in the following summary. Wastewater programs total \$36,108,000; water programs total \$41,883,000; combined programs total \$18,292,500; hydro program total 2,000,250 and the Integrated Plan programs total \$46,290,000. The requested funding for all programs is \$190,863,750 for 2023.

<u>Wastewater</u>	
General Purpose Sewer	\$ 5,000,000
Wastewater Collection	
Various Small Pump Station Rehabilitation	2,000,000
Island Road Pump Station Rehabilitation	378,000
Paving Program & Restoration	2,100,000
Sanitary Sewer Easement Program	1,700,000
Wastewater Treatment	
WPC Facilities Infrastructure Rehabilitation, Upgrades & Replacement	7,500,000
Hartford Water Pollution Control Facility Secondary Electric Upgrades	4,305,000
Rocky Hill Water Pollution Control Facility Preliminary and Electrical Upgrades	 13,125,000
Wastewater Total	\$ 36,108,000
<u>Water</u>	
General Purpose Water	\$ 4,000,000
Water Distribution	
WTP Infrastructure Rehabilitation, Upgrades & Replacement	4,500,000
Advanced Meter Reading Program	800,000
East Hartford Water Main Replacements	8,570,000
Water Main Materials	3,000,000
Paving Program & Restoration	5,250,000
Water Treatment/Transmission Improvements	1,000,000
Levee Protection - Water	263,000
District-wide Water Main Replacement Program	14,500,000
Water Total	\$ 41,883,000

Appropriation

Combined	
Facilities/Staffing	
IT Infrastructure Project	\$ 2,100,000
CEM Vehicles	3,040,000
CEM Generators	267,500
Facilities	1,050,000
Engineering Services Staffing	3,645,000
Construction Services Staffing	3,830,000
Technical Services Staffing	4,360,000
Combined Total	\$ 18,292,500
Hydro Rehabilitation	
Goodwin Hydroelectric Controls Upgrade Project	\$ 2,000,250
Hydro Total	\$ 2,000,250
Integrated Plan	
Various Sewer Pipe Replacement/Rehabilitations - District-wide	\$ 8,925,000
Large Diameter Sewer Rehabilitation Program	16,170,000
Sewer Collection Gates	5,025,000
Newington 18 & 19 Sewershed Inflow/Infiltration Reduction	945,000
Rocky Hill -2A/B Sewershed Inflow/Infiltration Reduction	1,200,000
I-4 (N-30)	200,000
North Branch Park River Drainage Study/Separation	1,000,000
Granby 7 Sewer Separation	1,800,000
Program Management Consultant	4,000,000
Wethersfield Cove Drop Shaft Connections - Phases 1 & 2	525,000
Hartford Water Pollution Control Facility -Sludge Equalization Facility	5,000,000
Private Property Inflow Disconnect/Back Water Valve Program	\$ 1,500,000
Integrated Plan Total	\$ 46,290,000
Total Capital Improvement Program and Integrated Plan	\$ 190,863,750

Sewer

The following is a list of the recommended wastewater system programs and projects to be funded through the MDC's 2023 Capital Improvement Program budget. The projects that comprise the wastewater system programs are necessary to enhance, upgrade and rehabilitate the extensive sewer infrastructure throughout the District and to improve the efficiency and effectiveness of facility operations. Each is considered to be a separate undertaking in accordance with Section 3-11 of the Charter of the Metropolitan District.

<u>Wastewater</u>	
Wastewater Treatment, Collection and Storm Water Collection	
General Purpose Sewer	\$ 5,000,000
Wastewater Collection	
Various Small Pump Station Rehabilitation	2,000,000
Island Road Pump Station Rehabilitation	378,000
Paving Program & Restoration	2,100,000
Sanitary Sewer Easement Program	1,700,000
Wastewater Treatment	
WPC Facilities Infrastructure Rehabilitation, Upgrades & Replacement	7,500,000
Hartford Water Pollution Control Facility Secondary Electric Upgrades	4,305,000
Rocky Hill Water Pollution Control Facility Preliminary and Electrical Upgrades	 13,125,000
Wastewater Total	\$ 36,108,000

Sewer

Program - General Purpose Sewer

 Amount
 Project #
 Fund

 \$5,000,000
 2110

Description

Planning, design and construction of the replacement and/or rehabilitation of existing sewer mains, pump stations, and any related collection system appurtenances at various locations District- wide as a result of infrastructure exceeding useful life. Projects may also include electrical, mechanical, and renewable energy upgrades in addition to facility upgrades and site work at wastewater treatment facilities. Projects may include limited sewer work associated with related water main replacements in order to maximize efficiency. This project will also cover for replacement and/or upgrades to the District's transportation and power operated equipment fleet and related/associated components. Consultant, Contractor, or District forces may be utilized. The District costs may include salary, benefits and overhead.

Purpose

To rehabilitate, upgrade or replace aging sewer pipelines and structures.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Sewer

Program - Various Small Pump Station Rehabilitation

<u>Amount</u> <u>Project #</u> <u>Fund</u> \$2,000,000 2110

Description

Design of improvements and/or construction of various equipment renewals, replacements, and rehabilitation at wastewater pump stations throughout District member towns to address various process, mechanical, structural, electrical, instrumentation and controls systems upgrades. Planned projects include installation of new pumps; replacement of process piping and valves; electrical/controls replacements and modifications; structural component replacement including aluminum grating and wet well covers. An inventory and evaluation of existing wastewater pump stations is also included. These projects are intended to extend and enhance the asset life. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To repair, rehabilitate or replace wastewater pump stations.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Sewer

Program - Island Road PS Rehabilitation

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$378,000	<u></u>	2110

Description

The Island Road Pump Station is a custom-built walk-in pump station installed in 1958. Minimal improvements have been made since its original construction. The station needs full rehabilitation including structural, mechanical, and electrical repairs/replacements. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To rehabilitate the pump station that has passed its useful life.

Future Appropriations

Future appropriation requests for additional projects are anticipated for the next year.

Sewer

Program – Paving Program and Restoration

<u>Amount</u>	Project #	<u>Fund</u>
\$2,100,000		2110

Description

Final pavement restoration of roads, sidewalks, driveways, parking lots and other areas disturbed by work on MDC water infrastructure, including costs for disposal of unsuitable materials and usage of material from stock. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To restore sites associated with various water main installations, replacements and repairs.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Sewer

Program – Sanitary Sewer Easement Program

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$1,700,000	·	2110

Description

Planning, design and construction for the improvements to existing District Sanitary Sewer Easements. Improvements may include, but not limited to clearing, cutting, or other improvements as required to maintain or improve access to existing sanitary sewer infrastructure within easements. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To rehabilitate aging pipelines and structures within recently cleared District sewer easement areas.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next two years.

Sewer

Program – <u>Water Pollution Control Facilities, Infrastructure, Rehabilitations, Upgrades and Replacement</u>

 Amount
 Project #
 Fund

 \$7,500,000
 2110

Description

Design and construction of various infrastructure renewals and replacements at the District's four water pollution control facilities to modernize existing systems including mechanical, electrical, process, instrumentation and control systems. This project will rehabilitate multiple water pollution control assets to improve operational readiness/reliability, safety, increase wastewater processing capabilities and add/enhance assets life. District and outside forces may be utilized for this program. District forces may be utilized for this program. The District cost may include salary, benefits, and overhead.

Purpose

To rehabilitate aging infrastructure at the District's four Water Pollution Control Facilities.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Sewer

Program - Hartford Water Pollution Control Facilities Secondary Electric Upgrades

<u>Amount</u>	Project #	<u>Fund</u>
\$4,305,000		2110

Description

The Secondary Electrical Upgrades project at the Hartford Water Pollution Control Facility, will replace antiquated electrical equipment with current electrical equipment that meets District standards to provide a reliable, safe and maintainable electrical system that meets current electrical codes. The replacement of this electrical equipment will upgrade the last remaining significant electrical gear that was provided with the plant upgrades completed in the early 70's. Project will include all mechanical, electrical, structural, architectural, instrumentation, and control. District and outside forces may be utilized for this project. The District cost may include salary, benefits, and overhead.

Purpose

To rehabilitate aging infrastructure in the Hartford Water Pollution Control Facility.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Sewer

Program - Rocky Hill Water Pollution Control Facilities Preliminary and Electrical Upgrades

<u>Amount</u>	Project #	<u>Fund</u>
\$13,125,000		2110

Description

The project includes updating the headworks facilities at the Rocky Hill Water Pollution Facility including but not limited to the replacement of the bar screen and grit removal equipment. Both require frequent removal of sewage debris screenings throughout each day and the bar screen remains the last District WPC facility that has screenings manually removed by District staff. Both the screening and grit equipment need to be replaced as they are beyond their service life, installed during the early 70's, that require frequent maintenance with scarce replacement parts available. Correction of these issues is essential for the protection of equipment and processes following a substantial \$50 Million upgrade. The project will include the installation of pre-engineered screening building and canopy to protect the new equipment and shelter operators during inclement weather. Project will include all mechanical, electrical, structural, architectural, instrumentation, and control. District forces may be utilized for a portion of this project. The District cost may include salary, benefits, and overhead.

Purpose

To update the headworks facility at the Rocky Hill Water Pollution Facility.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Bond Language

Funding Sources

Project is eligible for a loan under the State of Connecticut Clean Water Fund. However, funding is a condition of priority ranking and fund availability.

Water

The following is a list of the recommended water system programs and projects to be funded through the MDC's 2023 Capital Improvement Program budget. Each is considered to be a separate undertaking in accordance with Section 3-11 of the Charter of the Metropolitan District.

<u>Water</u>	
General Purpose Water	\$ 4,000,000
Water Distribution	
WTP Infrastructure Rehabilitation, Upgrades & Replacement	4,500,000
Advanced Meter Reading Program	800,000
East Hartford Water Main Replacements	8,570,000
Water Main Materials	3,000,000
Paving Program & Restoration	5,250,000
Water Treatment/Transmission Improvements	1,000,000
Levee Protection - Water	263,000
District-wide Water Main Replacement Program	14,500,000
Water Total	\$ 41,883,000

The projects that comprise the water system programs are necessary to extend, upgrade and maintain the extensive water infrastructure throughout the District and to enhance the efficiency and effectiveness of facility operations.

Water

Program - General Purpose Water Program

<u>Amount</u>	Project #	<u>Fund</u>
\$4,000,000		2120

Description

Planning, design and construction of the replacement and/or rehabilitation of aging water mains and related system-wide equipment/infrastructure improvements to enhance the effectiveness, efficiency and safety of the District's water supply, treatment and distribution systems. Projects may include electrical, mechanical, or renewable energy upgrades at District facilities as well as water modeling, master planning and the integration of SCADA and data collection/evaluation systems. District and outside forces may be utilized. The District costs may include salary, benefits and overhead.

Purpose

To enhance the effectiveness, efficiency and safety of the District's water supply, treatment and distribution systems.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Water

Program – Water Treatment Program Infrastructure, Rehabilitation, Upgrades and Replacements

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$4,500,000		2120

Description

Design and construct a variety of renewal and replacements at the three Water Treatment Facilities in an effort to modernize existing systems including, but not limited to, filter underdrain systems. Multiple water treatment assets will be rehabilitated to improve treatment processes, operational reliability, and improve the safety component within all. These projects are intended to extend and enhance the asset life. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To renew and replace assets at the water treatment facilities.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Water

Program - Advanced Meter Reading Program

<u>Amount</u>	Project #	<u>Fund</u>
\$800,000		2120

Description

The Advanced Meter Reading Program includes costs for all materials, equipment, technology and labor needed to replace water meters and install meter reading devices, including internal and contractor labor. This project will be used towards the long-term standardization and scheduled replacement program of meters, meter reading devices and appurtenances and may include the implementation of new meter reading technology and implementation of customer portal. District and outside forces may be utilized for this program The District costs may include materials, equipment, salary, benefits and overhead.

Purpose

To reduce the number of estimated water bills, replace meters that have exceeded manufacturers suggested life expectancy, replace outdated meter reading systems and standardize meter inventory

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Water

Program – East Hartford Water Main Replacements

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$8,570,000		2120

Description

This project includes the replacement of various small diameter water mains (i.e. 4" and 6") and aging infrastructure in residential East Hartford roads. District and outside forces may be utilized for this program. The District costs may include materials, equipment, salary, benefits and overhead.

Purpose

To replace aging infrastructure in East Hartford

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Bond Language

Funding Sources

Project is eligible for a loan under the State of Connecticut DWSRF. However, funding is a condition of priority ranking and fund availability.

Water

Program - Water Main Materials

<u>Amount</u> <u>Project #</u> <u>Fund</u> \$3,000,000 2120

Description

Purchase of various materials to support replacement of water mains District wide as a result of infrastructure exceeding useful life. Projects include, but are not limited to, The Accelerated Water Main Replacement Program, Sisson Avenue Area Water Main Replacement, Silas Deane Water Main Replacement, Ellington Road Water Improvements, and Deerfield, Chadwick and Goodwin Water Main Replacement. District and outside forces may be utilized for this program. The District costs may include materials, equipment, salary, benefits and overhead.

Purpose

To acquire materials to replace aging infrastructure District wide.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Water

Program – Paving Program and Restoration

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$5,250,000		2120

Description

Final pavement restoration of roads, sidewalks, driveways, parking lots and other areas disturbed by work on MDC water infrastructure, including costs for disposal of unsuitable materials and usage of material from stock. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To restore sites associated with various water main installations, replacements and repairs.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Water

Program - Water Treatment/Transmission Improvements

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$1,000,000	·	2120

Description

The Water Master Plan encompasses various projects to improve the water transmission and treatment infrastructure over several decades. This project will include the design and construction of improvements to the raw water supply pipelines and related appurtenances such as blow-offs and access manholes. The project will improve the operational reliability of the raw water system, and is intended to extend and enhance the asset life. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To improve the reliability and extend the asset life of various raw water pipelines, transmission mains and water treatment infrastructure.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next two years.

Water

Program - Levee Protection - Water Work

<u>Amount</u>	Project #	<u>Fund</u>
\$263,000		2120

Description

Construction, inspection and associated work for the placing of isolation valves outside Bulkeley Bridge and I-84 Highway (Hartford and East Hartford). District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To place isolation valves to repair aging infrastructure in the Bulkeley Bridge and I-84 Highway (Hartford and East Hartford).

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Water

Program - District Wide Water Main Replacement Program

<u>Amount</u> <u>Project #</u> <u>Fund</u> \$14,500,000

Description

Design and/or construction for the rehabilitation and/or replacement of various water mains and water services throughout the District that have exceeded their useful life and/or have experienced numerous breaks. District forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To improve the efficiency and safety of the District's water distribution system.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Bond Language

Funding Sources

Project is eligible for a loan under the State of Connecticut DWSRF. However, funding is a condition of priority ranking and fund availability.

Combined

The following is a list of the recommended combined capital programs and projects to be funded through the MDC's 2023 Capital Improvement Program budget. These capital programs and projects provide for needed fleet and equipment replacement and upgrades, facility improvements and staffing. Each is considered to be a separate undertaking in accordance with Section 3-11 of the Charter of the Metropolitan District.

Combined

Facilities/Staffing	
IT Infrastructure Project	\$ 2,100,000
CEM Vehicles	3,040,000
CEM Generators	267,500
Facilities	1,050,000
Engineering Services Staffing	3,645,000
Construction Services Staffing	3,830,000
Technical Services Staffing	 4,360,000
Combined Total	\$ 18.292.500

Combined

The following positions are included in the combined capital program:

Authorized Positions

<u>Title</u>	Number
Assistant Manager of Construction & Inspection	1
Construction & Utility Services Supervisor	4
Construction Manager	7
Durational Project Engineer	1
Engineer Technician 3	1
Manager of Construction & Inspection Services	1
Manager of Engineering Services	1
Manager of Technical Services	1
Principal Construction Engineering Technician	1
Project Engineer 2	2
Project Manager	11
Real Estate Administrator	1
Senior Project Manager	2
Senior Clerk	2
Senior Engineering Technician	1
Senior Project Manager	3
Supervisor Inspector	<u>1</u>
Total	41

Combined

Program - 2023 Information Technology Infrastructure Project

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$2,100,000	<u></u>	2130

Description

To upgrade District- wide infrastructure by implementation of data center load balancer hardware refresh, Hartford and Springfield data center server refresh, IT firewall refresh SCADA firewall refresh, Wireless LAN controller and wireless AP refresh, telecom closet refresh. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

District-wide Information Technology infrastructure upgrade.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Combined

Program - Fleet and Equipment Replacement and Upgrades

<u>Amount</u>	Project #	<u>Fund</u>
\$3,040,000	· · · · · · · · · · · · · · · · · · ·	2130

Description

This program consists of replacement and/or upgrades to the District's transportation and power operated equipment fleet and related/associated components. These vehicles, equipment and related/ associated components are intended to extend and enhance the capacity and capabilities of the District Labor support provided by, but not limited to, District technicians, mechanics, operating and engineering staff. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To maintain and upgrade the District's fleet and equipment.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Combined

Program – Generators Rehabilitation Renewal

<u>Amount</u>	Project #	<u>Fund</u>
\$267,500		2130

Description

To replace a variety of generators to support the District's pump stations. These generators related/ associated components are intended to replace aging pump water generators, that are considered no long reliable or cost effective to maintain.

Purpose

To replace and upgrade the District's generators equipment.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Combined

Program – Facilities and Equipment Improvements

<u>Amount</u>	Project #	<u>Fund</u>
\$1,050,00	· · · · · · · · · · · · · · · · · · ·	2130

Description

Design and construction of a variety of improvements including renewal and replacements at District Administrative, Operational, and Maintenance facilities which will address building envelopment, structural, architectural, mechanical, electrical, plumbing, fire protection, HVAC, security, site improvements, environmental abatement, and other relevant work. The project also includes equipment upgrades. District forces may be utilized for this program. The District cost may include salary, benefits, and overhead.

Purpose

To ensure the continued efficient and effective operation of the District's facilities and related equipment.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Combined

Program - Engineering Services Staffing

<u>Amount</u>	<u>Funds Center</u>	<u>Fund</u>
\$3,645,000	C1H03	2130

Description

Staffing costs

Purpose

The Engineering Services department holds responsibility for developing and designing the District's capital improvement projects. Projects include improvements to and expansion of the District's water distribution and sewer collection systems and related work on water and sewage treatment plants.

Future Appropriations

Future appropriation requests for this purpose are anticipated over the next four years.

Bond Language

Authorized Positions

<u>Title</u>	<u>Number</u>
Construction Manager	2
Manager of Engineering Services	1
Project Manager	5
Senior Project Manager	<u>3</u>
Total	11

Combined

Program - Construction Services Staffing

<u>Amount</u>	Funds Center	<u>Fund</u>
\$3,830,000	C1H04	2130

Description

Staffing costs

Purpose

The Construction Services department holds responsibility for construction for of all of the District's capital improvement projects including improvements to and expansion of the District's water distribution and sewer collection systems and related work on water and sewer treatment plants. For 2023, we have consolidated Survey & Inspection (C1H02) with the Construction (C1H04) department.

Future Appropriations

Future appropriation requests for this purpose are anticipated over the next four years.

Bond Language

Authorized Positions

<u>Title</u>	<u>Number</u>
Assistant Manager of Construction & Inspection	1
Construction & Utility Services Supervisor	4
Construction Manager	4
Engineer Technician 3	1
Manager of Construction & Inspection Services	1
Principal Construction Engineering Technician	1
Project Manager	1
Senior Clerk	1
Senior Engineering Technician	1
Supervisor Inspector	<u>1</u>
Total	16

Combined

Program - Technical Services Staffing

<u>Amount</u>	Funds Center	<u>Fund</u>
\$4,360,000	C1H05	2130

Description

Staffing costs

Purpose

The Technical Services department holds responsibility for providing technical support to all of the District's capital improvement projects, Clean Water Project and Integrated Plan projects, including improvements to and expansion of the District's water distribution and sewer collection systems and related work on water and sewage treatment plants.

Future Appropriations

Future appropriation requests for this purpose are anticipated over the next four years.

Bond Language

Authorized Positions

<u>Title</u>	<u>Number</u>
Construction Manager	1
Durational Project Engineer	1
Manager of Technical Services	1
Project Engineer 2	2
Project Manager	5
Real Estate Administrator	1
Senior Project Manager	2
Senior Clerk	<u>1</u>
Total	14

Hydro Rehabilitation

The following is a list of the recommended Hydro capital program and project to be funded through the MDC's 2023 Capital Improvement Program budget. These capital programs and projects provide for needed modernization to the District's Goodwin Hydroelectric Facility.

Each is considered to be a separate undertaking in accordance with Section 3-11 of the Charter of the Metropolitan District.

Hydro Rehabilitation	
Goodwin Hydroelectric Controls Upgrade Project	\$ 2,000,250
Hydro Total	\$ 2,000,250

Hydro Rehabilitation

Program - Goodwin Hydroelectric Controls Upgrade Project

<u>Amount</u>	Project #	<u>Fund</u>
\$2,000,250	·	2150

Description

To provide design and construction of upgrades to the electrical, instrumentation and controls systems at the Goodwin Hydroelectric Facility. Planned improvements include the installation of a new governor system, replacement of hydraulic power units, electrical/controls replacements, and various appurtenant work related to these modifications. This project is intended to enhance the effectiveness of, and extend and enhance the asset life. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

Infrastructure rehabilitation, upgrades and replacement work at the Goodwin Hydroelectric Facility including mechanical, electrical, instrumentation and controls systems.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Integrated Plan

The following is a list of the recommended Integrated Planning programs and projects to be funded through the MDC's 2023 Integrated Plan request. Each is considered to be a separate undertaking in accordance with Section 3-11 of the Charter of the Metropolitan District.

Integrated Plan

Various Sewer Pipe Replacement/Rehabilitations - District-wide	\$ 8,925,000
Large Diameter Sewer Rehabilitation Program	16,170,000
Sewer Collection Gates	5,025,000
Newington 18 & 19 Sewershed Inflow/Infiltration Reduction	945,000
Rocky Hill -2A/B Sewershed Inflow/Infiltration Reduction	1,200,000
I-4 (N-30)	200,000
North Branch Park River Drainage Study/Separation	1,000,000
Granby 7 Sewer Separation	1,800,000
Program Management Consultant	4,000,000
Wethersfield Cove Drop Shaft Connections - Phases 1 & 2	525,000
Hartford Water Pollution Control Facility -Sludge Equalization Facility	5,000,000
Private Property Inflow Disconnect/Back Water Valve Program _	1,500,000
Integrated Plan Total	\$ 46,290,000

Integrated Plan

Program - Various Sewer Pipe Replacement/Rehabilitations - District-wide

<u>Amount</u>	Project #	<u>Fund</u>
\$8,925,000		2600

Description

Design and construction of sewer system repairs, replacements and rehabilitation measures as a result of aging and deteriorating infrastructure located District-wide. The replacement, rehabilitation and or upgrade of District equipment. District forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To rehabilitate, upgrade or replace aging sewer pipelines and structures.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Integrated Plan

Program - Large Diameter Sewer Rehabilitation Program

<u>Amount</u>	Project #	<u>Fund</u>
\$16,170,000		2600

Description

This project will include the rehabilitation of large diameter sewers (combined and separated) located within the Hartford WPCF sewershed. Sewer rehabilitation based on recommendations from recently completed large diameter sewer inspection programs. This project will reduce CSOs in the Hartford WPCF collection system, via I/I reduction in the large diameter Hartford sewers. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To rehabilitate aging infrastructure in the Hartford Water Pollution Control Facility sewershed.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Bond Language

Funding Sources

Integrated Plan

Program – Sewer Collection Gates

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$5,025,000		2600

Description

To improve the existing sanitary sewer collection system gates, as required for Consent Order Compliance. District and outside forces may be utilized for this program. District costs may include salary, benefits and overhead.

Purpose

To improve the lifespan and functionality of District sanitary sewer collection gates.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Bond Language

Funding Sources

Integrated Plan

Program - Newington 18 & 19 Sewershed Inflow/Infiltration Reduction

<u>Amount</u>	Project #	<u>Fund</u>
\$945,000		2600

Description

This project will include I/I reduction in Newington, as required for Consent Decree Compliance. District and outside forces may be utilized for this program. District costs may include materials, equipment, salary, benefits and overhead.

Purpose

To eliminate and reduce inflow and infiltration sources from the sanitary sewer system.

Future Appropriations

Future appropriation requests for additional projects are anticipated for the next year.

Integrated Plan

Program - Rocky Hill -2A/B Sewershed Inflow /Infiltration Reduction

<u>Amount</u>	Project #	<u>Fund</u>
\$1,200,000	<u></u>	2600

Description

This project will include I/I reduction in the RHWPCF Sewershed, as required for Consent Decree Compliance. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To eliminate and reduce the inflow and infiltration sources on the Rocky Hill Water Pollution Control Facility sewershed.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next two years.

Integrated Plan

Program - <u>I-4 (N30)</u>

 Amount
 Project #
 Fund

 \$200,000
 2600

Description

This project will include the rehabilitation and or replacement of sewers (combined and separated) located within the Hartford WPCF sewershed, as required to achieve Consent Order Compliance with CSO N-30. Sewer rehabilitation based on recommendations from recently completed large diameter sewer Inspection programs. This project will reduce CSOs in the Hartford WPCF collection system, via I/I reduction in the large diameter Hartford sewers. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

Infrastructure rehabilitation within the Hartford Water Pollution Control Facility.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Integrated Plan

Program - North Branch Park River Drainage Study/Separation

<u>Amount</u>	Project #	<u>Fund</u>
\$1,000,00		2600

Description

Preliminary design for sewer separation in the North Branch Park River Drainage area, as required for Consent Order Compliance. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

Preliminary design for the sewer separation in the North Branch Park River Drainage area.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Bond Language

Funding Sources

Integrated Plan

Program - Granby 7 Sewer Separation

<u>Amount</u>	Project #	<u>Fund</u>
\$1,800,000	·	2600

Description

This project will complete the Final Design Phase for the Granby 7 Sewer Separation Design in the North Branch Park River Drainage District, as required for Consent Order Compliance. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

Final design for the Granby 7 sewer separation in the North Branch Park River Drainage area.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next three years.

Bond Language

Funding Sources

Integrated Plan

Program - Program Management Consultant

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$4,000,000		2600

Description

To satisfy the Program Management Consultant requirement for Consent Order Compliance. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To conform with Consent Order Compliance.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Integrated Plan

Program - Wethersfield Cove, Drop Shaft Connections - Phases 1 & 2

<u>Amount</u>	Project #	<u>Fund</u>
\$525,000		2600

Description

To complete the Final Design for the Wethersfield Cove, Drop Shaft Connections – Phases 1 & 2, as required for Consent Order Compliance. District and outside forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To conform with Consent Order Compliance.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.

Bond Language

Funding Sources

Integrated Plan

Program - Hartford Water Pollution Control Facility Sludge Equalization Facility

<u>Amount</u>	Project #	<u>Fund</u>
\$5,000,00		2600

Description

This project will provide an upgrade to the Sludge Equalization Facilities at the HWPCF. Project will include all mechanical, electrical, structural, architectural, instrumentation, and control. Consultant services shall include both engineering and inspection services. District forces may be utilized for a portion of this project. The District cost may include salary, benefits, and overhead. Project will utilize \$2.5M Grant as authorized by USEPA.

Purpose

To upgrade the Sludge Equalization Facilities at the HWPCF.

Future Appropriations

No additional appropriation requests are anticipated over the next four years.

Bond Language

Funding Sources

Integrated Plan

Program - Private Property Inflow Disconnect / Back Water Valve Program

<u>Amount</u>	<u>Project #</u>	<u>Fund</u>
\$1,500,000		2600

Description

This Program will include the inspection of private property sewer laterals in order to identify defects and/or infiltration sources. The program will also include the installation and or replacement of backwater, and/or additional work required to remove private inflow sources as needed to protect customers from sewer surcharging. District forces may be utilized for this program. The District costs may include salary, benefits and overhead.

Purpose

To eliminate infiltration and inflow sources from the sewer system.

Future Appropriations

Future appropriation requests for additional projects are anticipated over the next four years.