

APPENDIX 5

Master Plan/CIP Status

**Appendix 5
Master Plan/CIP Status**

| Listing of Master Plan Projects | Original MP Rating | CIP Year | Rating when added to CIP | NTP | SC | Total Contract Amount | FY19-23 | Beyond FY23 | Comment |
|--|--------------------|----------|--------------------------|--------|--------|-----------------------|---------------------|----------------------|---|
| FY24 Budget Cycle | | | | | | | | | |
| No Projects from Master Plan Added to Budget this Cycle | | | | | | | | | |
| FY23 Budget Cycle | | | | | | | | | |
| No Projects from Master Plan Added to Budget this Cycle | | | | | | | | | |
| FY22 Budget Cycle | | | | | | | | | |
| No Projects from Master Plan Added to Budget this Cycle | | | | | | | | | |
| FY21 Budget Cycle | | | | | | | | | |
| S.206 DITP Asset Protection | | | | | | | | | |
| DITP Roofing Replacement | 3 | FY21 | 3 | Jan-21 | Jun-22 | 2,000,000 | 2,000,000 | 0 | |
| 210 Clinton Wastewater Treat Plant | | | | | | | | | |
| Clinton SCADA Upgrades | 3 | FY21 | 3 | Jan-24 | Jan-26 | 750,000 | 0 | 750,000 | |
| Clinton Fire Alarm Replacement | 3 | FY21 | 3 | Jan-21 | Jul-22 | 900,000 | 900,000 | 0 | |
| S.542 Carroll Water Treatment Plant | | | | | | | | | |
| Corrosion Control Pipe Loop Study | 3 | FY21 | 3 | Mar-21 | Mar-22 | 500,000 | 500,000 | 0 | |
| Technical Assistance 11 | 3 | FY21 | 3 | Jan-21 | Dec-22 | 750,000 | 750,000 | 0 | |
| Technical Assistance 12 | 3 | FY21 | 3 | Jan-21 | Dec-22 | 750,000 | 750,000 | 0 | |
| FY21 Master Plan Totals - 6 projects | | | | | | \$5,650,000 | \$4,900,000 | \$750,000 | |
| FY20 Budget Cycle | | | | | | | | | |
| S.145 I&P Asset Protection | | | | | | | | | |
| Section 191 & 192 Charles River Valley Sewer | 3 | FY20 | 3 | May-19 | Oct-19 | 500,000 | 500,000 | 0 | |
| Pump Stations & CSO Facility Rehab Design/CA/REI | 3 | FY20 | 3 | Nov-21 | Nov-31 | 7,500,000 | 650,000 | 6,850,000 | |
| Pump Stations & CSO Facility Rehab Construction | 3 | FY20 | 3 | Nov-23 | Nov-30 | 37,500,000 | 0 | 37,500,000 | |
| S.555 Carroll Water Treatment Plant Asset Protection | | | | | | | | | |
| CWTP Emergency Generator #1 Replacement (Electric Portion) | 3 | FY20 | 2 | Jan-19 | Aug-19 | 750,000 | 750,000 | 0 | |
| FY20 Master Plan Totals - 4 projects | | | | | | \$46,250,000 | \$1,900,000 | \$44,350,000 | |
| FY19 Budget Cycle | | | | | | | | | |
| S.206 Deer Island Asset Protection | | | | | | | | | |
| Hydroturbine Replacements Design/ESDC/REI | 3 | FY19 | 3 | Sep-18 | Jun-24 | 2,000,000 | 1,720,253 | 279,747 | |
| Hydroturbine Replacements Construction | 3 | FY19 | 3 | Jun-20 | Jun-23 | 10,000,000 | 8,611,111 | 1,388,889 | |
| Bidirectional Radio Repeater System Upgrade | 2 | FY19 | 2 | Apr-18 | Oct-19 | 3,000,000 | 3,000,000 | | |
| S.128 I/I Local Financial Assistance | | | | | | | | | |
| Phases 11 & 12 | 3 | FY19 | 3 | Aug-18 | Aug-25 | 90,000,000 | 63,700,000 | 26,300,000 | |
| S. 542 Carroll Water Treatment Plant | | | | | | | | | |
| HVAC Equipment Replacement | 2 | FY19 | 2 | Jul-19 | May-22 | 2,300,000 | | 2,300,000 | |
| CWTP Chemical Pipe System Pipe, Pumps and Tank Replacement | 2 | FY19 | 2 | Jul-27 | Jun-29 | 4,000,000 | | 4,000,000 | |
| CWTP Water Pump Replacement | 2 | FY19 | 2 | Jul-27 | Jul-30 | 2,000,000 | | 2,000,000 | |
| Ozone Generator Replacement | 2 | FY19 | 2 | Oct-27 | Oct-30 | 20,000,000 | | 20,000,000 | |
| Ultra Violet Reactor Replacement | 2 | FY19 | 2 | Oct-32 | Oct-34 | 10,000,000 | | 10,000,000 | |
| S. 623 Dam Projects | | | | | | | | | |
| Sudbury/Foss Dam Impr/Wach North Dike Overtopping Protection Design CA/RI | 2 | FY19 | 2 | Oct-24 | Oct-29 | 210,000 | | 302,960 | |
| Sudbury/Foss Dam Improvements/Wachusett North Dike Overtopping Protection Construction | 2 | FY19 | 2 | Oct-26 | Oct-28 | 1,600,000 | 1,693,325 | | |
| S.617 Sudbury/Weston Aqueduct Repairs | | | | | | | | | |
| Farm Pond Inlet Chamber and Gate House - Rehabilitation Design CA/RI | 3 | FY19 | 3 | Oct-24 | Oct-29 | 400,000 | | 400,000 | |
| Farm Pond Inlet Chamber and Gate House - Rehabilitation Construction | 3 | FY19 | 3 | Oct-26 | Oct-28 | 2,000,000 | | 2,000,000 | |
| Waban Arches Rehabilitation Design CA/RI | 3 | FY19 | 3 | Oct-23 | Oct-28 | 300,000 | | 300,000 | |
| Waban Arches Rehabilitation Construction | 3 | FY19 | 3 | Oct-25 | Oct-27 | 1,200,000 | | 1,200,000 | |
| S.621 Watershed Land | | | | | | | | | |
| Watershed Land Acquisition | 3 | FY19 | 3 | Apr-06 | Jun-23 | 5,000,000 | | 5,000,000 | |
| S.693 NHS Revere & Malden Pipeline | | | | | | | | | |
| Sections 13 & 48 Rehabilitation Design CA/RI | 3 | FY19 | 3 | Jul-24 | Jul-29 | 2,150,000 | | 2,150,000 | |
| Sections 13 & 48 Rehabilitation Construction | 3 | FY19 | 3 | Jul-26 | Jul-28 | 10,750,000 | | 10,750,000 | |
| S.712 Cathodic Protection Distribution Mains | | | | | | | | | |
| Cathodic Protection Western System Design/CA/RI | 3 | FY19 | 2 | Jul-19 | Jun-23 | 930,000 | 909,000 | 21,000 | Condition determined to be worse than when Master Plan Priority Ratings assigned. |
| Cathodic Protection Western System Construction | 3 | FY19 | 2 | Jul-21 | Jun-23 | 4,300,000 | 3,762,000 | 538,000 | Condition determined to be worse than when Master Plan Priority Ratings assigned. |
| Cathodic Protection Metropolitan System Design/CA/RI | 3 | FY19 | 2 | Jul-20 | Jun-26 | 9,900,000 | 4,602,000 | 5,298,000 | Condition determined to be worse than when Master Plan Priority Ratings assigned. |
| Cathodic Protection Metropolitan System Construction | 3 | FY19 | 2 | Jul-22 | Jun-26 | 47,100,000 | 8,831,000 | 38,269,000 | Condition determined to be worse than when Master Plan Priority Ratings assigned. |
| S.763 Distribution Systems Facilities Mapping | | | | | | | | | |
| Water System Hydraulic Model | 4 | FY19 | 4 | Jul-19 | Jun-20 | 500,000 | 500,000 | | |
| FY19 Master Plan Totals - 17 projects | | | | | | \$229,640,000 | \$97,631,649 | \$132,194,636 | |

Master Plan Priority Ratings - Wastewater

Priority One

Critical/Emergency

Risk moderate to high/Consequence very high

Projects which:

Resolve emergencies or critical threats to public health or worker health and safety

Prevent imminent failure of the system and significant loss of service

Priority Two

Essential Projects

Risk variable/Consequences high

Projects which are essential to:

Critical facility assessment

Fix existing reliability or capacity problems during dry weather flow conditions

Reduce sanitary sewer overflows from the MWRA system

Address facilities in poor condition where the ability to provide uninterrupted service or adequate flow is compromised.

Upgrade or maintain emergency backup facilities in poor condition

Meet minimum hydraulic performance requirements and service needs

Implement MWRA's approved CSO control plan

Maintain wastewater effluent and residuals quality

To comply with mandated legal, regulatory or statutory requirements

Priority Three

Necessary Projects

Risk moderate to high/Consequence moderate to low

Projects which are necessary to:

Improve public health and worker safety

Restore the system's infrastructure where it is seriously deteriorated

Improve hydraulic performance

Significantly improve the effectiveness, efficiency, or reliability of system operations and service delivery including where appropriate, the ability to monitor the system

Maintain consumer confidence

To comply with other legal, regulatory or statutory requirements

Priority Four

Important Projects

Risk moderate/Consequences low

Projects which are important to:

Maintain the integrity of the system's infrastructure

Produce significant cost savings or revenue gains for MWRA

Monitor system needs and plan appropriate longer-term responses

Provide acceptable working conditions at field sites and at maintenance support facilities

Implement the regional I/I plan

Priority Five

Desirable Projects

Risk/Consequence both low

Projects which are desirable because they would:

Yield worthwhile cost savings, revenue gains, or efficiency improvements for MWRA

Protect the long term value and usefulness of system assets

Solve future problems and conditions which are expected to arise in the latter half of the planning period

Be beneficial towards the improved operation of a local system

Master Plan Priority Ratings - Water

Priority One

Critical/Emergency

Risk moderate to high/Consequence very high

Projects which:

Resolve emergencies or critical threats to public health or worker health and safety

Prevent imminent failure of the system and significant loss of service

Priority Two

Essential Projects

Risk variable/Consequences high

Projects which are essential to:

Critical facility assessment

Fix existing reliability problems related to “single points of failure”

Upgrade or maintain emergency back-up facilities in operational condition

Address facilities in poor condition where the ability to provide uninterrupted service, sanitary protections or adequate flow is compromised.

Meet minimum hydraulic performance requirements and service needs including adequate distribution storage in areas with a critical shortfall of storage

To comply with mandated legal, regulatory or statutory requirements

Priority Three

Necessary Projects

Risk moderate to high/Consequences moderate to low

Projects which are necessary to:

Improve public health and worker safety

Restore the system’s infrastructure where it is seriously deteriorated

Significantly improve the effectiveness, efficiency, or reliability of system operations and service delivery including where appropriate, the ability to monitor the system

Preserve water quality during distribution

Maintain consumer confidence

To comply with other legal, regulatory or statutory requirements

Priority Four

Important Projects

Risk moderate/Consequence low

Projects which are important to:

Maintain the integrity of the system's infrastructure

Improve hydraulic performance or add distribution storage

Produce significant cost savings or revenue gains for MWRA

Monitor system needs and plan appropriate longer-term responses

Provide acceptable working conditions at field sites and at maintenance support facilities

Maintain efforts to manage system demands

Provide broader environmental benefits

Priority Five

Desirable Projects

Risk/Consequence both low

Projects which are desirable because they would:

Yield worthwhile cost savings, revenue gains, or efficiency improvements for MWRA

Protect the long term value and usefulness of system assets

Solve future problems and conditions which are expected to arise in the latter half of the planning period

Be beneficial towards the improved operation of a local system