



## ● Proposed Capital Investment Plan Appendix

### Summary

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This April, the Board is scheduled to appropriate funds for projects identified in the Capital Investment Plan (CIP) for Fiscal Years (FYs) 2020/21 and 2021/22 (CIP), authorize the General Manager to initiate or proceed with work on all capital projects identified in the CIP, and adopt the biennial budget, which includes the CIP. Advance review and consideration of the CIP by the Engineering & Operations Committee is required in accordance with Administrative Code Section 2431 (p). The proposed CIP Appendix was previously distributed at the February 2020 Board, packaged with the Item 9-2 as Attachment 4. **Attachment 1** provides a list of revisions to the original CIP Appendix to the proposed Biennial Budget.

### Purpose

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Administrative Code Requirement Article 3: Engineering and Operations Committee; Section 2431: Duties and Functions

Section 2431(p) of Metropolitan's Administrative Code requires the Engineering and Operations Committee to study, advise, and make recommendations to the District's Capital Investment Program and appropriations for capital projects.

Section 5108(e) of Metropolitan Water District Administrative Code authorizes the General Manager to request the Board to appropriate funds required for the projects identified in the CIP for the next two fiscal years.

### Attachments

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List of Revisions to the Proposed fiscal years (FY) 2020/21 and FY 2021/22 Capital Investment Plan

### Detailed Report

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#### Background

The proposed CIP Appendix was distributed to the Board as Attachment 4 to Item 9-2 in advance of the Finance and Insurance Committee's February 10, 2020 meeting as part of the first Board workshop for Metropolitan's proposed biennial budget for Fiscal Years 2020/21 and 2021/22. Details of the CIP development process and capital program highlights were presented at the second budget workshop on February 25, 2020. Final adoption of the biennial budget which includes the CIP is scheduled for the April 2020 Board meeting.

In the time since the proposed CIP Appendix to the Proposed Biennial Budget for FYs 2020/221 and 2021/22 was developed for issuance to the Board, staff has identified the need to make several revisions to the original document. These proposed changes are included in the List of Revisions to the Proposed Capital Investment Plan (**Attachment 1**).

In accordance with the Administrative Code section referred to above, the Engineering and Operations Committee (E&O) will authorize the General Manager to proceed with the work described in the CIP as part of the approval process for the overall biennial budget. In advance of E&O making this determination on the CIP, staff will provide details of the proposed CIP at the committee's March 2020 meeting. Staff will also present details on the proposed revisions to the CIP appendix. Upon authorization by the Board, each project described and included in the CIP Appendix will proceed or continue under the General Manager's authority subject to any limits on that authority and requirements of the California Environmental Quality Act (CEQA).

An important component of E&O's study of the CIP is to potentially direct staff to seek specific authority for any CIP project in advance of initiating or continuing any work. The E&O's review and deliberation of the CIP and **Attachment 1** at the March committee meeting will provide the opportunity for Board members to request any additional information on specific projects in the proposed CIP Appendix. Additionally, discussion on this item

## Board Report (Proposed Capital Investment Plan Appendix)

will allow Board members to identify any project in the proposed CIP Appendix for which individual authorization will be required to proceed during the upcoming biennium.

**List of Revisions to the Proposed CIP Appendix Fiscal Years 2020/21 and 2021/22**

As a result of updated project estimates and reprioritization of several projects since the proposed CIP Appendix was originally developed in October 2019, several Program and Project Group forecasts have been revised while maintaining approximately the same fiscal year forecasts. The updated tables and charts are shown below and additional details are provided on the following pages.

1. Page 1: Replace the table with the following:

<b>Capital Program</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>Total</b>
Colorado River Aqueduct Reliability	\$ 55,000,000	\$ 52,370,000	\$ 107,370,000
Cost Efficiency & Productivity	\$ 6,705,000	\$ 8,800,000	\$ 15,505,000
Dams & Reservoirs Improvements	\$ 5,100,000	\$ 13,100,000	\$ 18,200,000
Distribution System Reliability	\$ 37,200,000	\$ 29,900,000	\$ 67,100,000
District Housing & Property Improvements	\$ 3,500,000	\$ 7,500,000	\$ 11,000,000
Minor Capital Projects	\$ 3,800,000	\$ 5,400,000	\$ 9,200,000
Prestressed Concrete Cylinder Pipe Rehabilitation	\$ 30,260,000	\$ 23,600,000	\$ 53,860,000
Regional Recycled Water Program	\$ 210,000	\$ —	\$ 210,000
Right of Way & Infrastructure Protection	\$ 2,415,000	\$ 5,700,000	\$ 8,115,000
System Flexibility/Supply Reliability	\$ 13,600,000	\$ 24,800,000	\$ 38,400,000
System Reliability	\$ 44,900,000	\$ 52,500,000	\$ 97,400,000
Treatment Plant Reliability	\$ 48,550,000	\$ 27,610,000	\$ 76,160,000
Water Quality/Oxidation Retrofit	\$ 18,500	\$ —	\$ 18,500
<b>Total</b>	<b>\$ 251,258,500</b>	<b>\$ 251,280,000</b>	<b>\$ 502,538,500</b>

2. Page 2. Change the Program name, currently titled “Advance Water Treatment Demonstration Plant” to “Regional Recycled Water” and the Definition to the following:

“Projects under this Program are planned to demonstrate the feasibility of recycling wastewater for recharge of groundwater basins, and provide a new, sustainable and drought resistant source of supply for Southern California”



5. Page 13. Replace Table 4 with the following:

<b>Capital Program and Project Groups</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>FY 2022/23</b>
<b>Colorado River Aqueduct Reliability</b>	<b>\$ 55,000,000</b>	<b>\$ 52,370,000</b>	<b>\$ 49,700,000</b>
CRA - Conveyance	\$ 5,000,000	\$ 4,970,000	\$ 6,700,000
CRA - Electrical Systems	\$ 2,500,000	\$ 6,500,000	\$ 14,800,000
CRA - Pumping Plants	\$ 39,500,000	\$ 28,400,000	\$ 16,000,000
CRA - Other	\$ 8,000,000	\$ 12,500,000	\$ 12,200,000
<b>Cost Efficiency &amp; Productivity</b>	<b>\$ 6,705,000</b>	<b>\$ 8,800,000</b>	<b>\$ 4,020,000</b>
Diamond Valley Lake Recreation - New/Improvements	\$ 925,000	\$ 1,800,000	\$ 3,500,000
Diamond Valley Lake Recreation - Refurbishment & Replacement	\$ 250,000	\$ 3,000,000	\$ —
IT - Business Support	\$ 5,500,000	\$ 4,000,000	\$ 520,000
Cost Efficiency & Productivity - Other	\$ 30,000	\$ —	\$ —
<b>Dams &amp; Reservoirs Improvements</b>	<b>\$ 5,100,000</b>	<b>\$ 13,100,000</b>	<b>\$ 22,000,000</b>
Dams & Reservoirs - All	\$ 5,100,000	\$ 13,100,000	\$ 22,000,000
<b>Distribution System Reliability</b>	<b>\$ 37,200,000</b>	<b>\$ 29,900,000</b>	<b>\$ 39,300,000</b>
Pipelines, Tunnels, Canals	\$ 27,900,000	\$ 22,800,000	\$ 11,000,000
Pressure Control Structures/Hydroelectric Plants/Service Connections/Valves & Gates	\$ 5,400,000	\$ 3,000,000	\$ 18,000,000
Distribution System - Other	\$ 3,900,000	\$ 4,100,000	\$ 10,300,000
<b>District Housing &amp; Property Improvements</b>	<b>\$ 3,500,000</b>	<b>\$ 7,500,000</b>	<b>\$ 8,700,000</b>
Housing & Property Improvements	\$ 3,500,000	\$ 7,500,000	\$ 8,700,000
<b>Minor Capital Projects</b>	<b>\$ 3,800,000</b>	<b>\$ 5,400,000</b>	<b>\$ 6,300,000</b>
Minor Capital Projects - All	\$ 3,800,000	\$ 5,400,000	\$ 6,300,000
<b>Prestressed Concrete Cylinder Pipe Rehabilitation</b>	<b>\$ 30,260,000</b>	<b>\$ 23,600,000</b>	<b>\$ 54,800,000</b>
Allen McColloch Pipeline	\$ 1,500,000	\$ 200,000	\$ 1,000,000
Calabasas Feeder	\$ 100,000	\$ 150,000	\$ 1,600,000
Rialto Feeder	\$ 185,000	\$ 250,000	\$ 600,000

<b>Capital Program and Project Groups</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>FY 2022/23</b>
Second Lower Feeder	\$ 26,900,000	\$ 21,300,000	\$ 43,300,000
Sepulveda Feeder	\$ 375,000	\$ 500,000	\$ 7,100,000
PCCP - Other	\$ 1,200,000	\$ 1,200,000	\$ 1,200,000
<b>Regional Recycled Water</b>	<b>\$ 210,000</b>	<b>\$ —</b>	<b>\$ —</b>
Regional Recycled Water Program - All	\$ 210,000	\$ —	\$ —
<b>Right of Way &amp; Infrastructure Protection</b>	<b>\$ 2,415,000</b>	<b>\$ 5,700,000</b>	<b>\$ 10,000,000</b>
Los Angeles Region	\$ —	\$ —	\$ 300,000
Orange County Region	\$ 1,500,000	\$ 1,600,000	\$ 2,200,000
Riverside/San Diego Region	\$ —	\$ —	\$ 1,000,000
Western San Bernardino Region	\$ 805,000	\$ 4,000,000	\$ 4,300,000
ROWIP - Other	\$ 110,000	\$ 100,000	\$ 2,100,000
<b>System Flexibility/Supply Reliability</b>	<b>\$ 13,600,000</b>	<b>\$ 24,800,000</b>	<b>\$ 38,000,000</b>
System Flexibility/Supply Reliability - All	\$ 13,600,000	\$ 24,800,000	\$ 38,000,000
<b>System Reliability</b>	<b>\$ 44,900,000</b>	<b>\$ 52,500,000</b>	<b>\$ 25,500,000</b>
IT/SCADA - Infrastructure	\$ 17,200,000	\$ 21,000,000	\$ 17,000,000
Operations Support	\$ 9,000,000	\$ 12,000,000	\$ 5,000,000
System Reliability - Other	\$ 18,700,000	\$ 19,500,000	\$ 3,500,000
<b>Treatment Plant Reliability</b>	<b>\$ 48,550,000</b>	<b>\$ 27,610,000</b>	<b>\$ 44,300,000</b>
Diemer	\$ 17,800,000	\$ 5,100,000	\$ 9,000,000
Jensen	\$ 18,500,000	\$ 14,200,000	\$ 14,600,000
Mills	\$ 480,000	\$ 860,000	\$ 5,600,000
Skinner	\$ 470,000	\$ 50,000	\$ 1,600,000
Weymouth	\$ 11,300,000	\$ 7,400,000	\$ 13,000,000
Treatment - General	\$ —	\$ —	\$ 500,000
<b>Water Quality/Oxidation Retrofit</b>	<b>\$ 18,500</b>	<b>\$ —</b>	<b>\$ 100,000</b>
Water Quality/Oxidation Retrofit - All	\$ 18,500	\$ —	\$ 100,000

6. Page 15. Potential Changes to the Proposed CIP
  - a. Change Program title from “Advanced Water Treatment Demonstration Plant (RRWP Demo Plant) to “Regional Recycled Water Program (RRWP)”
  - b. First paragraph, second line: change “The demo plant is the initial testing ...” to “The initial testing ...”
7. Page 17. Colorado River Aqueduct Reliability Program
  - a. Change FY 2021/22 Estimate from \$56 million to \$52.4 million
8. Page 23. CRA Main Pumping Plants Sand Removal System;
  - a. Last sentence, add: “and refurbish any identified damaged components.”
9. Page 29. Cost Efficiency and Productivity Program
  - a. Change FY 2021/22 Estimate from \$7.6 million to \$8.8 million
10. Page 38. Distribution System Reliability Program:
  - a. Change FY 2021/22 Estimate from \$31 million to \$29.9 million
  - b. Accomplishments for FY 2018/19 and FY 2019/20, Construction completed: Add “San Diego Pipeline No. 1 Joint Repair”
11. Page 42. Foothill Feeder PCS Valve Replacement:
  - a. First paragraph, last line: add “and other facility improvements.”
12. Page 43. OC-88 Pumping Plant Upgrades:
  - a. First paragraph, ninth line: replace “and install a second air compressor.” with “install a second air compressor, replace flow meters and pumps, perform overhead crane improvements, upgrade the surge tank, fire protection, and HVAC systems; and perform other associated facility improvements.”
13. Page 44. Olinda Pressure Control Structure Valve Replacement:
  - a. Last line: add “If cost effective, relocation of the PCS will also be considered.”
14. Page 45. Rio Hondo Pressure Control Structure Valve Replacements:
  - a. Second paragraph, line 3: delete “thirteen”
15. Page 45. San Dimas Hydroelectric Plant Rehabilitation:
  - a. First paragraph, third line: add “and to provide associated controls, seismic and other facility upgrades.”
16. Page 52. Add the following project description for “San Diego Pipelines 1 and 2/Rainbow Tunnel Improvements”: “The San Diego Pipelines 1 and 2 were built in the 1940’s and have multiple diameters and pipe materials consisting of steel, precast concrete cylinder pipe, and precast non-cylinder pipe. Some of the steel section have cement mortar lining, the remaining sections all have coal tar lining. The Rainbow Tunnel has an approximate 72-inch diameter, and is horseshoe shaped. A recent inspection identified sections where the lining needs replacement. Several valves at turnout structures have reached the end of their service lives and require replacement. This project will perform a detailed evaluation of both pipelines, the tunnel and appurtenant structures; and replace or refurbish the damaged linings and other components as needed.
17. “Page 60. District Housing and Property Improvements Program.
  - a. Change FY 2020/21 Estimate from \$1.5 million to \$3.5 million
  - b. Change FY 2021/22 Estimate from \$1.5 million to \$7.5 million
  - c. Under the Housing & Property Improvements Project group:
    - i. Change the project title from “District Housing Property Assessments” to “District Housing Improvements”
    - ii. Fourth line: change “under the CRA Housing Improvement – Renovation of Nine houses” to “complete the pilot effort ...”
    - iii. Change the project title from “Employee Village Enhancement Master Planning” to “Employee Village Enhancement”
18. Page 61. Minor Capital Projects Program:

- a. Accomplishments for FY 2018/19 and FY 2019/20:
  - i. Change “New projects initiated during the last biennium” to “New projects initiated during the last biennium thru December 2019”
  - ii. Change “Forty-six” to “Thirty-five”
  - iii. Change “Major milestones achieved during the last biennium” to “Major milestones achieved during the last biennium thru December 2019”
  - iv. Change “Thirty-six” to “Twenty-eight”
19. Pages 62 and 64. Prestressed Concrete Cylinder Pipe (PCCP) Reliability Program
  - a. Change FY 2020/21 Estimate from \$32.4 million to \$30.3 million
  - b. For all 5 Feeder Project Groups, change the project descriptions to:

The planned rehabilitation work involves lining the existing PCCP segments with steel liner pipe designed as a stand-alone pipeline which can accommodate full internal and external pressures on the line and replacing any identified damaged lining in non-PCCP segments. The project includes restoring the (Allen McColloch, Rialto Pipeline, Calabasas, Sepulveda, Second Lower) pipeline/feeder to “As Like New Conditions” as possible. This would include relocation of all air release and vacuum valves (AR/VV) that have not already been relocated above ground and evaluating and possible replacement of sectionalizing, service connection turnout, pumpwell, AR/VV, shutoff, and blowoff valves, etc. In addition, the project includes procurement of any needed permanent or temporary right of way and evaluation and possible replacement or modification of all master meters and meter structures.
20. Page 65. Program title. Change “Advanced Water Treatment Demonstration Plant” to Regional Recycled Water Program”
21. Page 67. Right of Way and Infrastructure Protection Program:

For the Los Angeles County, Orange County, Riverside and San Diego County, and Western San Bernardino County regions project descriptions, first line: change “needed repairs” to needed improvements ...”
22. Page 69. System Flexibility/Supply Reliability Program:
  - a. Change the Total Project Estimate for the Perris Valley Pipeline –Tunnels from \$30,000,000 to \$65,000,000
23. Page 70. Perris Valley Pipeline – Tunnels:
  - a. Eighth line: Replace the sentence starting with “This project includes ...” with “This project consists of construction of an approximate 1,700-foot-long tunnel and tie-ins to the previously constructed reaches ...”
24. Page 75. Information Technology Service Management System:

Third sentence, change “...requests and incidents” to “...requests, incidents, change requests, IT asset management, and other related functions.”
25. Page 79. Eagle Rock Security Project:

Last sentence, change “...detectors, and signage.” To “...detectors, signage, and other related security features.”
26. Page 84. Treatment Plant Reliability Program:
  - a. Change FY 2020/21 Estimate from \$48.1 million to \$48.6 million
  - b. Change FY 2021/22 Estimate from \$29.4 million to \$27.6 million
27. Page 92. Jensen Ozone Generator PLC Control and Communication Equipment Upgrade:
  - a. Change the project title to: “Jensen Ozone PSU and Critical Component Upgrade”
28. Page 101. Accomplishments for FY 2018/19 and FY 2019/20
  - a. Major milestones achieved during the last biennium. Delete “Weymouth Ozonation Facilities – Completed start-up and commissioning”