

June 5, 2019

TO THE BOARD OF DIRECTORS:

Robert Stockton, President
Donald D. Galleano, Vice President
S.R. "Al" Lopez, Secretary-Treasurer
Brenda Dennstedt
Gracie Torres

FROM: Craig D. Miller, General Manager

CONSIDER ADOPTION OF THE CAPITAL IMPROVEMENT AND FACILITIES PLAN FOR FISCAL YEAR 2019-2020

RECOMMENDATION:

Staff recommends that the Board of Directors approve the Capital Improvement and Facilities Plan (Plan) for Fiscal Year 2019-2020.

EXECUTIVE SUMMARY:

As discussed at the May 15, 2019 Board Workshop, the objective of the current capital planning process is to develop a comprehensive report that provides summary information about planned capital project investments in the coming years. This forward-looking report will document Western Municipal Water District's (District) strategic projects by describing each project's linkage to the District's Strategic Priorities and necessity as well as the project cost and implementation timeline. The report will also identify the multiple factors considered in prioritizing the individual projects. Staff will finalize the comprehensive report in summer 2019 following Board approval of the Plan.

The proposed Fiscal Year 2019-2020 spending includes projected expenditures of \$37,789,279. Funding offsets for select projects of \$20,725,000 results in a net total of \$17,064,279 in Western cash expenditures to complete the individual projects in the first year of the Plan. Funding offsets are derived from State Revolving Fund financing, Federal and State grant funding, and third party commitments for specific projects.

It is important to note that if the Board approves this Plan, the Board is not authorizing each project listed within the Plan. All projects that require execution of a public works contract in excess of \$35,000, or will result in a total expenditure of more than \$100,000, will be brought to the Board for individual project consideration.

BUDGET IMPACT:

If the Board of Directors elect to adopt the Plan with Fiscal Year 2019-2020 projected spending of \$37,789,279, it will provide staff, under the General Manager's direction:

1. Spending authority for the listed projects with a total cost of less than \$100,000 not requiring a public works contract; and
2. A discretionary fund of \$300,000 to be expended on unanticipated capital projects in accordance with the requirements and authority levels established through the District's purchasing policy.

All projects outlined in the attached listing with a public works contract in excess of \$35,000 or a total cost of more than \$100,000 will be presented to the Board of Directors for individual project approvals.

DETAIL:

Background:

The proposed Fiscal Year 2019-2020 Plan includes projected expenditures of \$37,789,279. Funding offsets for select projects of \$20,725,000 results in a Plan net total of \$17,064,279 in Western cash expenditures necessary to complete the individual projects. Funding offsets are derived from State Revolving Fund financing, Federal and State grant funding, and third party commitments for specific projects, such as the Enhanced and Active Recharge Projects in the San Bernardino Basin Area.

Staff thoroughly reviewed and prioritized the projects listed in the attached listing through a collaborative, multi-departmental process. Projects were prioritized following careful consideration of current asset condition, availability of funding, regulatory requirements, safety, and consequence of failure, just to list a few. The goal of the team's collaborative approach to project selection and ranking is to provide the Board with the confidence to approve the individual projects as they are both considered collectively and brought individually before the Board. In addition to a review of the need and timing of these specific projects, staff has reviewed the individual project workloads as well as the combined workload of the entire proposed Plan to ensure that we have the workforce to complete the projects listed in a timely manner.

The project listing for Fiscal Year 2019-2020 also includes the projects and associated funding obligations related to the District's Joint Powers Authority partnerships in the Chino Desalter Authority (CDA), the Santa Rosa Regional Resources Authority (SRRRA) and the Western Riverside County Regional Wastewater Authority (WRCRWA). The complete listing also includes known projects in the four-years following Fiscal Year 2019-2020. Although these future year projects were evaluated in the current process, they will be reevaluated each year to ensure that the District remains focused on the most important projects.

In addition to the comprehensive listing attached to this letter, the planned Fiscal Year 2019-2020 expenditures have been categorized below into the District's funding areas: Operating, Water Reliability, Asset Replacement and projects related to Added Facilities.

Operating Funds:

Name (Fund #'s)	Total Amount
General District Activities (100, 106, 107, 108)	\$7,530,000
Fleet Expansion (144)	\$154,890
Riverside Potable Water (200, 204, 220, 224)	\$2,330,500
Murrieta Potable Water (230, 234)	\$350,000
Western Water Recycling Facility (WWRF) (320, 324, 330, 334, 344)	\$100,000
Murrieta Wastewater (354)	\$550,000
Arlington Desalter (410, 414)	\$120,000

Water Reliability Funds:

Name (Fund #'s)	Total Amount
Riverside Water Reliability (206)	\$13,800,000

Added Facilities Charge (AFC) Funds:

Name (Fund #'s)	Total Amount
Riverside Potable Water AFC (201)	\$300,000
WWRF Treatment & Conveyance AFC (321)	\$200,000
Murrieta Wastewater AFC (351)	\$150,000

Asset Replacement Funds:

Name (Fund #'s)	Total Amount
General District Asset Replacement (105)	\$150,000
Vehicle Asset Replacement (145)	\$550,000
Operations Asset Replacement (165)	\$770,000
Riverside Potable Asset Replacement (205)	\$375,000
Riverside Non-potable Asset Replacement (215)	\$274,165
March East Asset Replacement (225)	\$350,000
Murrieta Water Asset Replacement (235)	\$2,750,000
La Sierra Asset Replacement (315) (flows to WRCRWA)	\$1,181,337
WWRF Asset Replacement (325, 335, 345)	\$755,000
Mills Gravity Line Major Maintenance (407)	\$126,000
Arlington Desalter Asset Replacement (415)	\$897,000

Reason for Action:

The Capital Improvement and Facilities Plan identifies the District's capital project priorities for Fiscal Year 2019-2020 and also gives a current view of the capital project forecast four-years out into the future. The Plan also provides District staff with guidance in workload and project planning.

Solution:

Approve the Capital Improvement and Facilities Plan for Fiscal Year 2019-2020.

BUSINESS PLAN REFERENCE:

No specific Business Plan reference; this action is part of Western's routine business activities.

LEGAL COUNSEL REVIEW:

Not Applicable

CRAIG D. MILLER
General Manager

Attachment(s):

1. Proposed Fiscal Year 2019-2020 Capital Improvement and Facilities Plan
2. Capital Improvement and Facilities Plan Presentation

Western Municipal Water District

Proposed Fiscal Year 2019-2020 Capital Improvement & Facilities Plan

Department Key:
 X = JPA Projects (PROJ # 900)
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		(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	Total
2019/2020	2019/2020	2020/2021	2020/2021	2021/2022	2021/2022	2022/2023	2022/2023	2023/2024	2023/2024	
TOTAL	37,789,279	(20,725,000)	17,076,890	(6,250,000)	8,538,890	(1,050,000)	4,414,890	(775,000)	3,985,000	-
Net Totals	17,064,279	10,826,890	7,488,890	3,639,890	3,985,000					

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	Project Hours	Total Support Hours	Total Project Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)	2019/2020	(Offset) 2019/2020	2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	Total	
901-1920-X	A	TBD	CDA Projects (Western's Portion)	Kawaii, Derek	Western's portion of projects approved by the CDA.	N/A	N/A	N/A	CDA Asset Replacement Fund	425		209,173										209,173	
902-1920-X	A	TBD	SRRRA Projects (Western's Portion)	Kawaii, Derek	Western's portion of projects approved by the SRRRA Board.	N/A	N/A	N/A	Murrieta Wastewater Asset Replacement	355		159,798											159,798
903-1920-X	A	TBD	WRCRWA Projects (Western's Portion)	Pollak, Anthony	Western's portion of projects approved by the WRCRWA Board.	2380	126	2506	La Sierra Area Asset Replacement Project	315		1,142,753											1,142,753
6000-1819-E	A	2520	Sterling Reservoir and Pump Station	Manghi, Fakhri	Complete the construction of the Sterling Reservoir and Pump Station.	320	40	360	Riverside Water Reliability Charge	206	SRF Loan Offset	13,800,000	(13,800,000)										-
6001-1819-E	A	9181	North Well #2	Manghi, Fakhri	This project will drill and equip a new well adjacent to the existing one. This project will increase water reliability by reestablishing an existing source of groundwater.	360	52	412	Murrieta Asset Replacement Project	235		2,750,000											2,750,000
6002-1819-E	A	9062	Tank Top Fall Protection	Huff, Sonia	Install tank fall restraint systems to safely acquire access to roof of existing reservoirs for inspection and monitoring purposes. Construction to begin June 2019.	160	0	160	Riverside Potable Water System Improvement Project	204		500,500											500,500
8000-1819-O	A	J1166	Hydro-Excavator Vehicle Lease	Chang, Alexander	Due to the network of underground utility lines encountered while excavating, this machine increases work site safety and reduces risk. This is to continue with the leasing agreement for this vehicle.	12	12	24	Fleet Expansion Project	144		108,122		108,122		108,122		108,122					432,488
8001-1819-O	A	J1168	CCTV Inspection Vehicle Lease	Chang, Alexander	Robotic Closed Circuit TV (CCTV) inspections are the most frequent used, cost efficient, and most effective method to inspect the internal condition of a wastewater collection system. This is to continue with the leasing agreement for this vehicle.	12	12	24	Fleet Expansion Project	144		46,768		46,768		46,768		46,768					187,072
6019-1920-E	A	NEW	Canon Street Interconnection with RPU	McMahon, Heath	Install interconnection with RPU and construct new pump station on Canon Road with chemical dosing for chloramine.	450	40	490	Riverside Potable Water System	204	Transfer of SARCCUP funds	500,000	(500,000)	4,000,000	(4,000,000)								-
6003-1819-E	A2.2	9170	MARB Pipe - Graeber St	Huff, Sonia	MARB Pipeline Replacement for Graeber Street. Project to be completed by Feb 2020 due to airshow in March 2020.	620	90	710	March East Asset Replacement Project	225		4,045,000											4,045,000
1000-1819-A	A1.8	9162	Content Management System	Bohn, Cynthia	Continued implementation of an Electronic Content Management System (ECMS) that will be used to manage the lifecycle of District records in a standardized, searchable way.	300	100	400	IT Project	108		100,000		50,000		50,000		50,000					250,000
5000-1819-W	A1.7	9164	Upper Santa Ana River Habitat Conservation Plan/SAR Integrated Model	Shaw, Ryan	The purpose of the Upper SAR HCP is to enable the water resource agencies to continue to provide and maintain a secure source of water for the residents and businesses in the watershed.	180	0	180	Water Resources Development Project	107	HCP Partner Agencies	900,000	(450,000)	1,000,000	(600,000)								850,000
5001-1920-W	A1.4	NEW	Riverside Basin Replenishment Obligation: WR-23	Shaw, Ryan	Perform WR-23 condition assessment and complete necessary electrical and hardware upgrades. Perform replenishment study and obtain necessary environmental permits.	80	0	80	Water Resources Development Project	107	SARCCUP Funding and Valley District	400,000	(250,000)										150,000
5002-1819-W	A1.3	9030	Enhanced Recharge Project - SAR Spreading Basins	Shaw, Ryan	This is a joint project between WMWD, San Bernardino Valley Municipal Water District, San Bernardino Valley Water Conservation District, and the City of Riverside. An analysis performed as part of the Santa Ana River Watershed Integrated Regional Water Management Plan determined that an estimated 80,000 AFY of water can be recharged into the Bunker Hill Basin.	40	0	40	Water Resources Development Project	107	Plaintiff Party Cost Sharing Agreements	5,000,000	(4,975,000)	1,100,000	(1,075,000)	500,000	(475,000)						75,000
5003-1819-W	A1.3	9055	Active Recharge Project - SAR Tributaries	Shaw, Ryan	The Western-San Bernardino Watermaster identified access to additional water rights in the SBBA. This project seeks to capture these new water rights. This is a joint project between San Bernardino Valley Municipal Water District and Western Municipal Water District on behalf of the plaintiff parties.	60	0	60	Water Resources Development Project	107	Plaintiff Party Cost Sharing Agreements			600,000	(575,000)	600,000	(575,000)	800,000	(775,000)				1,142,753
4000-1819-M	A0	TBD	Unplanned Projects < \$100k	Miller, Craig	Funding for emergency and/or unplanned projects less than \$100,000 authorized by the GM.	20	0	20	General District	100		300,000		300,000		300,000		300,000		300,000			1,500,000

NOTE: Projects in bold lettering represent them as a top 10 project in terms of cost

Western Municipal Water District

Proposed Fiscal Year 2019-2020 Capital Improvement & Facilities Plan

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8002-1920-O	B2.6	NEW	Chlorine Analyzers at Reservoirs	Magallon, Luis	Chlorine analyzers will give operators a real time look at the water quality of the reservoirs. Analyzers will monitor reservoir residuals and track water quality trends.	8	36	44	Riverside Potable Water System Improvement Project	204		30,000		30,000		30,000						60,000
6004-1819-E	B2.5	9173	ADS Well Rehab	Manghi, Fakhri	Rehabilitate the pumps and casings of the Arlington Desalter wells.	160	50	210	Arlington Desalter Asset Replacement	415		250,000		250,000		250,000		250,000				1,000,000
8003-1920-O	B2.5	9205	Reach F Earthquake Valve Actuator Replacement	Baringer, Jason	Replacement of the Reach F Earthquake valve actuator and control due to a previous failure in 2018. Due to a delay in the original parts order, installation is not slated to be complete until late summer 2019.	20	0	20	MGL Major Maintenance Project	407		126,000										-
8004-1920-O	B2.5	NEW	ADS Train Valve Replacement	Magallon, Luis	The valves connecting the CIP system to the trains are leaking. By addressing these now, we reduce chemical costs and increase the life span of the membranes.	8	80	88	Arlington Desalter Asset Replacement Project	415		40,000		40,000		40,000						120,000
8005-1920-O	B2.5	NEW	ADS RO Feed Valves and Actuators	Baringer, Jason	Replace valves and actuators due to aging.	20	0	20	Arlington Desalter Asset Replacement	415		32,000										32,000
8006-1819-O	B2.5	9195	ADS Process Control Analyzer	Magallon, Luis	REPLACEMENT- New EC and nitrate analyzers for all three trains. These analyzers are over ten years old.	40	20	60	Arlington Desalter Asset Replacement	415		25,000										25,000
8007-1920-O	B2.4	NEW	WWRF Tertiary Filter Rehabilitation	Pollak, Anthony	Replacement of the Aqua-Aerobics cloth media for filters 2 and 3 that are original since the expansion.	100	20	120	WWRF Treatment Asset Replacement	325		60,000										60,000
6020-1920-E	B2.4	9206	Nandina Manhole Rehab/Replacement	Manghi, Fakhri	16 manholes have been identified through condition assessment as in need of replacement or rehabilitation due to corrosion.	120	40	160	WWRF Conveyance West Asset Replacement Project	345		650,000										650,000
6021-1920-E	B2.4	NEW	Murrieta Inverted Siphon Max Capacity (collection system)	McMahon, Heath	Upgrade the Lemon St. inverted siphon currently operating over capacity due to upstream development.	280	20	300	Murrieta Wastewater System Improvement	354		550,000										550,000
6005-1819-E	B2.3	9201	Meridian Landscape Update	McMahon, Heath	Replace landscaping and irrigation at the Meridian facility, while incorporating a demonstration garden.	60	800	860	HQ Asset Replacement Project	105		150,000		150,000								300,000
8008-1819-O	B2.3	9140.4	Pump Motor Efficiency Program	Baringer, Jason	Using 3rd party efficiency testing, equipment will be rated and prioritized based on its efficiency percentage.	40	20	60	Riverside Potable Water Asset	205		150,000		150,000								300,000
8009-1819-O	B2.3	NEW	Water Systems Operations Plan Implementation	Miller, Gary	Hire consultant to assist in development of an operational plan for the potable water production and distribution system. Phase 1 will identify quick and easy changes we can make to our current operational strategy.	200	32	232	Riverside Potable Water System Improvement Project	204		100,000		100,000								200,000
8010-1819-O	B2.3	9189.4	1269 Submersible Pump Replacement	Baringer, Jason	Replace three (3) submersible pumps (2X 40HP 1X 125HP) at 1269 lift station, that have over time become substantially less efficient. MCCs are also outdated and need replacement. This will be done in conjunction with pump replacement.	40	50	90	WWRF Conveyance East Asset Replacement Project	335		45,000		35,000								80,000
8011-1920-O	B2.2	NEW	Replace Existing Hydro-Vac Truck	Chang, Alexander	This is a multipurpose machine that provides both sewer jetting and wet vacuum options. The replacement of this equipment will maintain public health cleaning practices and response to Sanitary Sewer Overflow (SSO) events.	50	0	50	Vehicle Asset Replacement Project	145		550,000										550,000
3000-1819-I	B2.2	9207	Computer Systems, Servers, & Network Infrastructure	Mouser, Michael	This project is an ongoing effort to replace capital IT equipment as needed annually.	40	0	40	IT Project	108		200,000		75,000		75,000		75,000		75,000		500,000
8012-1819-O	B2.2	9190.4	Natural Gas Engine Overhaul Program	Baringer, Jason	Perform factory recommended complete engine overhauls on natural gas engines at Bergamont and Holcomb pump stations; one unit per year, over the next 5 years.	60	30	90	Riverside Potable Water Asset Replacement Project	205		125,000		125,000		125,000		125,000				500,000
8013-1819-O	B2.2	9159	Distribution System Vault Hatch Replacement Program	Chanes, Lawrence	Replace aged vault lids with newer and safer technology that is more easily secured and opened.	40	0	40	Riverside Potable Water Asset	205		100,000		100,000		100,000		100,000				400,000
6006-1819-E	B2.1	NEW	Victoria Basin Culvert	Manghi, Fakhri	A study will be conducted by an engineer to determine the scope of a culvert to prevent potential hazards.	200	0	200	Arlington Desalter System Improvement	414		120,000		1,200,000								1,320,000
8014-1819-O	B2.1	9144	SCADA Master Plan	Standing Warrior, Bull	This plan will provide guidelines for all SCADA projects. The implementation plan outlines the recommended HMI and PLC hardware and software, design standards, communication, proper documentation and system implementation.	600	60	660	Ops Asset Replacement Project	165		640,000		950,000		735,000		800,000		645,000		3,770,000

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2000-1819-F	B2.1	9131.2	Meter Replacement and Retrofit Project (Phase I)	Mascaro, Kevin	Enhance meter accuracy and customer equity by replacing or retrofitting meters in the Riverside Service Area that are 15 years or older with AMI-compatible meters.	60	0	60	Riverside Potable Water System Improvement Project	204	Reclamation Grant	500,000	(500,000)									-
8015-1819-O	B2.1	9161	ADS Automation Upgrade	Standing Warrior, Bull	Automation upgrade to current HMI and PLCs' for the Desalter, Turnouts and Pump Stations. The current control system is beyond its useful life.	160	80	240	Arlington Desalter Asset Replacement Project	415		350,000										350,000
6007-1819-E	B2	9172	Riverside Reservoir Management System (RMS)	McMahon, Heath	RMS will decrease the amount of flushing necessary to maintain water quality. Overall system water quality will improve and public health protection increased.	240	310	550	Riverside Potable Water System Improvement Project	204		600,000										600,000
6008-1819-E	B2	NEW	Facilities Master Plan Riverside Potable and Recycled	Francis, Karl	Preparation of a Facilities Master Plan for the Riverside area potable and recycled services.	200	8	208	Riverside Potable Water AFC Project	201		300,000										300,000
6009-1819-E	B2	NEW	Facilities Master Plan Riverside Retail Sewer	Francis, Karl	Preparation of a Facilities Master Plan for the Riverside area sewer services.	200	8	208	WWRF AFC Project (e.g. Master Plan or	321		200,000										200,000
8016-1920-O	B2	NEW	ADS RO Membrane Replacement	Magallon, Luis	Membrane life expectancy is 7 years. Replacing each train on a year-over-year basis until all have been replaced.	80	0	80	Arlington Desalter Asset Replacement	415		200,000		200,000		200,000						600,000
1001-1920-A	B2	NEW	Meridian Electrical Breaker Installation	Bohn, Cynthia	This project will reduce the likelihood of a power outage at Meridian due to power spikes from SCE during high peak energy usage and HVAC equipment failures.	100	20	120	HQ Facility Improvement Project	106		100,000										100,000
6026-1819-E	B2	NEW	Murrieta Sewer Master Plan	Francis, Karl	Preparation of a Facilities Master Plan for the Murrieta area sewer services.	200	8	208	Murrieta Wastewater AFC Project (e.g.	351		150,000										150,000
6010-1819-E	B1.9	9198	Recoat Jim Jack Tank	Felix, Sergio	The contract for Jim Jack Tank will include the design team diving the tank, perform seismic assessment and providing specs for rehabilitating and coating the tank.	280	68	348	Riverside Non-potable Water Asset Replacement Project	215		164,165		1,500,000								1,500,000
6011-1819-E	B1.9	NEW	Tank Maintenance Program Non-Potable ~ Recycled	Felix, Sergio	Currently working on Jim Jack assessment, funds for future tank evaluations deferred until FY 20/21.	280	68	348	Riverside Non-potable Water Asset	215		110,000		700,000		280,000		600,000		220,000		1,800,000
3001-1819-I	B1.9	9178	GIS Application Improvements	Mouser, Michael	Complete development of new Meter Fee, GIS Viewer, & Dig Alert applications.	180	20	200	IT Project	108		50,000										50,000
8017-1819-O	B1.9	9197.4	Operations Workspace Improvements	Wilcox, Anita	Obtain design recommendations. Implement cost effective and efficient workspace solution for the highest number of stations reasonable for the area.	40	0	40	Ops Asset Replacement Project	165		30,000										30,000
3002-1819-I	B1.9	NEW	Wireless Microwave Wide Area Network (WAN) Expansion	Mouser, Michael	This project is to expand the District's existing microwave WAN to include the Arlington Desalter and Sterling Pump Station. This project was originally planned for FY 18/19.	60	20	80	IT Project	108		80,000										-
6012-1819-E	B1.8	NEW	Reservoir Management - Murrieta	McMahon, Heath	Adding a tank mixing system to the existing reservoirs will allow tanks to be kept at a high level rather than cycling the tanks from high to low water levels.	180	238	418	Murrieta System Improvement Project	234		350,000										-
8018-1920-O	B1.8	NEW	Asset ID Standards (Phase 2)	Arimas, Maribel	This is a continuation of Asset Identification Standards project, including the expanded assessment and design of standards beyond P&ID.	250	0	250	Ops Asset Replacement Project	165		100,000										-
6013-1819-E	B1.7	NEW	WWRF Solids Handling Study	McMahon, Heath	Conduct study to assess sewer treatment capacity and reliability by enhancing wet weather solids handling capacity.	160	0	160	WWRF Treatment System Improvement	324		100,000										100,000
5004-1819-W	B1.7	9127	SARCCUP Planning Activities	Shaw, Ryan	This project is being funded through SARCCUP grant funds. It includes CEQA, feasibility studies, and well site studies.	460	40	500	Water Resources Development Project	107		400,000	(250,000)									150,000
2001-1920-F	B1.7	NEW	Online Retail Water Customer Portal (AMI Phase II)	Mascaro, Kevin	Provide customers that have a smart meter to access their water usage online and receive alert notifications.	120	180	300	Riverside Potable Water System	204		100,000										-
6023-2021-E	C	NEW	New Electrical Pump at Holcomb Pump Station	McMahon, Heath	Add an additional electrical pump to Holcomb Pump Station to realize more cost effective operations over time.	260	60	320	Riverside Potable Water System	204						300,000						300,000
8019-1920-O	C2.5	NEW	ADS RO Feed Pump Replacement	Baringer, Jason	Purchase a mission critical spare pump for Arlington Desalter RO pumps to minimize service interruption to our customers and increase efficiency in labor hours.	40	20	60	Arlington Desalter Asset Replacement Project	415				100,000								100,000
8020-1920-O	C2.5	NEW	ADS Clean in Place Pump Replacement	Magallon, Luis	CIP pump needs to be replaced to extend the life span of membranes.	2	20	22	Arlington Desalter Asset Replacement	415				50,000								50,000

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Western Municipal Water District

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		(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	Total
2019/2020	2019/2020	2020/2021	2020/2021	2021/2022	2021/2022	2022/2023	2022/2023	2023/2024	2023/2024	
TOTAL	37,789,279	(20,725,000)	17,076,890	(6,250,000)	8,538,890	(1,050,000)	4,414,890	(775,000)	3,985,000	-
Net Totals	17,064,279	10,826,890	7,488,890	3,639,890	3,985,000					

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	Project Hours	Total Support Hours	Total Project Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)	2019/2020	(Offset) 2019/2020	2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	Total
8021-1920-O	C2.5	NEW	Non-Potable Pump Efficiency Program	Baringer, Jason	Reliability - Replacement of the Districts non-potable pumps and motors identified to be at the end of their useful service life.	70	30	100	Riverside Non-potable Water Asset Replacement Project	215				80,000								80,000
8022-1819-O	C2.3	9186	ADS Dist Pumps 1-4 Replacement	Baringer, Jason	Purchase one mission critical spare ADS distribution pump for pumps 1, 2, 3, and 4. Pumps will be replaced as condition and/or efficiency testing dictates the need.	40	20	60	Arlington Desalter Asset Replacement Project	415				150,000		150,000						300,000
8023-1819-O	C2.3	9146.4	VFD Replacement - Non-Potable System	Standing Warrior,	Assess and prioritize variable frequency drives (VFD) that have exceeded their life expectancy and are no longer supported.	80	0	80	Riverside Non-potable Water Asset	215				75,000								75,000
6014-1819-E	C2.2	9187	Grizzly Ridge Rehabilitation	McMahon, Heath	Project will consist of lining or replacing the existing steel bolted tank with a welded steel tank and mixing system.	480	32	512	Murrieta Asset Replacement Project	235					1,100,000							1,100,000
8024-1819-O	C2.2	9149	ADS MOV Replacement	Baringer, Jason	The Desalter treatment system contains multiple motor operated valves (MOV) and failure could result in significant down time for the plant. The MOV's would be prioritized, then rebuilt or replaced.	40	20	60	Arlington Desalter Asset Replacement Project	415				20,000				20,000				40,000
1005-2021-A	C2.2	NEW	Installation of LED lighting at Meridian	Bohn, Cynthia	Replace discontinued fluorescent lighting ballasts with new more efficient LED ballasts.	60	0	60	HQ Facility Improvement Project	106										400,000		400,000
8025-1819-O	C2.1	9193	Replace Valves at Oleander Pump Station	Chang, Alexander	Install isolation valves outside of pump station to isolate flow for purposes of dewatering and completing necessary repairs as a short-term solution.	40	0	40	Riverside Potable Water Asset Replacement Project	205					125,000							125,000
8026-1920-O	C2.1	NEW	Sampling Station Upgrade	Magallon, Luis	Upgrade outdated sample cans with newer cans to provide more coverage from the elements that can result in positive samples.	8	80	88	Riverside Potable Water System Improvement Project	204				20,000		20,000		20,000		20,000		80,000
6015-1819-E	C2	NEW	Tank Maintenance Program - Rainbow	McMahon, Heath	Pending a project consultant to begin work to coat and paint the Rainbow tank.	240	20	260	Rainbow/Rock Mountain Asset	245				75,000		795,000						870,000
6016-1819-E	C2	9155	MGL Isolation & Earthquake Valves and Blow-offs	Manghi, Fakhri	Upgrade or install additional isolation valves, earthquake valves and blow-offs along the fourteen mile pipeline has been identified.	120	0	120	MGL Major Maintenance Project	407				325,000		650,000				650,000		1,625,000
6024-2021-E	C2	NEW	Asphalt Replacement - Orangecrest	McMahon, Heath	The asphalt at the site is beyond its useful life and now poses a safety concern for District staff as identified by the District's Safety Manager.	40	0	40	Riverside Potable Water System Improvement Project	204						200,000						200,000
6017-1819-E	C1.9	NEW	Tank Maintenance Program Potable	McMahon, Heath	Perform periodic dive and dry inspections for 11 active tanks. Recoat tanks at approximate 10-year intervals and cleaning or minor coating repairs between these intervals.	240	0	240	Riverside Potable Water Asset Replacement Project	205				655,000		280,000		595,000				1,530,000
6018-1819-E	C1.9	3648	1269 Lift Station	McMahon, Heath	Update electrical equipment, rebuild 3' higher to protect from 100-year flood, and increase wet well size to accommodate rain associated inflows.	640	0	640	WWRF Conveyance East Asset Replacement Project	335				150,000		450,000				1,200,000		1,800,000
8028-1920-O	C1.9	NEW	Asphalt Seal Coating - Potable	Chanes, Lawrence	Implement a multi-year program to seal coat all Distribution system Potable water facilities to extend the life span of all paved Pump stations and Reservoirs.	20	0	20	Riverside Potable Water System Improvement Project	204				50,000		50,000		50,000		50,000		200,000
8029-1920-O	C1.9	NEW	Asphalt Seal Coating - Non-Potable	Chanes, Lawrence	Implement a multi-year program to seal coat all Distribution system Non-Potable water facilities to extend the life span of all paved Pump stations and Reservoirs.	20	0	20	Riverside Non-potable Water Asset Replacement Project	215				25,000		25,000		25,000		25,000		100,000
8030-1920-O	C1.9	NEW	Asphalt Seal Coating - La Sierra Collection System Lift Stations	Chang, Alexander	Implement a multi-year program to seal coat all Collection system Lift Stations to extend the life span of all paving.	40	0	40	La Sierra Area Asset Replacement Project	315						30,000						30,000
8031-1920-O	C1.9	NEW	Asphalt Seal Coating - WWRF Collection System Lift Stations	Chang, Alexander	Implement a multi-year program to seal coat all Collection system Lift Stations to extend the life span of all paving.	40	0	40	WWRF Conveyance West Asset	345						70,000						70,000
1006-2021-A	C1.8	NEW	IT Server Room Air Conditioner Replacement	Bohn, Cynthia	Replace existing A/C units with two 6-ton split systems with multi-stage condensing units.	100	0	100	HQ Asset Replacement Project	105				112,000								112,000
8032-1920-O	C1.6	NEW	Warehouse Assessment	Arimas, Maribel	Development of technical memo addressing storage capacity and layout design and optimization, as well as evaluation of inventory methods.	250	0	250	Ops Asset Replacement Project	165				100,000								100,000

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		(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	(Offset)	Total	
	2019/2020	2019/2020	2020/2021	2020/2021	2021/2022	2021/2022	2022/2023	2022/2023	2023/2024	2023/2024	
TOTAL	37,789,279	(20,725,000)	17,076,890	(6,250,000)	8,538,890	(1,050,000)	4,414,890	(775,000)	3,985,000	-	43,004,949
Net Totals		17,064,279		10,826,890		7,488,890		3,639,890		3,985,000	

Project #	Rank	Activity #	Project Name	Project Manager	Project Description	Project Hours	Total Support Hours	Total Project Hours	Fund Description	Fund	Offset Explanation (Grants/Loans)	2019/2020	(Offset) 2019/2020	2020/2021	(Offset) 2020/2021	2021/2022	(Offset) 2021/2022	2022/2023	(Offset) 2022/2023	2023/2024	(Offset) 2023/2024	Total
3007-2021-I	C1.5	NEW	District Facilities Audio/Visual Upgrade	Mouser, Michael	Plan and complete an upgrade to the audio/visual systems in the District's Board room and certain conference rooms.	120	0	120	HQ Facility Improvement Project	106						300,000						300,000
5005-1819-W	C1.4	3542	Riverside North Aquifer Storage & Recovery Project	Shaw, Ryan	This is a joint project between Western, the City of Riverside, and San Bernardino Valley Municipal Water District. It includes diversion of Santa Ana River water in-stream and off-stream recharge facilities and a possible Santa Ana Valley Pipeline connection.	180	10	190	Water Resources Development Project	107				-				-				-
8033-1819-O	D2.5	9168.4	Potable Distribution System Rehabilitation	Chanes, Lawrence	Assessments of the District's water storage facilities and pump stations is ongoing. Funding the rehabilitation will allow staff to prioritize facilities based on need.	80	0	80	Riverside Potable Water System Improvement Project	204				150,000								150,000
8034-1920-O	D2.5	NEW	ADS Delivery Isolation Valves etc	Magallon, Luis	Addition of isolation valves to ensure ability to operate MICADS system efficiently.	2	70	72	Arlington Desalter System Improvement	414				600,000								600,000
8035-1920-O	D2.4	NEW	ADS Salt Tank Platform	Magallon, Luis	Install a platform to monitor tank level and distribute salt as needed in a more efficient manner.	2	20	22	Arlington Desalter System Improvement	414				50,000								50,000
6025-2122-E	D2.3	NEW	Recycled Water Reservoir (Orange Crest)	McMahon, Heath	Implement study of the storage capacity and pressure levels for recycled water in the distribution system.	480	80	560	Riverside Non-potable Water System	214						300,000						300,000
8036-1920-O	D2.2	NEW	Portable Chlorine Boosting Trailer	Magallon, Luis	Enhance the nitrification process in our system by replacing outdated powder with a liquid chlorine unit.	8	0	8	Ops Equipment Acquisition Project	166				100,000								100,000
8037-1920-O	D2.1	NEW	Purchase Emergency Generators	Standing Warrior, Bull	This project serves to avoid loss of water distribution, sewer collection, and wastewater treatment by placing permanent generators at critical facilities.	40	0	40	Ops Equipment Acquisition Project	166				750,000								750,000
1002-1920-A	D2	NEW	Meridian Generator Expansion	Bohn, Cynthia	Expand number of circuits to be powered by generator in the event of an electrical outage.	100	0	100	HQ Facility Improvement Project	106						30,000						30,000
6022-1920-E	D1.9	NEW	Solar Site Erosion Damage Repair	McMahon, Heath	Repair erosion damage from runoff of solar panel site at Operations near MWD channel.	160	0	160	Ops Facility Improvement Project	167				80,000								80,000
8038-1920-O	D1.9	NEW	Machine Shop Equipment Assessment and Development	Baringer, Jason	Re-purpose the old auto shop building to house a machine shop and procure machine shop equipment.	50	20	70	Ops Equipment Acquisition Project	166				50,000		50,000						100,000
3003-1819-I	D1.8	NEW	Meeting Room Technology Upgrade	Mouser, Michael	Complete an upgrade of the District's existing Room Wizard meeting room scheduling systems and expand the system to Operations conference rooms.	80	30	110	HQ Facility Improvement Project	106								90,000				90,000
3004-1920-I	D1.8	NEW	Water and Sewer Infrastructure Mapping - Murrieta Service Area	Conrad, Robert	Western seeks to improve its water and sewer line GIS mapping for the Murrieta service area.	160	80	240	Murrieta System Improvement Project	234				500,000								500,000
1003-1920-A	D1.7	NEW	Modifications to Cubicle Workstations	Bohn, Cynthia	Install privacy glass to existing workstations on the 2nd floor at Meridian location to improve efficiency.	60	0	60	HQ Facility Improvement Project	106						40,000		60,000				100,000
1004-1920-A	D1.6	NEW	Installation of Sound Proof Booth	Bohn, Cynthia	Installation of sound proof booth to be utilized for audio/video recordings for improved efficiency.	40	8	48	HQ Facility Improvement Project	106						34,000						34,000
3005-1920-I	D1.4	NEW	ERP Gap Analysis and Improvements	Mouser, Michael	Perform Gap Analysis and develop improvements for the District's ERP (Lawson) software system.	100	120	220	IT Project	108						100,000		200,000		200,000		500,000
3006-1920-I	D1.4	NEW	CWMS Gap Analysis and Improvements	Diaz, Patricia	Perform Gap Analysis and develop improvements for the District's CWMS(Infor/Hansen) software system.	100	80	180	IT Project	108								100,000		200,000		300,000
5006--W	D1.4	NEW	CRA Recycled Water Crossing	McMahon, Heath	This project is being funded through SARCCUP grant funds. It is an upgraded CRA crossing to allow the movement of recycled water/groundwater to the south side of the CRA.	40	0	40	Riverside Non-potable Water System Improvement Project	214												-

NOTE: Projects in bold lettering represent them as a top 10 project in terms of cost

Capital Improvement and Facilities Plan

June 5, 2019

Board of Directors



Western Municipal Water District

Capital Plan Timeline



May 2, 2018

- Board Adoption of FY 2018/2019 Capital Plan

October 29, 2018

- Committee Kick-Off Meeting

December 2018 - April 2019

- Data collection commenced
- Committee ranking & prioritization
- Financial impact review
- GM review

May 15, 2019

- Board Workshop

June 5, 2019

- Board consideration of FY 2019/2020 Capital Plan adoption

FY 2018/2019 Capital Improvement and Facilities Plan Budget

	Net Budget	% of Total
Top 10 Projects	\$9,664,951	65%
All Other Projects	\$5,242,780	35%
FY 18/19 Net Cash Outflow	\$14,907,731	100%

FY 2019/2020 Capital Improvement and Facilities Plan Budget

	Net Budget	% of Total
Top 10 Projects	\$10,852,753	64%
All Other Projects	\$6,211,526	36%
FY 19/20 Net Cash Outflow	\$17,064,279	100%

Top 10 Projects - Fiscal Year 2019/2020



Project Name	Cost	Offset	Net	% of Total
*Sterling Reservoir and Pump Station	\$13,800,000	(\$13,800,000)	-	-
Enhanced Recharge Project - SAR Spreading Basins	\$5,000,000	(\$4,975,000)	\$25,000	-
MARB Pipe - Graeber St	\$4,045,000	-	\$4,045,000	24%
*Murrieta North Well #2	\$2,750,000	-	\$2,750,000	16%
*WRCRWA Projects (Western's Portion)	\$1,142,753	-	\$1,142,753	7%
*Upper SAR HCP/SAR Integrated Model	\$900,000	(\$450,000)	\$450,000	3%
Nandina Manhole Rehab/Replacement	\$650,000	-	\$650,000	4%
SCADA Master Plan	\$640,000	-	\$640,000	4%
*Riverside Reservoir Management System	\$600,000	-	\$600,000	4%
Murrieta Inverted Siphon Max Capacity (collection System Lemon St)	\$550,000	-	\$550,000	3%
TOP 10 PROJECT TOTAL	\$30,077,753	(\$19,225,000)	\$10,852,753	64%
*Projects previously included in FY 18/19	All Other Projects		\$5,842,555	36%
FY 19/20 NET CASH OUTFLOW			\$17,064,279	100%

Capital Plan Funding Breakdown



Operating Funds

Fund Name (Fund #'s)	Total Amount
General District (100, 106, 107, 108)	\$7,530,000
Fleet Expansion (144)	\$154,890
Riverside Potable (200, 204, 220, 224)	\$2,330,500
Murrieta Water (230, 234)	\$350,000
WWRF (320, 324, 330, 334, 344)	\$100,000
Murrieta Wastewater (354)	\$550,000
Arlington (410, 414)	\$120,000

Water Reliability Charge

Fund Name (Fund #'s)	Total Amount
Riverside Water Reliability (206)	\$13,800,000

Asset Replacement

Fund Name (Fund #'s)	Total Amount
General District Asset Replacement (105)	\$150,000
Vehicles Asset Replacement (145)	\$550,000
Operations Asset Replacement (165)	\$770,000
Riverside Potable Asset Replacement (205)	\$375,000
Riverside Nonpotable Asset Replacement (215)	\$274,165
March East Asset Replacement (225)	\$350,000
Murrieta Water Asset Replacement (235)	\$2,750,000
WWRF Asset Replacement (325, 335, 345)	\$755,000
MGL Major Maintenance (407)	\$126,000
Arlington Desalter Asset Replacement (415)	\$897,000

Capital Plan Funding Breakdown



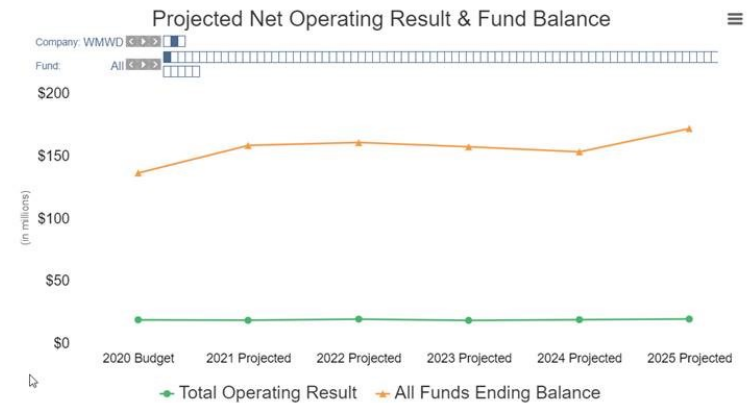
Added Facilities Charge (AFC)

Fund Name (Fund #'s)	Total Amount
Riverside Potable AFC (201)	\$300,000
WWRF Conv Treat Sewer AFC (321)	\$200,000
Murrieta Wastewater AFC (351)	\$150,000

JPA Projects

Fund Name (Fund #'s)	Total Amount
CDA Asset Replacement (425)	\$209,173
Murrieta Wastewater Asset Replacement (355)	\$159,798
La Sierra Asset Replacement (315) *WRCRWA*	\$1,142,753

- ✓ Review Reserve Level Targets
- ✓ Review Projected Ending Reserve Balances
- ✓ Review Days Cash on Hand
- ✓ Maintain Credit Ratings
- ✓ Analyze Most Effective Method to Fund Projects
- ✓ Long Range Financial Modeling



Balancing Risk with Affordability



	Current FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24
<i># of Projects</i>	55	52	46	36	20	12
<i>Planned Expenditures*</i>	\$14.9M	\$17M	\$10.8M	\$7.5M	\$3.6M	\$4M
<i>Days Cash on Hand</i>	406	389	385	385	396	406

**Includes Offsets (Loans, Reimbursements, and Grants)*

Consider Approval of FY 19/20 Capital Plan



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Project #	Rank	Activity #	Project Name	Project Manager	Project Description	Project Hours	Total Support Hours	TOTAL Project Hours	
999-1920-X	A	TBD	WRCRWA Projects (Western's Portion)	Pollak, Anthony	Western's portion of projects approved by the WRCRWA Board.	2380	126	2506	LR
6000-1819-E	A	2520	Sterling Reservoir and Pump Station	Manghi, Fakhri	Complete the construction of the Sterling Reservoir and Pump Station.	320	40	360	RR
6001-1819-E	A	9181	North Well #2	Manghi, Fakhri	This project will drill and equip a new well adjacent to the existing one. This project will increase water reliability by reestablishing an existing source of groundwater.	360	52	412	NR
6002-1819-E	A	9062	Tank Top Fall Protection	Huff, Sonia	Install tank fall restraint systems to safely acquire access to roof of existing reservoirs for inspection and monitoring purposes. Construction to begin in June 2019.	160	0	160	RWlr
8000-1819-O	A	J1166	Hydro-Excavator Vehicle Lease	Chang, Alexander	Due to the network of underground utility lines encountered while excavating, this machine increases work site safety and reduces risk. This is to continue with the leasing agreement for this vehicle.	12	12	24	FI
8001-1819-O	A	J1168	CCTV Inspection Vehicle Lease	Chang, Alexander	Robotic Closed Circuit TV (CCTV) inspections are the most frequent used, cost efficient, and most effective method to inspect the internal condition of a wastewater collection system. This is to continue with the leasing agreement for this vehicle.	12	12	24	FI
6019-1920-F	A	NFW	Cannon Street Interconnection with	McMahon	Install interconnection with RPU and construct new pump	450	40	490	R

Refer to Board Letter Attachment 1

QUESTIONS?