AGENDA

IRVINE RANCH WATER DISTRICT ENGINEERING AND OPERATIONS COMMITTEE

TUESDAY, APRIL 21, 2020

Due to COVID-19, this meeting will be conducted as a teleconference pursuant to the provisions of the Governor's Executive Orders N-25-20 and N-29-20, which suspend certain requirements of the Ralph M. Brown Act. Members of the public may not attend this meeting in person.

Participation by members of the Committee will be from remote locations. Public access and participation will only be available telephonically/electronically.

To virtually attend the meeting and to be able to view any presentations or additional materials provided at the meeting, please join online via Webex using the link and information below:

Via Web:

https://irwd.my.webex.com/irwd.my/j.php?MTID=macbc19f2cdaf7df3cc3b7be1185fb8db

Meeting Number (Access Code): 629 135 726

Meeting Password: GJsfHGEA832 (45734432 from phones and video systems)

After joining the meeting, in order to ensure all persons can participate and observe the meeting, please select the "Call in" option and use a telephone to access the audio for the meeting by using the call-in information and attendee identification number provided.

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the WebEx lobby when the Committee enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Committee once the closed session has concluded. Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

CALL TO ORDE	R 10:00 a.m.		
<u>ATTENDANCE</u>	Committee Chair: Doug Committee Member: Jo	<u></u>	
ALSO PRESENT	Paul Cook Jose Zepeda Rich Mori Kelly Lew Lars Oldewage John Dayer	Kevin Burton Paul Weghorst Eric Akiyoshi Jim Colston Malcolm Cortez Bruce Newell	Wendy Chambers Cheryl Clary Richard Mykitta Ken Pfister Scott Toland Mitch Robinson

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 12:00 p.m. on Monday, April 20, 2020.

ALL VOTES SHALL BE TAKEN BY A ROLL CALL VOTE.

COMMUNICATIONS

- 1. Notes: Burton
- 2. Public Comments
- 3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted.
- 4. Determine which items may be approved without discussion.

INFORMATION

5. MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONSTRUCTION STATUS QUARTERLY REPORT – TOLAND / MORI / BURTON

Recommendation: Receive and file.

ACTION

6. <u>MID-CYCLE CAPITAL BUDGET UPDATE FOR FISCAL YEARS 2019-20</u> AND 2020-21 – ROBINSON / AKIYOSHI / BURTON

Recommendation: That the Board receive and file the Mid-Cycle Capital Budget Update for Fiscal Years 2019-20 and 2020-21, and approve the Fiscal Years 2019-20 and 2020-21 Mid-Cycle Capital Budget Project additions as shown in the attached Exhibit "B."

OTHER BUSINESS

- 7. Directors' Comments
- 8. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

April 21, 2020

Prepared by: S. Toland / R. Mori

Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

MICHELSON WATER RECYCLING PLANT BIOSOLIDS AND ENERGY RECOVERY FACILITIES CONSTRUCTION STATUS OUARTERLY REPORT

SUMMARY:

Below is the November 2019 through March 2020 quarterly construction status report for the Michelson Water Recycling Plant (MWRP) Biosolids and Energy Recovery Facilities.

BACKGROUND:

Construction of the Biosolids project was awarded to Filanc/Balfour-Beatty Joint Venture (FBB) in March 2013 in the amount of \$163,465,940. The Biosolids project will provide biosolids digestion, dewatering, energy production, and on-site sludge drying. The project includes excavation for subsurface structures, installation of foundation piles, three egg-shaped methane digesters, a state-of-the-art odor control system, a biogas conditioning system and power generation using micro-turbines, a fats, oil and grease (FOG) receiving station, and new utility services. These facilities are being constructed on the land north of IRWD's existing Michelson Operations Center, maintenance shops, water quality laboratory, and warehouse.

General Project Information:

The project summary through March 31, 2020 and through Contract Change Order No. 112 is shown below.

Notice of Award	April 29, 2013
Contractual Project Completion Date	October 31, 2017
Estimated Project Completion Date	February 2021
Cumulative Time Extension through Change Order No. 112	368 Days
Percentage of Contractual Construction Time Elapsed	154%
Percentage of Total Contract Amount Invoiced	99.2%
Bid Amount	\$163,465,940
Total Change Orders	\$ 20,972,712 (12.8%)
Total Contract Amount	\$184,438,652
Amount Paid	\$183,106,665 (99.2%)

All major construction activities are complete including the solids handling building, digesters, digester control building, and ancillary facilities such as the FOG facilities, dewatering feed pump station and the storm water pump station. Since the last update, staff has accepted and taken control of the primary roads around the biosolids facilities, stormwater pump station No. 3, sample analysis room, and control room.

Engineering and Operations Committee: Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities Construction Status Quarterly Report April 21, 2020
Page 2

FBB continues to advance startup and testing activities. Over the past quarter, process control system testing of the anaerobic digestion equipment, including acid phase digesters, methane phase digesters, and sludge holding tanks, has been completed. Process control system testing has also been completed for the dewatering centrifuges, dewatering polymer system, ferric chloride feed system, anti-scalant feed systems, and centrate treatment systems. Equipment functional testing was recently completed on the heating water system, and the associated closed-loop hydronic piping was chemically cleaned, flushed and conditioned for final operation. FBB is now working on functional testing of the dewatered biosolids conveyance systems, the digester gas pre- and final-treatment systems, and FOG facilities. FBB will complete testing of the microturbines once the plant is generating sufficient biogas to supply the microturbines.

The storm water pump station was turned over to IRWD in December and has been in use during this winter season. IRWD took possession of the sample analysis room and has begun setting up the various lab equipment. IRWD also took possession of the control room and will officially take occupancy once the state certifies the elevators, which is estimated to occur in late April.

Staff continues to focus FBBs efforts on training for operations staff in advance of system operation and reliability testing. The construction management team continues to work with IRWD operations and laboratory staff to finalize the process and compliance sampling requirements and to ready the plant systems for operation by staff during commissioning of the facility.

Schedule Update:

FBB continues to advance the start-up activities for anaerobic digestion and dewatered conveyance systems; these systems are associated with Milestone Nos. 4 and 5. The remaining system operational testing (SOT) and system reliability testing (SRT) for Milestone Nos. 4 and 5 are scheduled to begin in early May and take approximately three to four weeks to complete.

Immediately following the successful completion of the SOT/SRT, staff anticipates introducing sludge through the system to begin maturation in the digesters. Sludge will initially be introduced intermittently over a set of fixed hours per day, and then gradually ramp up to continuous flow. Black and Veatch estimates that it will take approximately 45 days for the sludge to mature in the digesters and reach Class B production shortly thereafter. Operations staff will take the lead on plant operation once sludge is introduced, with support from FBB to address critical alarms and equipment issues.

Due to COVID-19 travel restrictions, the startup team from Andritz was recalled from the site by Andritz management due to safety concerns for its employees. The schedule for Class A production will be determined by when conditions allow Andritz to return its startup team to the site.

FISCAL IMPACTS:

Not applicable.

Engineering and Operations Committee: Michelson Water Recycling Plant Biosolids and Energy Recovery Facilities Construction Status Quarterly Report April 21, 2020
Page 3

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

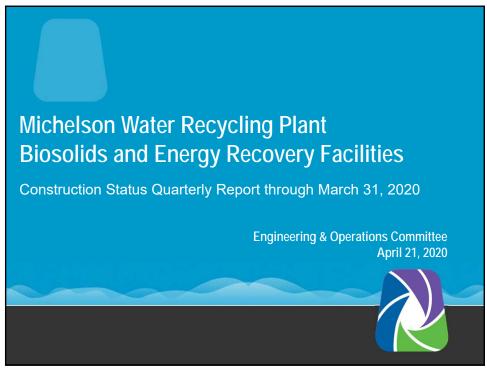
Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – MWRP Biosolids and Energy Recovery Facilities Quarterly Report

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EXHIBIT "A"



1

Project Summary

Contractor:

Contract Amount:

Change Orders to Date (through CCO 112)

Revised Contract Amount to Date:

Contractual Calendar Days:

Additional Days thru Change Orders:

Notice of Award:

■ Time Elapsed thru March 31, 2020:

Contractual Completion Date:

■ Balance to Finish (as of Mar. 31, 2020)

■ Estimated Project Completion Date

Filanc/Balfour-Beatty

\$163,465,940

\$ 20,972,712 (12.8%)

\$184,438,652

1,646

368

April 29, 2013

154%

October 31, 2017

\$1,331,987

February 2021

Irvine Ranch Water District



Construction Status during COVID-19

- FBB continues to advance construction, testing, IRWD staff training, and startup
- Staff continues to fully support FBB activities either remotely or by practicing appropriate social distancing
- IRWD consultants from Black & Veatch and EI&C Engineering remain on site to support startup and testing
- · FBB encouraging its subcontractors and suppliers to continue performing
 - Andritz startup and commissioning team left site; Unknown return date at this time
 - Challenges with scheduling vendor training for IRWD staff

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Introduction of Sludge is Upcoming

- Boiler system cleaned and flushed; Operating on natural gas and currently heating recycled water in all digesters
- FBB attempting to schedule remaining equipment training sessions for Milestone (MS) Nos. 4 & 5 by end of April
- FBB/IRWD advancing equipment functional testing and process control system testing for MS 4 & 5, which are precursors to system operational and reliability testing (SOT/SRT)
 - SOT/SRT scheduled for early May
 - SOT/SRT will consist of 3 to 4 weeks of testing, pending extent of issues
 - Introduction of sludge anticipated in late May / early June
- Staff continues preparing for introduction of sludge
 - Participating in FBB-provided vendor training
 - Conducting internal coordination meetings for compliance monitoring and process sampling

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Remaining Milestones

Milestone 2 (Thickening Facilities), Milestone 4 (Digestion Facilities), and Milestone 5 (Class B Biosolids Facilities) Commissioning – June thru July 2020

- Sludge initially introduced 6 to 8 hrs/day, gradually increases
- Estimated duration for digested sludge to mature is 45 days
- Biogas starts to form at approx. 20 days
- Gas pre-treatment and flare after biogas production stabilizes

Milestone 6 (Final Gas Treatment & Microturbines) Commissioning – July/August 2020

Milestone 7 (Heat Dryer) Commissioning – December 2020/January 2021

Milestone 3 (FOG) Commissioning – Floating, likely after Milestone 6.

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Consultant Summary

Committee	6	Purch	ase	Order		Var	iance		Total	T	otal Invoice to	Percent of
Consultant	Scope	No.		Amount	Total No.		Amount	1	Authorization		Date	Total
Arcadis-US	Construction Inspection & Management	609917, 604606 521366	s	2,931,368.00	3	s	3,461,066.00	s	6,392,434.00	s	(03/2020) 5,776,588.57	90%
Black & Veatch	Engineer of Record	609918, 600700 514248	s	12,509,031.00	8	s	11,881,634.00	s	24,390,665.00	s	(03/2020) 22,450,025.10	92%
EI&C	SCADA Testing	609963, 600246 518742	s	2,074,867.00	3	s	1,693,320.00	s	3,768,187.00	s	(03/2020) 3,105,453.00	82%
HDR	Construction Inspection	609962, 605837 521288	\$	2,834,476.00	3	s	182,741.78	s	3,017,217.78	s	(01/2020) 2,812,377.21	93%
	TOTAL:		s	20,349,742.00	17	s	17,218,761.78	s	37,568,503.78	s	34,144,443.88	91%

Irvine Ranch Water District

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April 2020 Quarterly Report Sample Analysis Room IRWD BIOSOLDS 33*39'56',-117*50'24',-65.6ft, 2** 02/04/2020 15:19



April 2020 Quarterly Report

2nd Floor Lobby and Operator Control Room





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April 2020 Quarterly Report

Boiler System Chemical Flushing and Testing







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Irvine Ranch



April 2020 Quarterly Report Flare and Digester Gas Pretreatment Testing Trying Biosoluss 11 Str. 31 Str. 321 04/01/2020 11:51:14 Invine Ranch Water District

Irvine Ranch







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April 21, 2020

Prepared by: E. Akiyoshi / M. Robinson

Submitted by: K. Burton
Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

MID-CYCLE CAPITAL BUDGET UPDATE FOR FISCAL YEARS 2019-20 AND 2020-21

SUMMARY:

The Two-Year Capital Budget for Fiscal Years (FY) 2019-20 and 2020-21 was approved by the Board on April 2, 2019. Staff will provide a presentation on the Mid-Cycle Capital Budget Update for FY 2019-20 and 2020-21. Staff recommends that the Board receive and file the update for the IRWD Capital Budget and approve adding 25 new projects to the Capital Budget.

BACKGROUND:

Last year, IRWD transitioned from annual to biennial operating and capital budgets. In April 2019, the Board-approved Capital Budget included forecasted expenditures for FY 2019-20 and FY 2020-21 of \$90.9 million and \$93.8 million, respectively.

Since April 2019, there have been Board-approved increases, and updates to project schedules. Staff's presentation summarizing the Mid-Cycle Capital Budget Update, attached as Exhibit "A", highlights these changes to the total budget and the forecasted expenditures for FY 2020-21, and also proposes adding 25 new projects to the Capital Budget. The total budget for these 25 added projects is \$20.6 million, and increases the forecasted expenditures for FY 2020-21 by \$4.6 million. The Capital Budget Project Additions list is attached as Exhibit "B".

FISCAL IMPACTS:

The following table presents the resulting total budget increase to the Capital Budget and forecasted expenditures for FY 2020-21 from the project additions.

Expenditure Group Description	Total Budget Increase (\$)	FY 2020-21(\$)
Replacement and Rehabilitation	14,572,900	2,772,800
Development	3,591,000	847,300
Operational	2,425,000	1,001,300
Total All Projects	20,588,900	4,621,400

ENVIRONMENTAL COMPLIANCE:

Not applicable.

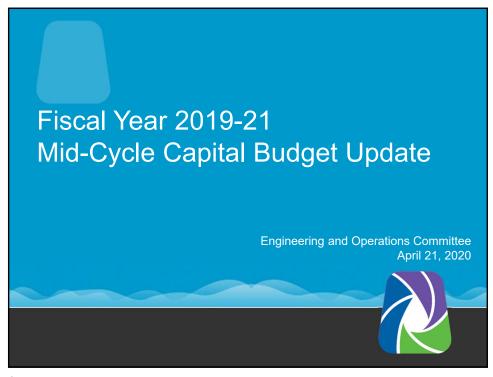
RECOMMENDATION:

That the Board receive and file the Mid-Cycle Capital Budget Update for Fiscal Years 2019-20 and 2020-21, and approve the Fiscal Years 2019-20 and 2020-21 Mid-Cycle Capital Budget Project additions as shown in the attached Exhibit "B."

Engineering and Operations Committee: Mid-Cycle Capital Budget Update For Fiscal Years 2019-20 and 2020-21 April 21, 2020 Page 2

LIST OF EXHIBITS:

Exhibit "A" – Mid-Cycle Capital Budget Draft Presentation Exhibit "B" – Mid-Cycle Capital Budget Project Additions for FY 2019-20 and 2020-21



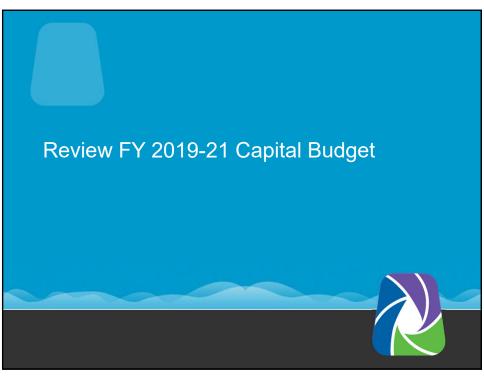
Presentation Outline

- Review FY 2019-21:
 - Approved Budget
 - o Board Approved Increases
 - o Project Schedule Adjustments
 - o FY 2019-20 Projected Expenditures
- Preview Mid-Cycle Project Additions and Update

Irvine Ranch Water District

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Irvine Ranch



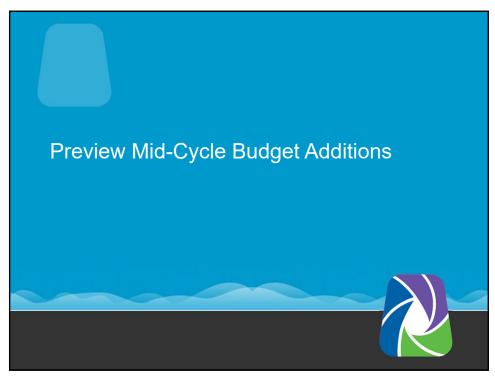
FY 2019-21 Re	eview	
Capital Project Categories	FY 2019-20 Forecasted Expenditures (\$ Millions)	FY 2020-21 Forecasted Expenditures (\$ Millions)
Replacement and Rehabilitation	17.7	24.4
Operational	15.6	14.9
Development	15.4	7.0
Property Management	14.3	0.0
Water Banking	11.7	15.5
Solids Handling	9.8	5.5
Well Rehabilitation	3.1	2.0
Nonpotable Storage	3.1	4.8
Replacement Business Software	2.4	1.8
General Plant	2.3	2.0
Planning	2.0	2.1
Water Resources	1.1	2.3
OCWD Annexation	0.6	0.6
Sewage Treatment	0.5	0.9
OCSD CORF / Equity / Solids Lease	(8.7)	10.0
•	Total \$90.9	\$93.8



Board Approved Inc	reases			
Description	April 2019 Board Approved Total Budget (\$)	Subsequent Board Approved Total Budget (\$)	FY 2019-20 Mid-Cycle Forecasted Expenditure Increases (\$)	FY 2020-21 Mid-Cycle Forecasted Expenditures Increases (\$)
BAKE PARKWAY FIRE FLOW PRV AND PIPELINE	412,700	750,000	298,600	54,300
BONITA CANYON RW PRV AND PIPELINE REPLACEMENT	325,000	411,400	86,400	0
INNOVATION PARK 12 INCH DW PIPELINE	0	410,000	42,700	85,200
MICHELSON FORCE MAIN REHABILITATION	2,217,300	2,967,300	8,600	0
CONVERSION TO MICROSOFT CLOUD EMAIL SYSTEM	187,000	304,000	70,200	35,100
MWRP HEADWORKS PLATFORM IMPROVEMENTS	175,000	377,900	146,600	1,000
MWRP HEADWORKS SCREENING AREA DIVERTER CHUTE	180,500	222,200	-26,400	-4,200
MWRP TRANSFORMER T1 REPLACEMENT	543,000	2,869,700	-148,000	1,435,900
DYER ROAD WELL FIELD – WELL 14 REHAB	770,000	1,094,000	261,500	0
DYER ROAD WELL FIELD – WELL 16 REHAB	770,000	1,239,000	378,500	0
WELL TREATMENT ALTERNATIVES STUDY	133,100	325,000	100,000	50,000
Total	5,713,600	10,970,500	1,218,700	1,657,300
Irvine Ranch Water District				5

FY 19-21 Projected Exp	penditures	
Description	FY 2019-20 Forecasted Expenditures (\$ Millions)	FY 2020-21 Forecasted Expenditures (\$ Millions)
April 2020 Forecast	90.9	93.8
Board Approved Increases	1.2	1.7
Kern Fan Schedule Adjustment	-10.2	-1.3
Other Project Schedule Adjustments	-1.7	-4.2
Total (Revised Forecasted Budget)	80.2	90.0
Projected Actual Expenditures	68.4	NA
rvine Ranch Water District		6

Irvine Ranch



Proposed Project Addition		
Description	Total Proposed Board Increases (\$)	FY 2020-21 Mid-Cycle Forecast Increases (\$)
AUTOMATION CYBERSECURITY - DW	1,350,000	81,500
COASTAL ZNS B&D BPS ELECRICAL REPLACEMENT	1,557,000	158,100
COMPREHENSIVE CONDITION ANALYSIS OF EXISTING ACP	635,800	5,800
DATS MISCELLANEOUS REHABILITATION	2,278,500	257,800
DRWF WELLSITE REHAB - 3 WELLS	1,588,000	387,300
EMERGENCY GENERATOR FUEL STORAGE - DW	550,000	466,400
EMERGENCY GENERATOR FUEL STORAGE - SS	275,000	222,600
GENERAL SECURITY SYSTEM MODIFICATIONS - DW	125,000	115,385
GENERAL SECURITY SYSTEM MODIFICATIONS - SS	125,000	115,385
HATS DIVERSION STRUCTURE REHABILITATION	707,000	244,700
PA 1 JEFFREY RD EXT 6RW & 12RW	163,000	22,800
LAKE FOREST NAKASE 24 ZB RW	1,365,000	270,000
MODJESKA RD BRIDGE 172 AT MARKUSON RD DW IMPROVEMENTS	504,900	46,200
MORSE/GILLETTE DW REPLACEMENT	674,000	162,400
MWRP CAS ELECRICAL CONDUITS REPLACEMENT	564,000	66,800
MWRP PRIMARY CLARIFIERS 1-5 COVERS REPLACEMENT	1,419,000	193,200
PA 12 REGIONAL ZONE A RW IMPROVEMENTS	1,615,000	303,300
PUBLIC OUTREACH CAMPAIGN REPLACEMENTS	500,000	313,100
RATTLESNAKE INLET-OUTLET REPLACEMENT	1,273,000	106,900
SEAWATCH RW PRV IMPROVEMENT	1,095,000	88,100
SILVERADO CANYON RD BRIDGE 174 AT SILVERADO COMM CTR DW IMPR	504,900	46,100
SILVERADO CANYON RD BRIDGE 175 AT LADD CANYON DW IMPR	504,900	455,600
SILVERADO CANYON RD BRIDGE 177 AT READ RESERVOIR DW IMPR	504,900	46,100
SR 55 WIDENING SEWER RELOCATION	262,000	194,600
TUSTIN LEGACY NEIGHBORHOOD D SOUTH 12SS	448,000	251,200
	Total 20,588,900	4,621,400

Irvine Ranch

Category	Total Budget Increase (\$)	FY 2020-21 Mid-Cycle Forecasted Expenditures (\$)
Replacement Facilities	14,572,900	2,772,800
Development	3,591,000	847,300
Operational	2,425,000	1,001,300
Tota	20,588,900	4,621,400
	nding Source	Funding By System
■ Replacement ■ Developing	27%	Potable \$7.1M \$9.7M
Developed	58%	Recycled

FY 202	20-21 F	orecasted	d Expen	ditures Update					
Description				FY 2020-21 Mid-Cycle Forecasted Expenditures (\$ Millions)					
Original Forecast				93.8					
Board Approved	Increases			1.7					
Project Schedule	Adjustments			-5.5					
Project Additions				4.6					
	Total (Ne	w Forecasted E	xpenditures)	94.6					
	Funding	Source		Funding By System					
Replacement			■ Potab	\$30 9M					
■ Developing	\$37.5M	\$41.1M	Sewe	\$42.9M					
■ Developed			■ Recyc	led					
	\$16	.ом		\$20.8M					

Irvine Ranch

Recommendation

That the Board receive and file the Mid-Cycle Capital Budget Update for Fiscal Years 2019-20 and 2020-21, and approve the Fiscal Years 2019-20 and 2020-21 Mid-Cycle Capital Budget Project additions as shown in the attached Exhibit "B."

Irvine Ranch Water District

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Irvine Ranch Water District EXHIBIT "B" Fiscal Year 2019-21 Mid-Cycle Capital Budget Project Additions

											lm	prove	ment	District	t .								
System	Project Number	Project Title	Start	End	FY 20-21 Direct	Total Direct	1100	1110	1120	1130	1250	1530	1540	1850	2100	2120	2130	2220	2250	2400	2530	2560 2	850 28
Potable Capital	11586	AUTOMATION CYBERSECURITY - DW	7/1/2020	6/30/2023	\$81,500	\$1,350,000		35.1	4.8	3.4	46.4	7.8	0.4	1.6									
Recycled Capital	11568	COASTAL ZNS B&D BPS ELECRICAL REPLACEMENT	4/1/2020	12/31/2022	\$158,089	\$1,557,000									100.0								
Potable Capital	11571	COMPREHENSIVE CONDITION ANALYSIS OF EXISTING ACP	6/1/2021	6/30/2023	\$5,769	\$635,800	60.0								40.0								
Potable Capital	11483	DATS MISCELLANEOUS REHABILITATION	3/1/2020	4/30/2022	\$257,839	\$2,278,500	100.0																
Potable Capital	11570	DRWF WELLSITE REHAB - 3 WELLS	7/1/2020	6/30/2022	\$387,304	\$1,588,000	100.0																
Potable Capital	11536	EMERGENCY GENERATOR FUEL STORAGE - DW	3/1/2020	1/31/2022	\$466,453	\$550,000		35.1	4.8	3.4	46.4	7.8	0.4	1.6									
Sewer Capital	11537	EMERGENCY GENERATOR FUEL STORAGE - SS	4/1/2020	1/31/2022	\$222,568	\$275,000										5.4	3.7	35.4	45.0		7.9	0.4	1.8
Potable Capital	11602	GENERAL SECURITY SYSTEM MODIFICATIONS - DW	6/1/2020	6/30/2021	\$115,385	\$125,000		35.1	4.8	3.4	46.4	7.8	0.4	1.6									
Sewer Capital	11192	GENERAL SECURITY SYSTEM MODIFICATIONS - SS	6/1/2020	6/30/2021	\$115,385	\$125,000										3.4	3.4	33.1	48.6		9.6	0.3	1.3
Sewer Capital	11122	HATS DIVERSION STRUCTURE REHABILITATION	4/1/2020	11/30/2021	\$244,659	\$707,000									100.0								
Recycled Capital	11582	LAKE FOREST NAKASE 24 ZB RW	7/1/2020	12/31/2022	\$270,000	\$1,365,000										8.8	4.2	15.3	49.2	7.9	13.1		1.5
Potable Capital	11593	MODJESKA RD BRIDGE 172 AT MARKUSON RD DW IMPROVEMENTS	5/1/2020	7/31/2022	\$46,186	\$504,900	100.0																
Potable Capital	11567	MORSE/GILLETTE DW REPLACEMENT	2/1/2020	5/31/2022	\$162,384	\$674,000	100.0																
Sewer Capital	11569	MWRP CAS ELECRICAL CONDUITS REPLACEMENT	7/1/2020	12/31/2022	\$66,844	\$564,000									100.0								
Sewer Capital	11599	MWRP PRIMARY CLARIFIERS 1-5 COVERS REPLACEMENT	5/1/2020	8/31/2022	\$193,167	\$1,419,000									100.0								
Recycled Capital	11500	PA 1 JEFFREY RD EXT 6RW & 12RW	1/1/2020	2/28/2023	\$22,759	\$163,000															100.0		
Recycled Capital	11584	PA 12 REGIONAL ZONE A RW IMPROVEMENTS	7/1/2020	12/31/2022	\$303,333	\$1,615,000										8.8	4.2	15.3	49.2	7.9	13.1		1.5
Potable Capital	11585	PUBLIC OUTREACH CAMPAIGN REPLACEMENTS	4/1/2020	12/31/2022	\$313,062	\$500,000	50.0								50.0								
Recycled Capital	11566	RATTLESNAKE INLET-OUTLET REPLACEMENT	4/1/2020	6/30/2022	\$106,865	\$1,273,000									100.0								
Recycled Capital	11597	SEAWATCH RW PRV IMPROVEMENT	4/1/2020	12/31/2022	\$88,149	\$1,095,000										8.8	4.2	15.3	49.2	7.9	13.1		1.5
Potable Capital	11588	SILVERADO CANYON RD BRIDGE 174 AT SILVERADO COMMUNITY CENTE	5/1/2020	7/31/2022	\$46,164	\$504,900	100.0																
Potable Capital	11587	SILVERADO CANYON RD BRIDGE 175 AT LADD CANYON DW IMPROVEM	3/1/2020	7/31/2021	\$455,570	\$504,900	100.0																
Potable Capital	11589	SILVERADO CANYON RD BRIDGE 177 AT READ RESERVOIR DW IMPROVE	5/1/2020	7/31/2022	\$46,165	\$504,900	100.0																
Sewer Capital	11583	SR 55 WIDENING SEWER RELOCATION	7/1/2020	12/31/2021	\$194,602	\$262,000										5.4	3.7	35.4	45.0		7.9	0.4	1.8
Sewer Capital	11359	TL NH D SOUTH 12SS	7/1/2020	12/31/2021	\$251,216	\$448,000											100.0						
		Total			\$4 621 416	\$20.588.900																	

Total \$4,621,416 \$20,588,900

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