

Regional Sewerage Program Policy Committee Meeting

AGENDA Thursday, June 6, 2019 4:00 p.m.

Location

Inland Empire Utilities Agency Boardroom 6075 Kimball Avenue Chino, CA 91708

Call to Order and Roll Call

Pledge of Allegiance

Public Comment

Changes/Additions/Deletions to the Agenda

1. Technical Committee Report (Oral)

2. Action Items

- A. Meeting Minutes for May 2, 2019
- B. Mechanical Restoration and Upgrades Construction Contract Award
- C. Biennial Regional Programs Budget and TYCIP

3. Informational Items

- A. Operations Division Update
- B. Legislative Update

4. Receive and File

- A. Building Activity Report
- B. Recycled Water Distribution Operations Summary
- C. IEUA Rate Study Workshop #2

5. Other Business

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Meeting August 1, 2019

Regional Sewerage Program Policy Committee Meeting Agenda June 6, 2019 Page 2 of 2

6. Adjournment

DECLARATION OF POSTING

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted to the IEUA Website at www.ieua.org and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Thursday, May 30, 2019.

Laura Mantilla

ACTION ITEM **2A**



Regional Sewerage Program Policy Committee Meeting

MINUTES OF MAY 2, 2019 MEETING

CALL TO ORDER

A meeting of the IEUA/Regional Sewerage Program – Policy Committee was held on Thursday, May 2, 2019, at the Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, California. Chairwoman Tenice Johnson, City of Montclair, called the meeting to order at 4:02 p.m.

ATTENDANCE

Committee Members:

Eunice Ulloa	City of Chino
Peter Rogers	City of Chino Hills
Kathy Tiegs	Cucamonga Valley Water District
Phillip W. Cothran (Alternate)	City of Fontana
Tenice Johnson (Alternate)	City of Montclair
Jim Bowman	City of Ontario
Kati Parker	Inland Empire Utilities Agency

Absent:

Debbie Stone	City of Upland	

Others Present:

Dave Crosley	City of Chino
Amanda Coker	City of Chino
Noel Castillo	City of Montclair
Courtney Jones	City of Ontario
Eduardo Espinoza	Cucamonga Valley Water District
Shivaji Deshmukh	Inland Empire Utilities Agency
Chris Berch	Inland Empire Utilities Agency
Kathy Besser	Inland Empire Utilities Agency
Randy Lee	Inland Empire Utilities Agency
Christina Besser	Inland Empire Utilities Agency
Shaun Stone	Inland Empire Utilities Agency
Javier Chagoyen-Lazaro	Inland Empire Utilities Agency

Others Present (Continued):

Jesse Pompa	Inland Empire Utilities Agency
Craig Proctor	Inland Empire Utilities Agency
Ken Tam	Inland Empire Utilities Agency
Laura Mantilla	Inland Empire Utilities Agency

PLEDGE OF ALLEGIANCE

Noel Castillo/City of Montclair led those present in the pledge of allegiance to the flag. A quorum was present.

PUBLIC COMMENTS

There were no public comments.

ADDITIONS/CHANGES TO THE AGENDA

There were no additions or changes to the agenda.

1. TECHNICAL COMMITTEE REPORT

Noel Castillo/City of Montclair stated that the Technical Committee unanimously approved the following action items at the April 25 meeting:

- City of Fontana Regional Connection Request F-31
- CVWD Regional Connection Request CW-19
- Regional Contract Facilitation Contract Amendment and Budget.

2. ACTION ITEMS

A. APPROVAL OF THE MINUTES OF THE APRIL 4, 2019 POLICY COMMITTEE MEETING

Christina Valencia/IEUA informed the Committee that a copy of the revised minutes was distributed. She noted that a paragraph was inadvertently omitted on the Ten-Year Capital Improvement Plan (TYCIP) Update.

Motion: By Peter Rogers/City of Chino Hills and seconded by Jim Bowman/City of Ontario to approve the meeting minutes of the April 4, 2019 Regional Policy Committee meeting.

<u>Motion carried:</u> Unanimously approved with Eunice Ulloa/City of Chino and Phillip Cothran/City of Fontana abstaining.

B. APPROVAL OF THE REGIONAL CONTRACT FACILITATION CONTRACT AMENDMENT

Craig Proctor/IEUA stated that staff is requesting the Policy Committee's recommendation to the IEUA Board of Directors to approve the contract amendment with Kearns & West Inc., (K&W) for the Regional Contract Facilitation Phase 2C. Mr. Proctor stated that K&W gave a status update to the Committee on the status of the negotiations in March 2019. He stated negotiations have been going well and a lot of progress is being made with all parties engaged and committed. While decent progress has been made on some of the topic issues, there are

still topics that have yet to be discussed. Mr. Proctor stated that the Technical Committee unanimously approved the contract amendment but would like to look for efficiencies and have quarterly check in to make sure contract facilitation remains within or under budget. The goal is to complete Term Sheets for the 22 items identified as topics for discussion. If the Policy Committee approves the recommendation, staff will present this item to the IEUA Board for consideration in June.

Kathy Tiegs/CVWD commented that efficiency is priority and she would like to see the contract amendment be completed at half the cost.

<u>Motion</u>: By Jim Bowman/City of Ontario and seconded by Peter Rogers/City of Chino Hills to recommend to the IEUA Board of Directors to approve the contract amendment with Kearns & West Inc., for the Regional Contract Facilitation, Phase 2C for \$393,831.00

Motion carried: Unanimously approved.

3. INFORMATIONAL ITEMS

A. PROPOSED BIENNIAL REGIONAL PROGRAMS BUDGET REVIEW FOR FISCAL YEARS 2019/20 AND 2020/21

Javier Chagoyen-Lazaro/IEUA provided an overview of the biennial budget for the Regional Water Programs. He stated that the proposed budget for the Wastewater Fund is \$73 million for FY 2019/20 and \$145 million in 2020/21. He noted that the increase in the second year is primarily for the construction of the RP-5 expansion and the Asset Management Program. As a result of the expansion, IEUA will be utilizing additional financing and the fund reserves will be increasing due to the projects. The budget for the Wastewater Operations is \$100 million. Mr. Chagoyen-Lazaro discussed the projections and actual costs for cost of service and reserves.

The budget for Recycled Water for each of the fiscal years is \$47 million and \$48 million. He explained that the expenses are debt service, O&M expenses and projects. Mr. Chagoyen-Lazaro stated that sources of funds are debt/grant proceeds, recycled water sales and the use of reserves to support future capital projects. He highlighted that for the second year of the biennial budget the fund reserves will increase to support future capital projects and reviewed the cost of services projections versus actuals. Mr. Chagoyen-Lazaro then reviewed the capital costs for the Groundwater Recharge Program. He stated that the Recharge Master Plan Update projects are 100% funded by Watermaster.

Mr. Chagoyen-Lazaro added that revenues will be stable and there will be no changes in adopted rates for FY 2019/20. He explained that IEUA is looking into financing options for the significant projects. He then reviewed the approval and timeline.

B. GRANTS SEMI-ANNUAL UPDATE

Jesse Pompa/IEUA gave a presentation on the Grants Semi-Annual Update. He stated that IEUA received \$473 million since 2000 in grants and loans for the Regional Water Programs. Of that, \$319 million are completed funding agreements and \$154 million is for open funding agreements. Currently there are 13 grant applications totaling \$757 million. Mr. Pompa

discussed the SRF fundable list and the principal forgiveness green project status which resulted in \$18.9 million SRF loan principal forgiveness between 2018 and 2019 fiscal years. Mr. Pompa stated that by pursuing SRF loans IEUA has saved \$236 million in interest payments versus selling bonds. He then informed the Committee of upcoming federal opportunities for WaterSmart grants, Title XVI and Drought Response Program.

C. LEGISLATIVE UPDATE

Kathy Besser/IEUA gave an update on the following:

- SB 307 Water Conveyance Use of Facility with Unused Capacity: Bill was amended; however, IEUA does not concur with the amendments that were done.
- AB 1672 Product Labeling Flushable Products: IEUA is in support and signed coalition letter.
- WaterFix: Two Tunnel Project supported by MWD: Governor Newsom's Administration announced they will begin a governmental review process for construction of a single tunnel project. IEUA will continue to follow.

4. RECEIVE AND FILE

A. BUILDING ACTIVITY REPORT

The Building Activity Report for January and February 2019 were received and filed by the Committee.

B. RECYCLED WATER DISTRIBUTION - OPERATIONS SUMMARY

The Recycled Water Distribution Operations Summary for March 2019 was received and filed by the Committee.

C. GROUNDWATER RECHARGE/RECYCLED WATER SEMI-ANNUAL UPDATE

The Groundwater Recharge/Recycled Water Semi-Annual Update was received and filed by the Committee.

D. ENGINEERING QUARTERLY PROJECT UPDATES

The Engineering Quarterly Project Updates was received and filed by the Committee.

5. OTHER BUSINESS

A. IEUA GENERAL MANAGER'S UPDATE

Shivaji Deshmukh stated that the second IEUA Workshop Rate Study was held today. He stated that the IEUA Rate Study Schedule was distributed to the Committee.

B. COMMITTEE MEMBER REQUESTED AGENDA ITEMS FOR NEXT MEETING

None.

C. COMMITTEE MEMBER COMMENTS

Ms. Tiegs thanked IEUA for the work the Grant Department has done in pursuing grants. She stated the amount of grants is impressive. She also thanked Mr. Pompa for the information on grant funding opportunities and resources.

D. NEXT MEETING – JUNE 6, 2019

6. ADJOURNMENT

The meeting was adjourned at 4:40 p.m.

Transcribed by:

Laura Mantilla, Executive Assistant

ACTION ITEM 2B



Date:

May/June 2019

To:

Regional Committees

From:

Inland Empire Utilities Agency

Subject:

RP-1 Mechanical Restoration and Improvements Construction Contract

Award

RECOMMENDATION

It is requested that the Regional Committees recommend the IEUA Board of Directors award the construction contract for the RP-1 Mechanical Restoration and Improvements, Project No. EN17082, to the lowest, responsive bidder for the not to exceed amount of \$8,075,000.

BACKGROUND

Regional Water Recycling Plant No.1 (RP-1) uses a conventional activated sludge process to treat wastewater in three parallel secondary treatment systems. Two buildings manage the sludge for the entire treatment process. The goal of the project is to replace mechanical (pumps, valves, piping, etc.) and electrical equipment (motor control centers, breakers, conductors, etc.) in both buildings, which are at the end of their useful life.

The electrical and most of the mechanical equipment is nearly 40 years old in both buildings. The utility water conveyance piping is corroding, which causes the pump packing seals to fail, increasing the maintenance of the mechanical equipment. In addition, the process pipe and valves are showing signs of corrosion (delaminated coating, rust, and leaks). Most of the electrical equipment is no longer being supported by the manufacturer. The motor control centers (MCC) in both buildings are critical electrical equipment, which are essential to plant operation and need to be replaced prior to catastrophic failure.

The scope of work for this project is as follows:

- Replace all sludge pumps, scum pumps, piping, and valves
- Upgrade remaining inefficient motor drives
- Replace all MCC equipment and conductors
- Install grinders on sludge transfer pumps

At the conclusion of this project, after all project components are complete, the new facilities will operate more efficiently (reduced energy consumption), reduce the overall maintenance requirements (ongoing repairs), and increase equipment reliability (modernized technology).

RP-1 Mechanical Restoration and Improvements Construction Contract Award May/June 2019 Page 2 of 2

On May 9, 2019, a request for bids was advertised on *PlanetBids* to seven prequalified contractors. Bid opening is scheduled for June 13, 2019.

The following table presents the anticipated project cost:

Description	Estimated Cost
Design Services	\$774,390
Design Contract (actual)	\$583,287
IEUA Design Services (actual)	\$191,103
Construction Services	\$969,000
Services During Construction (5% estimate)	\$403,750
IEUA Construction Services (7% estimate)	\$565,250
Construction	\$8,882,500
Construction Contract (not-to-exceed)	\$8,075,000
Contingency (10%)	\$807,500
Total Project Cost	\$10,625,890
Total Project Budget*	\$10,629,390

^{*}Approved bi-annual project budget for Fiscal Year 2019/20

The following is the project schedule:

Project Milestone	Date
Construction Contract Award	July 2019
Construction Completion	March 2021

The RP-1 Mechanical Restoration and Improvements Project is consistent with IEUA's Business Goal of Wastewater Management specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

RP1 Mechanical Restorations and Improvements Construction Contract Award

Project No. EN17082







Shaun J. Stone, P.E. May/June 2019



Project Location





The Project

- Pumps are outdated and inefficient
- Piping condition impacted by corrosion
- Electrical equipment replacement/upgrade to IEUA standards
- Scope includes:
 - Replace all sludge pumps, scum pumps, piping and appurtenances
 - Upgrade inefficient motor drives
 - Replace motor control centers
 - Install grinders on sludge transfer pumps



Sludge Pump Equipment and Appurtenances



Corroded Sludge Pump Base



Outdated Motor Control Center



Project Budget and Schedule

Description	Estimated Cost
Design Services	\$774,390
Design Consultant Contract (actual)	\$583,287
IEUA Design Services (actual)	\$191,103
Construction Services	\$969,000
Engineering Services During Construction (5% estimate)	\$403,750
IEUA Construction Services (7% estimate)	\$565,250
Construction	\$8,882,500
Construction Contract (not-to-exceed)	\$8,075,000
Contingency (10%)	\$807,500
Total Project Cost:	\$10,625,890
Total Project Budget*:	\$10,629,390

Project Milestone	Date
Construction	
Construction Contract Award	July 2019
Construction Completion	March 2021



^{*}Approved bi-annual project budget for Fiscal Year 2019/20.

Recommendation

• It is requested that the Regional Committees recommend the IEUA Board of Directors award the construction contract for the RP-1 Mechanical Restoration and Improvements Project, Project No. EN17082, to the lowest, responsive bidder, for a not-exceed amount of \$8,075,000.

The RP-1 Mechanical Restoration and Improvements Project is consistent with IEUA's Business Goal of Wastewater Management specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.



ACTION ITEM **2C**



Date:

June 6, 2019

To:

Regional Policy Committee

From:

Inland Empire Utilities Agency

Subject:

Review of Proposed Biennial Budget for Fiscal Years 2019/20 and

2020/21 for Regional Wastewater, Recycled Water and Recharge Water

Funds and FY 2020-2029 Ten Year Capital Improvement Plan

RECOMMENDATION

It is requested that the Regional Policy Committee recommend approval to the IEUA Board of Directors (Board) on the proposed Fiscal Years (FYs) 2019/20 and 2020/21 biennial budget for the Agency's Regional Wastewater Operations and Maintenance fund, Regional Wastewater Capital Improvement fund, Recycled Water fund, Recharge Water fund, and the FY 2020-2029 Ten-Year Capital Improvement Plan.

On May 30, 2019 the Regional Technical Advisory Committee unanimously recommended approval with the Agency's commitment to bring forth for review and approval any contracts related to the recycled water intertie projects with the City of Pomona and Jurupa Community Services District.

BACKGROUND

A review of the proposed biennial budget for Fiscal Years (FYs) 2019/20 and 2020/21 for Regional Wastewater, Recycled Water, and Recharge Water funds and the proposed FY 2020-2029 Ten-Year Capital Improvement Plan (FY 2020-2029 TYCIP) was presented to the IEUA Board of Directors on April 17, the Regional Technical Committee on April 25, and the Regional Policy Committee on May 2, 2019. No changes were recommended be made to the proposed biennial budget or TYCIP.

Since then, a few changes have been made to the proposed biennial budget and TYCIP as staff has continued to finalize the plans. Following is a summary of the changes:

- 1. Total operating costs slightly increased by \$138,570 for the development and evaluation of SB88 to ensure compliance with regulations in the calculation of stormwater recharge. Chino Basin Watermaster shares 50 percent of the project cost.
- 2. Debt service payment decreased by \$225,000 due to changes in the RP-5 Expansion project schedule.

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3. The proposed FY 2020-2029 TYCIP decreased by \$3 million from \$924 million to \$921 million due to an adjustment in the Chino Basin Program (CBP) budget timeline. Further details on the TYCIP changes are provided in the related section below.

The proposed biennial budget for FYs 2019/20 and 2020/21 and the Ten-Year Capital Improvement Plan (TYCIP) for FYs 2019/20 – 2028/29 is consistent with the Agency's long-term planning documents, and the Board-adopted 2016 Business Goals of fiscal responsibility, work environment, water reliability, and wastewater management. Some of the key objectives of the proposed biennial budget include:



FYs 2019/20 and 2020/21 Key Budget Assumptions

Total operations and maintenance (O&M) expenses for all Agency funds are slightly higher than FY 2018/19 projected actuals by three percent. Operating revenues are based on the multi-year rates and fees adopted in 2015 for FYs 2015/16 – 2019/20 as summarized in Appendix Tables A3 – A6. Key assumptions for the proposed biennial budget for FYs 2019/20 and 2020/21 Regional Wastewater and Recycled Water funds are summarized on Appendix Table A2.

FY 2020 - 2029 Ten Year Capital Improvement Plan (TYCIP)

The FYs 2020 - 2029 TYCIP is consistent with the Business Goals of Water Reliability, Wastewater Management, and Environmental Stewardship. Capital projects outlined in the TYCIP support the initiatives defined in the Agency's long-term planning documents, amongst them the Facilities Master Plan, Recycled Water Program Strategy, Energy Management Plan, and Asset Management Plan.

The proposed TYCIP of \$921 million planned over the next ten years includes critical replacement & rehabilitation (R&R) projects necessary to meet reliability and regulatory requirements. Also included are projects needed for improvement and expansion of existing facilities and infrastructure to meet future growth as forecasted by member agencies. Major projects include the RP-5 Expansion projects, the recycled water interties to the City of Pomona and Jurupa Community Services District (JCSD), and the RP-1 Capacity Recovery project which is slated to

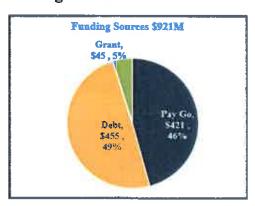
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begin construction in 2029. The TYCIP is funded by a combination of pay-go, low interest SRF loans, grants, and contributions.

Proposed TYCIP and Funding Source

Program	Proposed TYCIP (S Millions)
Regional Wastewater Capital	\$513
Recycled Water	\$204
Regional Wastewater Operations & Maintenance	\$108
Non-Reclaimable Wastewater	\$31
Water Resources	\$25
Recharge Water	\$26
Administrative Services	\$14
Total	\$921



Regional Wastewater Program

In accordance with the Regional Sewage Service Contract (Regional Contract), the Regional Wastewater Program is comprised of two funds; the Regional Wastewater Capital Improvement (Wastewater Capital) fund and the Regional Wastewater Operations and Maintenance (Wastewater Operations) fund, components of each fund are shown below in Table 1.

Table 1: Regional Wastewater Program Components

Description	Wastewater Capital	Wastewater Operations	
Accounts for the Agency's regional wastewater system's	Acquisitions, construction, improvement, and expansion.	Collection, treatment, and dispose of domestic sewage treatment for the contracting agencies, capital replacement and rehabilitation costs, and organics management.	
Primary Revenues & Other Funding Sources	New *EDU connection fees, property taxes, debt proceeds, and grant receipts. Monthly *EDU sewer rate, property taxes, and contract reimbursements.		
Primary Expenses and Other Uses of Funds	Capital project costs, debt service, and program support.	O&M costs including; employment, chemicals, utilities, materials & supplies, etc.	

^{*}EDU = Equivalent dwelling.

Regional Wastewater Capital Improvement Fund (Wastewater Capital Fund)

Total revenues for the Wastewater Capital fund are projected to increase by approximately thirteen percent in the proposed biennial budget. A key assumption is the continued pace of new development in the Agency's service area with 4,000 new equivalent dwelling unit (EDU) connections projected. This projection is lower than the member agencies forecast of 6,149 units.

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While the Agency applies member agencies growth forecasts to plan expansion of its facilities; a lower growth forecast is applied to revenue forecasts. This conservative approach ensures facilities are ready to meet the increased service demands from future growth and provides flexibility in financing options. Based on the five-year rates adopted in June 2015, revenues from wastewater connection fees are estimated at \$27.8 million in FY 2019/20, and \$28.7 million in FY 2020/21 as summarized in Table 2. An increase of three percent in assessed valuations accounts for the higher property tax receipts projected over the next two fiscal years. Property tax receipts allocated to the Wastewater Capital fund first support annual debt service costs, then capital project costs. Also included are State Revolving Fund (SRF) loan proceeds of \$9.8 million in FY 2019/20, and \$80.3 million in FY 2020/21 to support construction of the RP-5 Expansion project.

Table 2: Wastewater Capital Fund Major Funding Sources

Major Funding Sources (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Wastewater Connection Fees	\$27.8	\$28.7	4,000 new EDU connections at an adopted fee of \$6,955 per EDU in FY 2019/20 and an estimated 3% increase in FY 2020/21 (to be determined by the 2019 Rate Study).
Property Tax	34.0	35.1	Annual allocation of total property taxes to the Wastewater Capital fund will continue at 65% to total property tax receipts.
Debt and Grant Proceeds	9.8	80.3	SRF loan proceeds for the RP-5 Expansion project.
Inter-Fund Transfers and Other	4.2	11.2	Interfund transfer from Wastewater Operations fund to support the *CCWRF Asset Management Improvement project and interest revenues.
Total	\$75.8	\$155.3	

^{*}CCWRF- Carbon Canyon Water Recycling Facility

As reported in Table 3, a major expenditure in the Wastewater Capital fund is the capital investment plan (CIP) which accounts for about fifty percent of the proposed budget. A total of \$25.3 million in capital project costs is budgeted in FY 2019/20 and \$102.7 million in FY 2020/21. The proposed CIP budget includes construction of the RP-5 Expansion project slated to begin construction in 2020. Other major projects are summarized in Table 4.

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Table 3: Wastewater Capital Fund Major Expenses and Other Uses of Funds

Major Uses of Funds (SMillions)	FY 2019/20	FY 2020/21	Key Assumptions
Program Support	\$6.0	\$6.0	Includes employment, professional services, etc. in support of the (CIP)
Capital Improvement Plan (CIP)	25.3	102.7	Major capital projects summarized in Table 4
Debt Service	12.5	12.5	Includes principal and interest for the 2008B, 2010A and 2017A bonds, and SRF loan for RP-5 Expansion project
Other	12.3	12.0	Inter-fund transfers for capital and debt service support to other funds, including cost share of the Water Quality Lab project budgeted in the Wastewater Operations fund
Total	\$56.1	\$133.2	والمنظورين والمراجع والمراجع والمراجع والمراجع

Table 4: Wastewater Capital Fund Major Capital Projects

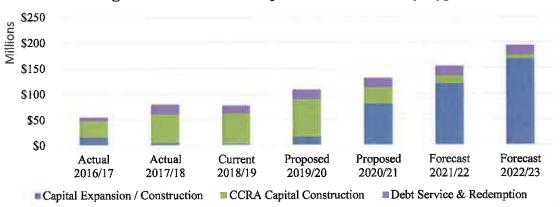
Major Projects (SMillions)	FY 2019/20	FY 2020/21	FY 2021/22 to FY 2023/24	TYCIP Total	
RP-5 Expansion	\$11.0	\$90.0	\$119.0	\$304.9	
*CCWRF Asset Management Improvements	6.8	7.5	6.0	26.9	
RP-1 Flare Improvements	5.0	4.17	- 1	5.0	
Collection System Upgrades	0.5	0.5	1.5	5.0	
RP-1 Solids & Liquid Treatment Expansion	0.2	74	~	80.5	
All Other Capital Projects	1.8	4.7	100.9	92.3	
Total	\$25.3	\$102.7	\$227.4	\$514.6	

^{*}CCWRF- Carbon Canyon Water Recycling Facility

The Wastewater Capital ending fund balance for FY 2019/20 is estimated at \$108.3 million, and \$130.3 million for FY 2020/21 as shown in Figure 1. The estimated increase in FY 2019/20 is due to loan proceeds issued to support construction of the RP-5 Expansion project scheduled to begin in 2020.

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Regional Wastewater Operations & Maintenance Fund (Wastewater Operations)

Total revenues and other funding sources in the Wastewater Operations fund are estimated at \$85.7 million and \$87.6 million for FYs 2019/20 and 2020/21, respectively. This includes \$2.4 million of grant receipts for the South Archibald Trichloroethylene (TCE) Plume Clean-Up project. Table 5 summarizes the Wastewater Operations fund proposed major revenues and other funding sources for FYs 2019/20 and 2020/21.

Table 5: Wastewater Operations Fund Major Revenues and Other Funding Sources

Major Funding Sources (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Monthly EDU	\$67.8	\$70.0	Includes EDU rate of \$20 00 in FY 2019/20 and 3% increase in FY 2020/21 (to be determined by the 2019 Rate Study).
Grants	1.3	1.1	Grant proceeds for the South Archibald TCE Plume Clean-Up project
Property Tax	9.5	9.5	Maintain the \$9.5 million allocation as adopted by the Board on June 15, 2016.
Cost Reimbursement from IERCA*	4.1	4.2	IEUA operation of the IERCA composter
Other	3.0	2.8	Includes interest revenue, contract cost reimbursement, and lease revenue.
Total	\$85.7	\$87.6	

^{*}Inland Empire Regional Composting Authority

Major expenses in the Wastewater Operations fund include operating and maintenance expenses, capital R&R project costs, organic management activities, and debt service costs. Total expenses and other uses of funds are \$96.2 million in FY 2019/20 and \$99.9 million in FY 2020/21. Proposed expenses and other uses of funds for FYs 2019/20 and 2020/21 are shown in Table 6.

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Table 6: Wastewater Operations Fund Major Expenses & Other Uses of Funds

Major Uses of Funds (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions		
Operations & Maintenance (O&M)	\$62.2	\$63.6	Includes employment, chemicals utilities, professional and contract labor costs, and other O&M costs		
O&M project costs	5.8	6.4	Includes the South Archibald TCE Plume Clean-Up project		
Capital Rehabilitation & Replacement (R&R) project costs	25.9	21.0	Based on the TYCIP		
Debt Service	1.4	1.4	Includes principal and interest for the 2017A bonds and SRF loan for the water quality laboratory		
Other	0.9	7.5	Inter-fund transfers for capital project support to the Administrative Services and share of the RP-5 Expansion project and CCWRF Asset Management Improvement project		
Total	\$96.2	\$99.9			

A total of \$25.9 million in capital project costs is budgeted in FY 2019/20 and \$21.0 million is projected for FY 2020/21. Major capital projects are listed in Table 7.

Table 7: Wastewater Operations Fund Major Capital Projects

Major Projects (SMillions)	FY 2019/20	FY 2020/21	FY 2021/22 to FY 2023/24	TYCIP Total
RP-1 Mechanical Restoration Upgrades	\$8.9	\$1.0		\$9.9
RP-4 Influent Screen Replacement	2.9			2.9
RP-1 Primary Effluent Conveyance Improvement	2.7		373	2.7
RSS Haven Avenue Repair & Replace from Airport to Mission	2.0	4.0		6.0
SCADA Enterprise System	2.0	3.5	3.0	8.5
RP-4 Process Improvements	1.9	1.0	3.2	6.1
All Other Capital Projects	5.5	11.5	17.5	71.7
Total	\$25.9	\$21.0	\$23.7	\$107.8

Cost of Service Review

In March 2015, the Board adopted monthly sewage EDU rates for five years (FYs 2015/16 – 2019/20) as summarized in Table 8.

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Table 8: Adopted Monthly EDU Sewage Rates

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
EDU Monthly Rate	\$15.89	\$17.14	\$18.39	\$19.59	\$20.00
Effective Date	10/01/15	7/01/16	7/01/17	7/01/18	7/01/19

The key objective of the multi-year rates was to establish a rate that fully recovered the cost of providing the service. Historically, property taxes have been used to support costs not recovered by rates. FY 2019/20 is the last year of the multi-year rates adopted in 2015. A rate study approved by the Board in January 2019 and currently underway will assess and evaluate the wastewater and water connection fees and the monthly service charges to ensure they appropriately recover related program cost of service, as well as support the Agency's long-term capital improvement plan. Part of the rate study also includes evaluation of the Chino Basin program (CBP) estimated impact to rates and fees.

Figure 2 shows the projected cost of service for the Wastewater Operations fund when the FY 2015/16 budget was adopted. The projected cost of service included two components: O&M (yellow) and R&R project (purple) costs. The R&R component was calculated using an average of ten years cost for recurring projects and an average of five years for non-recurring projects, with the objective to "smooth" the variability of these type of costs from year to year. Also included is a comparison of the actual cost of service for FYs 2015/16 – 2017/18, projected actuals for FY 2018/19 and updated forecast for FY 2019/20. Breakdown is provided to show the different components included in the original 2015 calculation: O&M expenses (purple) and R&R projects (green). Not included in the projected cost of service are the contributions to the Wastewater Capital fund for the operations share of the RP-5 Expansion project.

\$25 \$20 \$1.84 \$2.00 \$2.00 \$2.01 **\$15** \$10 16.60 \$17,88 \$17.99 16.03 15.73 14.02 \$5 \$0 2019/20 Forecast 2017/18 Actual 2018/19Projected 2015/16 Actual 2016/17 Actual COS of Adopted FY 15/16 Rates - O&M ISS COS Actual and Projected - O&M DOWN COS of Adopted FY 15/16 Rates - R&R COS Actual and Projected - R&R -Adopted EDU Rate

Figure 2: Monthly EDU Sewage Cost of Service

Fiscal year 2015/16 was the first of the five-year rates. As reported, actual cost of service starting in FY 2015/16 through FY 2017/18 exceeded the adopted rates. The updated cost of service projections for FYs 2018/19 through 2019/20 exceed the 2015 forecasts, primarily due to the higher R&R projects costs than estimated in 2015.

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The projected Wastewater Operations fund ending fund balance is estimated at \$65.9 million and \$53.6 million for FYs 2019/20 and 2020/21, respectively. The projected decrease in fund balance is due to contributions to the Wastewater Capital fund for the Wastewater Operations fund share of the RP-5 Expansion and planned R&R projects, such as the CCWRF Asset Management and Improvements project costs.

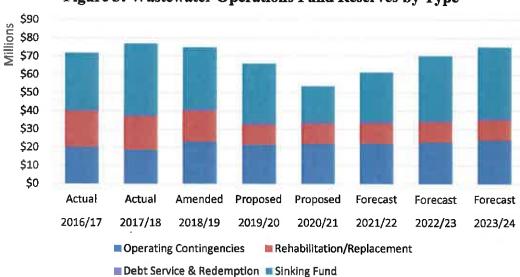


Figure 3: Wastewater Operations Fund Reserves by Type

Recycled Water Fund

A continued key initiative for the Agency is optimizing the beneficial reuse of recycled water and provide a cost effective and sustainable alternative to imported water for the region. Included in IEUA's long term planning documents is the continued expansion and improvement of the regional recycled water distribution system and groundwater recharge facilities. The Regional Recycled Water Distribution System (RRWDS) consists of over 89 miles of pipeline, four reservoir storage tanks with storage capacity between two and five million gallons, and multiple pump stations. Currently there are over 800 user connections to the RRWDS.

Total regional recycled water acre feet (AF) deliveries in FY 2019/20 and FY 2020/21 are projected to be 35,800 and 36,000 generating revenues of \$18.1 million and \$18.8 million, respectively. Recycled water deliveries for direct use have declined in the recent years primarily due to trends in decreased agricultural usage due to land conversions from farm sites to developed parcels.

Water connection fee revenues collected to support capital investments in the Agency's regional water distribution system for FY 2019/20 are projected to be \$7.9 million and \$8.0 million for FY 2020/21. Water connection fee rates are set per meter equivalent unit (MEU). One MEU is equivalent to a 5/8" and 3/4" meter size (standard residential meter size). Revenues and other funding sources of the Recycled Water fund are summarized in Table 9.

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Table 9: Recycled Water Fund Major Revenues & Other Funding Sources

Major Funding Sources (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Recycled Water Sales	\$18.1	\$18.8	FY 2019/20 adopted direct rate of \$490/AF and Groundwater Recharge (GWR) rate of \$550/AF FY 2020/21 rates to be determined by 2019 Rate Study.
Water Connection Fees	7.9	8.0	FY 2019/20 adopted fee is \$1,684/MEU with new connections of 4,700 and 4,630 for FY 2020/21. Fee for FY 2020/21 to be determined by 2019 Rate Study.
Property Tax	2.2	2.2	Maintain \$2.2 million allocation as approved by the Board of Directors in June 15, 2016.
State Revolving Fund Loan	8.1	5.2	SRF loan proceeds include funds for the JCSD* and City of Pomona recycled water intertie connections, and various other capital projects.
Other	12.5	7.9	Grants and capital reimbursements to support groundwater basin recharge and recycled water connection projects, interest and inter-fund debt service support for the 2017A Revenue bonds
Total	\$48.8	\$42.1	

^{*}Jurupa Community Services District

Major expenses for the Recycled Water fund include capital project costs (see Table 11), debt service, and operating costs. Capital expenditures in FY 2019/20 and FY 2020/21 are projected to be \$18.7 and \$23.8 million, respectively. Operating costs include employment, pumping costs, O&M projects, and a portion of the groundwater recharge O&M costs not reimbursed by Chino Basin Watermaster (CBWM). The projected biennial expense and other uses of funds for the Recycled Water fund are summarized in Table 10.

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Table 10: Recycled Water Fund Major Expenses & Other Uses of Funds

Major Uses of Funds (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Operating Expenses	\$11.7	\$11.6	Includes employment, professional fees, materials and supplies, pumping costs, a portion of the groundwater recharge operations expense, and O&M project costs.
Capital Improvement Plan (CIP)	18.7	23.8	See Table 11 for a summary of major capital projects.
Debt Service	11.0	12.1	Includes principal and interest costs for outstanding bonds, SRF loans, and interfund loan repayments to the Non-Reclaimable Wastewater fund.
Other	3.0	1.7	Inter-fund transfers for water connection fees in support of the RRWDS*, and capital and operating support to the Administrative Services and Recharge Water funds.
Total	\$44.4	\$49.2	

^{*}Regional Recycled Water Distribution System

Annual debt service costs include principal, interest, and financial fees for SRF loans, 2017A Revenue Bonds and interfund loan repayment to the Non-Reclaimable (NRW) fund. Debt service is estimated to be \$11.0 million in FY 2019/20 and \$12.1 million in FY 2020/21. The annual interfund loan repayment, which began in FY 2018/19, will first be applied to the \$12 million due to the NRW fund. Payments towards the \$13.5 million due to the Regional Wastewater Capital fund are budgeted to begin in FY 2022/23. The final re-payment of inter-fund loans is scheduled for FY 2024/25. A summary of inter-fund loans and repayment schedules is provided in Appendix A7.

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Table 11: Recycled Water Fund Major Capital Projects

Major Projects (SMillions)	FY 2019/20	FY 2020/21	FY 2021/22 to FY 2023/24	TYCIP Total
Recycled Water Intertie to City of Pomona	\$2.0	\$3.0	\$61.0	\$80.0
Recycled Water Intertie to Jurupa Community Services District	1.0	18.5	11.8	31.3
Baseline Recycled Water Pipeline Extension	5.7	0	0	5.7
RP-1 1158 Recycled Water Pump Station Upgrades	4.7	0	0	4.7
Napa Lateral (San Bernardino Speedway, CSI, Prologis)	1.6	0	0	1.6
All Other Capital Projects Total	3.7 \$18.7	2.3 \$23.8	10.8 \$83.6	81.1 \$204.4

Cost of Service Review

In May 2015, the Board adopted recycled water Acre Foot (AF) service rates for five years (FYs 2015/16 – 2019/20), as summarized in Table 12.

Table 12: Adopted Recycled Water Rates

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
Direct Delivery/Acre Foot (AF)	\$350	\$410	\$470	\$480	\$490
Groundwater Recharge/Acre Foot (AF)	\$410	\$470	\$530	\$540	\$550
Effective Date	10/01/15	7/01/16	7/01/17	7/01/18	7/01/19
AF Deliveries	35,150	37,100	37,300	42,950	45,770

A key objective of the multi-year rates was to establish a rate that fully recovered the cost of providing the service. Figure 4 is a comparison of the cost of service projections (dark blue) as adopted in FY2015/16 to the actual COS and current updated projections (green). Included in the cost of service AF calculation are operational and maintenance (O&M) costs, project costs less any grants or contributions, and debt service costs which is partially offset by property tax receipts and interfund transfers from the Wastewater Capital fund. As shown in Figure 4 the estimated cost of service of \$603/AF in FY 2019/20 is projected to exceed the adopted rate of \$490/AF. A key driver for the higher projected AF cost of service rate are lower recycled water deliveries. Projections and underlying assumptions are reviewed and updated each year as part of the budget process and 2019 Rate Study currently underway.

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The Recycled Water fund projected ending fund balances for FY 2019/20 and FY 2020/21 is \$41.1 million and \$34.0 million, respectively. The projected decrease is in fund reserves is primarily due to higher CIP costs planned over the next two years which are supported by a combination of SRF loans, grants, and pay-go funding. Projected ending fund balances are reported below in Figure 5.

Adopted Recycled Wtr Rate

COS Actual

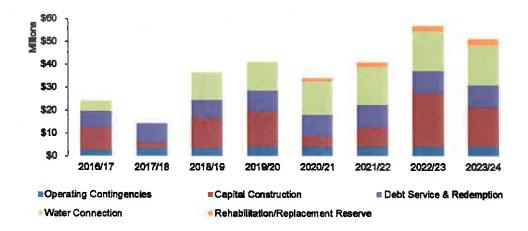


Figure 5: Recycled Water Fund Reserve by Type

Recharge Water Fund

COS Adopted 15/16 Rates

The Recharge Water (RW) fund accounts for the revenues and expenses associated with groundwater recharge (GWR) operations and maintenance (O&M) through joint efforts with Chino Basin Watermaster (CBWM), Chino Basin Water Conservation District (CBWCD), and the San Bernardino County Flood Control District (SBCFCD). Operating expenses include general basin maintenance and/or restoration, groundwater administration (e.g. labor, tools, and supplies), contracted services (e.g. weeding and vector control), compliance reporting, and environmental documentation for permit compliance.

Total budgeted revenues, other funding sources, and inter-fund contributions and support for FYs 2019/20 and 2020/21 are \$9.5 million and \$18.6 million, respectively. The budget is comprised

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of reimbursements from CBWM for groundwater recharge facilities' O&M, capital project support, and debt service costs. The remaining balance will be contributed by IEUA for its portion of capital and debt service (50/50 share with CBWM), and pro-rata share of O&M costs. Table 13 is a summary of revenues and other funding sources.

Table 13: Recharge Water Fund Revenues and Other Funding Sources

Major Funding Sources (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Watermaster Operating Cost Reimbursement	\$1.2	\$1.1	Reimbursement of ground water recharge O&M and facilities
Contract Cost Reimbursement	0.1	0.0	Reimbursement from CBWM* for O&M projects.
Watermaster Debt Service	0.6	0.7	Reimbursement for CBWM share of debt service costs for the 2008B bonds – estimated interest rate is 4% for both fiscal years.
State Revolving Fund (SRF) Loan	1.3	3.8	Loan proceeds to support Recharge Mater Plan Update (RMPU) projects.
Grants	4.8	11.5	Grant proceeds to support RMPU projects.
Other	1.5	1.5	Interest revenue and inter-fund transfer for the Agency's operating support for pro-rata share of groundwater basin maintenance, capital projects, non-reimbursable labor, and debt service from the Recycled Water and Wastewater Capital funds.
Total	\$9.5	\$18.6	

^{*}Chino Basin Watermaster

Total Recharge Water program expenses for FYs 2019/20 and 2020/21 are \$8.2 million, and \$16.3 million, respectively. The key expenses include capital costs related to the Recharge Master Plan Update (RMPU) projects, debt service costs for the Chino Basin Facilities Improvement Project (CBFIP) 2008B Variable Rate Revenue bonds, and groundwater O&M costs.

The FYs 2019/20 and 2020/21 groundwater O&M budget, shown in Table 14, includes utilities and general groundwater basin maintenance costs for infiltration, restoration and slope repairs on the following groundwater basins: Jurupa, San Sevaine, Turner, and Victoria.

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Table 14: Recharge Water Major Expenses & Other Uses of Funds

Major Uses of Funds (\$Millions)	FY 2019/20	FY 2020/21	Key Assumptions
Operating Expense	\$1.9	\$1.8	Program support and maintenance, utilities, specialty O&M, Watermaster and SBCFCD costs, and IEUA's pro-rata share.
Debt Service	1.3	1.3	Principal, interest and financial expense for the bonds.
Capital Improvement Plan (CIP)	5.0	13.2	Capital project costs shared with Watermaster for RMPU projects.
Total	\$8.2	\$16.3	

The FY 2019/20 and 2020/21 capital project costs for the Recharge Capital Program mainly involve modifications, improvements, and refurbishment at selected basins for \$5.0 million and \$13.2 million, respectively. CBWM has updated the Recharge Master Plan, and Agency staff is taking the lead in the execution and administration of the capital projects. Table 15 is a summary of major projects in the Recharge Water program and respective cost sharing ratio between IEUA and CBWM.

Table 15: Recharge Water Fund Capital Projects and Cost Sharing

Major Projects (\$Millions)	FY 2019/20	FY 2020/21	TYCIP Total	IEUA Cost Share	CBWM Cost Share	
Recharge Master Plan Update	\$5.0	\$9.8	\$14.8	0%	100% of pay-go and debt service	
Lower Day Recharge Master Plan Update	0	3.4	3.4	0%	100% of pay-go and debt service	
Infrastructure Replacement	0	0.1	0.1	100%	0%	
Asset Management Total	0 \$5.0	0 \$13.2	8.2 \$26.5	50%	50%	

The ending fund balance for FYs 2019/20 and 2020/21 is projected to be \$5.4 million and \$7.7 million, respectively (Figure 6). Throughout the subsequent years, ending fund balances are estimated to average \$7.9 million based on current assumptions to leverage SRF loan and grant proceeds to finance RMPU capital projects.

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\$10.0 \$8.0 \$6.0 \$4.0 \$2.0 \$0.0 2021/22 2023/24 2016/17 2017/18 2018/19 2019/20 2020/21 2022/23 Amended Proposed Forecast Forecast Forecast Actual Actual Proposed

Figure 6: Recharge Water Fund Reserve by Type

Conclusion

Over the next two fiscal years, key areas of focus will be execution of critical expansion and R&R capital projects, completion of the 2019 Rate Study to identify necessary future rate adjustments, implementation of succession planning for timely recruitment of critical personnel to ensure the transfer for knowledge and expertise to the next generation of Agency employees, and developing a financing strategy to support CIP. Another key initiative is the continued evaluation of the CBP with regional stakeholders to secure conditional funding of \$207 million through the California Water Commission Water Storage Investment Program by 2021. Achieving these objectives will ensure the Agency is positioned to continue its commitment to delivering essential high-quality services in a cost-effective manner and supporting the region's economic development.

Debt Service & Redemption

Capital Construction

Additional Background Information

Appendix A – Sources and Uses of Funds: Regional Wastewater Capital, Regional Wastewater O&M, Recycled Water and Recharge Water funds.

Appendix Table A1 – Acronyms

Appendix Table A2 – Key assumptions for FYs 2019/20 and 2020/21 budget

Appendix Table A3 – Wastewater connection fees

Operating Contingencies

Appendix Table A4 – EDU volumetric rates

Appendix Table A5 – Recycled water rates

Appendix Table A6 – Water connection fees

Appendix Table A7 - Inter-fund loan repayment schedule

Appendix Table A8 – Major projects in FYs 2017/18 and 2018/19, and Total Ten-Year Budget

Appendix A

INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2019/20 and 2020/21 BIENNIAL BUDGET REGIONAL WASTEWATER CAPITAL IMPROVEMENT FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2016/2017	2017/2018	2018/2019	2019/2626	2020/2021	2021/2022	2022/2023	2023/2024
			Projected	Proposed	Proposed			
	Actual	Actual	Actual	Budger	Budget		Forecast	
REVENUES								
Interest Revenue	\$0.2	\$0.5	\$0.5	\$18	\$0.8	\$0.6	\$0.7	\$0.8
TOTAL REVENUES	\$0.2	\$0.5	\$0.5	14.8	\$0.8	\$0.6	\$0.7	\$0.8
OTHER FINANCING SOURCES								
Property Tax - Debt and Capital	\$29.7	\$31.5	\$32.7	\$34.0	\$35 I	\$36.1	\$37.2	\$37.9
Regional System Connection Fees	30.5	32.8	26.5	27 8	28 7	29.5	26.6	27.4
State Loans		0,5	36	98	803	103.7	56.1	29.2
Sale of Assets		1.3	- 2	-		-	-	-
Other Revenues	0.1	0.0	0.0	0.0	00	0.0	0.0	0.0
Loan Transfer from Internal Fund	_	_	_			-	2.0	6.0
TOTAL OTHER FINANCING SOURCES	\$60.3	\$66.2	\$59.2	571,7	\$144.0	\$169.3	\$121.8	\$100.5
EXPENSES								
Employment Expenses	\$3.8	\$3.8	\$4. I	\$3.6	\$3.7	\$4,0	\$4.1	\$4.3
Contract Work/Special Projects	1.1	0.6	0.1	1.0	-	-	_	_
Operating Fees	0.3	0.3	0.3	6.3	03	0.3	0.3	0.3
Professional Fees and Services	0.4	0.3	0.4	94	0.4	0.4	0.4	0.4
Other Expenses	0.5	0.9	1.4	5	1.5	1,6	1.6	1.6
TOTAL EXPENSES	\$6.1	\$6.0	\$6.2	No. 0	\$6.0	\$6.3	\$6.5	\$6.7
CAPITAL PROGRAM								
Work In Progress	\$11.4	\$20.3	\$27.4	524.8	\$102.2	\$125.1	\$66.2	\$36.1
IERCA investment	-		0.5	10.5	0,5	-		-
TOTAL CAPITAL PROGRAM	\$11.4	\$20.3	\$27.9	525.3	\$102.7	\$125,1	\$66.2	\$36.1
DEBT SERVICE								
Financial Expenses	\$0.3	\$0.1	\$0.1	50 1	\$0.3	\$0.1	\$0.1	\$0.1
Interest	4.7	3.0	2.7	30	2.7	2.3	2.0	5,1
Principal	57.3	8.8	8.9	94	9.6	10,1	5.1	8.5
Short Term Inter-Fund Loan TOTAL DEBT SERVICE		\$11.9		2/4/2	-	-		
TOTAL DEBT SERVICE	\$62.3	\$11.9	\$11.7	\$12.5	\$12.5	\$12.5	\$7.3	\$13.7
TRANSFERS IN (OUT)	(60.2)	6 0.1	64.7	220	P10.4	# 7.0	20.4	61.4
Capital Contribution	(\$0.3)	\$0.1	\$4.7	33.4	\$104	\$3.9	\$2.4	\$1.4
Debt Service	(0.9)	(2.8)	(2.9)	1020	(3 3)	(3.4)	(3.4)	(1.2)
Capital - Connection Fees Allocation	(1.0)	(0.8)	(6.8)	(9.0)	(8.7)	(2,1)	(2.7)	(4.0)
TOTAL INTERFUND TRANSFERS IN (OUI)	(\$2.2)	(\$3.6)	(\$4.9)	(58.9)	(\$1.6)	(\$1.6)	(\$3.7)	(\$3.8)
FUND BALANCE								
Net Income (Loss)	(\$21.4)	\$24.8	\$9.0	519.8	\$22 0	\$24.4	\$38.9	\$41.0
Beginning Fund Balance July 01	\$76.3	\$54.8	\$79.6	588.6	\$108 3	\$130.3	\$154.7	\$193.6
ENDING FUND BALANCE AT JUNE 30*	\$54.8	\$79.6	\$88.6	\$108.2	\$130.3	\$154.7	\$193.6	\$234.7
RESERVE BALANCE SUMMARY								
Capital Construction	\$15.7	\$4.6	\$2.6	5198	\$79.9	\$119.8	\$167.0	\$210.6
CCRA Capital Construction	\$31.7	\$55.6	\$70.1	5723	\$30.9	\$15.4	\$7.0	\$4.4
Debt Service & Redemption	<u>\$7.4</u>	\$19.5	\$15.9	5105	\$19.5	\$19.5	\$19.6	\$19.6
ENDING BALANCE AT JUNE 30	\$54.8	\$79.6	\$88.6	51083	\$130.3	\$154.7	\$193.6	\$234.7

INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2019/20 AND 2020/21 BIENNIAL BUDGET REGIONAL WASTEWATER OPERATIONS & MAINTENANCE FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2016/2017	2017/2018	2018/2019	2010/2020	2020/2021	2021/2022	2022/2023	2023/2024
	ACTUAL	ACTUAL	PROJECTED ACTUAL	BEDECK ED	PROPOSED BUDGLT		FORECAST	
REVENUES	HOTCH	HOTOID	7102111					
User Charges	\$56,597	\$62,144	\$66,663	911,155	\$70,366	\$72,653	\$75,020	\$77,466
Cost Reimbursement JPA	3,675	3,981	3,763	400	4,227	4,396	4,572	4,755
Contract Cost Reimbursement	70	64	66	116	66	66	66	66
Interest Revenue	538	965	1,800	1701	1,300	1,200	1,300	1,500
TOTAL REVENUES	\$60,881	\$67,155	\$72,293	573,000	\$75,959	\$78,315	\$80,958	\$83,787
OTHER FINANCING SOURCES								
Property Tax Revenues - Debt/Capital/Reserves	\$9,549	\$9,549	\$9,549	198561	39,549	\$9,549	\$9, 549	\$9,549
State Loans	7,531	11,310	2,239		0	0	0	0
Grants	11,780	3,142	3,011	379	1,135	0	0	0
Other Revenues	611	248	601		909	909	909	909
TOTAL OTHER FINANCING SOURCES	\$29,470	\$24,248	\$15,400	\$11,7110	\$11,593	\$10,458	\$10,458	\$10,45
EXPENSES				00000				
Employment Expenses	\$32,335	\$28,718	\$32,321	1,71 (0.1)	\$35,261	\$37,433	\$39,003	\$40,495
Contract Work/Special Projects	11,048	7,544	7,787	5811	6 47.5	4,015	3,940	5,215
Utilities	5,329	5,806	6,182	6/(227	6,266	6,423	6,584	6,751
Operating Fees	1,443	1,519	1,752	1000	2015	2,080	2,143	2,206
Chemicals	4,180	3,880	4,086	597	5,013	5,163	5,318	5,478
Professional Fees and Services	2,252	3,587	3,667	470	4 226	4,353	4,437	4,582
Biosolids Recycling	4,007	4,044	4,329	3211	4,515	4,651	4,790	4,934
Materials & Supplies	2,199	1,992	2,020	2014	2,064	2,126	2,190	2,256
Other Expenses	887	2,621	3,773	4277	4,231	4,322	4,422	4,524
TOTAL EXPENSES	\$63,684	\$59,710	\$65,922	548.034	\$70,020	\$70,570	\$72,831	\$76,444
CAPITAL PROGRAM				20000		24.004	0/700	010.046
Capital Construction & Expansion (WIP)	\$12,557	\$23,781	\$21,754	Vitini	\$21,047	\$6,726	\$6,775	\$10,246
TOTAL CAPITAL PROGRAM	\$12,557	\$23,781	\$21,754	\$25 nan	\$21,047	\$6,726	\$6,775	\$10,246
DEBT SERVICE	\$16	(\$26)	\$0		\$0	\$1	\$0	\$0
Financial Expenses	200	(\$20)	175	911	641	620	597	573
Interest	200	179	177	1 100	771	791	814	857
Principal TOTAL DEBT SERVICE	\$216	\$325	\$352	31,412	\$1,412	\$1,412	\$1,412	\$1,430
				111.4577.4				
TRANSFERS IN (OUT) Capital Contribution	(\$181)	(\$1,826)	(\$5,020)	meter.	(\$11 010)	(\$4,226)	(\$2,702)	(\$2,011
Debt Service	(415-5)	(-,,	(,)	1	122	123	123	(2,146
Operation support to GG for Non-Capital Projects		(649)	(508)	(2376)	(1,307)	(279)	(1,016)	(705
Capital - Connection Fees Allocation		0	5,454	4.74	4.785	1,879	2,255	3,599
TOTAL INTERFUND TRANSFERS IN (OUT)	(\$181)	(\$2,475)	(\$74)	0792)	(\$7,409)	(\$2,502)	(\$1,339)	(\$1,263
FUND BALANCE								
Net Income (Loss)	\$13,712	\$5,113	(\$409)	000,500	(\$12,335)	\$7,564	\$9,058	\$4,862
Beginning Fund Balance July 01	58,012	71,724	76,837	- No CO	65,909	53,574	61,137	70,195
ENDING FUND BALANCE JUNE 30*	\$71,724	\$76,837	\$76,428	Shifteen	\$53,574	\$61,137	\$70,195	\$75,057
RESERVE BALANCE SUMMARY			A			d== ==	A	****
Operating Contingies	\$20,038	\$18,590	\$20,720	30(32)	\$21,931	\$22,058	\$22,753	\$23,896
Rehabilitation/Replacement	19,624	18,094	10,783	1 61/283	10,783	10,783	10,783	10,783
Debt Service	787	1,204	1,412		1 412	1,412	1,430	1,430
Sinking Fund	31,275	38,948	43,513	(1234)	19,448	26,884	35,228	38,947
ENDING BALANCE AT JUNE 30	\$71,724	\$76,837	\$76,428	\$45,900	\$53,574	\$61,137	\$70,195	\$75,057

INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2019/20 and 2020/21 BIENNIAL BUDGET RECYCLED WATER FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2017/2018	2018/2019	2018/2019	2019/2020	2020/2021	2021/2022	2022/23	2023/24
	ACTUAL	AMENDED BUDGET	PROJECTED	PROPOSED	PROPOSED BUDGET		FORECAST	
REVENUES	rac r carac	DODGER	ACTUAL	11075377	BODGEI		A ORECAS I	
Interest Revenue	\$371	\$577	577	\$987	\$949	\$945	\$1,230	\$1,366
Water Sales	16,878	15,890	15,890	08.12G	18,752	19,408	20,445	21,03
TOTAL REVENUES	\$17,343	\$16,467	\$16,467	514 03	\$19,701	\$20,353	\$21,675	\$22,39
OTHER FINANCING SOURCES								
Property Tax - Debt/Capital	\$2,170	\$2,170	\$2,170	\$2,170	\$2,170	\$2,170	\$2,170	\$2,17
Connection Fees	7,889	6,416	6,416	7.915	8 032	8,025	8,019	8,01
State Loans	3,418	7,909	1,503	8 :53	5,220	7,240	22,469	23,10
Grants	2,164	6,710	4,503	7,032	3,750	1,875	3,500	6,25
Capital Contract Reimbursement	202	72	663	2.075	702	6,824	7,220	3,47
Other Revenues	12	0	0	0	0	. 0	0	
TOTAL OTHER FINANCING SOURCES	\$15,855	\$ 23,277	\$ 15,255	5 27,345	\$ 19,875	\$ 26,134	\$ 43,378	\$ 43,004
EXPENSES								
Employment Expenses	\$4,084	\$4,248	\$4,416	\$5.384	\$5.370	\$5,701	\$5,940	\$6,16
Contract Work/Special Projects	1,019	1,982	1,131	1.780	1,365	1,063	995	97.
Utilities	1,833	2,028	2,512	1.801	2,885	2,971	3,061	3,15
Operating Fees	3	10	6	LO.	t0	11	11	1
Chemicals	0	0	0	e	0	0	0	
Professional Fees and Services	481	884	685	666	632	669	741	72
Office and Administrative expenses	2	3	3	3	3	3	3	
Materials & Supplies	154	203	252	169	174	185	199	21
Other Expenses	728	934	980	132	1,122	1,146	1,170	1,19
TOTAL EXPENSES	\$8,304	\$10,293	\$9,983	\$11,743	\$11,562	\$11,750	\$12,121	\$12,45
CAPITAL PROGRAM								
Work In Progress	\$7,439	\$16,237	\$8,213	51A,727	\$23,800	\$16,300	\$23,305	\$44,00
TOTAL CAPITAL PROGRAM	\$7,439	\$16,237	\$8,213	518,717	\$23,800	\$16,300	\$23,305	\$44,00
DEBT SERVICE								
Financial Expenses	\$1	\$3	\$3	23	\$3	\$4	\$3	\$
Interest	2,715	2,657	2,800	2/157	2,881	2,846	2,877	2,57
Principal	5,159	5,256	5,256	67	6,232	6,625	7,083	7,38
Short Term Inter-Fund Loan	0	3,000	3,000	000	3,000	3,000	5,000	6,00
TOTAL DEBT SERVICE	\$7,875	\$10,916	\$11,059	511,027	\$12,116	\$12,475	\$14,963	\$15,96
TRANSFERS IN (OUI)								
Capital Contribution	(\$80)	(\$1,052)	(\$1,020)	15583	(\$21)	(\$13)	(\$21)	(\$13
Debt Service	2,397	2,400	2,400	2/10	2,542	2,540	2,541	2,66
Operation support	(464)	(709)	(680)	(836)	(755)	(759)	(817)	(83
Water Connection Allocation	(390)	(1,652)	(1,652)	(I.02)	(950)	(855)	(297)	(31
TOTAL INTERFUND TRANSFERS IN (OUI)	\$1,463	(\$1,014)	(\$951)	(5545)	\$816	\$914	\$1,406	\$1,38
FUND BALANCE								
Net Income (Loss)	\$11,043.26	\$1,284.32	\$1,516.28	54,405,15	(\$7,086,16)	\$6,874.61	\$16,070.83	(\$5,628.7
Beginning Fund Balance July 01	24,092	35,135	35,135	30,651	41,056	33,970	40,845	56,91
ENDING BALANCE AT JUNE 30	\$35,135	\$36,419	\$36,651	541,056	¥33,970	\$40,845	\$56,916	\$51,28
RESERVE BALANCE SUMMARY								
Operating Contingency	\$2,767.89	\$3,431,10	\$3,431.10	SENTAND	\$3 853 94	\$3,916.81	\$4,040.19	\$4,150.6
Capital Construction	12,831	12,702	12,934	12,511	4.604	8,456	23,284	16,94
Water Connection	9,548	12,259	12,259	12.510	14,478	16,509	17,130	17,46
Debt Service	9,988	8,027	8,027	116	9,475	9,963	9,961	9,72

^{*} Numbers may not total due to rounding

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INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2019/20 AND 2020/21 BIENNIAL BUDGET RECHARGE WATER FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2016/2017	2017/2018	2018/2019	2019/2020	2019/2020	2021/2022	2022/2023	2023/2024
			PROJECTED	PROPOSED	PROPOSED			
	ACTUAL	ACTUAL	ACTUAL	BUDGET	BUDGET		FORECAST	
REVENUES								N
Cost Reimbursement from JPA	\$948	\$864	\$1,137	\$1,237	\$1,076	\$1,108	\$1,141	\$1,175
Contract Cost reimbursement	(10)	0	1,544	69	0	0	0	0
Interest Revenue	16	23	85	115	160	190	195	195
TOTAL REVENUES	\$954	\$888	\$2,766	51,421	\$1,236	\$1,298	\$1,336	\$1,370
OTHER FINANCING SOURCES	\$0	\$0	\$0	\$1,256	\$3.764	\$143	\$0	\$0
State Loans	•	0	452	4.845	11 521	0	0	0
Grants	(4) 1,117	2,280	1,026	565	662	937	1,059	1,188
Capital Contract Reimbursement Other Revenues	0	25	1,020	300	0	0	0	0
TOTAL OTHER FINANCING SOURCES	\$1,113	\$2,305	\$1,478	36,665	\$15,947	\$1,080	\$1,059	\$1,188
TOTAL OTHER PRANCENG SOURCES	- 41,113	gargo o o	\$1,775	130077	0.20,2.1.	42,000	42,027	
EXPENSES								
Employment Expenses	\$565	\$657	\$596	36.53	\$677	\$718	\$748	\$777
Contract Work/Special Projects	353	25	1,544	119	0	0	0	0
Utilities	82	99	75	58.	70	72	74	76
Operating Fees	5	7	12	1.3	8	8	8	8
Professional Fees and Services	801	591	1,171	914	859	885	911	939
Office and Administrative expenses	9	10	15	15	16	16	17	17
Expense Allocation	65	0	47	53	52	54	55	56
Materials & Supplies	69	83	90	98	101	104	107	111
Other Expenses	15	0	. 0	1.0	0	0	0	0
TOTAL EXPENSES	\$1,964	\$1,471	\$3,549	51.973	\$1,782	\$1,857	\$1,921	\$1,984
CAPITAL PROGRAM					***	****	4-00	4550
Capital Expansion/Construction	\$864	\$1,645	\$1,036	53300	\$13,184	\$290	\$500	\$750
TOTAL CAPITAL PROGRAM	\$864	\$1,645	\$1,036	55,000	\$13,184	\$290	\$500	\$750
DYDDO CYDNYGG								
DEBT SERVICE	ė==	\$ 71	\$68	561	\$125	\$63	\$62	\$ 61
Financial Expenses	\$73 95	148	245	494	430	527	491	454
Interest	647	683	710	739	769	916	944	988
Principal TOTAL DEBT SERVICE	\$815	\$902	\$1,024	\$1,267	\$1,324	\$1,506	\$1,497	\$1,503
TOTAL DEBT SERVICE	9013	3702	31,024	25,440.0	\$1,524	919000	#1,477	91,000
TRANSFERS IN (OUT)					1.15			
Capital Contribution	\$399	\$15	\$44	544	\$0	\$0	\$10	\$113
Debt Service	408	451	512	631	662	694	688	69 0
Operation support	507	440	661	183	707	749	780	809
Property Tax Transfer	68	25	1,009	25.	5	23	45	68
TOTAL INTERFUND TRANSFERS IN (OUT)	\$1,381	\$931	\$2,227	\$1.460	\$1,374	\$1,466	\$1,523	\$1,679
FUND BALANCE				2000-200				
Net Income (Loss)	(\$196)	\$105	\$863	\$1,000	%2 267	\$19 1	\$0	\$0
Beginning Fund Balance July 01	3,337	3,140	3,246	€ 10%		7,681	7,872	7,872
ENDING FUND BALANCE AT JUNE 30*	\$3,140	\$3,246	\$4,108	55,414	\$7,681	\$7,872	\$7,872	\$7,872
RES ERVE BALANCE SUMMARY				9.5		man	A C.CO	6000
Operating Contingencies	\$1,978	\$2,165	\$1,183	3067	\$891	\$928	\$960	\$992
Capital Expansion / Construction	500	500	1,659	2383	5,245	5,398	5,367	5,335
Debt Service & Redemption	662	581	1,267	1,545	1,545	1,545	1,545	1,545
ENDING BALANCE AT JUNE 30	\$3,140	\$3,246	\$4,108	\$5,414	\$7,681	\$7,872	\$7,872	\$7,872

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Appendix Table A1: Acronyms

AFF Acre Foot CBFIP Chino Basin Facilities Improvement Project CBP Chino Basin Program CBWM Chino Basin Water Master CCWRF Carbon Canyon Wastewater Reclamation Facility CIP Capital Improvement Plan EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority KWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-5 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-5 Regional Water Reclamation Facility (Plant) in the City of Gancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan		Acronyms
CBP Chino Basin Program CBWM Chino Basin Water Master CCWRF Carbon Canyon Wastewater Reclamation Facility CIP Capital Improvement Plan EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Water Reclamation Facility (Plant) in the City of Ontario RP-1 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-5 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	AF	Acre Foot
CBWM Chino Basin Water Master CCWRF Carbon Canyon Wastewater Reclamation Facility CIP Capital Improvement Plan EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority KWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	CBFIP	Chino Basin Facilities Improvement Project
CCWRF Carbon Canyon Wastewater Reclamation Facility CIP Capital Improvement Plan EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Wastewater Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	CBP	Chino Basin Program
CIP Capital Improvement Plan EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	CBWM	Chino Basin Water Master
EDU Equivalent Dwelling Unit FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	CCWRF	Carbon Canyon Wastewater Reclamation Facility
FTE Full Time Equivalent FY Fiscal Year GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Water Reclamation Facility (Plant) in the City of Ontario RP-1 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RWDS Regional Water Reclamation Facility (Plant) in the City of Chino RWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	CIP	Capital Improvement Plan
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GG Administrative Services Program GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Wastewater Operations and Maintenance Program RP-2 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-3 Old Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	FTE	
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GWR Groundwater Recharge IERCA Inland Empire Regional Composting Authority kWh Kilowatt hour MEU Meter Equivalent Unit NC Non-Reclaimable Wastewater Program NRW Non-Reclaimable Wastewater O&M Operations & Maintenance R&R Replacement & Rehabilitation RC Regional Wastewater Capital Improvement Program RMPU Recharge Master Plan Update RO Regional Wastewater Operations and Maintenance Program RP-1 Regional Water Reclamation Facility (Plant) in the City of Ontario RP-2 Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	GG	Administrative Services Program
kWhKilowatt hourMEUMeter Equivalent UnitNCNon-Reclaimable Wastewater ProgramNRWNon-Reclaimable WastewaterO&MOperations & MaintenanceR&RReplacement & RehabilitationRCRegional Wastewater Capital Improvement ProgramRMPURecharge Master Plan UpdateRORegional Wastewater Operations and Maintenance ProgramRP-1Regional Water Reclamation Facility (Plant) in the City of OntarioRP-2Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells.RP-4Regional Water Reclamation Facility (Plant) in the City of Rancho CucamongaRP-5Regional Water Reclamation Facility (Plant) in the City of ChinoRRWDSRegional Recycled Water Distribution SystemRWRecharge Water ProgramSBCFCDSan Bernardino County Flood Control DistrictSCADASupervisory Control and Data AcquisitionSRFState Revolving FundTCETrichloroethyleneTYCIPTen Year Capital Improvement Plan	GWR	
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RP-2 Regional Water Reclamation Facility (Plant) in the City of Chino RP-3 Old Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RO	Regional Wastewater Operations and Maintenance Program
RP-3 Old Regional Water Reclamation Facility (Plant) in the City of Fontana rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RP-1	Regional Water Reclamation Facility (Plant) in the City of Ontario
rebuilt into a recharge facility with 4 recharge basins or cells. RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RP-2	Regional Water Reclamation Facility (Plant) in the City of Chino
RP-4 Regional Water Reclamation Facility (Plant) in the City of Rancho Cucamonga RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RP-3	
RP-5 Regional Water Reclamation Facility (Plant) in the City of Chino RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RP-4	Regional Water Reclamation Facility (Plant) in the City of Rancho
RRWDS Regional Recycled Water Distribution System RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RP-5	
RW Recharge Water Program SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RRWDS	
SBCFCD San Bernardino County Flood Control District SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	RW	
SCADA Supervisory Control and Data Acquisition SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan	SBCFCD	
SRF State Revolving Fund TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan		
TCE Trichloroethylene TYCIP Ten Year Capital Improvement Plan		
TYCIP Ten Year Capital Improvement Plan		
	ww	Water Resources Program

June 6, 2019

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Appendix Table A2: Key Assumptions for FYs 2019/20 and 2020/21 Budget

Revenues and Other Funding Sources	Expenses and Other Uses of Funds
4,000 new wastewater connections per year	3% average growth for O&M expenses
3.4 million volumetric EDU @ 0.25% annual growth	Eliminates vacancy factor in staffing to support succession plan
Recycled Water Deliveries: FY 2019/20 35,800 AF FY 2020/21 36,000 AF	Addition of several major construction projects within the next two-year period
4,700 and 4,630 new water connections (MEU) for FY 2019/20 & FY 2020/21, respectively	Leverage professional services to achieve effective maintenance approach
4% and 3% growth in property tax receipts. Property tax allocated to Regional Capital fund remains at 65%, and "fixed amount" allocation to Regional O&M, Recycled Water, and Administrative Service funds, based on FY 2016/17 budget amendment.	
Capital Improvement Plan (CIP) partially funded by low interest SRF loans and grants	

Appendix Table A3: Wastewater Connection Fees

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19 Projected	FY 2019/20 Projected
Wastewater Connection Fee	\$5,415	\$6,009	\$6,309	\$6,624	\$6,955
Effective Date	1/01/16	1/01/17	7/01/17	7/01/18	7/01/19
Wastewater Connection Units	4,774	5,155	5,223	4,000	4,000

Appendix Table A4: Monthly EDU Sewage Rates

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
EDU Volumetric Rate	\$15.89	\$17.14	\$18.39	\$19.59	\$20.00
Effective Date	10/01/15	7/01/16	7/01/17	7/01/18	7/01/19

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Appendix Table A5: Recycled Water Rates

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19 Projected	FY 2019/20 Projected
Direct Delivery/Acre Foot (AF)	\$350	\$410	\$470	\$480	\$490
Groundwater Recharge/Acre Foot (AF)	\$410	\$470	\$530	\$540	\$550
Effective Date	10/01/15	7/01/16	7/01/17	7/01/18	7/01/19
AF Deliveries	32,331	33,146	34,335	32,000	35,800

Appendix Table A6: Water Connection Fees

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19 Projected	FY 2019/20 Projected
Water Connection Fee (for 5/8" and 3/4" meter size)	\$693	\$1,455	\$1,527	\$1,604	\$1,684
Effective Date	1/01/16	1/01/17	7/01/17	7/01/18	7/01/19
Meter Equivalent Units (MEUs)	1,346	4,984	5,455	4,800	4,700

Appendix Table A7: Recycled Water Inter-Fund Loan Repayment Schedule

Inter Fund Loans Issued	Due to	Loan Amount (SMillions)	Repayment Schedule
FY 2007/08	Non-Reclaimable Wastewater (NRW) Fund	\$9.0	2018/19 \$3.0 2020/21-2021/22 \$6.0 Total \$9.0
FY 2007/08	Regional Wastewater Capital (RC) Fund	3.0	2022/23 \$1.0 2023/24-2024/25 \$2.0 Total \$3.0
FY 2009/10	Non-Reclaimable Wastewater (NRW) Fund	6.0	2021/22 \$3.0 2022/23 \$3.0 Total \$6.0
FY 2014/15	Regional Wastewater Capital Improvement (RC) Fund	10.5	2022/23 \$1.0 2023/24 \$5.0 2024/25 \$4.5 Total \$10.5
Total	Grand Total	\$28.5	\$28.5

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Appendix Table A8: Major Projects in FYs 2019/20 and 2020/21

	200127	24000	
Projects (SThousands)	FY 2019/20 Proposed	FY 2020/21 Proposed	Total Ten-Year Budget
		Wa	stewater Capital Fund
RP-5 Expansion	\$4,900	\$6,790	\$338,270
CCWRF Assets Management and Improvements	2,700	1,020	23,220
Purchase Existing Solar Installation	0	7,500	7,500
RP-1 Headworks Primary and Secondary Upgrades	5,290	588	5,878
RP-1 Disinfection Pump Improvements	1,197	2,086	5,342
RP-1 Flare Improvements	1,050	2,380	4,900
RP-1 Mixed Liquor Return Pumps	2,172	0	2,172
Total Regional Capital Fund Major Projects	\$17,309	\$20,364	\$387,282
		Wast	ewater Operations Fund
RP-1 Mechanical Restoration Upgrades	\$8,855	\$1,000	\$9,855
RP-4 Influent Screen Replacement	2,850		2,850
RP-1 Primary Effluent	2,660		2,660

June 6, 2019

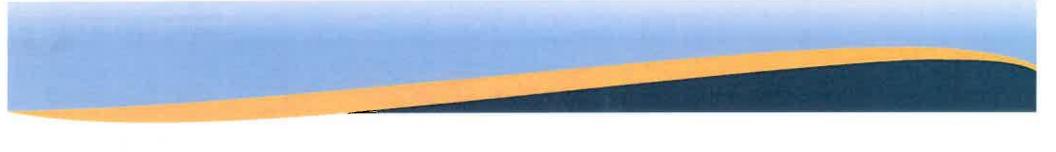
Page 25 of 26

	#10.27	1 EV	
Projects	FY 2019/20	FY 2020/21	Total Ten-Year Budget
(SThousands)	Proposed	Proposed	Total Fell-Fear-Budget
Conveyance	Toposeu	Topostu	
Improvement			
SCADA			
Enterprise	2,000	3,500	8,500
System			
RSS Haven			
Avenue	2,000	4,000	6,000
Repair &	_,	,,,,,	.,
Replacement Digester 6 and			
7 Roof	1,500	2,800	4,300
Repairs	1,500	2,800	4,500
RP-4 Primary			
Clarifier	1,150	5,200	7,130
Rehabilitation			· · · · · · · · · · · · · · · · · · ·
Total			
Regional			
Operations	\$22,965	\$17,550	\$47,445
Fund Major			
Projects			
			Recycled Water Fund
DW			Recycled Water Fund
RW Connections			
Connections	2,000	3,000	Recycled Water Fund 80,000
	2,000		
Connections to City of	2,000		
Connections to City of Pomona RW Connections	2,000		
Connections to City of Pomona RW Connections to JCSD	W	3,000	80,000
Connections to City of Pomona RW Connections to JCSD Baseline	1,000	3,000	31,300
Connections to City of Pomona RW Connections to JCSD Baseline RWPL	W	3,000	80,000
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension	1,000	3,000	31,300
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158	1,000 5,730	3,000	80,000 31,300 5,730
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU	1,000	3,000	31,300
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades	1,000 5,730	3,000	80,000 31,300 5,730
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East	1,000 5,730 4,672	3,000	31,300 5,730 4,672
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East Reservoir Re-	1,000 5,730	3,000	80,000 31,300 5,730
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East	1,000 5,730 4,672	3,000	31,300 5,730 4,672
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East Reservoir Re- Coating and	1,000 5,730 4,672	3,000	31,300 5,730 4,672
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East Reservoir Re- Coating and Painting Napa Lateral Total	1,000 5,730 4,672 1,000	3,000 18,500 1,200	80,000 31,300 5,730 4,672 2,200
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East Reservoir Re- Coating and Painting Napa Lateral Total Recycled	1,000 5,730 4,672 1,000	3,000	80,000 31,300 5,730 4,672
Connections to City of Pomona RW Connections to JCSD Baseline RWPL Extension RP-1 1158 RMPU Upgrades 1158 East Reservoir Re- Coating and Painting Napa Lateral Total	1,000 5,730 4,672 1,000	3,000 18,500 1,200	80,000 31,300 5,730 4,672 2,200

Projects (SThousands)	FY 2019/20 Proposed	FY 2020/21 Proposed	Total Ten-Year Budget
		Recharge	e Water Fund
RMPU Construction Costs	5,000	9,750	14,790
Lower Day Basin RMPU Improvements		3,404	3,404
Total Recharge Water Fund	\$5,000	\$13,154	\$18,194
TOTAL MAJOR PROJECTS	\$61,281	\$73,768	\$578,428

INFORMATION ITEM

3A



Operations Division Semi-Annual Update



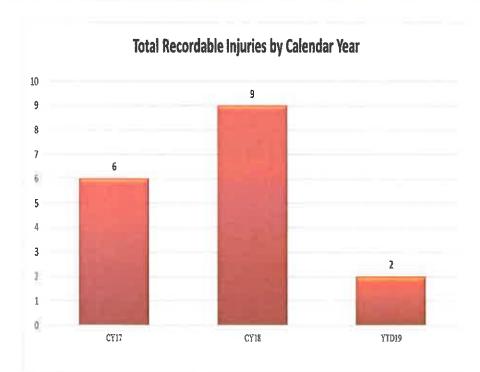


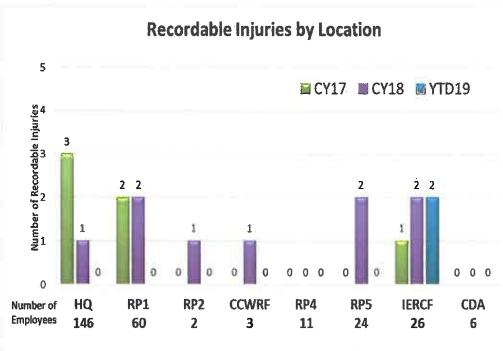




Chander Letulle, Manager of Operations & Maintenance May/June 2019

Total Recordable Injuries by Calendar Year

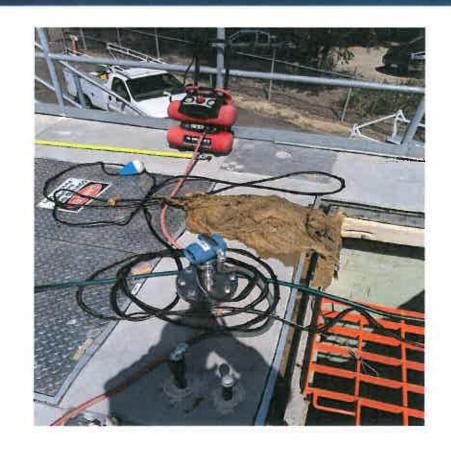






Permit Compliance

- National Pollutant Discharge Elimination System (NPDES)
- Southern California Air Quality Management District (AQMD)
 - RP-1 Flare
- Sanitary Sewer System
 - Preserve Lift Station





Emergency Responses







4/27/2019

- 40 year old 30" TP-1 outfall in the City of Chino
- The leak was caused by a damaged gasket at one of the pipe joints
- All of the flow was contained in an adjacent basin
- Repaired and placed back into service on 4/29/2019

5/9/2019

- 30" Bickmore Avenue pipeline in the City of Chino
- The leak was caused by a damaged saddle on a service lateral
- · All of the flow was contained on site
- Repaired and placed back into service on 5/10/2019

IERCF Compost Screening Replacement

- Replacement of end-of-life screen (12 years)
- Project completed April 2019
- Stainless steel or coated for corrosion protection
- Increased production and reliability
- Began daily operations May 6, 2019





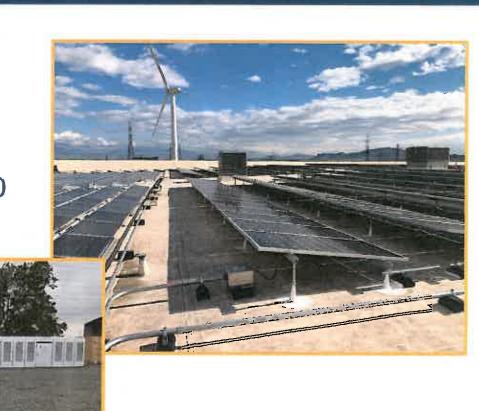


RP4/IERCF Energy Project

- Producing full power
- 1.5 MW of Batteries at RP4
- 1.5 MW of Solar at IERCF
- Guaranteed Annual Savings: \$87,500

Solar production: 189,277 kWh





Chino I Desalter Winter Maintenance Shutdown 2019









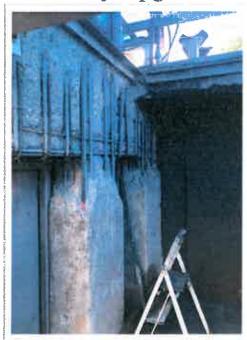






Recently Completed Projects

RP-1 Headworks & Primary Upgrades



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

RP-4 Trident Filter Rehab Project



RP-4 SCADA
Migration Project



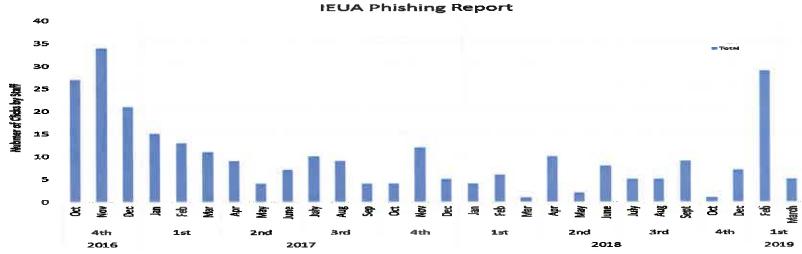
Integrated Systems Services (ISS) Cybersecurity

NEWS

Personal data for 1,000 pensioners accessed from OC Sanitation District

District officials said they are 'working with the parties involved to fully understand the situation and the data breach'

By TONY SAAVEDRA | tsaavedra@scng.com and TERI SFORZA | tsforza@scng.com | Orange County Register PUBLISHED: March 11, 2019 at 6:33 pm | UPDATED: March 11, 2019 at 8:12 pm

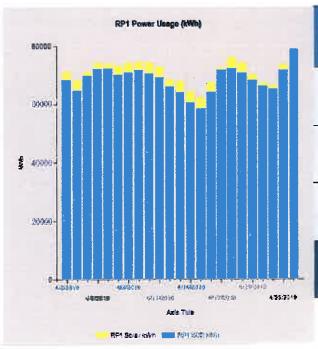




Integrated Systems Services (ISS) Energy Reports

Energy - RP1

April 2019



Source	Usage	Day	Consumed / Produced (kWh)	Day	Consumed / Produced (kW)
-	High	4/23/2019	78,624	4/4/2019 6:45 AM	3,788
SCE	Low	4/14/2019	58,239	4/1/2019 11:59 PM	2,981
	Avg		68,356		2,874
	fligh	4/10/2019	3.962	4/4/2019 11:30 AM	429
Solar	Low	4/16/2019	847	4/1/2019 11:59 PM	0
	Avg		2,815		151
	High	4/17/2019	75,900	4/4/2019	4,217
Combined (SCE+Solar)	Low	4/14/2019	52,007	4/2/2019	0
(502.00)	Avg		70,704		3,001
Monthly	Totals	SCE (kWh)	1,572,181	Solar (kWh)	61,929

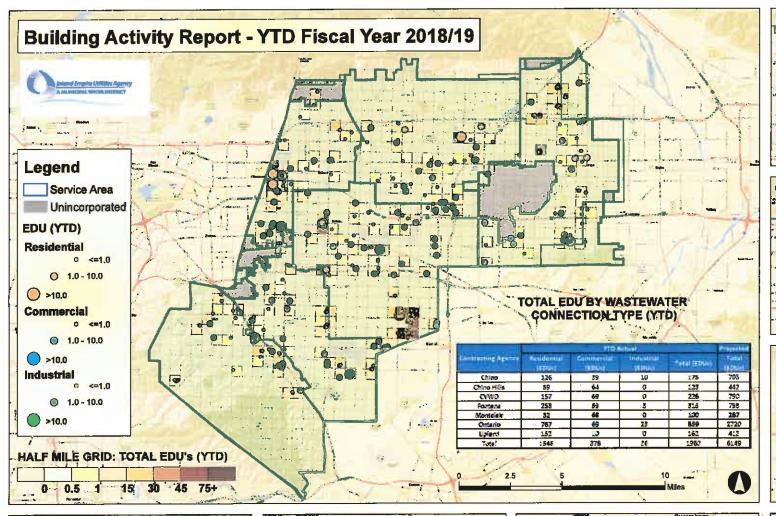


INFORMATION ITEM

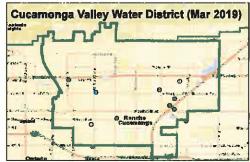
3B

Bill No.	Author	Bill Name	Description	IEUA Action	Comments
AB 292	Quirk	Recycled Water: raw water and groundwater augmentation	Updates terminology related to potable reuse in order to promote a better understanding of the various types of reuse.	Support	Sponsored by WateReuse
AB 405	Rubio	Sales and use taxes: exemption: water treatment	Chemicals used in the treatment of drinking water are already exempted from sales tax. This bill would also exempt from sales tax chemicals related to wastewater treatment and recycled water treatment. Estimated to save IEUA \$75K/year.	Support	
				Support	
AB 533	Holden	Income taxes: exclusion: turf removal water conservation program	This bill would exclude from gross income any amount received as a rebate, voucher, or other financial incentive issued by a water service provider for turf removal before January 1, 2024.	MWD Coalition Letter 3/21/19	
AB 557	Wood	Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program	Would appropriate \$9.25 million from the General Fund to the Department of Water Resources in Fiscal Year 2019/20 to operate the Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program.	Support	
AB 654	Rubio	Public Records: utility customers: disclosure of personal Information	Would allow a local agency to share utility usage data and other personal customer Information with another governmental agency for scientific, educational, or research purposes and maintain that data as confidential.	Support	
	220			Oppose	
AB 1194	Frazier	Sacramento - San Joaquin Delta: Delta Stewardship Council	Would increase the membership of the Delta Stewardship Council to 13 members, including 11 voting members and 2 nonvoting members.	MWD Coalition Letter 3/28/19	
AB 1672	Bloom	Product labeling: flushable products	Would establish labeling requirements and performance standards for wet wipes so that Californians will know whether a product can be discarded safely by their plumbing.	Support	Sponsored by CASA
			The fill the state of the Community Code that would start Connection and	Oppose	
SB 204	Dodd	State Water Project: Contracts	This bill would add requirements to the Government Code that would significantly and unnecessarily delay any action on California WaterFix moving forward and would increase costs to implement the project by creating excessive delays in the contracting process.	MWD Coalition Letter 3/6/19	
	Roth	Water Conveyance: use of facility with unused capacity		Oppose	
SB 307			Would impose additional state environmental review by unrelated agencies on a project that has already undergone environmental review under the California Environmental Quality Act.	IEUA Letter 3/28/19	
SB 414	Caballero	Small System Water Authority Act of 2019	Would promote the voluntary consolidation of smaller, non-compliant water agencies with compliant water agencies.		Sponsored by Eastern MWD and CMUA
SB 332	Hertzberg	Ocean Discharge	Bill seeks to reuse 50% of all wastewater discharged to the ocean by 1/1/2030 and 95% of all discharged wastewater by 1/1/2040.	Oppose Unless Amended	
SB 669	Cabaliero	Safe Drinking Water Trust	Would establish a Fund to collect moneys from the General Fund. Interest earnings from the Fund are to be used by the Trust to assist chronically noncompliant water systems in need of financial assistance.		Sponsored by ACWA and CMUA

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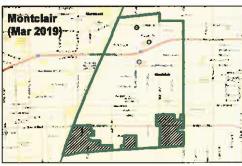






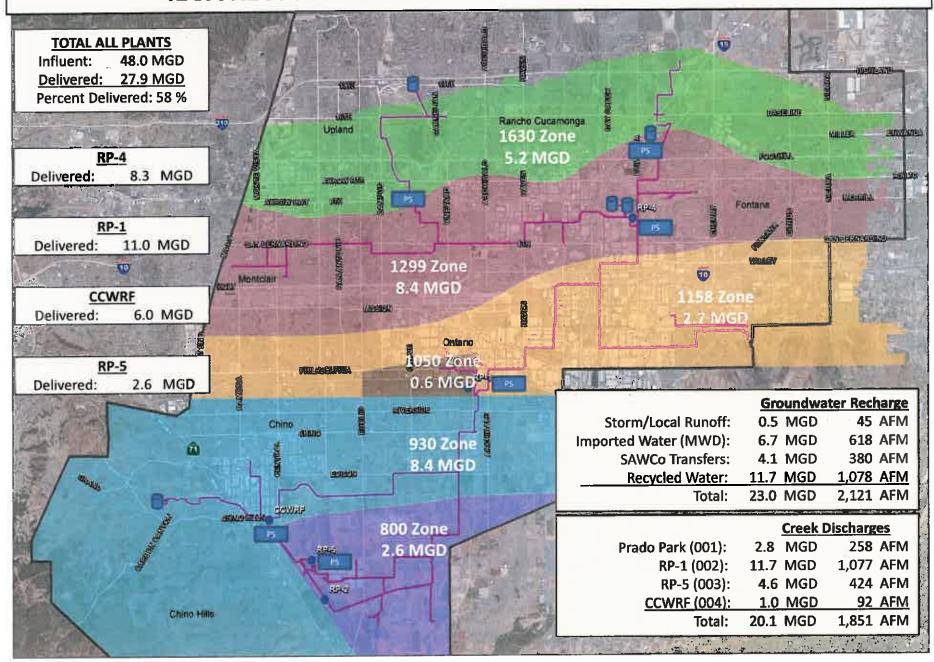






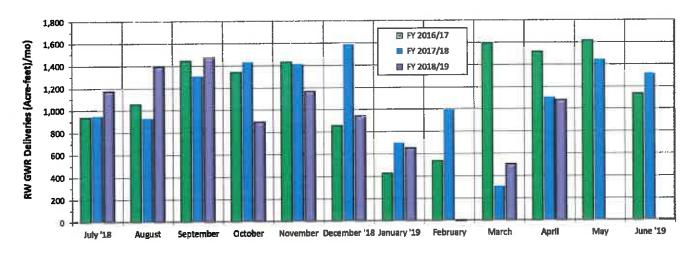
RECEIVE AND FILE 4B

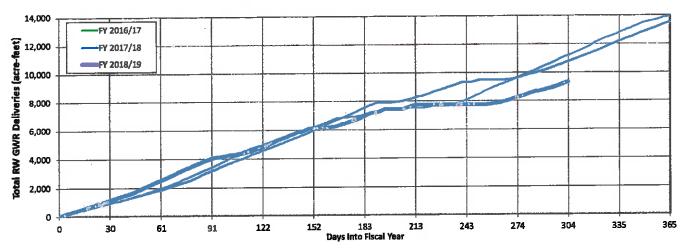
IEUA RECYCLED WATER DISTRIBUTION - APRIL 2019



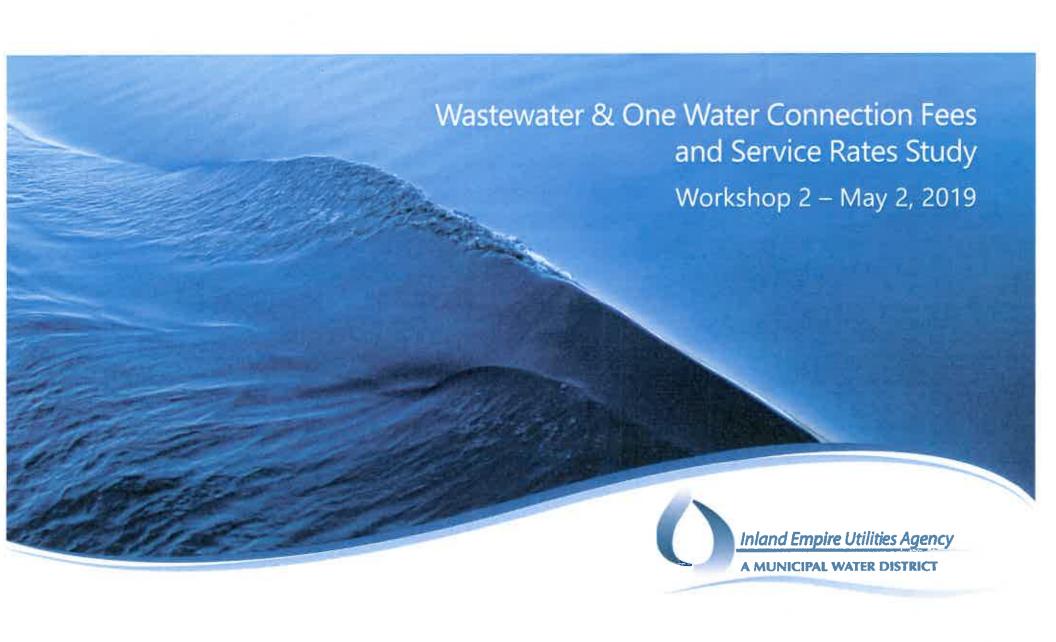
Recycled Water Recharge Deliveries / Plan - April 2019 (Acre-Feet)

Basin	4/1-4/6	<i>4/7-4/</i> 13	4/14-4/20	4/21-4/27	4/28-4/30	Month Actual	FY To Date Actual	Deliveries a	re draft until reported as final.
Ely =	0,0	0.0	0.0	0.0	0,0	0,0	1392		
Banana	0.0	0.0	0.0	0.0	0,0	0,0	309		
Hickory	0,0	0.0	0.0	0,0	0,0	0.0	188		
Tumer 1 & 2	0.0	0,0	0,0	0.0	0.0	0.0	547		
Turner 3 & 4	0,0	0,0	0.0	0.0	0.6	0,0	347		
8th Street	82.7	67.1	79.9	120.0	30.3	380.0	2159		
Brooks	46.0	55.5	58.7	83.7	21.7	265.6	924		
RP3	11.4	6,5	0.0	0.0	0.0	17,9	1148		
Declez	22.6	4,8	21.2	45.5	11.5	105,6	1399		
Victoria	71.4	81.4	55,8	78.7	23.6	310.9	1253		
San Sevalne	0.0	0.0	0.0	0,0	0,0	0.0	0		
Total	234,1	215,3	215,6	327.9	87.1	1,080.0	0 9,318	1,105	AF previous FY to day actual





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Workshop Agenda

- 1. Connection Fee Background
- 2. Wastewater Connection Fees
- 3. One-Water Connection Fees

IEUA Funding Strategy: Based upon a comprehensive and integrated approach



General Study Approach: Each fee or rate analysis follows a similar approach.



Policy & Rate and Fee Structure Review



Revenue Requirement and Funding Needs Analysis



Demand Analysis and Flow and Loading Analysis



Cost Allocation
Analyses
-growth/existing
-functional group



Rate and Fee Design Analysis



Outreach, Engagement, & Messaging













What is a connection fee? One-time charge imposed on new or upsized meters or connections to compensate for the cost of providing system capacity

- Assessed per unit of capacity required:
 - Wastewater per Equivalent Dwelling Unit (EDU)
 - Water per Meter Equivalent Unit (MEU)

Adopted Fees

Wastewater Connection Fees

One Water Connection Fees FY 2018/19: \$6,624 per EDU

FY 2019/20: \$6,955 per EDU

FY 2018/19: \$1,604 per MEU

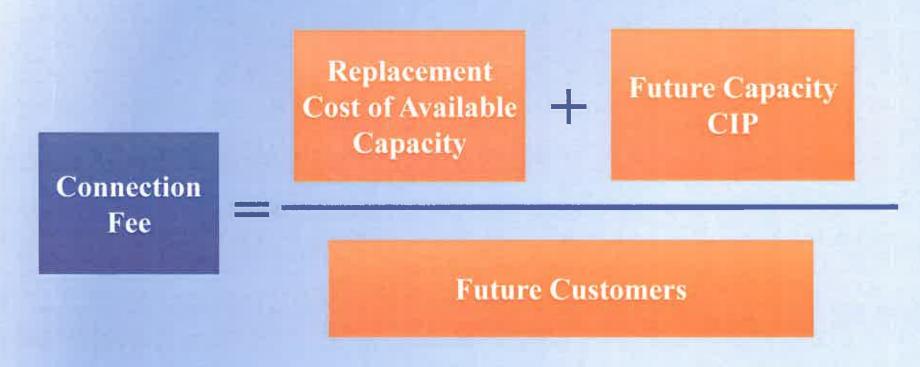
FY 2019/20: \$1,684 per MEU

Regulatory Requirements: Connection fees are subject to California Government Code §66013

- Requires a reasonable nexus between the amount of the charge and the cost of capacity to serve the new development
- Defines maximum fee that may be imposed
- Legally permissible to include components for water resources, production, storage, distribution, and financial reserves
- Expansion fee revenues may only fund expansion related projects
- Not subject to Proposition 218

Hybrid Connection Fee Methodology:

Recovers proportionate share of capacity for existing system and planned future improvements



System Value and Cost Components: Hybrid connection fees account for existing assets as well as future improvements.

Existing Assets (Buy-In)

- Existing Physical Assets (Replacement Cost New Less Depreciation, RCNLD)
- Plus: Construction in Progress
- Plus: Cash Reserves
- Less: Adjustment for property tax revenues used for capital projects

Future Improvements (Incremental)

Capital Improvements Attributable to Growth





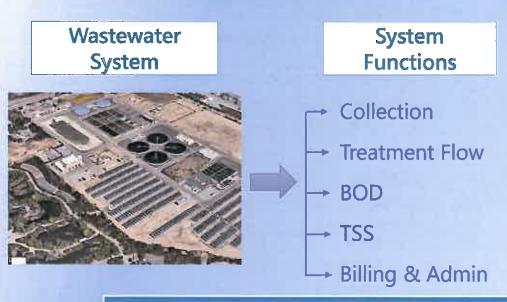
Existing System Assets: Value based on Replacement Cost New Less Depreciation (RCNLD)

- RCNLD
 - Book Value
 - Original Value
 - Less: Accumulated Depreciation
 - Escalated to FY 2018/19 using ENR CCI

Wastewater System Valuation

	Original Value	Accumulated Depreciation	Book Value	RCNLD (Trended Book Value)
Total (M)	\$716.4	(\$373.4)	\$343.0	\$505.9

Asset Allocation: Asset values are allocated to billable constituents based on each assets function within the system.



- Ex 1. Collection Assets
 - Allocated to flow since collection systems are sized based on flow
- Ex 2. Aeration Basins
 - Allocated to BOD since they are used to remove BOD from wastewater

Wastewater RCNLD Functional Allocation

Billable Constituent	Flow	BOD	TSS	Total
Total (M)	\$268.3	\$157.3	\$80.2	\$505.9

Available Existing System Assets: The value of existing physical system available to serve growth is based on available capacity within the system.

- Each asset was associated with a particular treatment plant (or the collection system) in order to determine the "capacity" of the asset available for future users.
- Using the asset's RCNLD, the value of its available capacity was calculated

RCNLD of Available Wastewater Capacity

Billable Constituent	Flow	BOD	TSS	Total
Total (M)	\$82.1	\$47.8	\$22.4	\$152.3
Resulting Functional Allocation	54%	31%	15%	100%

Applicable Reserves: Approximately 28% of IEUA's reserves are included based on the total growth in EDUs.

- The reserve funds of the wastewater system include:
 - Regional Operations and Maintenance (RO) Fund
 - Regional Wastewater Capital Improvement (RC) Fund
 - Non-Reclaimable Wastewater (NC) Fund

Wastewater Reserves

 Additionally, a share of the Administrative Services (GG) Fund proportional to the wastewater assets' total RCNLD out of all Agency RCNLD was included.

MANUAL INCOME.			
Fund	Fund Report Balance 17/18 (M)	Future User's Share (M)	
Regional Operations	\$76.8	\$21.5	
Regional Capital	\$79.6	\$22.3	
Non Reclaimable Wastewater	\$9.8	\$2.7	
Administrative Services	<u>\$8.4</u>	<u>\$2.3</u>	Note: Totals may not
Total	\$174.6	\$48.9	tie due to rounding.

Construction-in-Progress: Approximately 28% of the construction in progress value is included based on the total growth in EDUs.

- Construction in progress costs are escalated to current dollars using the ENR CCI
- A share of the Administrative Services (GG) Fund costs were included proportional to the wastewater assets' total RCNLD out of all Agency RCNLD

Wastewater Construction In Progress

Fund	Total Construction In Progress (M)	Future Users' Share (M)
Regional Operations	\$36.9	\$10.3
Regional Capital	\$36.9	\$10.3
Non Reclaimable Wastewater	\$0.4	\$0.1
Administrative Services	\$1.3	<u>\$0.4</u>
Total	\$75.5	\$21.1

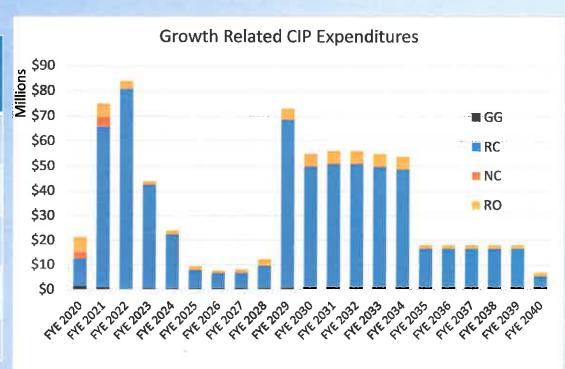
Property Tax Offset: Approximately 28% of the construction in progress value is included based on the total growth in EDUs.

- Each year a share of property tax revenues collected by IEUA are allocated to pay for capital projects, debt service, and O&M
- The present values of each recorded property tax receipt used for capital projects since FY 1999/00 totals \$61.0M
- Percentage of all customers by buildout that are new, 28%, represents the percentage of \$61.0M that has been collected from undeveloped properties
- \$17.1M is allocated to future users

Capital Improvement Plan: Approximately 46% of CIP costs through 2040 are considered to be growth related.

Wastewater Capital Improvement Plan

Fund	2020 - 2040 Project Costs (M)	Future Users' Share (M)
Regional Operations (RO)	\$286.9	\$58.6
Regional Capital (RC)	\$1,192.9	\$645.0
Non Reclaimable Wastewater (NC)	\$49.4	\$13.4
Administrative Services (GG)	<u>\$48.9</u>	<u>\$13.7</u>
Total	\$1,578	\$730.8



Customer Base: Determined based on flow and loading forecasts and Equivalent Dwelling Unit (EDU) assumptions.

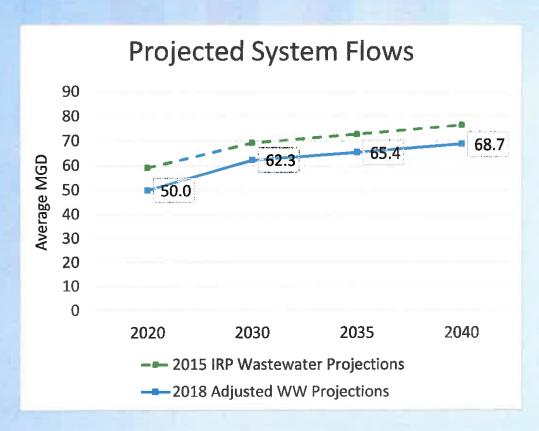
Flow Forecast Loading Forecast

EDU Assumptions Cost Allocations

Existing and Future Customer Base (EDUs)

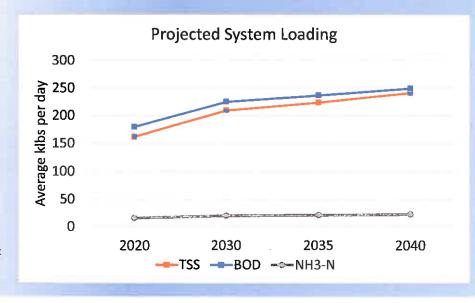
Flow Forecast: Projected flows are updated from the 2015 IRP to reflect actual flows in recent years.

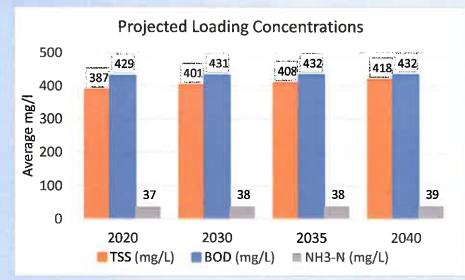
- Flow increase through 2040
 - 18.7 MGD
- Projected flows represent a 10% reduction from the 2015 IRP
 - Impact of water use efficiency measures and ongoing plumbing code updates



Loading Forecast: System loadings are expected to be consistent with projections from the 2015 Wastewater Facilities Master Plan.

 Loading concentrations are expected to increase over time due to continued indoor water use efficiency improvements for new development as well as existing customers





Resulting Growth Forecast: Loadings are expected to increase slightly faster than flows.

Flow and Loading Projections

	2020	2040	Future Users		
Flow (MGD)	50.0	68.7	18.7	27%	
BOD (klbs/day)	179.0	247.9	68.8	28%	
TSS (klbs/day)	161.6	239.8	78.2	33%	

EDU Definition: The EDU definition represents the expected flow and loading from a typical single family customer and accounts for IEUA's asset base.

- Updated flow assumption of 180 gpd based on 50 gpcd and projected persons per household
- Loading concentration assumptions may be refined as additional information becomes available (CASA Study, etc.)
 - Two options have been developed
 - Option A: Low Strength Concentrations: scaled loading assumptions based on current contract and updated gpd
 - Option B: High Strength Concentrations: assumes incrementally higher concentrations that Option A

EDU Definition: Continued

- Cost weighting factors are used to incorporate IEUAs asset base (physical system) into the EDU calculation
 - Weighting factors have been updated by allocating asset values to Flow,
 BOD, and TSS based on the function served by and sizing of each asset

EDU Assumptions

	Regional Contract	2015 Study		ated entration	Upd High Cond	ated centration	Weighting Factor*
Flow	270 gpd	195 gpd	180 gpd		180 gpd	-	54%
BOD	230 mg/L	318 mg/L	345 mg/L	0.52 lbs/day	380 mg/L	0.57 lbs/day	31%
TSS	220 mg/L	304 mg/L	330 mg/L	0.50 lbs/day	365 mg/L	0.55 lbs/day	15%

*Weighting factors may change as the asset allocation is refined.

EDU Calculation: Determines the total number of EDUs based on flow and loading growth over the study period.

Option A: Low Loading Concentrations

Component	Future Users	ļ	Per EDU (Low Concentration)		Weighting Factor	L	EDU _Components-
Flow	18.7 MGD	÷	180 gpd	X	54%	=	55,976
BOD	69.0 klbs	÷	0.52 lb	X	31%	=	41,784
TSS	78.2 klbs	÷	0.50 lb	X	15%	=	23,220
					Future EDU	Is	120,980

Option B: High Loading Concentrations

Component	Future Users		Per EDU (High Concentration)		Weighting Factor		EDU Components
Flow	18.7 MGD	÷	180 gpd	Х	54%	=	55,976
BOD	69.0 klbs	÷	0.57 lb	X	31%	=	37,935
TSS	78.2 klbs	÷	0.55 lb	Х	15%	=	20,993
					Future EDU	Js	114,905

 Higher loading concentration assumptions result in lower future EDUs because overall loading projections are fixed

 Note: Totals may not tie due to rounding.

Preliminary Wastewater Connection Fees

Component	Value _≃ (M)
RCNLD (Existing Physical System)	\$152.3
Construction in Progress	\$21.1
Reserves	\$48.9
Less: Property Tax Offset	<u>(\$17.1)</u>
Subtotal Buy-In Portion	\$205.3
Incremental Portion (Growth Related CIP)	\$730.8
Option A: Low Loading Concentrations Scenari	0
Expected Future Users (EDUs)	120,980
Buy-In Fee (\$ per EDU)	\$1,700
Incremental Fee (\$ per EDU)	\$6,000
Total Connection Fee (\$ per EDU)	\$7,700
Option B: High Loading Concentrations Scenar	io
Expected Future Users	114,905
Buy-In Fee (\$ per EDU)	\$1,800
Incremental Fee (\$ per EDU)	\$6,400
Total Connection Fee (\$ per EDU)	\$8,200

Note: Totals may not tie due to rounding.

- Results of the preliminary analyses suggest fees ranging from:
 - \$7,700 per EDU in the low loading concentration scenario

to:

- \$8,200 per EDU in the high loading concentration scenario
- The adopted fee for FY 2019/20 is \$6,955 per EDU





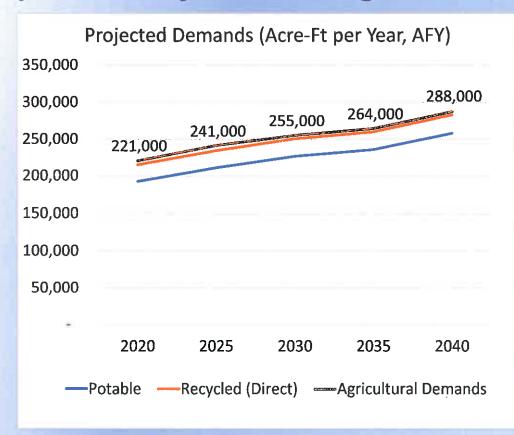
Customer Base: Determined based on water usage projections and demands per Meter Equivalent Unit (MEU).

Water Demand Forecast

Calculated Usage per Meter Equivalent Unit (MEU)

Existing and Future Customer Base (MEUs)

Water Usage Forecast: Based on 2015 UWMP or values provided by member agencies.



Water Usage Projection

	2020	2040	Future Users
Potable	193,327	257,543	64,216
Recycled (Direct)	22,000	25,000	3,000
Agricultural Demands	5,344	4,990	-354
Total	220,671	66,862	
Percent fo	23%		

MEU Calculations: Future MEUs are calculated based on the current usage per MEU and projected demands.

Current Connections and MEUs

		Potable	Recycled
Meter Size	MEU Ratio	Connections	Connections
5/8"	1.0	83,869	
3/4"	1.0	56,733	
1 10	2.5	43,528	122
1.5"	5.0	5,410	214
2"	8.0	8,244	458
3"	17.5	697	117
4"	31.5	356	36
6"	70.0	152	30
8"	120.0	266	11
10"	150.0	36	23
12"	175.0	2	
Total Connections		199,293	1,011
MEUs		414,146	15,091

MEU Calculation		
Current MEUs		
Potable	414,146	
Recycled	15,091	
Total	429,236	
2020 Usage (AFY)	220,671	
AFY per MEU	0.514	
2040 Usage	287,533	
2040 MEUs	559,292	
New MEUs	130,056	
Percent	23%	

Existing System Assets: The future users' share of the RCNLD and Construction in Progress is 23% based on the expected MEU growth through 2040.

Water System Valuation*

	Original	Accumulated	Book	RCNLD	Future Users'
	Value	Depreciation	Value	(Trended Book Value)	Share
Total (M)	\$283.7	(\$71.5)	\$212.2	\$268.1	\$61.7

^{*}Includes assets from the Recycled Water, Recharge Water, and Water Resources Funds

Water System Construction in Progress

Fund	Total Construction In Progress (M)	Future Users' Share (M)
Recycled Water	\$11.0	\$0.02
Recharge Water	\$3.4	\$0.8
Water Resources	<u>\$1.3</u>	<u>\$2.5</u>
Total	\$15.7	\$3.3

Applicable Reserves: Approximately 23% of IEUA's reserves are included based on the total growth in MEUs.

- The reserve funds of the water system include:
 - Recycled Water (WC) Fund
 - Recharge Water (RW) Fund
 - Water Resources (WW) Fund
- Additionally, a share of the Administrative Services (GG) Fund proportional to the water assets' total RCNLD out of all Agency RCNLD was included.

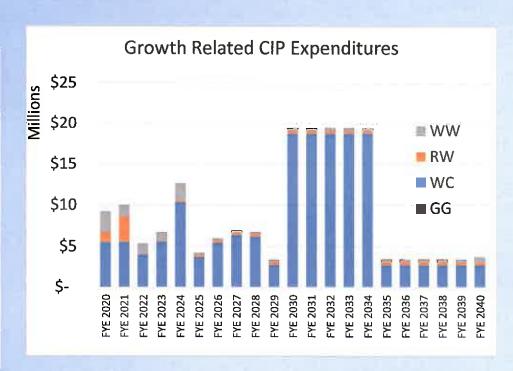
Water System Reserves

Fund	Balance (M)	Future User's Share (M)
Recycled Water	\$35.1	\$8.1
Recharge Water	\$3.3	\$0.7
Water Resources	\$10.6	\$2.4
Administrative Services	<u>\$4.8</u>	<u>\$1.1</u>
Total	\$53.7	\$12.4

Capital Improvement Plan: Approximately 28% of CIP costs through 2040 are considered to be growth related.

Water System Capital Improvement Plan

Fund	2020 - 2040 Project Costs (M)	Future Users' Share (M)
Recycled Water (WC)	\$421.3	\$164.8
Recharge Water (RW)	\$44.8	\$10.3
Water Resources (WW)	\$60.3	\$13.9
Administrative Services (GG)	<u>\$3.5</u>	<u>\$0.8</u>
Total	\$592.9	\$189.8



Preliminary One-Water Connection Fees

Component	Value (M)
RCNLD (Existing Physical System)	\$61.7
Construction in Progress	\$3.3
Reserves	\$12.4
Less: Property Tax Offset	n/a
Subtotal Buy-In Portion	\$77.3
Incremental Portion (Growth Related CIP)	\$189.8
	4
Expected Future Users (MEUs)	130,056
Buy-In Fee (\$ per MEU)	\$600
Incremental Fee (\$ per MEU)	\$1,500
Total Connection Fee per MEU	\$2,100

- Results of the preliminary analyses suggest fees of approximately \$2,100 per MEU
- Calculations will continue to be refined based on:
 - CIP Costs
 - Growth Projections
 - Growth Allocations
- The adopted fee for FY 2019/20 is \$1,684 per MEU





Next Steps:

- Continue to refine connection fee analyses
- Develop analyses for service rates
 - Wastewater Monthly EDU Rate
 - Water Monthly MEU Rate
 - Recycled Water Volumetric Rates
 - Recharge Water Volumetric Rate
- Incorporate scenarios to assess the impact of the Chino Basin Program