# NOTICE OF MEETING

#### **OF THE**

# REGIONAL SEWERAGE PROGRAM TECHNICAL COMMITTEE

#### OF THE



#### WILL BE HELD ON

THURSDAY, MAY 25, 2017 3:30 P.M.

ANZA CONFERENCE ROOM AT THE OFFICE OF THE AGENCY 6075 KIMBALL AVENUE CHINO, CA 91710



#### Regional Sewerage Program Technical Committee Meeting

#### AGENDA Thursday, May 25, 2017 3:30 p.m.

#### Location

Inland Empire Utilities Agency
Anza Conference Room – Building B
6075 Kimball Avenue
Chino, CA 91708

#### Call to Order and Roll Call

#### Additions/Changes to the Agenda

#### 1. Action Items

- A. Approval of the April 27, 2017 Meeting Minutes
- B. 2017/18 & 2018/19 TYCIP and IEUA Regional Budget
- C. Technical Committee Meeting Time

#### 2. Informational Items

- A. Regional Contract Update/Renewal (Oral)
- B. Energy Management Planning Update

#### 3. Receive and File

- A. Draft Regional Policy Committee Agenda
- B. Building Activity Report
- C. Recycled Water Distribution Operations Summary

## 4. Previous Technical Committee Items Requested None

#### 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 June 29, 2017

#### 6. Adjournment

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#### **DECLARATION OF POSTING**

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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 by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Monday, May 22, 2017.

Laura)Mantilla

ACTION ITEM

**1A** 



# Regional Sewerage Program Technical Committee Meeting MINUTES OF APRIL 27, 2017 MEETING

#### **CALL TO ORDER**

A regular meeting of the IEUA/Regional Sewerage Program – Technical Committee was held on Thursday, April 27, 2017, at the Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, California. Committee Chairman Mike Hudson called the meeting to order at 3:30 p.m.

#### **ATTENDANCE**

#### **Committee Members:**

Jesus Plasencia	City of Chino
Ron Craig	City of Chino Hills
Braden Yu	Cucamonga Valley Water District
Dan Chadwick	City of Fontana
Mike Hudson	City of Montclair
Katie Gienger	City of Ontario
Rosemary Hoerning	City of Upland
Joseph Grindstaff	Inland Empire Utilities Agency

#### **Others Present:**

Chris Berch	Inland Empire Utilities Agency
Kathy Besser	Inland Empire Utilities Agency
Javier Chagoyen-Lazaro	Inland Empire Utilities Agency
Tina Cheng	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Jason Marseilles	Inland Empire Utilities Agency
Laura Mantilla	Inland Empire Utilities Agency
Jesse Pompa	Inland Empire Utilities Agency
Lisa Snider	Inland Empire Utilities Agency
Shaun Stone	Inland Empire Utilities Agency
Christina Valencia	Inland Empire Utilities Agency

#### **ADDITIONS/CHANGES TO THE AGENDA**

Chairman Hudson asked if there were any changes/additions/deletions to the agenda. The Committee agreed to table item 2B - Energy Management Planning Update until the May 25, 2017 meeting.

#### 1. ACTION ITEMS

#### A. APPROVAL OF THE MARCH 30, 2017 MEETING MINUTES

<u>Motion</u>: By Braden Yu/Cucamonga Valley Water District and seconded by Dan Chadwick/City of Fontana to approve the minutes of the March 30, 2017 Technical Committee meeting.

Motion carried: Unanimously.

#### B. RP-5 EXPANSION CONSULTANT CONTRACT AMENDMENT

Shaun Stone/IEUA gave a presentation on the next steps of the RP-5 Liquids Expansion and Solids Treatment Facility consultant contract amendment for the design services. Mr. Stone explained the project background consisting of: Waste Water Facilities Master Plan developed between 2013 and 2015, preliminary design report (PDR) developed in January of 2016, objective to create a standardized set of design criteria for the RP-1 capacity recovery project, expansion of RP-5 and decommission and relocation of RP-2. Over 40 project meetings were conducted with staff, Board workshops, committee updates, all providing direction to the finalization of the PDR in March 2017.

(Rosemary Hoerning/City of Upland and Jesus Plasencia/City of Chino entered the meeting room at 3:33 p.m.)

Mr. Stone then gave an overview of the project scope consisting of the following: increase the plant capacity to 30 million gallons per day (MGD), full conversion to membrane bio-reactors, ultraviolet disinfection, rotary drum thickening technologies, phased digestion for the solids portion, and center fused dewatering. Parsons submitted a proposal for \$21.29 million. Negotiations were conducted on the following key points: streamlining of project management, deferment of project components not immediately required (phase 2 of the RP-2 site), all major scope items maintained as described in the PDR, and discount of Parsons fee. Parsons came forth with a revised fee proposal of \$17.99 million; a reduction of \$3.3 million or 15.5 % from the original proposal. Mr. Stone stated that IEUA completed a survey of scopes of work and design with various agencies for validation and reviewed the costs with the Committee. He then reviewed the project budget and schedule. The total project cost is slightly over \$319 million and the total project budget is \$325 million. Mr. Stone requested that the Regional Technical Committee recommend the IEUA Board to approve the consultant contract amendment with Parsons for the not-to-exceed amount of \$17,993,680 million.

Katie Gienger/City of Ontario asked if this also includes RP-1. Mr. Stone replied that it is only for the expansion of RP-5. Mr. Grindstaff stated that the President is proposing a big infrastructure program and it is likely we will do an RFP and go through 30% of design with RP-1 if the federal government moves ahead with the infrastructure grants. Rosemary Hoerning/City of Upland inquired about the IEUA design support services cost. Mr. Stone explained the cost associated such as, archaeological investigation, ground penetrating radar, other environmental work, staff support services and geotec survey as well.

Jesus Plasencia/City of Chino stated that the staff report recommends a food waste receiving station at RP-5. Mr. Stone explained that it will be at the solids handling facility, where there is already a

food waste operation. The goal is to cleanup how food waste is received; not to expand. This would allow the facility to operate within its permitted capacity. Mr. Stone further stated that the food waste portion will be a separate bid item to either be added or deleted from the project as necessary.

Mr. Hudson noted for the minutes that representatives from the city of Chino and Upland had arrived.

<u>Motion</u>: By Braden Yu/Cucamonga Valley Water District and seconded by Rosemary Hoerning/City of Upland to make recommendation to the IEUA Board of Directors to approve the consultant contract amendment with Parsons for the not-to-exceed amount of \$17,993,680.

Motion carried: Unanimously.

#### 2. INFORMATIONAL ITEMS

#### A. REGIONAL CONTRACT

Joseph Grindstaff/IEUA informed the Committee that we plan to have a proposal next month on how to proceed based on last month's feedback from the Committee.

#### B. ENERGY MANAGEMENT PLANNING UPDATE – THIS ITEM WAS TABLED

#### C. REVIEW OF TYCIP AND IEUA REGIONAL BUDGETS FY2017/18 & 18/19

Christina Valencia/IEUA introduced Javier Chagoyen-Lazaro, Manager of Finance and Accounting. Mr. Chagoyen reviewed the 10-year EDU growth forecasts provided by the member agencies, which project 36,000 new connections. He highlighted that the cities of Ontario, Chino and Chino Hills, represent nearly 70% of the projected growth. To accommodate this growth the Agency is planning to spend about \$350 million, about \$72 million more than initially planned due to a change in the RP-5 facility expansion from 15 MGD to 30 MGD. In the latter years of the 10-year period, is rehabilitation and capacity recovery of the RP-1 facility and the decommission of the RP-2 site located in the flood plain.

Ms. Hoerning asked whether the region has experienced that kind of growth previously. Mr. Berch replied that it is about 60% and will provide a chart with historical projections versus actuals. Mr. Grindstaff stated that Ms. Valencia applies a more conservative approach budgeting only 3,000 EDUs per year for the next two years. Mr. Lazaro stated the proposed FY 2018-2027 TYCIP is \$815 million with 80%, or \$642 million, planned within the first 5 years. A major project planned during the first 5 years is construction of the RP-5 Liquids and Solids Treatment Expansion project. He provided a summary of the proposed FY 2018-2027 TYCIP by Agency fund and the estimated funding sources. Extending the proposed TYCIP out another 5 years to 15 years increases the capital improvement plan to \$1.2 billion. Mr. Chagoyen reviewed the six major capital projects that account for 55% of the \$1.2 billion. In addition to the RP-5 expansion, another key project is the RP-1 rehabilitation project.

Mr. Chagoyen then continued with an overview of the biennial budget for the fiscal years (FYs) 2017/2018 and 2018/19 of the Regional Wastewater, Recycled Water and Recharge Water funds, which account for approximately 70% of the Agency's total proposed biennial budget. He explained

two key assumptions is "ramp-up" of succession planning with nearly 30% of employees possibly retiring over the next 5 years, and the Agency's continued transition from corrective maintenance to preventative/predictive maintenance. Mr. Chagoyen gave an overview of the Regional Wastewater Capital Improvement fund, including major revenues and sources of funds, major expenses, capital projects, and the estimated ending fund reserve balance. He provided the same overview for the Regional Wastewater Operations and Maintenance fund and the Recycled Water fund, including a cost of service comparison to the forecasts established in 2015 as part of the approval of the multiyear rates for FYs 2015/16 - 2019/20. Another key assumption Mr. Chagoyen highlighted is the projected reduction in the Recycled Water fund reserves. Due to the uncertainty of State Revolving Fund (SRF) funding availability given the current over subscription of the program, a key assumption over the next two fiscal years is the use of fund reserves to support recycled water capital projects. Should SRF loans/grants become available, the Recycled Water fund reserves will be significantly higher than projected. Mr. Chagoyen stated that the final draft of the proposed FYs 2017/18 - 208/19 budget for the Regional Wastewater and Recycled Water programs and FY 2018 - 2027 TYCIP will be brought back to the Regional Technical Committee on May 25 and the Regional Policy Committee on June 1 for final review and comment.

#### **EXHIBIT J STUDY**

Sylvie Lee/IEUA stated that IEUA had a workshop with the Committee to go over the Carollo study last month. IEUA received data from four agencies and water data from only three. She stated that the Committee needs to make a decision on when the data will be provided to start the analysis, and which data set will be used. Ms. Hoerning stated that Upland's data will be available at the end of next month. Mr. Plasencia and Ms. Gienger agreed that one month was plenty of time for their data to be completed as well. Ms. Lee stated that the Committee Chair recommended a discussion be held at the Special TAC meeting. Mr. Berch added that he was concerned about changing the scope and to consider what the initial goals were. He further stated that if the Committee wants to phase it in such a way, that should be the format of that conversation. Dan Chadwick said they would like to have IEUA attend one of the meetings coming up.

#### 3. RECEIVE AND FILE

#### A. MINUTES OF THE REGIONAL SEWERAGE PRETREAMENT SUMMARY REPORT

The minutes of the Regional Sewerage Pretreatment Summary Report were received and filed by the Committee.

#### **B. DRAFT REGIONAL POLICY COMMITTEE AGENDA**

The draft Regional Policy Committee Agenda was received and filed by the Committee.

#### C. BUILDING ACTIVITY REPORT

The Building Activity Report was received and filed by the Committee.

#### D. RECYCLED WATER DISTRIBUTION - OPERATIONS SUMMARY

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

#### **E. ENGINEERING PROJECT UDPATES**

The Engineering Project Update presentation was received and filed by the Committee.

### 4. PREVIOUS TECHNICAL COMMITTEE ITEMS REQUESTED None.

#### 5. OTHER BUSINESS

#### A. IEUA GENERAL MANAGER'S UPDATE

Mr. Grindstaff reported on the following:

- Bromide Last month, Mr. Grindstaff had reported that IEUA had its first violation in years.
  The primary source for bromide discharge was identified, a popsicle manufacturer was using
  a bromide base cleaner. The manufacturer will be changing their chemical usage effective
  May 1, 2017. In addition, another facility in Chino was also identified using products that
  contain bromide. IEUA is working with the city of Chino to get this resolved.
- Salinty IEUA came close to violating our permit during the drought last year. The 12- month
  average TDS limit was getting higher. IEUA approached the State Water Resources Control
  Board and they encouraged IEUA to change the average from an annual average to a 5 or 10year average; however, it requires an amendment to the basin plant and IEUA has started
  working with Chino Basin Watermaster and Wildermuth. The study is expected to take 18 to
  24 months.
- Mr. Grindstaff's Retirement Mr. Grindstaff informed the IEUA Board that he intends to retire at the end of this year. IEUA has hired Norm Roberts to do the recruitment. The goal is to have someone hired by the fall.

#### B. COMMITTEE MEMBER REQUESTED AGENDA ITEMS FOR NEXT MEETING

Ron Craig/City of Chino Hills requested if the Committee would consider changing the meeting to start earlier.

- C. COMMITTEE MEMBER COMMENTS
  None.
- D. <u>NEXT MEETING MAY 25, 2017</u>
- 6. ADJOURNMENT The meeting adjourned at 4:41 p.m.

Transcribed		
by:		
	Laura, Executive Assistant	

ACTION ITEM

1B



Date:

May 25, 2017/June 1, 2017

To:

Regional Committees

From:

Inland Empire Utilities Agency

Subject:

Review of Proposed Biennial Budget for Fiscal Years 2017/18 and 2018/19 for Regional Wastewater and Recycled Water Funds, and

FY 2018-2027 Ten Year Capital Improvement Plan

#### RECOMMENDATION

It is requested that the Regional Technical and Policy Committees (Regional Committees) provide recommendations to the IEUA Board of Directors (Board) on the proposed Fiscal Years (FYs) 2017/18 and 2018/19 biennial budget for the Agency's Regional Wastewater Operations and Maintenance fund, Regional Wastewater Capital Improvement fund, and Recycled Water fund, and the FY 2018-2027 Ten Year Capital Improvement Plan.

#### **BACKGROUND**

A review of the proposed biennial budget for Fiscal Years (FYs) 2017/18 and 2018/19 for Regional Wastewater, Recycled Water, and Recharge Water funds and the proposed FY 2018 – 2027 Ten Year Capital Improvement Plan (FY 2018-2027 TYCIP) was presented to the Board of Directors on April 19, the Regional Technical Committee on April 27, and the Regional Policy Committee on May 4, 2017.

Since then, 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. Total operating costs increased slightly by \$.5 million to incorporate the reclassification of vacant positions to support succession planning and streamlining of operations approved by the IEUA Board in May. Interfund transfers from the Wastewater Operations fund to the Administrative Services fund increased by \$324,000 to support acquisition/improvement of Agency-wide equipment. The most significant change was an increase in the proposed FY 2018-2027 TYCIP of \$18 million from \$815 million to \$833 million. Further details on the TYCIP changes are provided in the related section below.

#### FYs 2017/18 and 2018/19 Key Budget Assumptions

Key assumptions for the proposed biennial budget for FYs 2017/18 and 2018/19 Regional Wastewater and Recycled Water funds include: 3% increase in property tax receipts with no change in allocation by fund as approved by the Board in 2015; 3,000 new wastewater connections per fiscal year; and use of grants to support the South Archibald TCE Plume Clean Up project

Review of Proposed Biennial Budget for FYs 2017/18 and 2018/19 Regional Wastewater, and Recycled Water, and 2018 TYCIP May 25, 2017/June 1, 2017 Page 2 of 29

costs. 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. Total operations and maintenance (O&M) expenses are slightly higher than FY 2016/17 projected actuals. Key assumptions of the proposed biennial budget are summarized on Appendix Table A2.

#### FY 2018 – 2027 Ten Year Capital Improvement Plan (TYCIP)

The rehabilitation, replacement, improvement, and expansion of the Agency's facilities continue to be the key drivers for the proposed FY 2018-2027 TYCIP. These drivers are consistent with the Agency's long term planning documents approved by the Board of Directors, amongst them the:

- 2015 Wastewater Facilities Master Plan Updated flow factors and concentrations
- Asset Management Plan
- 2015 Recycled Water Program Strategy Update
- 2015 Energy Management Plan
- 2016 Integrated Resources Plan
- 2016 Water Use Efficiency Business Plan

The proposed FY 2018-2027 TYCIP increased by approximately \$18 million from \$815 million to \$833 million since last presented to the IEUA Board and Regional Committees. The increase is primarily due to additional requirements and changes in scope of work, including: 1) \$11.9 million Regional Water Recycling Plant No. 4 (RP-4) Process Improvements project (EN17110); 2) \$3.5 million RP-4 Primary Clarifier Rehabilitation project (EN17043); and 3) \$2.2 million 1158 East and West Full Recoat projects (EN21004 and EN22004) added in the Recycled Water fund. Both RP-4 projects are budgeted in the Regional Wastewater Operations and Maintenance (Wastewater Operations) fund.

The proposed FY 2018-2027 TYCIP includes both capital (\$716.8 million) and non-capital (O&M) projects (\$116.1 million). A summary by fund is provided in Table 1. Projects in the Regional Wastewater and Recycled Water programs account for nearly 88%, or \$733 million, of the proposed FY 2018 -2027 TYCIP. About 80% of the \$733 million, or \$585 million, is scheduled within the first 5 fiscal years (2018-2022).

#### FYs 2018-2022 Major Projects

- RP-5 Liquid Expansion to 30 million gallons per day (MGD) \$174.1 million
- RP-5 Solids Treatment Expansion \$164.1 million
- Water Quality Laboratory \$15.3 million

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**Table 1: FY 2018 – 2027 TYCIP by Fund** 

Fund (\$Millions)	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23 through FY 2026/27	TOTAL
*Wastewater Capital	\$27.4	\$26.6	\$82.2	\$167.7	\$107.8	\$77.1	\$488.8
**Wastewater Operations	30.0	32.8	22.1	10.4	9.3	53.0	157.6
Recycled Water	14.3	13.0	12.2	12.6	16.1	18.0	86.2
Non-Reclaimable Wastewater	1.2	1.9	1.0	0.3	0.3	7.7	12.4
Water Resources	5.8	8.1	17.2	10.2	1.7	9.5	52.5
Recharge Water	2.1	13.1	7.7	0.0	0.0	0.0	22.9
Admin Services	3.8	1.1	1.8	0.9	0.8	4.1	12.5
Total	\$84.6	\$96.6	\$144.2	\$202.1	\$136.0	\$169.4	\$832.9

<sup>\*</sup>Regional Wastewater Capital Improvement Fund (includes \$2.5 million capital investment in the IERCA)

The RP-1 Liquids and Solids Rehabilitation (RP-1 Rehab) project is slated to begin construction in 2027 with a major portion of expenditures planned after 2028. The RP-1 Rehab project and improvements to the Regional Recycled Water Distribution System (RRWDS) are expected to increase the capital improvement plan to \$1.2 billion by 2032. Six major capital projects in the Regional Wastewater program account for nearly 55%, or \$664 million, of the \$1.2 billion planned over the next 15 years.

#### FYs 2023-2032 Major Projects

- RP-1 Liquids Treatment Capacity Recovery \$182.0 million
- RP-1 Advanced Water Treatment Facility \$80.0 million
- RP-1 Solids Treatment Expansion \$48.0 million

These major capital projects are needed to meet the anticipated growth in the Agency's service area, replacement and rehabilitation (R&R) of aging facilities and infrastructure, and sustainment of water quality in the region. Funding for these major projects is shared by the Regional Wastewater Capital and the Wastewater Operations funds. Funding sources for the expansion projects in the Wastewater Capital fund include: new wastewater connection fees, property taxes, grants, new debt issues, contributions from the Wastewater Operations fund, and fund reserves. The R&R projects in the Wastewater Operations fund are supported by Equivalent Dwelling Unit (EDU) monthly sewer rates, property taxes, and fund reserves.

#### 2018 - 2027 TYCIP Non-Capital (O&M) Projects

Non-capital (O&M) projects account for approximately \$116 million of the proposed \$833 million 2018-2027 TYCIP. Approximately 45%, or \$52.5 million, is budgeted in the Water Resources

<sup>\*\*</sup>Regional Wastewater Operations & Maintenance Fund

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fund with the majority (\$32.5 million) designated for the Santa Ana River Conservation and Conjunctive Use Program (SARCCUP). Other Water Resources projects include the Local Supply Resilience Projects, California Data Collaborative Water Use Efficiency Data Analytics, water resource planning documents, and the Agency's regional water use efficiency programs. These projects support sustainability of the region's water supplies, including an investment in water use efficiency programs and water banking.

Over 30%, or \$36 million, is budgeted in the Wastewater Operations fund as reported in Table 2. Projects in the Wastewater Operations fund include condition assessments of Agency-wide assets such as: digester cleaning, aeration panel replacement, and coating of Agency structures. Also included is major maintenance of the Agency's facilities, lift stations, and conveyance systems. Timely upkeep of Agency facilities is necessary to ensure uninterruptible delivery of essential services in a cost-effective manner. Emergency repairs can cost as much as 30% more than routine maintenance. Also included in the Wastewater Operations fund is the South Archibald TCE Plume Clean Up project. Due to the significant efforts of Agency staff and other key stakeholders, this project is expected to be fully funded by grants and contributions.

Non-capital projects included in the Administrative Services, Non-Reclaimable Wastewater, Wastewater Capital, and Recycled Water funds support major maintenance of the Agency's general facilities, including roofing and parking lot repairs, Prado Basin annual monitoring, and hydraulic modeling of the Agency's regional recycled water system.

Table 2: 2018 FY 2018-2027 TYCIP Non-Capital Projects by Fund

Fund (\$Millions)	FY 2017/18	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23 through FY 2026/27	TYCIP TOTAL
<b>Wastewater Capital</b>	\$0.9	\$0.8	\$0.3	\$0.8	\$0.3	\$3.0	<b>\$6.1</b>
Wastewater Operations	6.0	8.2	2.4	1.9	1.6	15.9	36.0
Recycled Water	2.2	1.7	1.4	1.6	1.1	7.0	15.0
Non-Reclaimable Wastewater	0.1	0.1	0.1	0.1	0.1	0.5	1.0
Water Resources	5.8	8.1	17.2	10.2	1.7	9.5	52.5
Recharge Water	0.3	0.3	0.0	0.0	0.0	0.0	0.6
<b>Admin Services</b>	1.4	0.2	0.4	0.4	0.4	2.1	4.9
Total	<b>\$16.7</b>	<b>\$19.4</b>	\$21.8	\$15.0	\$5.2	\$38.0	\$116.1

Review of Proposed Biennial Budget for FYs 2017/18 and 2018/19 Regional Wastewater, and Recycled Water, and 2018 TYCIP May 25, 2017/June 1, 2017 Page 5 of 29

#### **Regional Wastewater Program**

The Regional Wastewater Program is comprised of two funds: Regional Wastewater Capital Improvement (Wastewater Capital), and Regional Wastewater Operations and Maintenance (Wastewater Operations). Components of each fund are summarized in Table 3.

**Table 3: Regional Wastewater Program Components** 

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

<sup>\*</sup>EDU = Equivalent dwelling unit is the estimated volumetric impact of a single residence.

#### **Regional Wastewater Capital Improvement Fund (Wastewater Capital)**

Total revenues for the Wastewater Capital fund are projected to increase by approximately 3% in the proposed biennial budget. A key assumption is the continued pace of new development in the Agency's service area with 3,000 new equivalent dwelling unit (EDU) wastewater connections projected for each budget year. Based on the 5 year rates adopted in June 2015, revenues from wastewater connection fees are estimated to increase by \$1.8 million in FY 2017/18 to \$18.9 million and by just under \$1 million to \$19.9 million in FY 2018/19. Table 4 summarizes the Wastewater Capital estimated revenues and other sources of funds. An estimated rise of 3% in assessed valuations accounts for the increase in property tax receipts from \$29.0 million projected in the current fiscal year to \$29.9 million and \$30.8 million 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.

**Table 4: Wastewater Capital Fund Revenues and Funding Sources** 

Funding Sources (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Wastewater Connection Fees	\$18.9	\$19.9	3,000 new wastewater connections per year consistent with FY 2016/17. Adopted fee of \$6,309

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Funding Sources (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
			per EDU effective 7/1/17, and \$6,624 effective 7/1/18.
Property Tax	29.9	30.8	Annual increase of 3% due to a projected increase in assessed property values. No change in 65% allocation to Wastewater Capital fund of total property tax receipts.
Other	4.3	3.1	Includes inter-fund transfer from the Wastewater Operations fund, share of the RP-2/RP-5 Solids Treatment Expansion project and interest revenues.
Total	\$53.1	\$53.8	

As reported in Table 5, the major expenditure in the Wastewater Capital fund is the capital investment plan (CIP) which accounts for over 50% of proposed budget. A total of \$27.0 million in capital project costs is budgeted in FY 2017/18 and \$26.3 million in FY 2018/19. The proposed CIP budget includes design of the RP-2/RP-5 Expansion project along with other major projects as summarized in Table 6.

**Table 5: Wastewater Capital Fund Expenses and Other Uses of Funds** 

Uses of Funds (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Program Support	\$7.2	\$7.2	Includes employment, professional services, and monthly capacity fees for the Non-Reclaimable Wastewater system used to dispose of regional centrate.
Capital Improvement Plan (CIP)/Investment	27.0	26.3	Major capital projects as summarized in Table 6. Totals include IEUA investment in the Inland Empire Regional Composting Authority.
Debt Service	12.1	12.2	Includes principal and interest for the 2008B, 2010A and 2017A bonds, and State Revolving Fund (SRF) loan for RP-1 Dewatering Expansion Facility.
Other	5.7	4.3	Inter-fund transfers for capital and debt service support to other funds, including cost share of the Water Quality Lab project

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Uses of Funds (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
			budgeted in the Wastewater Operations fund.
Total	\$52.0	\$50.0	

Capital projects budgeted over the next two years in the Wastewater Capital fund average \$26.6 million as summarized in Table 6. This includes the Agency's share of \$500,000 per year to support of the Inland Empire Regional Composting Authority (IERCA) capital improvement plan. A total of \$2.5 million for IERCA capital contributions is budgeted over the next ten years.

**Table 6: Wastewater Capital Fund Capital Projects** 

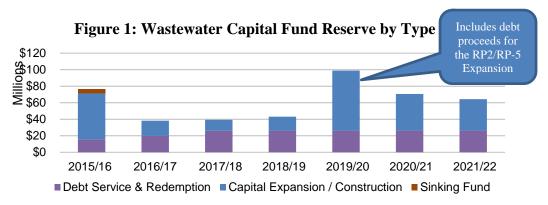
Capital Projects (\$Millions)	FY 2017/18	FY 2018/19	FY 2019/20 to FY 2021/22	TYCIP Total
RP-5 Liquid and Solids Expansion	\$4.9	\$6.8	\$320.3	\$338.3
RP-1 Solids Expansion and Liquids Treatment Capacity Recovery	4.0	0.0	0.0	54.8
*CCWRF Asset Management Improvements	2.7	1.0	19.5	23.2
RP-1 Solids Thickening Expansion	0.3	1.1	8.0	20.0
RP-1 Disinfection Facility and Pump Improvements	2.8	2.3	2.1	7.2
RP-1 Headworks Primary and Secondary Upgrade	5.3	0.6	0.0	5.9
<b>RP-1 Flare Improvements</b>	1.0	2.4	1.5	4.9
RP-1 Mixed Liquor Return	2.2	0.0	0.0	2.2
Other Capital Projects/investments	3.8	12.1	5.9	28.7
Total	\$27.0	\$26.3	\$357.3	\$485.2

<sup>\*</sup>CCWRF- Carbon Canyon Water Recycling Facility

The Wastewater Capital fund ending fund balance for FY 2017/18 is estimated at \$39.3 million, and \$43.1 million for FY 2018/19. As shown in Figure 1, fund reserves in the Wastewater capital fund are designated to support capital construction and debt service requirements as mandated by the Agency's bond covenants. The increase in FY 2019/20 fund reserves includes debt proceeds from new debt needed to support construction of the RP-2/RP-5 Expansion project slated to begin in 2019.

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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 \$86.7 million and \$92.1 million for FYs 2017/18 and 2018/19, respectively. This includes \$16.5 million of anticipated State Revolving Fund (SRF) loan proceeds during the two-year period for construction of the Water Quality Laboratory scheduled for completion in 2019, and \$7.2 million in grant receipts, of which \$6.4 million is for the South Archibald Trichloroethylene (TCE) Plume Clean Up project. Table 7 summarizes the Wastewater Operations fund proposed major revenues and other funding sources for FYs 2017/18 and 2018/19.

**Table 7: Wastewater Operations Fund Revenues and Other Funding Sources** 

Funding Sources (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
EDU Volumetric	\$60.6	\$64.7	Adopted EDU rate of \$18.39 in FY 2017/18 and \$19.59 in FY 2018/19 and assumed annual growth factor of 0.25% in the number of billable EDUs.
State Revolving Fund (SRF) Loans and Grants	11.3	12.4	Loan proceeds for the construction of the Water Quality Laboratory and grant proceeds for the South Archibald TCE Plume 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*	3.8	3.9	Reimbursement of the IERCA labor costs.
Other	1.5	1.6	Includes interest revenue, contract cost reimbursement, lease revenue, and inter-fund transfers.
Total	<b>\$86.7</b>	\$92.1	

<sup>\*</sup>Inland Empire Regional Composting Authority

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Major expenses in the Wastewater Operations fund include operating and maintenance expenses, capital replacement and rehabilitation (R&R) project costs, organic management activities, and debt service costs. Total expenses and other uses of funds are \$93.9 million in FY 2017/18 and \$94.5 million in FY 2018/19. The increase of \$0.6 million between the two years is primarily due to higher O&M project costs. Proposed expenses and other uses of funds for FYs 2017/18 and 2018/19 are summarized in Table 8.

**Table 8: Wastewater Operations Fund Expenses & Other Uses of Funds** 

Uses of Funds (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Operations & Maintenance (O&M)	\$58.1	\$58.5	Includes employment, chemicals utilities, professional and contract labor costs, and other O&M costs.
O&M project costs	6.0	8.3	Includes the South Archibald TCE Plume Clean-Up project.
Capital Rehabilitation & Replacement (R&R) project costs	24.1	24.5	Asset Management Plan R&R project costs including completion of the Water Quality Project in FY 2018/19. Major projects are summarized in Table 9.
Debt Service	0.3	0.3	Includes principal and interest for the 2017A bonds.
Other	5.4	2.9	Inter-fund transfers for capital project support to the Administrative Services fund and project cost share of the RP-2/RP-5 Expansion project and CCWRF Asset Management Improvement project.
Total	\$93.9	\$94.5	

A total of \$24.1 million in capital project costs is budgeted in FY 2017/18, and \$24.5 million is projected for FY 2018/19. When the monthly EDU rates were adopted in March 2015 only \$22.8 million in capital project spending was anticipated over these two years. The increase in capital spending is due to carry forward of projects not completed in FY 2016/17, primarily the Water Quality Laboratory slated for completion in 2019. Major capital projects are listed in Table 9.

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**Table 9: Wastewater Operations Fund Capital Projects** 

Capital Projects (\$Millions)	FY 2017/18	FY 2018/19	FY 2019/20 to FY 2021/22	TYCIP Total
Water Quality Laboratory	\$11.3	\$4.0	\$0.0	\$15.3
<b>RP-4 Process Improvements</b>	3.0	6.3	7.9	17.3
SCADA Enterprise System	1.7	2.6	5.7	10.0
RP-1 Secondary System Rehabilitations	0.7	2.9	1.6	5.2
RP-1 Digester 6 and 7 Roof Repairs	1.4	1.3	0.3	3.0
All Other Capital Projects	6.0	7.4	20.4	70.8
Total	\$24.1	\$24.5	\$35.9	\$121.6

#### **Cost of Service Review**

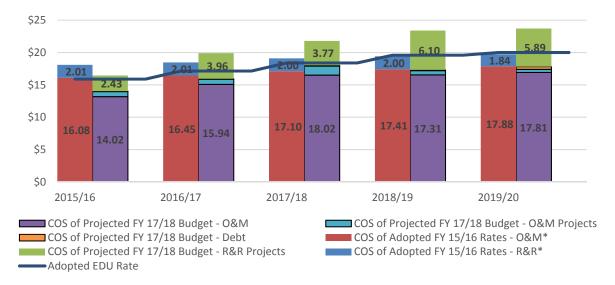
In March 2015, the Board adopted five-year monthly sewage EDU rates for FYs 2015/16 – 2019/20 (see Appendix Table A4: Monthly Sewage EDU Rates). The key objective of the multi-year rates was to establish a rate that fully recovered the cost of providing the service. Historically, property taxes have been used to support costs not recovered by rates. Figure 2 below 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 (red) and R&R project (blue) costs. The R&R component of \$2 per EDU was calculated using the average cost of recurring projects planned over the next 10 years plus the average cost of non-recurring projects over the next 5 years. As R&R project costs tend to fluctuate from year-to-year, the use of an average was intended to "smooth out" volatility in the proposed rates.

Figure 2 also includes a comparison of the actual cost of service for FY 2015/16, projected actuals for FY 2016/17 and updated forecasts for FYs 2017/18 – 2019/20. The projected R&R cost of service shows the project budget for each fiscal year included in the proposed FY 2018-2027 TYCIP. Additionally, further breakdown of the O&M portion is provided to show the different components included in the original calculation: O&M expenses (purple), O&M projects (light blue) and debt service (orange). The O&M EDU unit cost is the sum of these three components.

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Figure 2: Monthly EDU Sewage Cost of Service



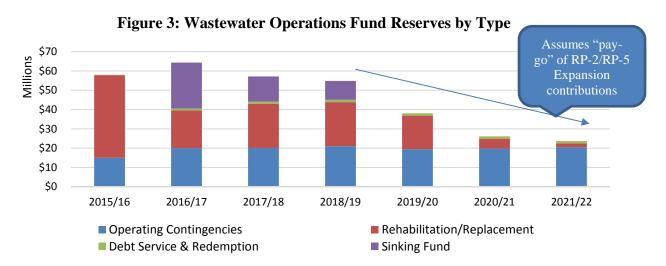
Fiscal year 2015/16 was the first of the five-year rates. As reported, actual cost of service of \$16.45/EDU exceeded the adopted rate of \$15.89/EDU. The updated projections for FYs 2016/17 through 2019/20 exceed the 2015 forecasts primarily due to the "ramp-up" of succession planning, higher CalPERS rates due to a reduction in the discount rate beginning FY 2018/19, and higher O&M and R&R projects as reported on Table 8 (Major Expenses) and Table 9 (Capital Projects).

Not included in the projected cost of service are the contributions from the Wastewater Operations fund to the Wastewater Capital fund for its share of the RP-2/RP-5 Solid Treatment Expansion project. These contributions are estimated to be \$6.8 million over the next two fiscal years and \$70.5 million over the next 10 fiscal years.

The projected Wastewater Operations fund ending fund balance is estimated at \$57.2 million and \$54.8 million for FYs 2017/18 and 2018/19, respectively. The decrease in fund balance is due to higher R&R project budget and contributions to the Wastewater Capital fund for the Wastewater Operations share of the RP-2/RP-5 Expansion project.

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Based on current assumptions, a significant decline in the fund reserves for the Wastewater Operations fund is projected over the next five years. Further assessment of key assumptions and projections will be done as part of the Long-Range Plan of Finance update in the fall of 2017 to ensure appropriate reserve levels are sustained to support long-term obligations such as the decommission of the Regional Plant No. 2 site.

#### **Recycled Water Fund**

A continued key initiative for the Agency is to optimize 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, 4 reservoir storage tanks with storage capacity between 2 and 5 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 2017/18 are projected to be 35,500 and 36,700 in FY 2018/19, with related revenues of \$17.2 million and \$18.2 million, respectively. Recycled water deliveries for direct use have declined in recent years primarily due land conversions from farm sites to developed parcels resulting in decreased agricultural usage. Another reason is fewer than anticipated new connections/usage by member agencies for the direct use due to delays in project implementation.

Water connection fee revenues, collected to support capital investments in the Agency's regional water distribution system, are projected to be \$4.2 million in FY 2017/18 and \$4.4 million in FY 2018/19, an increase of over 60% compared to \$2.7 million projected in FY 2016/17. 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 size of a residential meter). Revenues and other funding sources of the Recycled Water fund are summarized in Table 10.

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**Table 10: Recycled Water Fund Revenues & Other Funding Sources** 

Funding Sources (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Recycled Water Sales	\$17.2	\$18.2	FY 2017/18 direct rate of \$470/AF and Groundwater Recharge (GWR) rate of \$530/AF FY 2018/19 direct rate of \$480/AF and GWR rate of \$540/AF
Water Connection Fees	4.2	4.4	FY 2017/18 rate \$1,527/MEU FY 2018/19 rate \$1,604/MEU 2,730 new MEU connections are projected each fiscal year.
Property Tax	2.2	2.2	Maintain \$2.2 million allocation as approved by the Board of Directors in June 15, 2016.
Other	3.3	2.6	Grants and capital reimbursements to support basin recharge projects, and inter-fund debt service support for the 2017A bond.
Total	\$26.9	\$27.4	

Major expenses for the Recycled Water fund include capital, debt service, and operating costs, as summarized in Table 11. Included in operating costs are employment, pumping costs, O&M projects, and the Agency's share of groundwater recharge O&M costs equal to the percentage that recycled water recharged into the groundwater recharge basins bears to the total amount of water recharged. The projected increase in O&M expenses in FY 2017/18 is primarily due to additional O&M projects needed for the upkeep of groundwater recharge basins and hydraulic monitoring projects.

Table 11: Recycled Water Fund Expenses & Other Uses of Funds

Uses of Funds (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Operating Expenses	\$10.6	\$10.3	Includes employment, professional fees, materials and supplies, utilities, a portion of the groundwater recharge operations expense, and O&M project costs.
Capital Improvement Plan (CIP)	12.1	11.3	See Table 12 for a summary of major capital projects.

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Uses of Funds (\$Millions)	FY 2017/18	FY 2018/19	Key Assumptions
Debt Service	7.7	7.8	Includes principal and interest costs for outstanding bonds and SRF loans.
Other	1.4	1.4	Inter-fund transfers to Administrative Service, Recharge Water, and Water Resources funds of new water connection fees in support of the RRWDS*.
Total	\$31.8	\$30.8	

<sup>\*</sup>Regional Recycled Water Distribution System

Annual debt service costs, inclusive of principal, interest and financial fees for several SRF loans and 2017A Revenue Bonds, are estimated to be \$7.7 million in FY 2017/18 and \$7.8 million in FY 2018/19. There is no change to the \$28.5 million inter-fund loans (\$13.5 million due to the Wastewater Capital fund and \$15 million due to the Non-Reclaimable Wastewater fund) outstanding when the FY 2015/16 budget was adopted. However, during the FY 2016/17 mid-year budget update, the first payment was deferred until FY 2019/20 due to higher capital project expenditures. Repayment of the outstanding inter-fund loans is scheduled over a 7 year period with the final payment planned in FY 2025/26. A summary of inter-fund loans and repayment schedules is provided in Appendix A7.

Expansion and improvement of the regional recycled water system (RRWDS) is the key driver for the Recycled Water fund capital improvement fund. Historically, the Agency has leveraged State Revolving Funds (SRF) loans and grants to finance construction of the RRWDS. Extension of the repayment period from 20 to 30 years coupled with the Proposition 1 funding at a rate of 1% to support recycled water projects during California's epic drought, has resulted in an unprecedented number of SRF loan applications and an oversubscription of available funding. The preliminary Intended Use Plan for FY 2017/18 published by the State Water Resources Control Board (SWRCB), administrator of the SRF program, estimates an additional \$2.5 billion in new bond issuances is needed to fund all the applications currently in the pipeline. This is significantly above the annual amount historically authorized by the SWRCB Board. Although the Agency will continue to pursue SRF loans and grants to support recycled water projects, due to the uncertainty of available SRF funding, projects planned over the next two fiscal years are assumed to be funded on a pay-go basis.

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**Table 12: Recycled Water Fund Capital Projects** 

Capital Projects (\$Millions)	FY 2017/18	FY 2018/19	FY 2019/20 to FY 2021/22	TYCIP Total
Napa Lateral/San Bernardino Speedway	\$2.7	\$1.4	\$1.8	\$5.9
San Sevaine Basin Improvements	4.3	0.5	0.5	5.4
Baseline Recycled Water Pipeline Extension	0.3	3.0	1.4	4.8
Recycled Water System Cathodic Improvements	0.2	2.2	1.1	3.5
RP-5 Recycled Water Pipeline Bottleneck	2.1	0.3	0.0	2.4
All Other Capital Projects	2.5	3.9	32.1	49.2
Total	\$12.1	\$11.3	\$36.9	\$71.2

#### **Cost of Service Review**

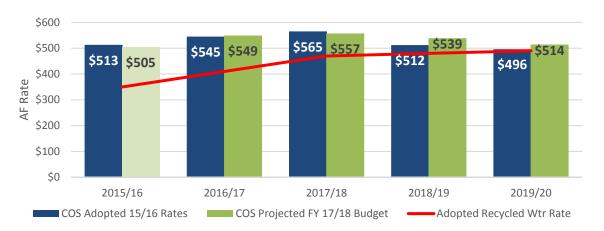
In May 2015, the Board adopted recycled water Acre Foot (AF) service rates for five years (FYs 2015/16 – 2019/20). See Appendix Table A5: Recycled Water Rates. The key objective of the multi-year rates was to establish a rate that fully recovered the cost of providing the service. Historically, the Metropolitan Water District (MWD) Local Project Program rebate and property taxes have been used to support costs not recovered by rates. The current fiscal year will be the final year of the MWD Local Project Program rebate equal to a maximum \$2.1 million per year. The adopted multi-year rates account for the loss of this funding source.

Figure 4 is a comparison of the cost of service (COS) projections as of 2015 (COS Adopted 2015/16 Rates) to the updated projections. The calculation of the cost of service per AF includes operational and maintenance (O&M) costs, O&M and R&R projects less any grants or contributions, and debt service which is also partially offset by property tax receipts. The 2015 projected cost of service assumed higher recycled water deliveries which partly account for the changes in the AF unit cost in the updated forecasts. As shown in Figure 4 the estimated cost of service of \$514/AF in FY 2019/20 is projected to exceed the adopted rate of \$490/AF. Future projections and underlying assumptions are reviewed and updated each year as part of the budget process and Long Range Plan of Finance update.

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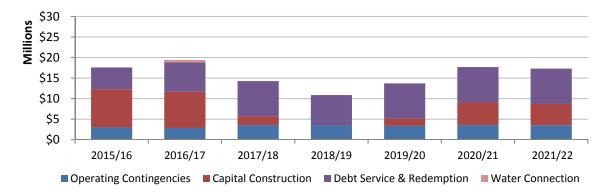
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Figure 4: Recycled Water Cost of Service



The Recycled Water fund projected ending fund balances for FY 2017/18 and FY 2018/19 is \$14.3 million and \$10.9 million, respectively. The projected decline is driven by the use of fund reserves to support capital expenditures over the next two years due to the uncertainty of SRF loan/grant funding. Based on current assumptions future year balances begin to increase as capital spending trends downward and recycled water deliveries steadily grow. Projected ending fund balances are reported below in Figure 5. Should SRL loan funding be available to support capital expenditures planned over the next two years, this will result in higher ending fund balances.

Figure 5: Recycled Water Fund Reserve by Type



#### **Conclusion**

Over the next two fiscal years, key areas of focus will be timely recruitment of critical personnel to ensure the transfer of knowledge and expertise to the next generation of Agency employees, execution of R&R projects for appropriate upkeep of Agency facilities and infrastructure, completion of the RP-2/RP-5 Expansion design and award of the related construction contract. Achieving these objectives will ensure the Agency can continue to support the region's economic development by providing essential services in a regionally planned and cost-effective manner.

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Attached in the Appendix section are the Sources and Uses of Fund reports of the Agency's Wastewater Capital, Wastewater Operations, and Recycled Water. The proposed budget for these programs is consistent with the IEUA Business Goals of *Fiscal Responsibility, Water Reliability, Wastewater Management, Environmental Stewardship and Business Practices*.

#### **Attachments:**

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

Appendix Table A1 – Acronyms

Appendix Table A2 – Key assumptions for FYs 2017/18 and 2018/19 budget

Appendix Table A3 – Wastewater connection fees

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 B – FY 2018-2027 Ten Year Capital Improvement Plan – Final Draft

Review of Proposed Biennial Budget for FYs 2017/18 and 2018/19 Regional Wastewater, and Recycled Water, and 2018 TYCIP May 25, 2017/June 1, 2017 Page 18 of 29

#### Appendix A

# INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2017/18 and 2018/19 BIENNIAL BUDGET REGIONAL WASTEWATER CAPITAL IMPROVEMENT FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2015/2016	2016/2017	2017/18	2018/19	2019/20	2020/21	2021/22
	2015/2016	PROJECTED	PROPOSED		2019/20	2020/21	2021/22
	ACTUAL	ACTUAL	BUDGET	BUDGET		FORECAST	
REVENUES							
Interest Revenue	\$135	\$187	\$226	\$357	\$547	\$547	\$364
TOTAL REVENUES	\$135	\$187	\$226	\$357	\$547	\$547	\$364
OTHER FINANCING SOURCES							
Property Tax - Debt and Capital	\$27,659	\$29,058	\$29,930	\$30,828	\$31,444	\$32,073	\$32,715
Regional System Connection Fees	24,910	17,136	18,927	19,872	18,779	20,658	20,337
Debt Proceeds	0	0	0	0	100,000	100,000	75,000
Other Revenues	10	1	1	1	1	1	1
TOTAL OTHER FINANCING SOURCES	\$52,579	\$46,195	\$48,858	\$50,701	\$150,224	\$152,732	\$128,053
EXPENSES							
Employment Expenses	\$4,248	\$3,995	\$4,157	\$4,155	\$4,243	\$4,478	\$4,682
Contract Work/Special Projects	1,253	795	900	800	300	800	300
Operating Fees	240	242	246	254	261	269	277
Professional Fees and Services	234 509	329 1,899	364	365	372	377	382 1,668
Other Expenses TOTAL EXPENSES	\$6,484	\$7,260	1,591 <b>\$7,258</b>	1,596 <b>\$7,170</b>	1,588 <b>\$6,765</b>	1,627 <b>\$7,551</b>	\$7,310
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CAPITAL PROGRAM							
IERCA investment	\$0	\$0	\$500	\$500	\$500	\$500	\$0
Work In Progress TOTAL CAPITAL PROGRAM	6,057 <b>\$6,057</b>	10,737 <b>\$10.737</b>	26,450 <b>\$26,950</b>	25,793 <b>\$26,293</b>	81,875 <b>\$82,375</b>	166,955 <b>\$167,455</b>	107,500 <b>\$107,500</b>
TOTAL CAPITAL PROGRAW	\$6,037	\$10,737	\$20,950	\$20,293	\$62,375	\$167,455	\$107,500
DEBT SERVICE							
Financial Expenses	(\$203)	\$140	\$175	\$174	\$280	\$175	\$173
Interest	5,882	5,064	3,140	3,114	7,792	12,581	15,793
Principal	7,074	57,274	8,791	8,922	10,875	12,716	14,450
TOTAL DEBT SERVICE	\$12,753	\$62,479	\$12,105	\$12,211	\$18,947	\$25,472	\$30,415
TRANSFERS IN (OUT)							
RO to RC -RP-5 Solids Treatment	\$0	\$0	\$1,350	\$1,715	\$3,472	\$3,472	\$3,472
RO to RC -CCWRF Asset Management Improvements	0	195	2,700	1,020	7,700	10,800	1,000
RO to RC -RP-5 Expansion Maintenance Building	0	0	0	0	5,000	5,000	5,000
RC to GG - Agency-wide Projects	(358)	,	(993)	(423)	(594)	(280)	(224)
RC to RO - Water Quality Laboratory	(11)	, ,	(103)	(92)	0	0	0
RO to RC - RP-5 Expansion Debt Funding RC to RW - 2008B Bond Debt	(202)	0 (402)	0 (515)	(593)	1,736	3,472	4,774
RC to RO - Water Quality Lab SRF Loan	(382)	(402)	(515) 0	(583) 0	(592) (253)	(644) (253)	(641) (253)
RC to WC - 2017A Bond Debt	(1,390)		(2,399)	(2,400)	(2,400)	(2,400)	(2,399)
Capital - Connection Fee Allocation to GG	(527)	,	(1,378)	(410)	(697)	(195)	(156)
Capital - Connection Fee Allocation to RO	(3,545)	, ,	0	0	0	0	0
Capital - Connection Fee Allocation to NC	(123)		(293)	(456)	(245)	(72)	(72)
TOTAL INTERFUND TRANSFERS IN (OUT)	(\$6,335)	(\$3,990)	(\$1,631)	(\$1,630)	\$13,127	\$18,900	\$10,501
FUND BALANCE Net Income (Loss)	\$21,083	(\$38,085)	\$1,140	\$3,754	\$55,810	(\$28,298)	(\$6,306)
Beginning Fund Balance July 01	φ21,063 55,173	(\$36,065) 76,257	38,172	39,312	43,066	(\$26,296) 98,877	70,578
ENDING FUND BALANCE AT JUNE 30 *	\$76,257	\$38,172	\$39,312	\$43,066	\$98,877	\$70,578	\$64,272
		,=	,	,,	,	,	
RESERVE BALANCE SUMMARY							
Capital Construction	\$240	\$0	\$1,894	\$2,514	\$39,494	\$1,542	\$1,895
CCRA Capital Construction	55,201	18,337	11,514	14,386	33,165	42,823	36,160
Debt Service & Redemption Sinking Fund	15,615 5,200	19,835 0	25,904 0	26,166 0	26,218 0	26,213 0	26,217 0
ENDING BALANCE AT JUNE 30	\$76,257	\$38,172	\$39,312	\$43,066	\$98,877	\$70,578	\$64,272
LITUING BALANCE AT JUNE 30	φ10,231	ψ30,17Z	ψ35,312	φ43,000	φ30,011	φι υ, υι ο	φυ4,21Z

<sup>\*</sup>Numbers may not total due to rounding

Review of Proposed Biennial Budget for FYs 2017/18 and 2018/19 Regional Wastewater, and Recycled Water, and 2018 TYCIP May 25, 2017/June 1, 2017 Page 19 of 29

# INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2017/18 AND 2018/19 BIENNIAL BUDGET REGIONAL WASTEWATER OPERATIONS & MAINTENANCE FUND - SOURCES AND USES OF FUNDS (In Thousands)

	2015/16	2016/17	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022
	2013/10	2016/17 PROJECTED			2019/2020	2020/2021	2021/2022
	ACTUAL	ACTUAL	BUDGET	BUDGET	ı	ORECAST	
REVENUES							
User Charges	\$49,958	\$56,381	\$60,634	\$64,743	\$66,260	\$68,422	\$70,653
Cost Reimbursement JPA	3,403	3,750	3,825	3,902	3,980	4,059	4,140
Contract Cost Reimbursement	79	93	93	93	93	93	93
Interest Revenue	284	305	454	557	462	319	247
TOTAL REVENUES	\$53,724	\$60,529	\$65,006	\$69,294	\$70,794	\$72,893	\$75,133
OTHER FINANCING SOURCES							
Property Tax Revenues - Debt/Capital/Reserves	\$9,573	\$9,549	\$9,549	\$9,549	\$9,549	\$9,549	\$9,549
State Loans	1,480	1,779	7,901	8,598	2,606	0	0
Grants	445	10,128	3,389	3,830	1,037	900	958
Other Revenues	972	757	776	795	816	836	858
TOTAL OTHER FINANCING SOURCES	\$12,470	\$22,212	\$21,614	\$22,772	\$14,007	\$11,285	\$11,365
		. ,		. ,			
EXPENSES	005.044	<b>#00 500</b>	000.050	<b>#</b> 00 004	004.050	<b>#00.000</b>	000 504
Employment Expenses	\$25,644	\$28,590	\$30,052	\$30,601	\$31,359	\$32,026	\$33,531
Contract Work/Special Projects Utilities	3,595 5,828	10,500 6,761	5,971 6,671	8,265 6,872	2,447 7,078	1,850 7,290	1,600 7,509
Operating Fees	1,807	1,848	6,671 2,018	2,073	2,133	2,199	2,260
Chemicals	3,895	4,277	4,419	4,547	4,684	4,824	4,969
Professional Fees and Services	1,969	2,612	4,089	3,358	3,438	3,523	3,622
Office and Administrative expenses	7	2,012	4,003	4	4	5,025	5
Biosolids Recycling	3,777	4,433	4,307	4,408	4,540	4,676	4,816
Materials & Supplies	1,927	2,080	2,161	2,200	2,266	2,333	2,404
Other Expenses	951	2,634	4,410	4,427	4,407	4,514	4,628
TOTAL EXPENSES	\$49,401	\$63,736	\$64,103	\$66,755	\$62,356	\$63,241	\$65,343
CAPITAL PROGRAM							
Capital Construction & Expansion (WIP)	\$7,814	\$13,000	\$24,063	\$24,506	\$19,662	\$8,500	\$7,718
TOTAL CAPITAL PROGRAM	\$7,814	\$13,000	\$24,063	\$24,506	\$19,662	\$8,500	\$7,718
DEBT SERVICE							
Financial Expenses	\$0	\$1	\$0	\$0	\$0	\$0	\$0
Interest	ან 162	پ 206	پەر 179	ъо 175	ъо 638	ъо 619	ъо 599
Principal	0	200	173	173	726	744	765
TOTAL DEBT SERVICE	\$163	\$207	\$352	\$352	\$1,364	\$1,364	\$1,364
TRANSFERS IN (OUT)							
WC to RO - SCADA Enterprise SRF Loan	\$3,430	\$598	\$0	\$0	\$0	\$0	\$0
RC to RO - New Water Quality Laboratory SRF Loan	11	103	103	92	0	0	0
RO to RC - CCWRF Asset Management and Improvement		(195)	(2,700)	(1,020)	(7,700)	(10,800)	(1,000)
RO to RC - RP-1 Maintenance Facility Cost Share	0	0	0	0	(5,000)	(5,000)	(5,000)
RO to RC - RP-5 Solids Handling Facility Cost Share	0	0	(1,350)	(1,715)	(3,472)	(3,472)	(3,472)
RC to RO - New Water Quality Laboratory SRF Loan	0	0	0	0	253	253	253
RO to WC - SCADA Enterprise SRF Loan	0	0	0	0	(149)	(149)	(149)
RO to RC - RP-5 Solids Handling Facility SRF Loan	0	0	0	0	(1,736)	(3,472)	(4,774)
Operation support to GG for Non-Capital Projects	0	0	(1,311)		(407)	(373)	(373)
Capital - Connection Fees Allocation	3,545	0	0	0	0	0	0
TOTAL INTERFUND TRANSFERS IN (OUT)	\$6,985	\$506	(\$5,259)	(\$2,810)	(\$18,211)	(\$23,013)	(\$14,515)
FUND BALANCE							
Net Income (Loss)	\$15,801	\$6,304	(\$7,157)	(\$2,357)	(\$16,792)	(\$11,939)	(\$2,442)
Beginning Fund Balance July 01	42,211	58,012	64,316	57,159	54,803	38,011	26,071
ENDING FUND BALANCE JUNE 30 *	\$58,012	\$64,316	\$57,159	\$54,803	\$38,011	\$26,071	\$23,629
RESERVE BALANCE SUMMARY							
Operating Contingies	\$14,969	\$19,995	\$20,093	\$20,951	\$19,459	\$19,727	\$20,401
Rehabilitation/Replacement	42,827	19,527	22,895	22,895	17,383	5,175	2,059
Debt Service	216	1,051	1,169	1,169	1,169	1,169	1,169
Sinking Fund	0	23,742	13,003	9,788	0	0	0
* Numbers may not total due to rounding	\$58,012	\$64,316	\$57,159	\$54,803	\$38,011	\$26,071	\$23,629

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# INLAND EMPIRE UTILITIES AGENCY FISCAL YEARS 2017/18 and 2018/19 BIENNIAL BUDGET RECYCLED WATER FUND - SOURCES AND USES OF FUNDS (In Thousands)

PROJECTED   PROPOSED   BUDGET   BUDGE
Interest Revenue
Water Sales         13,468         15,891         17,245         18,188         19,100         20,266         21           TOTAL REVENUES         \$13,574         \$16,004         \$17,385         \$18,327         \$19,235         \$20,433         \$21           OTHER FINANCING SOURCES           Property Tax - Debt/Capital         \$2,162         \$2,170 </td
TOTAL REVENUES         \$13,574         \$16,004         \$17,385         \$18,327         \$19,235         \$20,433         \$21           OTHER FINANCING SOURCES           Property Tax - Debt/Capital         \$2,162         \$2,170         \$2,1
OTHER FINANCING SOURCES           Property Tax - Debt/Capital         \$2,162         \$2,170
Property Tax - Debt/Capital         \$2,162         \$2,170
Connection Fees     997     2,739     4,169     4,379     4,138     4,263     3       State Loans     7,851     1,740     0     0     3,638     5,776     4       Grants     4,371     1,116     388     63     1,262     2,172     2
State Loans     7,851     1,740     0     0     3,638     5,776     4       Grants     4,371     1,116     388     63     1,262     2,172     2
Grants 4,371 1,116 388 63 1,262 2,172 2
Capital Contract Reimbursement 761 389 345 72 3,087 67
Other Revenues 13 0 0 0 0 0
TOTAL OTHER FINANCING SOURCES \$16,153 \$8,155 \$7,071 \$6,683 \$14,294 \$14,448 \$12
EXPENSES
Employment Expenses \$4,412 \$4,099 \$4,257 \$4,258 \$4,349 \$4,586 \$4
Contract Work/Special Projects 1,023 637 2,151 1,681 1,360 1,610 1
Utilities         2,433         2,195         2,182         2,248         2,315         2,385         2
Operating Fees 3 3 10 10 11 11
Professional Fees and Services 480 511 686 722 698 667
Office and Administrative Expense 1 0 4 4 4 4
Materials & Supplies 106 190 218 222 228 235
Other Expenses         415         926         1,142         1,147         1,143         1,170         1           TOTAL EXPENSES         \$8,874         \$8,562         \$10,650         \$10,292         \$10,107         \$10,667         \$10
101 AL EXPENSES \$0,074 \$0,302 \$10,030 \$10,232 \$10,107 \$10,007 \$10
CAPITAL PROGRAM
Work In Progress \$5,077 \$6,487 \$12,134 \$11,274 \$10,926 \$11,000 \$14
TOTAL CAPITAL PROGRAM \$5,077 \$6,487 \$12,134 \$11,274 \$10,926 \$11,000 \$14
DEBT SERVICE
Financial Expenses (\$31) \$1 \$2 \$1 \$1 \$1
Interest 2,722 2,746 <b>2,568</b> 2,543 2,654 2,508 2
Principal 3,962 3,919 5,159 5,256 6,007 6,133 6
Short Term Inter-Fund Loan 0 0 0 2,000 2,000 2
TOTAL DEBT SERVICE \$6,653 \$6,666 \$7,729 \$7,801 \$10,662 \$10,642 \$10
TRANSFERS IN (OUT)
Capital Contribution (\$4,734) (\$942) (\$324) (\$265) (\$22) (\$10)
Debt Service 1,390 1,103 2,399 2,400 2,550 2,549 2
Operation support (466) (506) (676) (668) (679) (688)
One Water (386) (387) (352) (512) (843) (464)
TOTAL INTERFUND TRANSFERS IN (OL (\$4,197) (\$733) \$1,047 \$955 \$1,006 \$1,388 \$1
FUND BALANCE
Net Income (Loss) \$4,927 \$1,712 (\$5,009) (\$3,401) \$2,841 \$3,960 (\$
Beginning Fund Balance July 01 12,636 17,563 19,274 14,265 10,864 13,705 17
ENDING BALANCE AT JUNE 30 * \$17,563 \$19,274 \$14,265 \$10,864 \$13,705 \$17,665 \$17
RESERVE BALANCE SUMMARY
Operating Contingency \$2,958 \$2,854 \$3,550 \$3,431 \$3,369 \$3,556 \$3
Capital Construction 8,847 8,800 2,119 (0) 1,739 5,513 5
Water Connection 0 501 0 0 0 0
Rehabilitation/Replacement (R&R) 500 0 0 0 0 0
Debt Service         5,258         7,119         8,596         7,433         8,596         8,596         8
ENDING BALANCE AT JUNE 30 \$17,563 \$19,274 \$14,265 \$10,864 \$13,705 \$17,665 \$17

<sup>\*</sup> Numbers may not total due to rounding

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#### **Appendix Table A1: Acronyms**

	Acronyms
AF	Acre Foot
CALPERS	California Public Employee Retirement System
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 Water Reclamation Facility (Plant) in the City of Ontario
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
SARCCUP	Santa Ana River Conservation and Conjunctive Use 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
ww	Water Resources Program

May 25, 2017/June 1, 2017

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#### Appendix Table A2: Key Assumptions for FYs 2017/18 and 2018/19 Budget

Revenues and Other Funding Sources	Expenses and Other Uses of Funds
3,000 new wastewater connections per year	3% average increase for O&M expenses
3.3 million volumetric EDU @ 0.25% annual growth	Includes 10 rotating positions to support succession planning
Recycled Water Deliveries: FY 2017/18 35,500 AF FY 2018/19 36,700 AF	Leverage professional/contract services to continue transition from corrective to preventive/predictive maintenance
2,730 new water connections (MEU) per year	
3% growth in property tax receipts. No change in the allocation by fund as approved by the Board in 2015	Includes debt service of the new 2017A Bond (\$67.6M)
Capital Improvement Plan (CIP) partially funded by low interest SRF loans and grants for the Regional Wastewater programs	

#### **Appendix Table A3: Adopted Wastewater Connection Fees**

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
<b>Wastewater Connection Fee</b>	\$5,338	\$5,712	\$6,309	\$6,624	\$6,955
Effective Date	1/01/16	1/01/17	7/01/17	7/01/18	7/01/19
<b>Wastewater Connection Units</b>	4,774	3,000	3,000	3,000	2,700

#### **Appendix Table A4: Adopted Monthly Sewage EDU Rates**

Rate Description	FY	FY	FY	FY	FY
	2015/16	2016/17	2017/18	2018/19	2019/20
<b>EDU Volumetric Rate</b>	\$15.89	\$17.14	\$18.39	\$19.59	\$20.00
Rate Increase	\$1.50	\$1.25	\$1.25	\$1.20	\$0.41
<b>Effective Date</b>	10/01/15	7/01/16	7/01/17	7/01/18	7/01/19

#### **Appendix Table A5: Adopted Recycled Water Rates**

Rate Description	FY	FY	$\mathbf{FY}$	$\mathbf{FY}$	FY
	2015/16	2016/17	2017/18	2018/19	2019/20
<b>Direct Delivery/Acre Foot (AF)</b>	\$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	32,400	35,500	36,700	37,800

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#### **Appendix Table A6: Adopted Water Connection Fees**

Rate Description	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20
W C C F	2013/10	2010/17	2017/10		
Water Connection Fee	\$693	\$1,455	\$1,527	\$1,604	\$1,684
(for 5/8" and 3/4" meter size)	ΨΟΣ	Ψ1, 433	Ψ1,527	Ψ1,00-	Ψ1,00-
Effective Date	1/01/16	1/01/17	7/01/17	7/01/18	7/01/19
<b>New Meter Equivalent Units</b>	005	2.720	2.720	2.720	0.457
(MEUs)	985	2,730	2,730	2,730	2,457

#### **Appendix Table A7: Inter-Fund Loan Repayment Schedule**

Inter Fund Loans Issued	Due to	Loan Amount (\$Millions)	Repayment Schedule
FY 2007/08	Non-Reclaimable Wastewater (NRW) Fund	\$9.0	2019/20-22/23 \$8.0 2023/24 \$1.0 Total \$9.0
FY 2007/08	Regional Wastewater Capital (RC) Fund	3.0	2022/23-2024/25 \$3.0 Total \$3.0
FY 2009/10	Non-Reclaimable Wastewater (NRW) Fund	6.0	2023/24 \$1.0 2024/25 \$2.0 2025/26 \$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	<b>Grand Total</b>	\$28.5	\$28.5

Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Summary - DRAFT  $$\xi$$  in Thousands

	Project														
Fund	Group	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Ten Year Total	FYs 2028-32	FYs 2033-37	FYs 2038-42
Administrative Services	Capital	\$2,476	\$873	\$1,350	\$500	\$400	\$400	\$400	\$400	\$450	\$350	\$7,599	\$0	\$100	\$100
	Special	1,407	179	437	400	400	400	507	400	400	400	4,930	0	0	0
Administrative Services Total		\$3,883	\$1,052	\$1,787	\$900	\$800	\$800	\$907	\$800	\$850	\$750	\$12,529	\$0	\$100	\$100
Non-Reclaimable Wastewater	Capital	1,094	1,802	923	200	200	700	2,700	3,200	400	200	11,419	800	1,000	1,000
	Special	125	100	100	100	100	100	100	100	100	100	1,025	0	0	0
Non-Reclaimable Wastewater Total	I	\$1,219	\$1,902	\$1,023	\$300	\$300	\$800	\$2,800	\$3,300	\$500	\$300	\$12,444	\$800	\$1,000	\$1,000
Regional Wastewater Capital	Capital	26,450	25,793	81,875	166,955	107,500	10,120	6,100	12,250	8,530	37,100	482,672	185,000	0	0
	Special	900	800	300	800	300	800	300	800	300	800	6,100	0	0	0
Regional Wastewater Capital Total		\$27,350	\$26,593	\$82,175	\$167,755	\$107,800	\$10,920	\$6,400	\$13,050	\$8,830	\$37,900	\$488,772	\$185,000	\$0	\$0
<b>Regional Wastewater Operations</b>	Capital	24,063	24,506	19,662	8,500	7,718	6,750	6,750	6,750	7,750	9,100	121,550	77,500	1,000	1,000
	Special	5,971	8,265	2,447	1,850	1,600	2,350	2,800	4,950	2,200	3,600	36,033	9,000	0	0
<b>Regional Wastewater Operations T</b>	otal	\$30,034	\$32,771	\$22,109	\$10,350	\$9,318	\$9,100	\$9,550	\$11,700	\$9,950	\$12,700	\$157,582	\$86,500	\$1,000	\$1,000
Recharge Water	Capital	1,729	12,902	7,662	10	0	0	0	0	0	0	22,302	0	0	0
The state of the s	Special	325	250	0	0	0	0	0	0	0	0	575	0	0	0
Recharge Water Total		\$2,054	\$13,152	\$7,662	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$22,877	\$0	\$0	\$0
Recycled Water	Capital	12,134	11,274	10,926	11,000	14,960	1,000	1,250	1,900	3,490	3,320	71,253	102,500	0	0
	Special	2,151	1,681	1,360	1,610	1,110	1,610	1,110	1,860	1,110	1,360	14,962	0	0	0
Recycled Water Total		14,284	12,955	12,286	12,610	16,070	2,610	2,360	3,760	4,600	4,680	86,215	102,500	0	0
Water Resources	Special	\$5,829	\$8,140	\$17,140	\$10,200	\$1,700	\$1,700	\$2,200	\$2,200	\$1,700	\$1,700	\$52,509	\$0	\$0	\$0
Water Resources Total		\$5,829	\$8,140	\$17,140	\$10,200	\$1,700	\$1,700	\$2,200	\$2,200	\$1,700	\$1,700	\$52,509	\$0	\$0	\$0
Grand Total		\$84,653	\$96,565	\$144,181	\$202,125	\$135,988	\$25,930	\$24,217	\$34,810	\$26,430	\$58,030	\$832,928	\$374,800	\$2,100	\$2,100

# Appendix B – FY 2017/18 Ten Year Capital Improvement Plan – Final Draft

#### Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Details - DRAFT \$ in Thousands

	Project	Project															
Fund	Group	Number	Project Name	FY2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Ten Year Total	FYs 2028-32	FYs 2033-37	FYs 2038-4
dmi ni str	rative Service		Hardware 1979 OH Confirming	\$30	***	to	\$0	\$0	\$0	\$0	\$0	\$0	\$0	***	đo.	\$0	
	Capital	CP16005	Headquarters LEED OM Certification		\$38	\$0	\$0	50	50	50	\$0	50	50	\$68	\$0	50	
		CP17001	Regional Office Furniture	80	20					* -				100			
		CP18001	Security Camera Purchase & Installation HQA & B	113	-									113			
		EN16049	Conference Rooms Aud to Visual Upgrades	452	15					* 7	*			467			
		EN20021	Agency SCADA in tegration with SAP			250				*	*	-	*	250			
		EN2 10 20	Primavera Enhancements	-			100			*	*	100	*	200		100	1
		EP17003	RP-1 Training Room	375	-	-			-					375		-	
		EPXXII04	Agency-Wide Vehicle Replacement	500	500	500	150	150	150	150	150	150	150	2,550		- 0	
		1515001	HOM PHASE 2-SELF SERVICE/HR PROCESS AUTO	100										100			
		1515003	DOCUMENT/RECORDS MANAGEMENT SYSTEM	30		*			*	* 1			*	30			
		1516001	HOM PHASE2 - POSITION BUDGETING & CONTRO	206		*		*	*	*			*	206			
		1516003	SAP ARCHIMNG	50		*	*	*	-	*		*		50	-		
		1516021	SAP Roadmap & Strategy	150	300	400	250	250	250	250	250	200	200	2,500			
		1517030	Raines Conference Room AV Upgrade	2					-					2	-		
		1518003	BizNet Email Services Disaster Recovery	25				*	-	*				25	-		
		1518004	BizNet Network infrastructure Replacement Project	240								*	*	240			
		1518005	BizNet Network New Workstation	20									*	20			
		IS18007	BizNet Voice Mail Server	17						*				17			
		1518012	New Scanner Purchase - Records Management	6				*		2				6		-	
		LB18001	ICP Power Conditioners	17										17	-	-	
		LB18002	Spectrophotometer	7										7			
		LB18004	Instrument Software Updates	55						9.1				55	-	-	
		LB20001	ICPin strument			200								200			
	Capital To	tal		\$2,476	\$873	\$1,350	\$500	\$400	\$400	\$400	\$400	\$450	\$350	\$7,599	\$0	\$100	13
	Special	CP16003	Headquarters Roofing Replacement	1,207	104									1,311			
		CP16004	Headquarters LEED OM Certification	25		1.4			-	87				25		-	
		EN18020	Website Yearly Maintenance	50						×1				50			
		EN20008	HQ Parking Lot FY19/20			437				-				437			
		EN24004	HQ Parking Lot FY23/24							507				507			
		FP18999	Non-Capital Project Placeholder				400	400	400		400	400	400	2,400			
		1518002	BizNet Cybersecurity Risk Assessment, Policy Develor	125			-	400			400	400		125			
		1519001	BizNet Cybersecurity Network Vulnerability Assess m	123	75			-		2				75			
	Special To		BitNet Cybersecurky Network Vulnerability Assess m	\$1,407	\$179	\$437	\$400	\$400	\$400	\$507	\$400	\$400	\$400	\$4,930	\$0	\$0	
onl of oto	rative Service			\$3,883	\$1,052	\$1,787	\$900	\$800	\$800	\$907	\$800	\$850	\$750	\$12,529	50		
	ai mable Wa			\$3,003	\$1,032	\$1,787	\$300	\$800	3800	3907	\$800	\$830	\$7.50	\$12,529	30	3100	-
ii-roe ca	Capital		SBOFCD NRW Essement	560										560			
	Capital														-		
			NRWS Philadelphia Pump Station Pump 3 Improvem	250	***			*						250			
		EN19021	San Bernardino Lift Station Facility Improvements		420	180								600			
		EN22002	NRW East End Flowmeter Replacement	84	1,182	543			-					1,809		-	
		EN23002	Philadelphia Lift Station Force Main Imp	-	-	*			500	2,500	3,000	*	*	6,000	-		
			Lift Station AMP Projects		-	*		*	-	*		200	*	200	800	1,000	1
			NRWS Manhole Upgrades - XX/XX	200	200	200	200	200	200	200	200	200	200	2,000	-	-	
	Capital To			\$1,094	\$1,802	\$923	\$200	\$200	\$700	\$2,700	\$3,200	\$400	\$200	\$11,419	\$800	\$1,000	\$1
	Special	EN17074	NRW Pressure Pipeline Condition Assessment	25	-		-	*	-			-		25	-		
		ENXX016	NRWS Emergency O &M Projects FY XX/XX	100	100	100	100	100	100	100	100	100	100	1,000	-	-	
	Special To	tal		\$125	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$1,025	\$0	\$0	
n-Reck	ai mable Wa	stewater To	tal	\$1,219	\$1,902	\$1,023	\$300	\$300	\$800	\$2,800	\$3,300	\$500	\$300	\$12,444	\$800	\$1,000	\$1
gional	Wastewater	Capital															
	Capital	EN11031	RP-5 Flow Equalization and Effluent Moni	15	-		-			27	27			15	-	-	

#### Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Details - DRAFT \$ in Thousands

Mary		Project	Project															
Compined   Mil-1001	Fund			Project Name	FY2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	FY 2027	Ten Year Total	FYs 2028-32	FYs 2033-37	FYs 2038-42
Part	Regional V	Wastewat e	Capital															
Part		Capital	EN14018	RP-4 Disinfection Facility Improvements	1,620	195			*		*				1,815	(40)		*
Part			EN14019	RP-1 Headworks Primary and Secondary Upg	5,290	588						1.0			5,878		-	
PATE			EN15042	SBCFCD Sewer Easement	280										280	-	-	-
PATT			EN16011	Whispering Lakes Pump Station Rehab								0.00		500	500	4,500	-	-
Name			EN16024	RP-1 Mixed Liquor Return Pumps	2,172					-					2,172		-	-
Septem   S			EN17006	CCWRF Assets Management and Improvements	2,700	1,020	7,700	10,800	1,000						23,220		-	-
No.			EN17044	RP-1 Power Reliability Generator Control	1,260	140									1,400		-	
N.11006   Ph1 Internative provements   1,050   2,380   1,470   2,000   3,000   3,000   3,000   3,000   3,000   1,300   2,000   3,0			EN17050	Septic Conversion PDR	35	765									800			-
Nil 1002   Pil 1 September			EN18004	RP-1 IPS System Improvements	175	525	300								1,000		-	
Nil 1002   Pil 1 September			EN18006	RP-1 Flare Improvements	1,050	2,380	1,470								4,900			2
N.									2									-
N.   N.   N.   N.   N.   N.   N.   N.								3,000	3,000	3,000	3,000	3,000	1.530				-	
Phil 1985   COV/P Aire Many Many Many Many Many Many Many Many											-,	-,	-,					
Part							2.087	15	100		-							
Part				-														
PRI-1000   RP-5 Equation is 10 mg/l   2-50   3,360   34,740   77,250   32,350   3,085																		
N1900   No. 94   N1900   No. 95   N1900   N1									53 250	3.085								
NN 1900   RP-3 9F   P.   1924   NN 1900   RP-1   1924   Treatment Capacity Recovery   2,00   C   C   C   C   C   C   C   C   C						3,300			33,230	3,003		-		75.0		750	-	
NN 2005   RP-1 Department Chapter (1 per part   RP-1 Department (1 per part   RP-1 Department Chapter (1 per part   RP-1 Department (1 per partment (1 per p						9.490			40 750	2 225								
PAY 2001   PAY 1 Usual firestment Capacity Recovery   2,000   2,000   2,000   2,000   2,000   2,000   2,000   3,000					2,430	3,430	30,110	74,500	49,730	3,233		EM				-	-	
EN2-902   RP-1 Feeling Expansion   2,000   -   -   -   -   -   -   -   -   -					2.000	-							71115	coul bear		120 750	-	-
ENZ-022   RP-4 Testiary Spansion   F1718   Scolar Intergration System Urgardes XQVX   Sol   So										-							-	-
ENXIOLIS   Collection System Upgrades XX/XX   Sol										-							-	7
S18001   FY1718 SCADA Energy Monitoring Project   75   75   1818 000   SCADA Energy Monitoring Project   75   75   75   75   75   75   75   7																4,500	-	
STATE   STAT						500	500	500	500	500	500	500	500	500		-	-	-
PLI 7002   HQL Solar Photoxo taic Power Plants Ph. 2   7,500						-			2	-				7		-		-
PLI 9001   Purchase Existing Solar Installation   7,500   525,793   \$81,875   \$166,955   \$107,900   \$10,120   \$6,100   \$12,250   \$8,530   \$37,100   \$482,672   \$185,000   \$0   \$0   \$0   \$0   \$0   \$0   \$0					85	*		-	-	-			-	-		-	-	-
Capital Total   Special   Policy   Special   Policy   Preserve Lift Station   300							-	-	-	300	1,100	-	-	*		-		-
Special   EN13028   Preserve Lift Station   300   30				Purchase Existing Solar Installation														
EN17057   Schemaning Documents   School   Scho		Capital To	tal													\$1.85,000	\$0	\$
EN17077   San Bernardino Lift Station Emergency Diversion Sys   500		Special			300		300		300		300		300		1777			-
WR16021   Prep of TM for IEUA Fac Comp w/Ttie22   100   590   \$800   \$300   \$300   \$			EN17055	RC Planning Documents		500		500	*	500	*	500		500				
Special   Total   Special   Total   Special   Total   Special			EN17077	San Bernardino Lift Station Emergency Diversion Syst	500	-			*	*	*			*	500			-
S27,350   \$26,593   \$82,175   \$167,755   \$107,800   \$10,920   \$6,400   \$13,050   \$8,830   \$37,900   \$488,772   \$185,000   \$0			WR16021	Prep of TM for IEUA Fac Comp w/Title22	100	-								+	100			-
Capital   EN   3016   SCAOA Enterprise System   1,680   2,632   4,848   850   10   -   -   -   10,020   -		Special To	tal		\$900	\$800	\$300	\$800	\$300	\$800	\$300	\$800	\$300	\$800	\$6,100	\$0	\$0	\$
Capital   EN   3016   SCADA Enterprise System   1,680   2,632   4,848   850   10   -   -   -   10,020   -   -   -   15,300   -   -   -   15,300   -   -   -   -   -   -   -   -   -	egional V	Wastewat e	r Capital To	tal	\$27,350	\$26,593	\$82,175	\$167,755	\$107,800	\$10,920	\$6,400	\$13,050	\$8,830	\$37,900	\$488,772	\$1.85,000	\$0	\$
EN15018 Water Quality Laboratory 11,300 4,000	legional V	Wastewat e	r Operation	•														
EN15012 RP-1 East Primary Effuent Pipe Rehab 187 1,728 821 2,735 - 2,735 2,735 - 2,7		Capital	EN13016	SCADA EnterpriseSystem	1,680	2,632	4,848	850	10						10,020			-
EN15013 RP-1 TWAS and Primary Effluent Piping Re 356 40			EN15008	Water Quality Laboratory	11,300	4,000				-					15,300			
EN16070 Agencywide Pumps Efficiencies Improvement 15			EN15012	RP-1 East Primary Effluent Pipe Rehab	187	1,728	821							100	2,735	-	-	*
EN17034 Agencywide Lighting Improvements - Phase 15			EN15013	RP-1 TWAS and Primary Effluent Piping Re	356	40									395		-	*
EN17042 Digester 6 and 7 Roof Repairs 1,350 1,350 300 3,000 3,000 3,000			EN16070	Agencywide Pumps Efficiencies Improvemen	15	*									15	-		
EN17043 RP4 Primary Claffer Rehab 751 2,842 2,868			EN17034	Agencywide Lighting Improvements - Phase	15										15			*
EN17043 RP4 Primary Claffer Rehab 751 2,842 2,868			EN17042	Digester 6 and 7 Roof Repairs	1,350	1,350	300								3,000			
EN17045 RP-1 Filter Valve Replacement 135 515			EN17043			2,842	2,868								6,461		-	
EN17047 RP-1 Dewatering Slig/Conveyor Safety Imp 135 15 150 150										-							-	
EN17052 RP-1 and RP-4 Safety improvements 665 74 739 EN17059 RP-1 iron Sponges installation 315 35 350 EN17065 Regional Plant Energy Modifications 150 150 150 150 150 150 150 150 150 - 1,350														-			-	
EN17059 RP-1 Iron Sponges Installation 315 35 350 EN17065 Regional Plant Energy Modifications 150 150 150 150 150 150 150 150 150 - 1,350										-							-	
EN17065 Regional Plant Energy Modifications 150 150 150 150 150 150 150 150 150 - 1,350 -																		
								150	150	150	150	150	150		100000000000000000000000000000000000000			
			EN17082	RP-1 Mechanical Restoration and Upgrades	350	700	450						-		1,500		-	

### Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Details - DRAFT \$\int Thousands\$

	Project	Project															
Fund	Group	Number	Project Name	FY2018	EV 2019	FY 2020	FY 2021	FY 2022	EV 2023	EV 2024	EY 2025	FY 2026	FY 2027	Ten Year Total	FV+ 2028-32	EV: 2033-37	FYs 2038-42
	Wastewater			112010	112025	11 2020	TT ZUZZ	TT ZUZZ	112025	112024	112023	F1 2020	11 2027	Tell real Total	1132020-32	1 15 2033-37	115 2030 42
ic grona	Capital		RP-4 Process Improvements	3,087	6,252	7,915							-	17,254			
	Capital	EN18024	RP-1 Civil Restoration and Upgrades	105	245	150								500			
		EN18025	RP-1 Secondary System Rehabilitations	700	2,940	1,560								5,200			
		EN18029	TP-1 Electrical Distribution Panel Replacement	70	165									235			
		EN18039	RP-1 Lighting Pole Replacement	220	-									220			
		EN18040	RP-1 Maintenance Building HVAC Replacement	455	195									650			
		EN2 1002	Chino Creek Wetlands & Educational Park	-	-		900	958						1,858			
		EN21103	RP-5 Regional Wastewater AMP				6,000	6,000	6,000	6,000	6,000	6,000	6,000	42,000			-
		EN26021	Regional Conveyance AMP				0,000		.,			500		500	500	1,000	1,000
		EP18003	Major Facilities Repairs / Replacements (South)	914										91.4		2,000	
		EPXXXXX	Major Facilities Repairs/Replacements	1,109	600	600	600	600	600	600	600	600	600	6,509			
		LB19001	TOC Combustion Instrument	1,100	30		-	-		000	-	-		30			-
		PL26001	RP-1 Advanced Water Treatment Facility								-	500	2,500	3,000	77,000		-
	Capital To		N-1 Advanced Water Heatment Pacing	\$24,063	\$24,506	\$19,662	\$8,500	\$7,718	\$6,750	\$6,750	\$6,750	\$7,750	\$9,100	\$121,550	\$77,500	\$1,000	\$1,00
	Special	CP16001	Regional Plant Facilities Aesthetics	80	80	\$13,002	30,300	\$1,110	\$0,730	30,730	30,730	\$1,130	33,100	160	\$77,500	31,000	31,00
	special	EN13012	Magnolia Channel Monitoring&Maintenance	80	100									100		-	
				1,350	6,120	845	- 0							8,315			- 1
		EN16021	South Archibaid TCEPiume	250	250	250	250	250	250	250	250	250	250	2,500			
		EN17022	RO On-Call Operations and Maintenance Su	250	250	250	250	250	250	250 250	250	250	250	2,500		-	-
		EN17026	RO Safety Operations and Maintenance Sup		20	250	250	250	20	20	250	250	250		-		-
		EN17040	RP-1 Aeration Basin Panel Repairs	56	- 5		-					-	2 000	56	0.000		- 1
		EN26025	RP-2 Decommissioning and PDR	-		-	-		-		600	600	2,000	3,200	9,000		
		ENXX019	RO Emergency O&M Projects FY XX/XX	250	250	250	250	250	250	250	250	250	250	2,500			
		EP17005	Agency-Wide Condition Assessment	250	250	250	250	250	250	250	250	250	250	2,500			
		EPXXIII	Digester Cleaning			500	500	500	500	500	500	500	500	4,000			
		1518008	SCADA Cybersecurity Risk Assessment, Policy Develo	125					*	*			*	125	-		
		1519002	SCADA Cybersecurity Network Vulnerability Assess m	*	75				*	*		*	*	75			
		PA17006	Agency-Wide Aeration Panel Replacement	3,220	500	-	-		500	1,200	2,500		-	7,920	-		-
		PAXX002	Agency Wide Coatings and Pavings	100	100	100	100	100	100	100	100	100	100	1,000	-		-
		PK1 1001	Water Discovery Field Trip & Bus Grant	40	40	2	-					-		82	-	-	-
		PL17001	RO Planning Documents		250		250		250		250			1,000			-
	Special To			\$5,971	\$8,265	\$2,447	\$1,850	\$1,600	\$2,350	\$2,800	\$4,950	\$2,200	\$3,600	\$36,033	\$9,000		
	Wastewater	Operation	Total	\$30,034	\$32,771	\$22,109	\$10,350	\$9,318	\$9,100	\$9,550	\$11,700	\$9,950	\$12,700	\$157,582	\$86,500	\$1,000	\$1,00
echarge																	
	Capital		RMPU Construction Costs	210	10,137	6,554	9		*			-	*	16,910			-
			Recharge Master Plan Update Projects	1,204	516				*			-		1,720	-		-
			Lower Day Basin RMPU Improvements	315	2,248	1,108	1				*			3,672			*
	Capital To	tal		\$1,729	\$12,902	\$7,662	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$22,302	\$0	\$0	\$
	Special	RW18001	GWR Montcleir Basin Gate Rehab	75	-									75			
			Midgefly Mitigation Project	250	250	-	*	*	*			*	*	500	-	-	-
	Special To			\$325	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$575	\$0		
	Water Tota	l-		\$2,054	\$13,152	\$7,662	\$10	\$0	\$0	\$0	\$0	\$0	\$0	\$22,877	\$0	\$0	\$
lecycled i	Water																
	Capital	EN09007	1630 E Pipeline Seg B & 1630 E Resrvoir		*	*	*		*		*	1,000	2,400	3,400	13,000		*
		EN12016	North CIM Lateral	30	50	50	50	50	50	50	50	50	20	450			*:
		EN13001	San Sevaine Basin Improvements	4,320	548	541	*				*	*	*	5,408			*
		EN13045	Wineville RW Extens ion Segment B	100	*		*				*	*		100			*
		EN13048	RP-1 Power System Up grades	280	490	330	*							1,100			
		EN14042	RP-1 1158 RWPS Upgrades	195	2,354	1,093			-			-	-	3,643	-		
		EN14043	RP-5 RW Pipeline Bottleneck	2,070	330	-						-	-	2,400			*
		EN14047	GWR and RW SCADA Control Upgrades	282										282			

### Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Details - DRAFT \$ in Thousands

	Project	Project															
Fund	Group	Number	Project Name	FY2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	Ten Year Total	FYs 2028-32	FYs 2033-37	FYs 2038-4
ecycled 1																	
	Capital	EN15002	1158 Reservoir Site Cleanup	102	280	864	2				2	2		1,245		- 0	-
	10.51.00	EN15043	SBCFCD Recycled Water Easement	570								2		570			
		EN15055	1630 E& W. Recycled Water Pump Station	11	2							-		11		-	
		EN16034	RW Pressure Sustaining Valve Installation	50		250	45							345			
		EN16060	RW Connections to City of Pomona	200	200	950	950	950	950	950	950	940	900	7,940	62,000		
		EN16065	RW Connections to JCSD			1,500	7,000	7,000						15,500			
		EN17007	930 To 800 West CCWRF PRV	76	225	283								584			
		EN17032	RP-4 Outfall Repair from Mission Blvd to				30	5,000						5,030			
		EN17041	Ordhard Recycled Water Turnout Improveme	10	20	70								100			
		EN17046	1630 East Pump Station Upgrades	203	38									240			
		EN17049	Baseline RWPL Extension	350	3,010	1,440								4,800			
		EN17067	Declez Monitoring Well Project	176	20	1,100						- 0		195			
		EN17080	RW System Cathodic Protection Improvements	210	2,240	1,050								3,500			
		EN18030	CCWRF RW Propeller Flowmeter Replacement	60	2,240	1,000	-					-		60		-	
		EN19003	RP-1 Outfall Parallel Line	50	-	230	1,925	960						3,165			
		EN19020	RW System Migration to PlantPAx	30	70	430	1,525	300		0.00			-	500	-		
		EN20022	1299 Spot Repair		70	75						- 0		75			
		EN21004	1158 West Full Recoat			/3	1,000					- 0		1.000			
		EN22004					1,000					- 6		1,000	- 2	- 6	
			1158 East Full Recoat					1,000		100	0.00				-		
		EN24003	Wineville Basin Pipeline		-	-	- 5			100	900			1,000	-	-	
		EN24005	1630 West Spot Repair							75				75	-		
			930 Spot Repair							75	*			75			
		EN26023	1299 Pressure Zone Pipeline Capacity Upg							*		500	*	500	8,500		
		EN26024	2025-2030 Recycled Water Projects							*		1,000		1,000	19,000		
		1518010	GWR Ne twork Infrastructure Replacement	25										25			
		LB18003	TOC UV/ Persuifate instrument	35	-	-	*					-		35			
			Napa Lateral	2,730	1,400	1,770		-		*	-			5,900	-	-	
	Capital To			\$12,134	\$11,274	\$10,926	\$11,000	\$14,960	\$1,000	\$1,250	\$1,900	\$3,490	\$3,320	\$71,253	\$102,500	\$0	
	Special	EN16035	WC Planning Documents	250	250	-	500	-	500	*	500	-	500	2,500		-	
		EN16037	RW Asset Management Plan	250	250	250	250	250	250	250	250	250		2,250			
		EN16039	WRCWRA Interte	250	250							*		500			
		EN17020	WC On-Call Operations and Maintenance Su	250	250	250	250	250	250	250	250	250	250	2,500			
		EN17039	8th St. Basin RW Turn out Discharge Retro	191	21	-								212			
		EN18021	Prado Basin AMP Annual Monitoring	200	100	100	100	100	100	100	100	100	100	1,100			
		EN20031	Recycled Water Program Strategy 2020			250		-				-		250			
		EN25031	Recycled Water Program Strategy 2025							*	250			250			
		ENXXID 11	RW Hydraulic Modeling FY XX/XX	200	200	200	200	200	200	200	200	200	200	2,000			
		ENXXD17	WC Emergency O&M Projects FY XX/XX	250	250	250	250	250	250	250	250	250	250	2,500			
		PL18002	Basin Plan Amendment	250	50						**			300	-		
		WR16001	Water Soften er Removal Rebate Program	60	60	60	60	60	60	60	60	60	60	600	-		
	Special To			\$2,151	\$1,681	\$1,360	\$1,610	\$1,110	\$1,610	\$1,110	\$1,860	\$1,110	\$1,360	\$14,962	\$0	\$0	
cycled t	Water Total			\$14,284		\$12,286	\$12,610	\$16,070	\$2,610	\$2,360	\$3,760	\$4,600	\$4,680	\$86,215	\$102,500	\$0	
_	sources				,						4-1			, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,		
	Special	PL18001	California Data Collaborative WUE Data Analytics	40	40									80			
			Local Supply Resilience Projects	100	100	100	100	100	100	100	100	100	100	1,000			
			SAMPA Action Team Conjunctive Use SARCUP	3,000	6,000	15,000	8,500					-		32,500	-		
			WW Planning Documents	500	250	290	-			500	500			2,040			
			Landscape Audit & Evaluation Program	40	-					-	-		-	40			
			Shows that Teach	16			9							16			
		*************	STORY STR. (DBC)	10		-	-	-		-	-	-		10	-	-	

# Review of Proposed Biennial Budget for FYs 2017/18 and 2018/19 Regional Wastewater, and Recycled Water, and 2018 TYCIP May 25, 2017/June 1, 2017 Page 29 of 29

### Proposed Fiscal Year 2017/18 Ten Year Capital Improvment Plan Details - DRAFT \$ in Thousands

	Project	Project															
Fund	Group	Number	Project Name	FY2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY2025	FY 2026	FY 2027	Ten Year Total	FYs 2028-32	FYs 2033-37	FYs 2038-42
Water Res	ources	Name of the second															
	Special	WR18006	Large Landscape Retrofit Program	200	-	*			*				**	200			
		WR18007	Residential Rebate Incentives	100										100			
		WR18008	Oil Rebate Incentives	100	100								*:	100			
		WR18009	National Theater for Children	57			* /			0.00				57			
		WR18011	Frees prin Idennozziles.com Voluche r Program	200		*							*	200			*
		WR18013	Sponsorships & Public Outreach Activities	77	-					1.00			*	77			**
		WR18015	Landscape Training Classes	15									*	15			*
		WR18017	Residential Pressure Regulation Program	300									**	300			
		WR18018	Member Agency Local Programs Funding	100	*									100			
		WR18020	IEUA WUE Model Update & Workshop	5										5			-
		WR18021	Regional WUE Support Tools	75	*									75			
		WR18027	Residential Small Site Controller Upgrade Program	200										200			
		WR18028	WaterBank	660	150	150								960			-
		WR18XXX	Conservation Programs		1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	1,600	14,400			-
	Special To	tal		\$5,829	\$8,140	\$17,140	\$10,200	\$1,700	\$1,700	\$2,200	\$2,200	\$1,700	\$1,700	\$52,509	\$0	\$0	\$0
Water Res	ources Tota	al		\$5,829	\$8,140	\$17,140	\$10,200	\$1,700	\$1,700	\$2,200	\$2,200	\$1,700	\$1,700	\$52,509	\$0	\$0	\$0
<b>Grand Total</b>	al			\$84,653	\$96,565	\$144,181	\$202,125	\$135,988	\$25,930	\$24,217	\$34,810	\$26,430	\$58,030	\$832,928	\$374,800	\$2,100	\$2,100

# Regional Wastewater and Recycled Water Program Fiscal Years 2017/18 & 2018/19 Biennial Budget and Ten Year Capital Improvement Plan









Christina Valencia, CFO/AGM May 2017

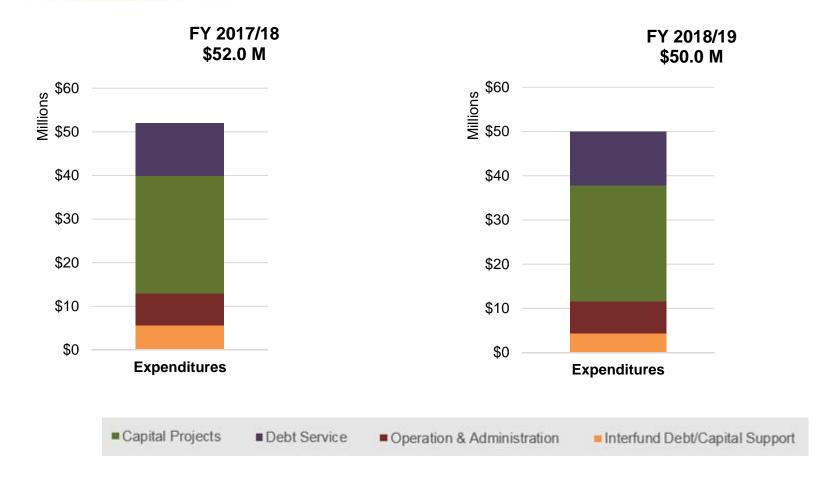
# Ten Year Capital Improvement Plan (TYCIP) Fiscal Years 2018 - 2027

### Highlights

- \$833 million planned over the next 10 years
  - 80% or \$663 million, planned between 2018 2022
- Increase of ~\$18M over preliminary \$815M TYCIP
  - \$15.4 M increase in Regional Wastewater Programs
    - RP-4 Primary Clarifier Rehabilitation
    - RP-4 Process Improvements
  - \$2.2 M increase in Recycled Water Program
    - 1158 East/West Full Pipeline Recoating
- No adjustment requested from approved rates or fees

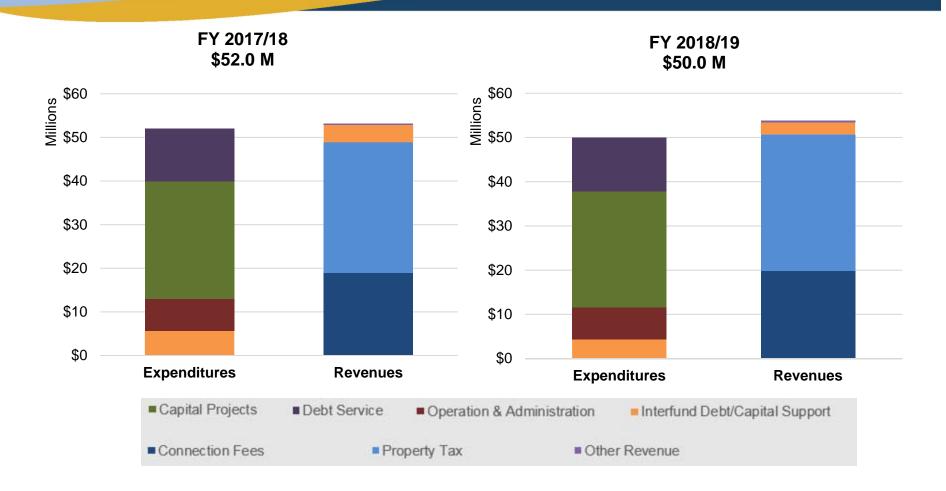


# Wastewater Capital Fund Expenditures



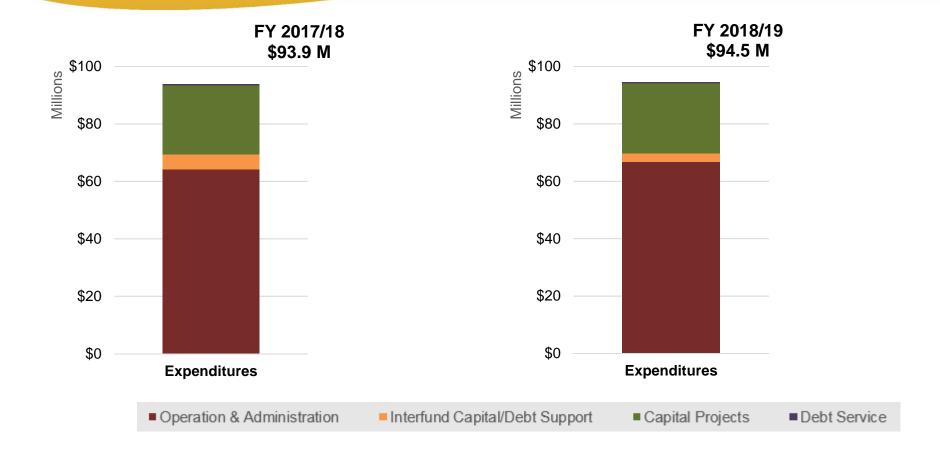


### Wastewater Capital Fund Expenditures and Revenues





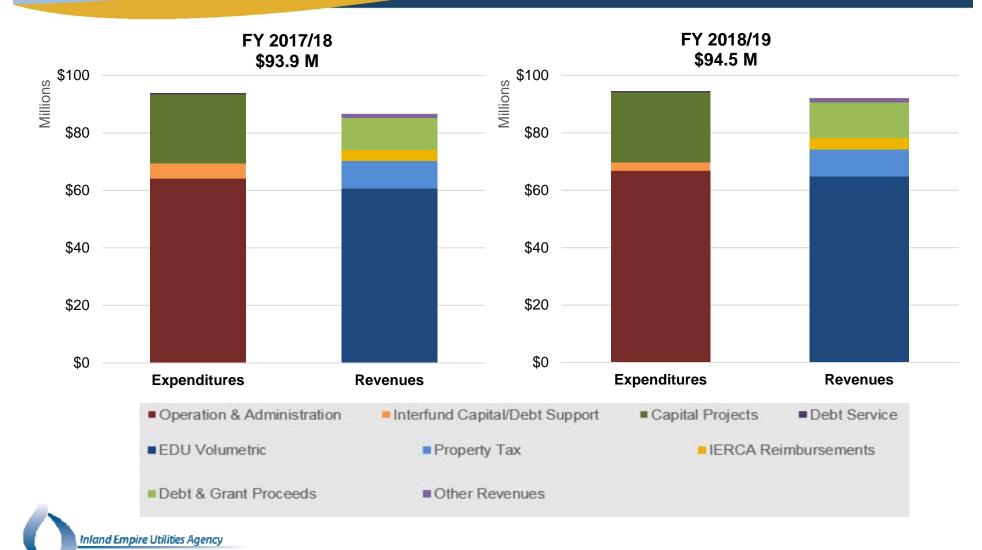
# Wastewater Operations Fund Expenditures



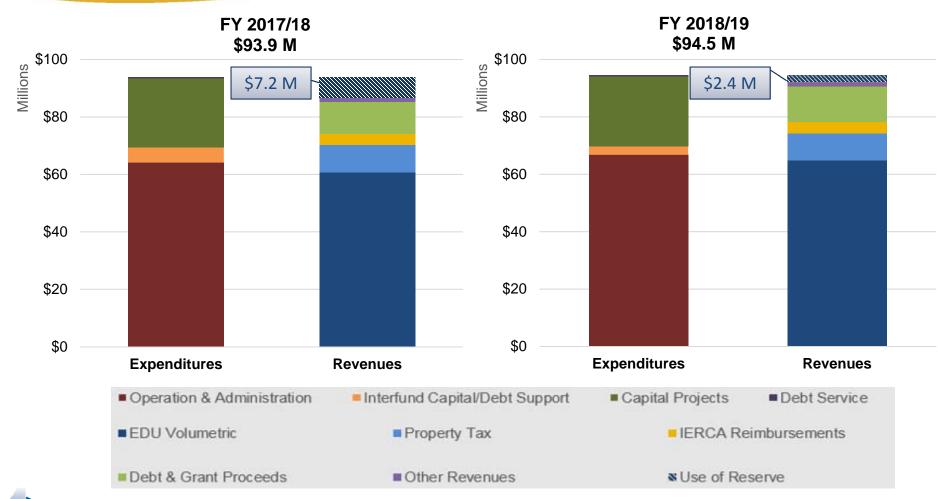


### Wastewater Operations Fund Expenditures and Revenues

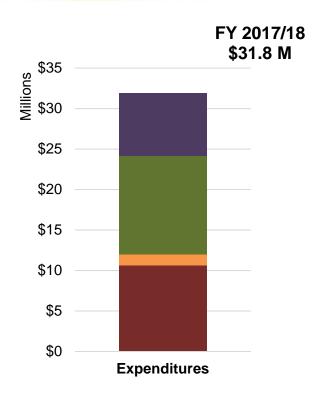
A MUNICIPAL WATER DISTRICT

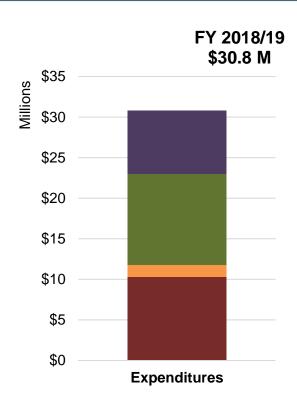


### Wastewater Operations Fund Expenditures and Revenues



# Recycled Water Fund Expenditures





■ Operation & Administration

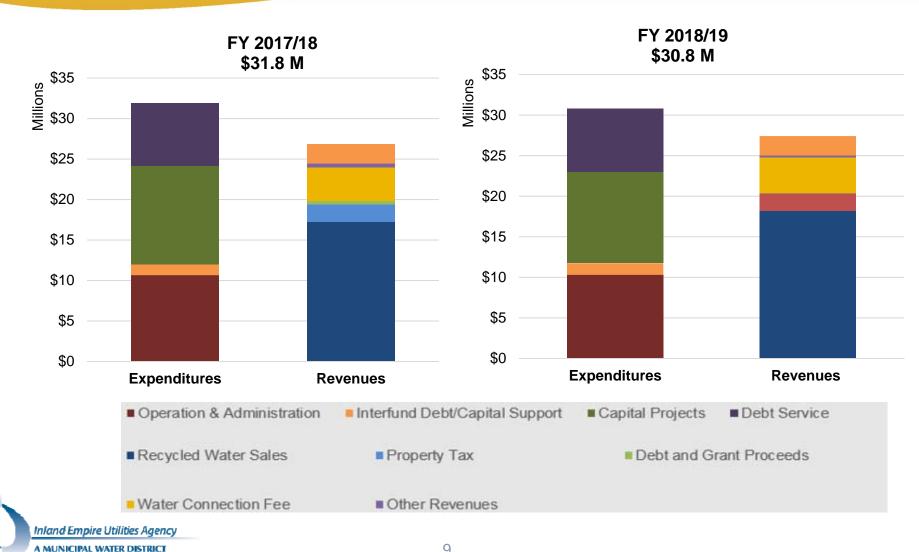
■ Interfund Debt/Capital Support

■ Capital Projects

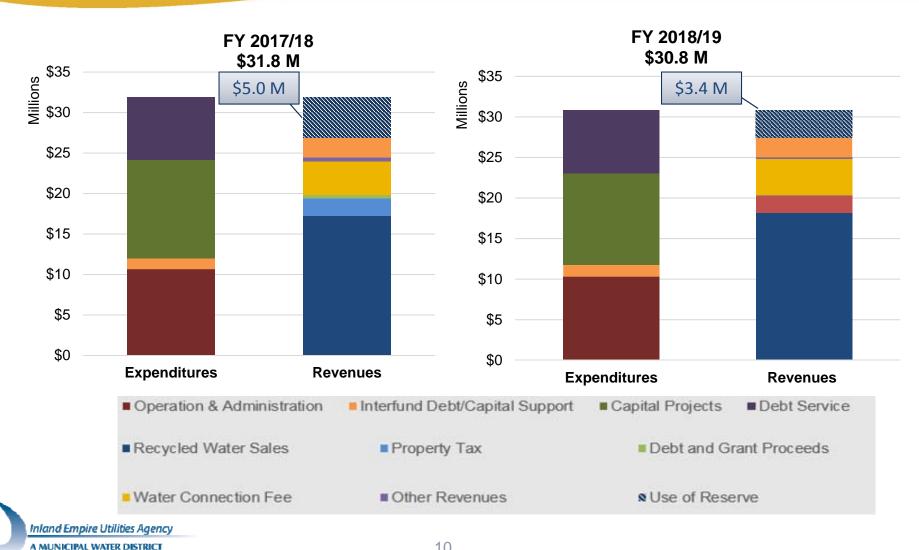
■ Debt Service



### **Recycled Water Fund Expenditures and Revenues**



### **Recycled Water Fund Expenditures and Revenues**



### **Next Steps**

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Timeline	IEUA Finance Committee/Board	Regional Technical/Policy Committees
Budget Workshop	March 1	
Fiscal Years 2017/18-2018/19 Biennial Budget Overview	March 8 March 15	March 30 April 6
Review of proposed biennial O&M budget for Regional Wastewater, Recycled Water, and Recharge Water programs and Ten Year Capital Improvement Plan (TYCIP) FYs 2018-2027.	April 19	April 27 May 4
Review proposed biennial O&M and capital budget of Non-reclaimable Wastewater, Water Resources, and Administrative Services funds.	May 10 May 17	
Review and comment on proposed biennial O&M budget for Regional Wastewater and Recycled Water programs and TYCIP.		May 25 June 1
Final review and approval of proposed biennial O&M budget and TYCIP.	June 14 June 21	



ACTION ITEM

1C

Date:

May 25, 2017

To:

Regional Technical Committee

From:

Inland Empire Utilities Agency

Subject:

**Technical Committee Meeting Time Options** 

### **RECOMMENDATION**

It is recommended that the Committee decide on the timing of future meetings.

### **BACKGROUND**

The Committee had requested changing the meeting to an earlier time, to accommodate the Committee members schedule. Below are the results from the Doodle poll that was conducted.

6 participants	1:00	1.30	2:00	2:30	3.00	3.30
Ron Craig			V			
Chuck Hays				V		
Mike Hudson						1
Katie Gienger			1	1	1	1
Rosemary Hoerning	01		1	1		
Jesus Plasencia			1	1	1	

INFORMATION ITEM
2B

# Energy Management Plan #1 Long Term Planning: RP-5







May 2017



### **Energy Management Drivers**

- Fiscal responsibility
  - Cost containment
  - Budgeting
  - Future grant eligibility
- Operational reliability
  - Minimize dependence on utility
- Environmental Stewardship
  - Enhance air quality
  - Support state goals



### **Energy Management Initiatives**

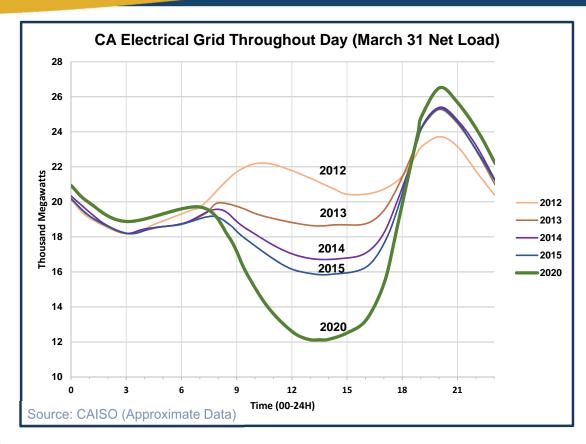
### 2015 Energy Management Plan

- Peak power independence
- Grid interdependence
- Organics diversion
- Carbon neutrality
- Energy efficiency

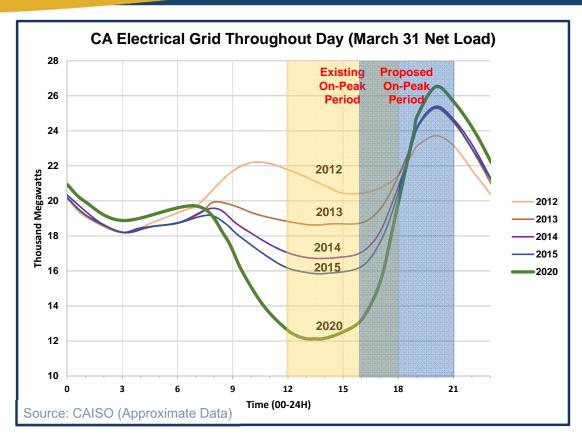




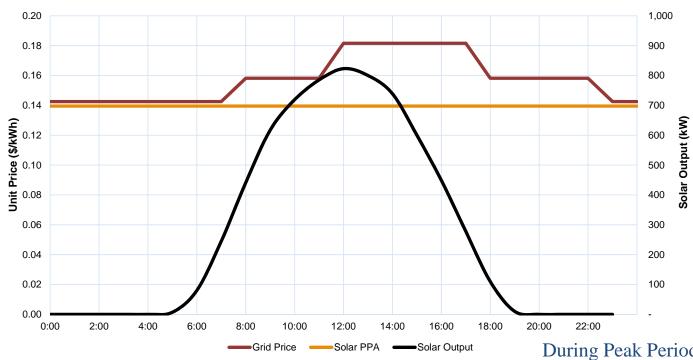
### **Market Trends - Duck Curve**



### **Market Trends - Duck Curve**



### Time of Use – Summer Season (RP-4)

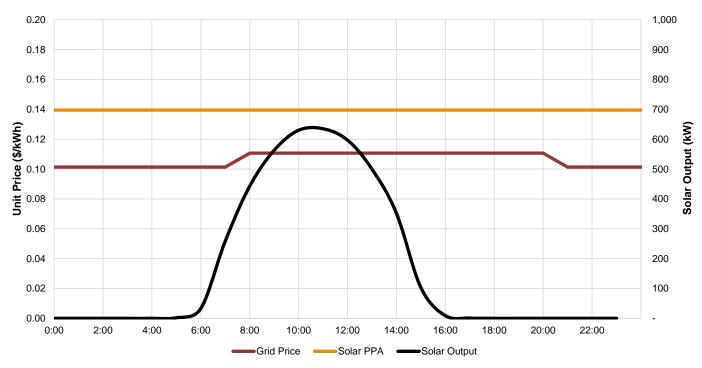




During Peak Period of Solar Production:

Solar PPA: \$0.14 /kWh SCE Grid Price: \$0.16/kWh

### Time of Use – Winter Season (RP-4)



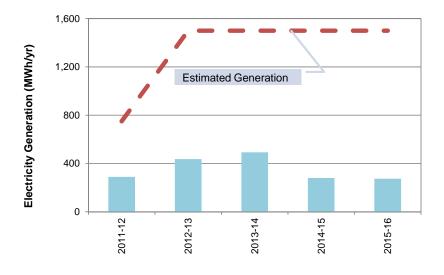


### **SCE Demand Charges Savings**

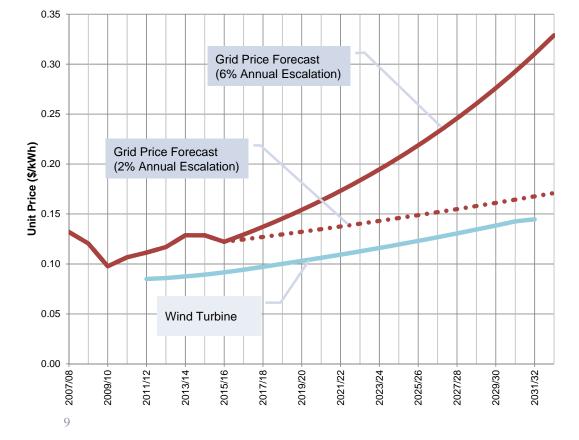
Facility	Demand Charges Without On-Site Generation	Demand Charges With On-Site Generation	Monthly Savings	Annual Savings
RP-1	\$ 79,200	\$ 55,684	\$ 23,516	\$ 282,192
RP-4	\$ 73,800	\$ 64,790	\$ 9,010	\$ 108,120
RP-5	\$ 28,800	\$ 19,790	\$ 9,010	\$ 108,120
TOTAL				\$ 498,432



### **RP-4 Wind Turbine**

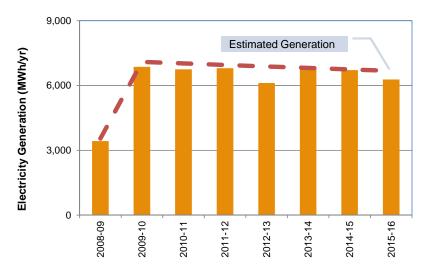


Savings FY 11/12 – FY 15/16	\$53,000
Range of Savings PPA Term (FY 11/12 – FY 31/32)	\$220,000 (2% Esc) \$620,000 (6% Esc)

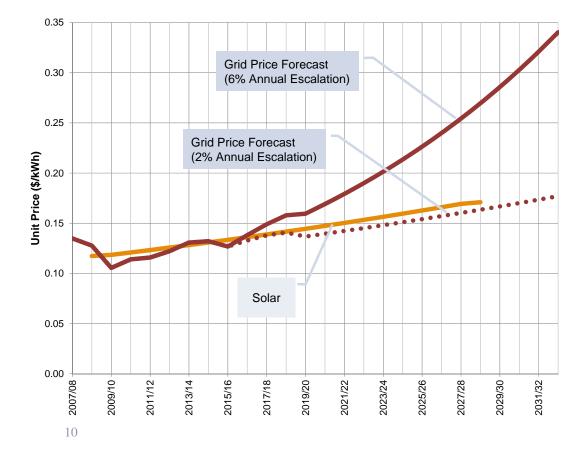




### **IEUA Solar with Demand Charges Savings and Time of Use**

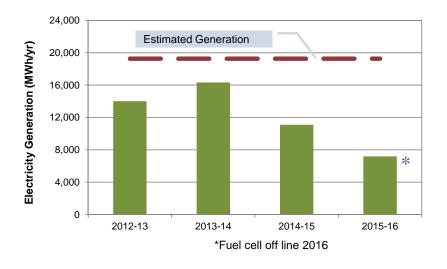


Savings FY 08/09 – FY 15/16	\$98,000
Range of Savings PPA Term (FY 08/09 – FY 28/29)	\$1,800,000 (2% Esc) \$5,900,000 (6% Esc)

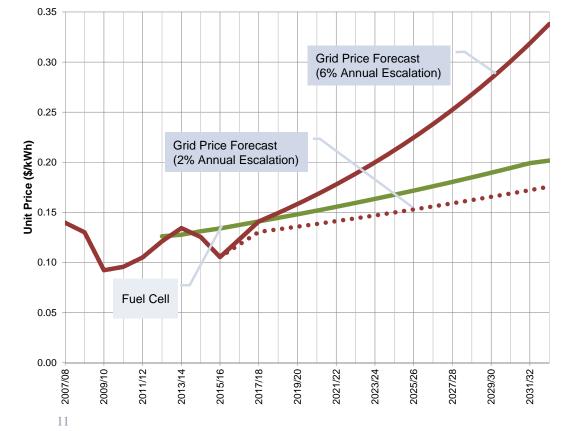




### **RP-1 Fuel Cell with Demand Charges Savings**

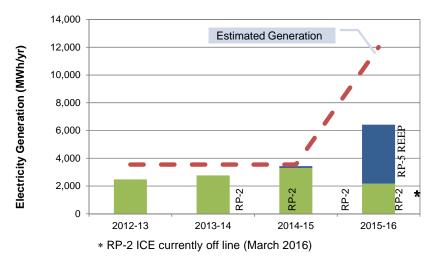


Savings FY 12/13 – FY 15/16	-\$620,000
Range of Savings PPA Te	rm -\$10,400,000 (2% Esc)
(FY 12/13 – FY 32/33)	\$9,400,000 (6% Esc)

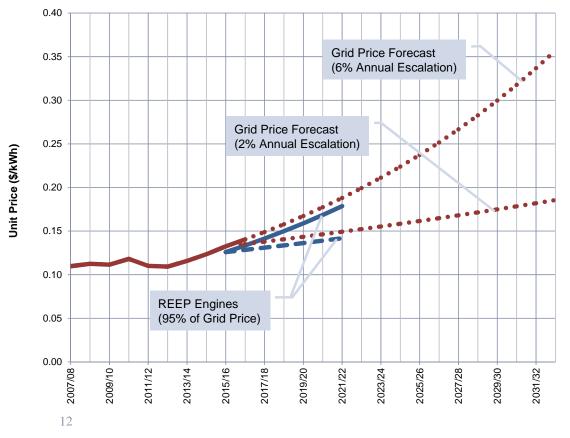




### **Internal Combustion Engines**



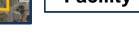
Savings FY 11/12 – FY 15/16	\$28,000
Range of Savings Lease Term	\$340,000 (2% Esc)
(FY 11/12 – FY 21/22)	\$400,000 (6% Esc)



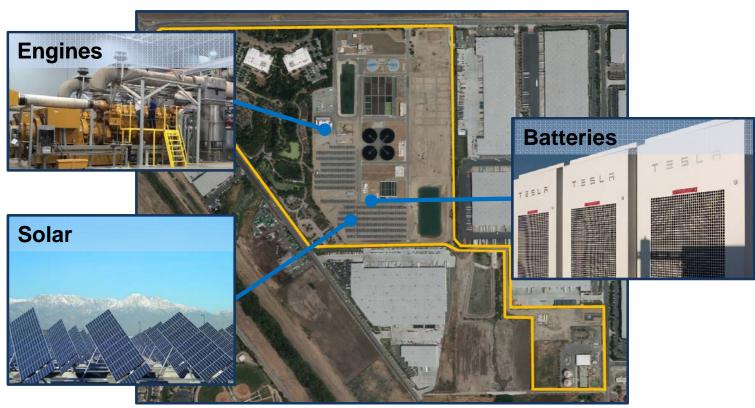


### Case Study - Regional Plant No. 5

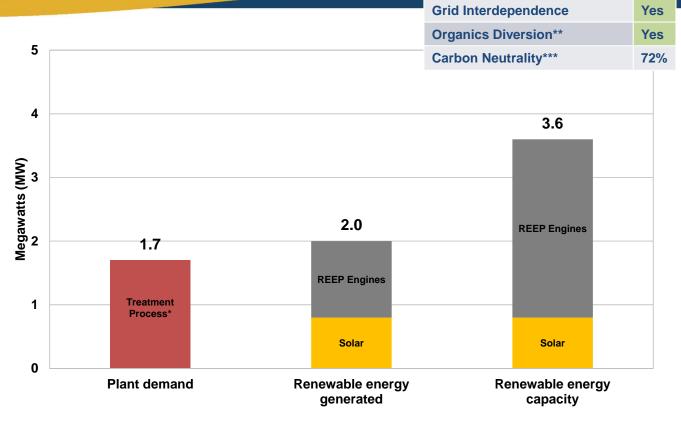




# Existing Renewables & Resource Management @ RP-5



# Regional Plant No. 5 (Current, 10 MGD)





Goals

**Peak Power Independence** 

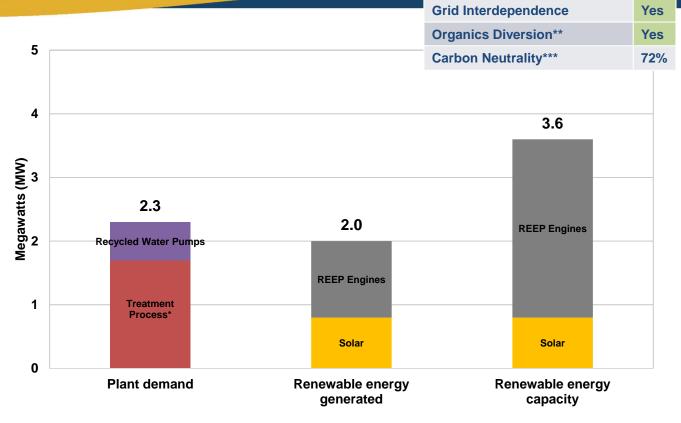
Yes

<sup>\*</sup> Includes RP-2 and RP-5 Campus

<sup>\*\*</sup>Organics diversion indirectly achieved through RP-5 SHF

<sup>\*\*\* 48%</sup> of the attributes assigned to IBE by contract for RP-5 SHF

# Regional Plant No. 5 (Current, 10 MGD)





Goals

**Peak Power Independence** 

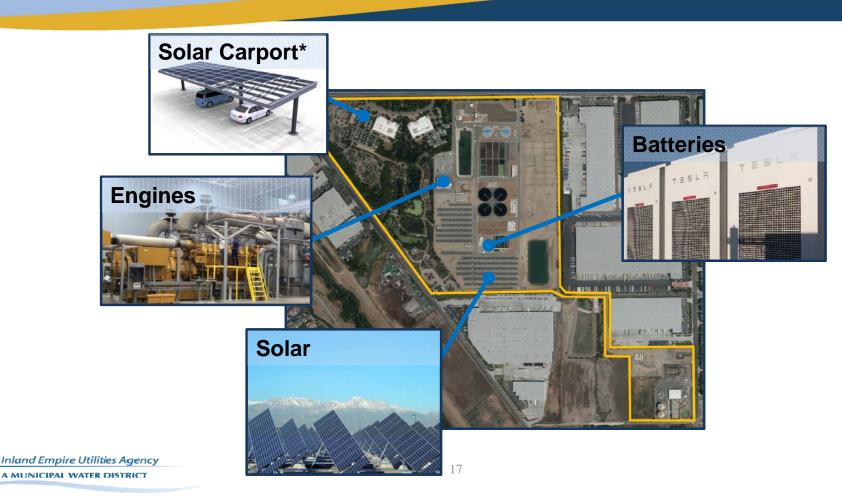
No

<sup>\*</sup> Includes RP-2 and RP-5 Campus

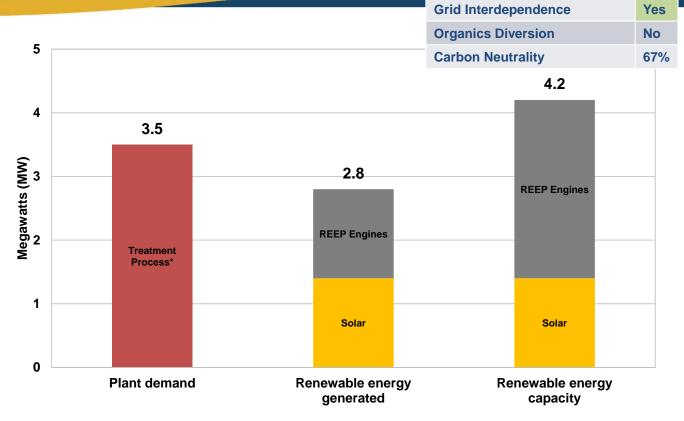
<sup>\*\*</sup>Organics diversion indirectly achieved through RP-5 SHF

<sup>\*\*\* 48%</sup> of the attributes assigned to IBE by contract for RP-5 SHF

# Potential Renewable\* & Resource Management @ RP-5



# RP-5 Biosolids Only (2025, 16 MGD)



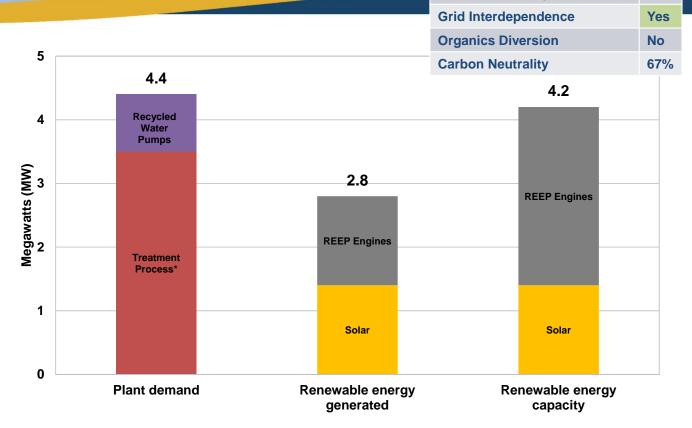
Goals

**Peak Power Independence** 

No



# RP-5 Biosolids Only (2025, 16 MGD)



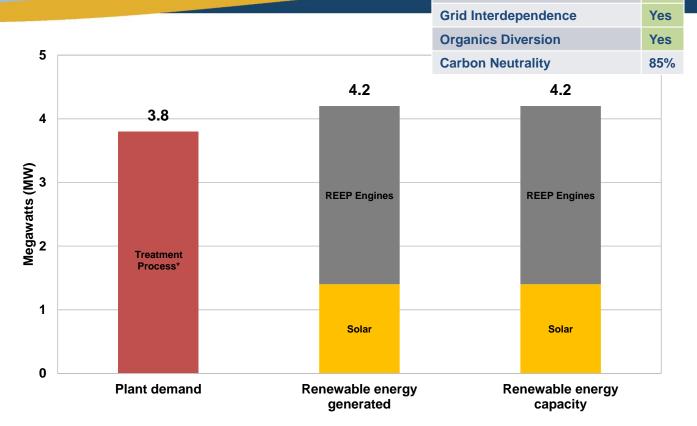
Goals

**Peak Power Independence** 

No



# RP-5 Biosolids and Food Waste (2025, 16 MGD)



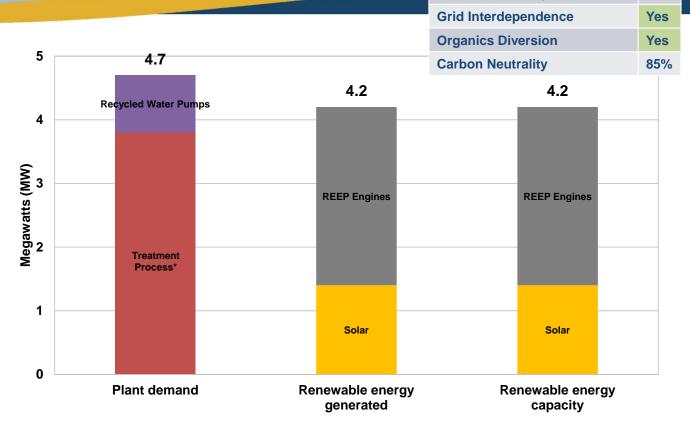
Goals

**Peak Power Independence** 

Yes



# RP-5 Biosolids and Food Waste (2025, 16 MGD)



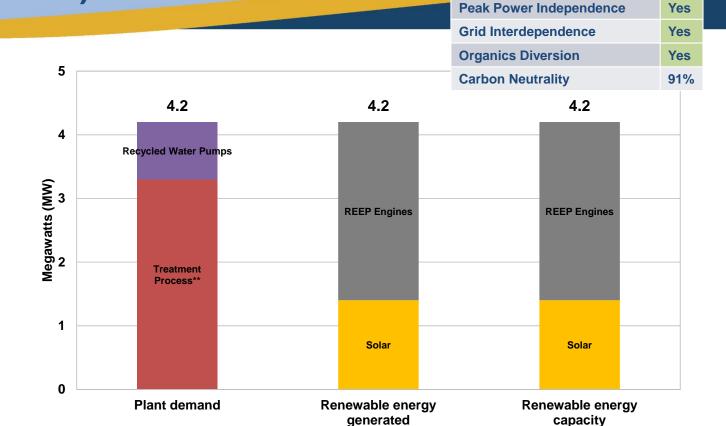
Goals

**Peak Power Independence** 

No



#### RP-5 Biosolids, Food Waste, Energy Efficiency\* (2025, 16 MGD) Goals





\*Energy efficiency potentially achieved through potential treatment process optimization

capacity

Yes

<sup>\*\*</sup> RP-5 Campus (Liquid and Solid & Food Waste Treatment, Headquarters)

### Questions



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#### Regional Sewerage Program Policy Committee Meeting

#### **AGENDA**

Thursday, June 1, 2017 4:00 p.m.

#### **Location**

Inland Empire Utilities Agency Boardroom 6075 Kimball Avenue Chino, CA 91710

Call to Order and Roll Call

Pledge of Allegiance

**Public Comment** 

Changes/Additions/Deletions to the Agenda

- 1. Technical Committee Report (Oral)
- 2. Action Item
  - A. Approval of the May 4, 2017 Meeting Minutes
  - B. 2017/18 & 2018/19 TYCIP and IEUA Regional Budget
- 3. Informational Items
  - A. Regional Contract Update/Renewal (Oral)
- 4. Receive and File
  - A. Building Activity Update
  - B. Recycled Water Distribution Operations Summary
- 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 July 6, 2017
- 6. Adjournment

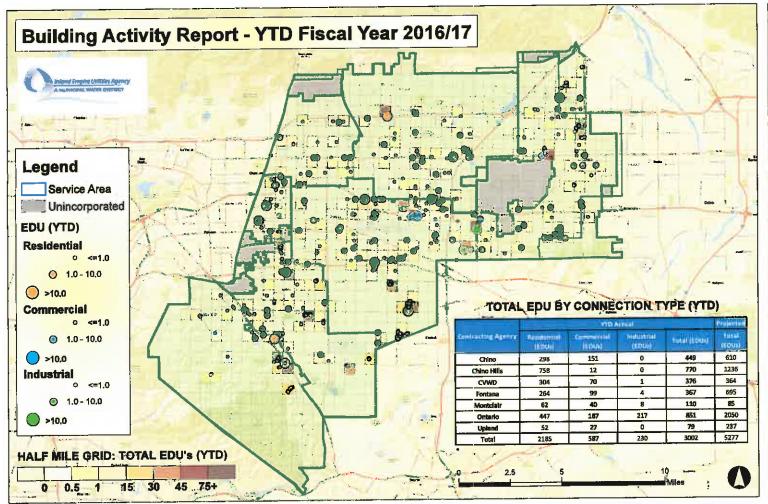
Regional Sewerage Program Policy Committee Meeting Agenda TBD Page 2 of 2

#### DECLARATION OF POSTING

										A Municipal		
										foyer at the	Agency	/ˈs main
of	fice, 6	075 Kiml	oall Avenue	, Building A,	Chin	o, CA	on Friday	/, May 29	9, 2017			

Laura Mantilla

RECEIVE AND FILE 3B











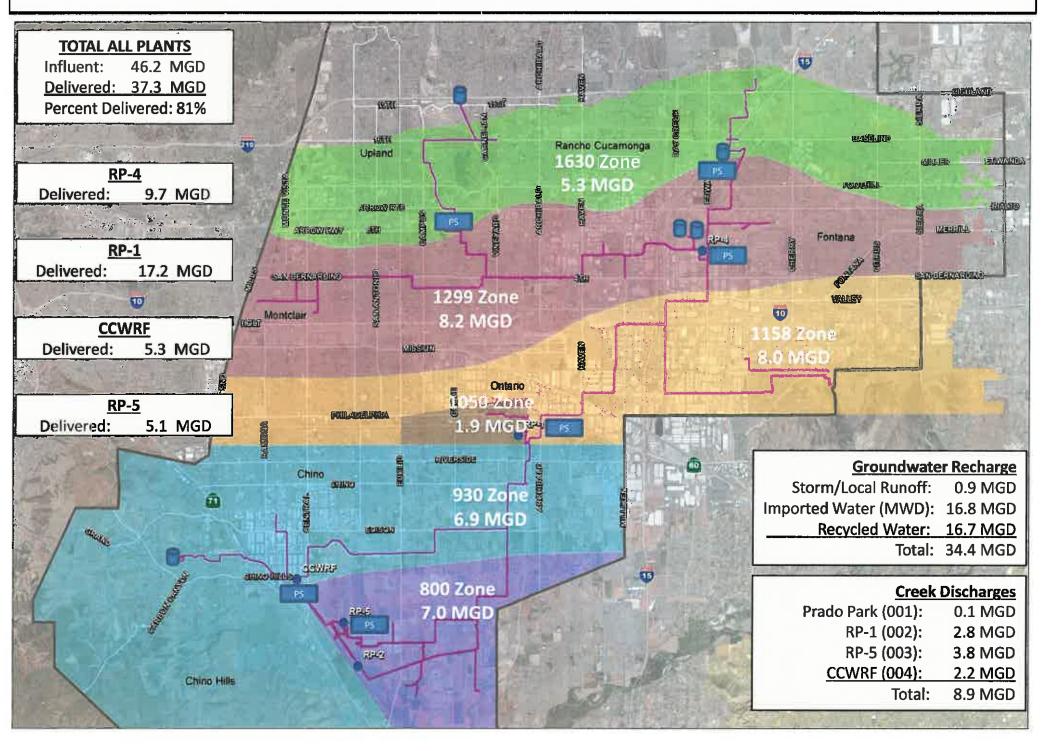






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### **IEUA RECYCLED WATER DISTRIBUTION - APRIL 2017**



Recycled Water Recharge	Deliveries / Plan	April 2017	(Acre-Feet)
RECYCIED WARE RECIIATUE	Dalladilde i Ligii .	י אווו בעורי	Merel and Ch

Recycled Water Recharge Deliveries / Plan - April 2017 (Acre-Feet)								Deliveries are draft until reported as final.		
Basin	4/1-4/7	4/8-4/14	4/15-4/21	4/22-4/28	4/25-4/30	Month Actual	FY To Date Actual			
Ely	38.5	40.7	48.6	48.1	13.8	189.7	1092			
Banana	0.0	0.0	0.0	0.0	0.0	0.0	500			
Hickory	0.0	0.0	0.0	0.0	0.0	0.0	136			
Turner 1 & 2	26.0	32.6	21.6	24.5	5.0	109.7	955			
Turner 3 & 4	30.0	24.6	0.0	44.0	0.0	98.6	930			
8th Street	65.9	63.2	77.8	62.5	11.1	280.5	1899			
Brooks	0.0	0.0	0.0	8.1	0.0	8.1	317			
RP3	130.8	108.9	115.9	121.6	36.1	513.3	4652			
Declez	0.0	0.0	0.0	0.0	0.0	0.0	514			
Victoria	50.3	76.4	83.3	83.2	23.7	316.9	1108			
San Sevaine	0.0	0.0	0.0	0.0	0.0	0,0	0			
Total	341.5	346.4	347.1	391.9	89.7	1,516.7	11,173	10,411	AF, Previous FY End of Month Actual	

