Carollo Engineers, Inc.
3400 Central Avenue, Suite 205 • Riverside,
California 92506 • P. 951.776.3955 • F. 951.776.4207
carollo.com

Inland Empire Utilities Agency

2020 RATE STUDY
RECYCLED & RECHARGE WATER RATES

DRAFT | DECEMBER 2019

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Contents

Appendices

Tables

Figures

Abbreviations

AF	acre-feet
AFY	Acre-Feet per Year
Carollo	Carollo Engineers, Inc.
CBWCD	Chino Basin Water Conservation District
CIP	Capital Improvement Plan
FY	Fiscal Year
GG	General Administrative Fund
IEUA or Agency	Inland Empire Utilities Agency
IRP	Integrated Water Resources Plan
MGD	million gallons per day
MWD	Metropolitan Water District of Southern California
O&M	operations and maintenance
RC	Wastewater Regional Capital Fund
RRWDS	regional recycled water distribution system
RW	Recharge Water Fund
RWPS	Recycled Water Program Strategy
SBCFCD	San Bernardino County Flood Control District
Watermaster	Chino Basin Watermaster
WC	Recycled Water Fund
WW	Water Resources

-This Page Intentionally Left Blank-

Section 1 – Introduction

The Inland Empire Utilities Agency (IEUA or Agency) is a public agency serving the Inland Empire region of Southern California as a regional wastewater agency, as well as a wholesale supplier of imported and recycled water. The Agency contracted with Carollo Engineers, Inc. (Carollo) to conduct a Water, Recycled Water, and Wastewater Rate and Connection Fee Study for the regional wastewater and water systems. This report details the purpose and cost basis for updating the Agency's Recycled Water Direct Use and Groundwater Recharge Rates. The analysis discussed in this report provides the support for an update to those rates to be implemented in Fiscal Year (FY) 2020/21 effective July 1, 2020. The proposed FY 2020/21 rates will be updated to reflect the projected revenue requirements for FY 2020/21 through FY 2024/25, and present two alternatives: 1) Maintaining current rate structure comprised of a variable recycled water rate per acre-feet[1] (AF) for direct use, and a recharge water surcharge rate per AF, and 2) proposing a combination of the current variable component for direct use and recharge along with a fixed charge component to recover a portion of revenue requirements.

IEUA supplies water to retail agencies through both imported water supplied by the Metropolitan Water District of Southern California (MWD) and recycled water. Costs associated with imported MWD water deliveries are recorded in the Water Resources fund. Costs associated with recycled water deliveries for direct use are recorded in the Recycled Water Fund (WC), and recharge deliveries in the Recharge Water fund.

In 2000, IEUA and its contracting agencies identified recycled water use as a critical component in drought-proofing the region and maintaining its economic growth. With imported water rates increasing and long-term imported supply reliability in decline, the region committed to aggressively and proactively develop local water supplies to offset these impacts.

IEUA, in partnership with its contracting agencies and Chino Basin Watermaster (Watermaster), invested over $600 million in water recycling, conservation, recharge improvements, the MWD groundwater storage and recovery projects, the Chino Desalter, and other water management programs. These programs collectively reduce the region's need for imported water, especially during drought or conditions when imported water supplies may not be available. In addition to the region switching large potable water users to recycled water, IEUA and Watermaster obtained a landmark permit in 2005 for groundwater recharge using IEUA's high-quality recycled water. The use of recycled water provides a high-quality alternative water source to the Agency, its seven member agencies (Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and Cucamonga Valley Water District), commercial customers, and recharge basins for groundwater storage which helps to improve the resiliency of the region's water supply.

[1] An acre-foot of water is equal to 325,900 gallons of water, the equivalent of filling one acre one foot deep with water.

Due to the increasing need for reliable water supplies and for additional supplies to meet the needs of future growth, IEUA will continue to invest in localized water supplies. These investments are based on the 2015 Recycled Water Program Strategy (RWPS) which updated the 2005 Recycled Water Implementation Plan and the 2007 Recycled Water Three Year Business Plan. The primary objective of the RWPS is to prioritize projects to maximize the beneficial use of recycled water throughout the year accounting for changes in the region's water resource priorities due to increased water use efficiencies. These projects are integrated in the Agency's long-term planning documents including; the capital improvement plan (CIP) and long-term (20-year) capital outlook based on the 2015 Integrated Water Resources Plan (IRP).

IEUA and contracting agencies also affirmed the Recycled Water Policy Principles in 2015 to guide investment of any remaining significant system improvements. One of these principles is to "maintain a financially viable recycled water program with rates that incentivize use of all available recycled water and that provide funding to achieve full cost-of-service for the recycled water program".

The proposed FY 2020/21 Recycled and Recharge Water Rates reflect the capacity needed to serve each customer, and support IEUA's recycled and recharge programs consistent with the 2015 RWPS. The Recycled Water fund accounts for revenues and expenses related to operations and maintenance for distributing recycled water from the Agency's four recycling plants to direct users, CIP costs, debt service costs, and a portion of the groundwater recharge activities not covered by the reimbursement agreement with Watermaster. The Recharge Water fund accounts for revenues and expenses associated with groundwater recharge operations and maintenance. The recharge program is a joint effort between the Watermaster, the Chino Basin Water Conservation District (CBWCD), the San Bernardino County Flood Control District (SBCFCD), and IEUA.

1.1 Current Rate Structure

IEUA's current rate design consists of a variable recycled water rate per AF, and a recharge water surcharge rate per AF, entirely commodity based. Revenues generated under the current rate design vary from year to year based on the volume of recycled water delivered, primarily due to weather conditions.

The 2015 Rate Study conducted by Carollo considered other rate alternatives to facilitate revenue stability and lessen the fiscal impact of reduced deliveries. One alternative proposed in 2015 included a fixed charge based on either an account or meter equivalent basis. Following an extensive review with member agencies, no consensus was reached on a fixed charge component and the existing commodity-based rate design was maintained with no fixed component.

This analysis will evaluate and develop rates for FY 2020/21 through FY 2024/25 based on the current commodity based structure, as well as the change in recycled water sales trends since the adoption of the IEUA resolution (2016-6-17) unanimously requested and approved by IEUA and regional contracting agencies establishing regulations for the purchase of recycled water above base entitlement and the addition of a fixed component to recover debt service costs not affected by volumetric fluctuations from year to year.

The recycled and recharge water rates were designed to recover the costs of the Recycled Water direct use and Recharge costs not covered by the reimbursement agreement with Watermaster.

As wholesale service charges to other agencies and entities, IEUA's direct use and recharge rates need to meet the requirements of Article XIII of the California Constitution as amended by Proposition 26. The rates are considered to be fees for a specific service and are therefore exempt from the approval requirements of taxes, however, the rates charged must be proportional to the specific level of service provided to each user to maintain that status. As stated in Article XIII, the rates must be: "A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the State of providing the service or product to the payor." To meet these requirements, it is important that the rates appropriately recover costs from each user, establishing a nexus between the level of service that each user receives and the fees or rates that they are charged.

1.1.1 Recycled Water Direct Use Service

IEUA owns and operates five water recycling treatment facilities, four of which produce recycled water. These facilities receive an average of 53 million gallons per day (MGD) of wastewater from its member agencies which is treated to Title 22 regulations set forth by the California Division of Drinking Water and State Water Resources Board.

IEUA currently collects rate revenue for recycled water direct use deliveries on a commodity, or volumetric basis. As of July 2019, the direct use rate is $490 per acre-foot delivered. IEUA provides service to member agencies, as well as direct use service to irrigation and industrial customers. Rates are collected completely on a commodity basis and are intended to recover operation and maintenance (O&M) expenses, capital project costs benefitting existing users/uses and which are not allocated to support future growth, debt service costs, as well as a portion of groundwater recharge O&M costs not reimbursable by Watermaster.

1.1.2 Recharge Water Service

In addition to the direct use deliveries, IEUA recharges up to 50,000 AF of imported water from northern California, between 15,000 and 25,000 AF of stormwater, and between 10,000 and 15,000 AF of recycled water. Annual recharge varies due to weather patterns and the availability of supplemental water supplies (imported and recycled water). In partnership with Watermaster, CBWCD, SBCFCD, the Agency currently operates 19 recharge basins throughout the Chino Basin.

The current rate for recharge deliveries of recycled water to various groundwater basins is $550 per AF as of July 2019. The recharge water rate is the combination of the $490 per AF recycled water direct use rate with a $60 per AF surcharge added to recover costs associated with the operation and maintenance of the recharge basins not reimbursable by Watermaster. Similar to the recycled water direct use rate, the recharge water rate is collected entirely on a commodity basis with no fixed component. Table 1 shows adopted Recycled and Recharge Water Rates through FY 2019/20.

Table 1 Adopted Recycled and Recharge Water Rates

Fiscal Year (FY)	Recycled Water Direct Use Rate ($/AF)	Recharge Water Surcharge Rate ($/AF)	Total Recharge Water Rate ($/AF)
FY 2015/16	$350	$60	$410
FY 2016/17	$410	$60	$470
FY 2017/18	$470	$60	$530
FY 2018/19	$480	$60	$540
FY 2019/20	$490	$60	$550

1.2 Direct Use and Recharge Demand

1.2.1 Historic Demand

A key objective of the 2015 Rate Study was to set rates that fully recovered program costs. The rates implemented for the Recycled Water and Recharge Water funds were based on projected demand for recycled direct use and recharge water deliveries. The volume of recycled water delivery of direct use and groundwater recharge can vary seasonally and annually based on a variety of factors (e.g. rainfall intensity, rainfall duration, and recharge basin maintenance activities. As presented in Figure 1, actual deliveries for the last four fiscal years were significantly lower than projected primarily due to significant changes in recycled water sales trends following the adoption of the resolution (2016-6-17) establishing regulations for the purchase of recycled water above base entitlement and delays in groundwater recharge projects, and recycled water capacity improvement projects. The high precipitation this past winter season also resulted in lower recycled water deliveries in FY 2018/19.

Lower than expected demands since the 2015 Rate Study have led to decreased direct usage and recharge surcharge revenues. These revenue shortfalls, in part, drive the need for the rate increases proposed by this study and the exploration of alternative methodology to recover costs. The volumetric projections of this study take a more conservative approach than the previous study to mitigate the potential for revenue shortfalls.

1.2.2 Projected Recycled and Recharge Water Demand

The total amount of recycled water for direct use and groundwater recharge is used to determine the $/AF rate imposed on recycled and recharge water customers. Current recycled and recharge water demands were provided by the Agency, and demand projections were calculated in cooperation with Agency staff. Figure 1 illustrates the forecasted recycled and recharge water demand from FY 2020/21 through FY 2024/25.

A modest increase in demand is expected through the end of the study period in FY 2024/25. Recycled water direct use demand is projected to increase from 22,500 AF in FY 2020/21 to 23,000 AF in FY 2024/25, an annualized growth rate of 0.9 percent. Recharge water demand is projected to increase from 14,000 AF in FY 2020/21 to 15,000 AF in FY 2024/25, an annualized growth rate of 1.7 percent.

Historic and projected demands for each user are included for reference in Appendix A.

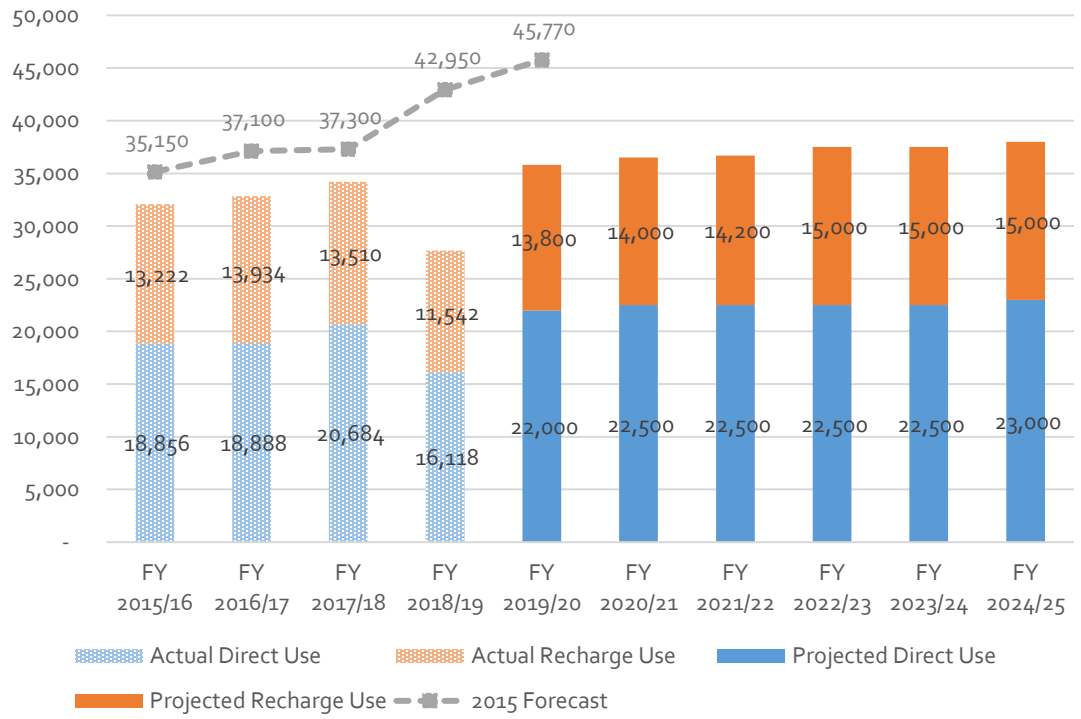


Figure 1 Recycled and Recharge Water Demands (AFY)

The overall demand forecast is consistent with the analysis for the one water connection fee and was used along with historical direct use and recharge demands to project demands for each user. Future demands for each user are projected based on the Agency's overall recycled water demand projections and each user's demands over the past three years.

Section 2 – Revenue Requirements Analysis

The findings and results presented in this report represent the first draft of the Recycled and Recharge Water Rate analysis. IEUA may continue to refine the rate calculations as additional or new data becomes available and based on feedback from the member agencies and other stakeholders.

1.2 Recycled and Recharge Water Program Costs

Recycled Water Program and Recharge Water Program costs were projected through FY 2024/25 based on current costs and typical cost escalation factors. The projections also consider any specific increases or decreases in costs that the Agency expects over the rate study period. Appendix B provides details for O&M budget line-items. As reported in Appendix B, some program costs, such as debt service costs, tend to be fixed in nature and do not change significantly based on the quantity of recycled water delivered. Some expenses, such as utilities, can vary based on the volume delivered.

2.1.1 Recycled Water Direct Use Costs

The Recycled Water fund records the revenues and expenses associated with the operations and maintenance of the facilities used to distribute recycled water supplied from Agency's four Agency water recycling plants to direct users and recharge basins, including a portion of groundwater recharge O&M expenses not funded by Watermaster. Additionally, the Recycled Water fund records all revenues and costs related to capital projects and financing of the regional recycled water distribution system (RRWDS).

In FY 2020/21 the projected costs for the Recycled Water fund total $26.14 million and include: $10.47 million O&M expenses, non-operating expenses of $12.12 million debt service costs and $2.30 million capital project costs, and $1.25 million non-reimbursable recharge O&M expenses as summarized in Table 2. Appendix B provides details for O&M budget line-items.

Table 2 Recycled Water Expenses Summary

Recycled Water Expenses	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Direct Use Activity					
Operating Expenses	$10.47	$10.54	$10.80	$11.16	$12.24
Non-operating Expenses					
Debt Service	12.12	12.47	14.42	15.41	14.68
Capital	2.30	1.50	5.31	4.00	3.96
Subtotal - Recycled Water Direct Use Activity	**$24.89**	**$24.51**	**$30.52**	**$30.57**	**$30.88**
Recharge Activity - Non-Reimbursable					
Operating Expenses	$1.25	$1.31	$1.37	$1.34	$1.30
Non-operating Expenses	-	-	-	-	-
Subtotal - Recharge Water Activity	**$1.25**	**$1.31**	**$1.37**	**$1.34**	**$1.30**
Total Recycled Water	**$26.14**	**$25.82**	**$31.89**	**$31.91**	**$32.18**

Notes:
(1) Presented totals may not tie due to rounding for presentation purposes. All values in millions of dollars.

As legally required, the recharge operating expenses currently recorded in the Recycled Water fund not reimbursable from Watermaster will be consolidated into the Recharge Water fund to appropriately calculate the recharge rate needed to recover related program costs. In FY 2020/21 non-reimbursable recharge activity costs are projected to be $1.25 million as reported in Table 2.

2.1.2 Recharge Water Costs

The Recharge Water fund accounts for the revenues and expenses associated with the operations and maintenance of groundwater recharge facilities. Through the joint effort of the Watermaster, the CBWCB, the SBCFCD, the Agency operates and maintains 19 groundwater recharge basins. Costs recorded in the Recharge Water fund are partially reimbursable by Watermaster and include general basin maintenance or restoration costs, groundwater administration (e.g. labor, utilities, equipment, and tools), contracted services (e.g. weeding and vector control), and compliance reporting and environmental documentation fees for the

program's Fish & Game Permit. As shown in Table 3, recharge O&M costs for FY 2020/21 are projected to be $1.79 million. Also included are non-reimbursable recharge activity costs currently recorded in the Recycled Water fund (see Table 2). As legally required, these non-reimbursable recharge operating expenses will be consolidated into the Recharge Water fund to appropriately calculate the recharge rate needed to recover related program costs. In FY 2020/21 non-reimbursable recharge activity costs are projected to be $1.25 million as reported in Table 3.

Non-operating expenses for the Recharge Water fund include debt service and capital project costs as presented in Table 3. In FY 2020/21 debt service costs are projected to be $1.32 million and capital project costs are $13.18 million. Debt service costs are for the 2008B Variable Rate Bonds (refinancing the 2002A Bonds in May 2008) issued to finance the Chino Basin Facilities Improvement Project (CBFIP). Debt principal and interest costs are equally shared by Watermaster and the Agency. The Agency's portion of debt service cost is supported by an inter-fund transfer from the Regional Wastewater Capital Improvement fund and the Recycled Water fund supports capital.

In FY 2020/21 total costs for the Recharge Water fund are projected to be $17.54 million, including $3.04 million O&M (inclusive of recharge costs from the Recycled Water fund), $1.32 million debt service costs, and $13.18 million capital project costs. Appendix B provides details for O&M budget line-items.

Table 3 Recharge Water Operating Expenses

Recharge Water	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Operating Expenses	$1.79	$1.86	$1.92	$1.99	$2.08
Recharge Expenses from Recycled Water fund (Table 2)	$1.25	$1.31	$1.37	$1.34	$1.30
Total Recharge Operating Expenses	**$3.04**	**$3.17**	**$3.29**	**$3.33**	**$3.38**
Non-operating Expenses					
Debt Service	$1.32	$1.51	$1.50	$1.50	$1.50
Capital	13.18	0.29	0.50	0.75	1.00
Total Recharge Water Non-Operating Expenses	**$14.51**	**$1.80**	**$2.00**	**$2.25**	**$2.50**
Total Recharge Water	**$17.54**	**$4.96**	**$5.29**	**$5.58**	**$5.87**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

2.2 Transfers

IEUA utilizes inter-fund transfers to support related costs in other programs. One example is the transfer of water connection fees from the Recycled Water fund to the Water Resources, Recharge Water and Administrative funds. Water connection fees are initially recorded in the Recycled Water fund and transferred to other funds to support capital project costs related to growth in the service area. Table 4 and Table 5 summarize the forecasted transfers IN and OUT of the Recycled Water and Recharge Water funds over the next five fiscal years. These transfers are accounted for in both the recycled and recharge water revenue requirement calculations.

Table 4 Recycled Water Fund Transfers ($ millions)

Transfers	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Transfer In/(Out) - Recycled Water - Direct Usage Activity					
Capital Contribution (to Administrative fund)	$(0.02)	$(0.01)	$(0.01)	$(0.02)	$(0.03)
Connection Fee Allocation (to Water Resources, Recharge Water, Administrative funds)	(4.53)	(1.39)	(1.25)	(2.45)	(0.72)
Debt Service (from Regional Wastewater funds)	2.54	2.54	2.54	2.67	2.67
Operating Support (to Administrative fund)	(0.05)	(0.01)	(0.04)	(0.03)	-
Subtotal - Recycled Water Direct Usage	**$(2.05)**	**$1.13**	**$1.24**	**$0.17**	**$1.91**
Transfer In/(Out) - Recycled Water - Recharge Activity					
Capital Contribution (to Recharge Water fund)	$-	$-	$(0.01)	$(0.11)	$(0.22)
Operating Support (to Recharge Water fund)	(0.71)	(0.75)	(0.78)	(0.81)	(0.87)
Subtotal - Recycled Water Recharge	**$(0.71)**	**$(0.75)**	**$(0.79)**	**$(0.92)**	**$(1.08)**
Total Net Recycled Water Fund Transfers	**$(2.76)**	**$0.38**	**$0.45**	**$(0.75)**	**$0.83**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 5 Recharge Water Fund Transfers ($ millions)

Transfer In/(Out) - Recharge Water	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Capital Contribution (from Recycled Water)	$-	$-	$0.01	$0.11	$0.22
Connection Fee Allocation (from Recycled Water)	3.03	0.07	0.12	0.17	0.23
Debt Service (from Regional Wastewater Capital)	0.66	0.69	0.69	0.69	0.69
Operating Support (from Recycled Water)	0.71	0.75	0.78	0.81	0.87
Total Recharge Water Transfers	**$4.40**	**$1.51**	**$1.59**	**$1.78**	**$2.00**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

2.3 Offsetting Revenues

In addition to revenues generated from the Recycled and Recharge Water rates, there are other offsetting revenue sources that decrease the amount of funds required to be collected through the Recycled and Recharge Water rates. The following revenues are used to offset the Recycled and Recharge Water Rate revenue requirements;

Operating Offsetting Revenues:

- Cost reimbursement from Watermaster
- Interest revenue

Non-Operating Offsetting Revenues:

- Connection fees
- Property tax – debt & capital
- Loans
- Grants
- Capital Cost Reimbursement

Table 6 summarizes the total amounts of each offsetting operating revenue applied to the total Recycled and Recharge Water Rate revenue requirement.

Table 6 Offsetting Operating Revenues ($ millions)

Offsetting Operating Revenues	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Offsetting Operating Revenues - Recycled Water Direct Use					
Interest Revenue	$0.95	$0.94	$1.23	$1.36	$1.44
Subtotal Recycled Water	**$0.95**	**$0.94**	**$1.23**	**$1.36**	**$1.44**
Offsetting Operating Revenues - Recharge Water					
Cost Reimbursement from Watermaster	$1.08	$1.11	$1.14	$1.18	$1.21
Interest Revenue	0.16	0.19	0.20	0.20	0.20
Subtotal Recharge Water	**$1.24**	**$1.30**	**$1.34**	**$1.37**	**$1.41**
Total Offsetting Operating Revenues	**$2.19**	**$2.24**	**$2.57**	**$2.75**	**$2.85**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 7 summarizes the total amounts of each offsetting non-operating revenue, including the use of connection fees, applied to the total Recycled and Recharge Water Rate revenue requirement.

Table 7 Offsetting Non-Operating Revenues

Non-Operating Revenues	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Non-Operating Revenues - Recycled Water Direct Use					
Property Tax	$2.17	$2.17	$2.17	$2.17	$2.17
Projected Connection Fees Revenue	6.42	6.67	6.93	7.20	7.48
Loans	3.48	-	-	-	-
Grants	1.35	-	-	-	-
Capital Cost Reimbursement	0.09	0.09	0.09	0.09	0.10
Subtotal Recycled Water	**$13.51**	**$8.93**	**$9.19**	**$9.46**	**$9.75**
Non-Operating Revenues - Recharge Water					
Loans	3.76	0.14	-	-	-
Grants	11.52	-	-	-	-
Capital Cost Reimbursement	0.66	0.94	1.06	1.19	1.31
Subtotal Recharge Water	**$15.95**	**$1.08**	**$1.06**	**$1.19**	**$1.31**
Total Non-Operating Offsetting Revenues	**$29.45**	**$10.01**	**$10.25**	**$10.65**	**$11.06**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

Revenues from IEUA's one water connection fee are collected in the WC and used for eligible expenditures which include capital projects as well as a share of debt service. Additionally, connection fees are transferred to the Recharge Water (RW), Water Resources (WW), or General Administrative (GG) funds to pay for eligible projects. Table 8 shows the expected connection fee revenues for each fiscal year as well as the projected use of connection fees.

Table 8 Use of Connection Fees

Use of Connection Fees	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Projected Connection Fee Revenue	**$6.42**	**$6.67**	**$6.93**	**$7.20**	**$7.48**
Eligible Recycled Water Projects	$0.38	$0.44	$1.28	$0.98	$1.10
Transfer to Recharge Water Fund for Eligible Projects	3.03	0.07	0.12	0.17	0.23
Transfer to Water Resources Fund for Eligible Projects	1.45	1.31	1.11	2.26	0.47
Transfer to General Administrative Fund for Eligible Projects	0.04	0.01	0.03	0.02	0.02
Use for Debt Service	-	0.10	1.63	2.25	1.15
Total Connection Fees to be Used	**$4.91**	**$1.93**	**$4.16**	**$5.68**	**$2.97**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

2.4 Projected Revenue Requirements

The amount of revenue to be collected from user rates is defined by the total revenue requirements less any offsetting revenues. The sections below present the revenue required from both the Recycled Water Rate and Recharge Water Rate. Additional detailed financial projection tables are included for reference in Appendix B.

Actual recycled water demands since the 2015 Rate Study were significantly below the expected demands that served as the basis for that study, resulting in lower revenues for the Recycled Water and Recharge Water funds. The revenue shortfall between FYs 2015/16 – 2018/19 due to lower than projected recycled water deliveries is estimated at $11 million. In order to recover from these revenue losses and to keep up with inflationary increases in costs, annual increases of 3 percent are recommended for the direct recycled water use rate.

In order to appropriately recover recharge program costs (including non-reimbursable recharge costs recorded in the WC) and keep up with inflationary cost increases, the recharge surcharge will need to be adjusted by 20.2 percent for FY 2020/21 through FY 2022/23, and 19.5 percent for FY 2023/24 and FY 2024/25.

2.4.1 Recycled Water Revenue Requirement

Based on preliminary budget projections, IEUA's recycled water total revenue requirement for FY 2020/21 is $18.42 million. As illustrated in Table 9, the total recycled water revenue requirement is projected to grow to $21.61 million by FY 2024/25, driven by forecasted increases in recycled water demand and inflationary increases in costs.

Table 9 Required Recycled Water Direct Use Rate Revenues

Recycled Water Fund Required Rate Revenues	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Operating Expenses	$10.47	$10.54	$10.80	$11.16	$12.24
Debt Service	12.12	12.47	14.42	15.41	14.68
Capital	2.30	1.50	5.31	4.00	3.96
Transfers	2.76	(0.38)	(0.45)	0.75	(0.83)
Total Expenses	**$27.65**	**$24.13**	**$30.08**	**$31.32**	**$30.05**
Remove Operation Support to Recharge Water Fund	(0.71)	(0.75)	(0.78)	(0.81)	(0.87)
Remove Capital Support to Recharge Water Fund	0.00	0.00	(0.01)	(0.11)	(0.22)
Less: Offsetting Revenues					
Operating Revenues	$(0.95)	$(0.94)	$(1.23)	$(1.36)	$(1.44)
Non-Operating Revenues, net of connection fees (Table 7)	(7.09)	(2.26)	(2.26)	(2.26)	(2.27)
Use of Connection Fees for Transfers, Projects, and Debt Service (Table 8)	(4.91)	(1.93)	(4.16)	(5.68)	(2.97)
Subtotal: Offsetting Revenues	**$(12.95)**	**$(5.13)**	**$(7.65)**	**$(9.30)**	**$(6.68)**
Contribution to (Use of) Reserves	**$4.44**	**$0.84**	**$(1.54)**	**$(0.40)**	**$(0.67)**
Required Revenues from Direct Usage Rates	**$18.42**	**$19.09**	**$20.09**	**$20.70**	**$21.61**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

The offsetting revenues include One Water connection fees to help lower the rate revenue requirements by using connection fees to pay a portion of debt service. The calculation of the water connection fee includes an allocation of the existing assets based on excess capacity and CIP projects that will benefit future users. Therefore, annual revenues from connection fees can be used to offset direct capital costs and/or debt service payment that would otherwise be borne by user rates. The use of connection fees in this manner allows the Agency to account for fluctuations driven by the development cycle.

2.4.2 Recharge Water Revenue Requirement

Based on preliminary budget projections, IEUA's recharge water total revenue requirement for FY 2020/21 is $1.01 million. Table 10 presents the required rate revenues for recharge water usage. As shown, the total recharge water revenue requirement is projected to grow to $2.24 million by FY 2024/25, driven primarily by the rate revenue increases needed to reach full cost recovery and to a lesser extent increases in demands.

Table 10 Required Recharge Water Rate Revenues ($ millions)

Recharge Water Required Rate Revenues	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Operating Expenses	$3.04	$3.17	$3.29	$3.32	$3.38
Debt Service	1.32	1.51	1.50	1.50	1.50
Capital	13.18	0.29	0.50	0.75	1.00
Transfers (Includes Connection Fees)	(4.40)	(1.51)	(1.59)	(1.78)	(2.00)
Total Expenses	**$13.14**	**$3.46**	**$3.70**	**$3.79**	**$3.88**
Plus: Operations Previously Supported by Recycled Water Fund	0.71	0.75	0.78	0.81	0.87
Plus: Capital Previously Supported by Recycled Water Fund	-	-	0.01	0.11	0.22
Less: Offsetting Revenues					
Operating Revenues	$(1.24)	$(1.30)	$(1.34)	$(1.37)	$(1.41)
Non-Operating Revenues	(15.95)	(1.08)	(1.06)	(1.19)	(1.31)
Subtotal: Offsetting Revenues	**$(17.19)**	**$(2.38)**	**$(2.40)**	**$(2.56)**	**$(2.72)**
Contribution to (Use of) Reserves	**$4.35**	**$(0.60)**	**$(0.52)**	**$(0.27)**	**$0.00**
Required Revenues from Recharge Surcharge Rates	**$1.01**	**$1.23**	**$1.57**	**$1.88**	**$2.24**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Section 3 – Rate Design

The rate design analysis uses the results of the revenue requirement analysis along with recycled water demands (direct usage and recharge) to calculate rates. The study has reviewed several rate structure options including retaining the existing variable rate structure or the implementation of a fixed charge to recover a portion of revenue requirements.

3.1 Current Structure Rates

The current rate design consists of a variable recycled water rate per AF, and a recharge water surcharge rate per AF. The forecasted recycled water demand and projected revenue requirements are used to determine the $/AF recycled water rate over the FY 2020/21 through FY 2024/25 rate study period using the following calculation.

$$Recycled\ Water\ Direct\ Use\ Rate\ (^{\$}/_{AF}) = \frac{Required\ Recycled\ Water\ Diect\ Use\ Rate\ Revenue}{Forecasted\ Recycled\ Water\ Demand}$$

The forecasted recharge water demand and projected revenue requirements are used to determine the $/AF recharge water surcharge over the FY 2020/21 through FY 2024/25 rate study period using the following calculation.

$$Recharge\ Water\ Rate\ \left(\$/_{AF}\right) = \left(\frac{Required\ Recharge\ Water\ Rate\ Revenue}{Forecasted\ Recharge\ Water\ Demand}\right) + Recycled\ Water\ Rate$$

3.1.1 Proposed Recycled Water Direct Use Rate: Alternative 1

Table 11 presents the calculation of the proposed recycled water direct use rates for each year of the study period under the current rate structure. The rates presented would be charged to all users of recycled water whether for direct use or recharge.

Table 11 Proposed Recycled Water Direct Use Rate ($/AF)

	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Required Revenues from Rates (millions)	$18.42	$19.09	$20.09	$20.70	$21.61
Projected Demands (AF)	36,500	36,700	37,500	37,500	38,000
Recycled Water Direct Use Rate per AF	**$505**	**$520**	**$536**	**$552**	**$569**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

3.1.2 Proposed Recharge Water Rate: Alternative 1

The Agency's recharge water customers are charged a per AF surcharge in addition to the recycled water rate. Table 12 presents the calculation of the proposed recharge surcharge rates as well as the total rate for recharge water for each year of the study period under the current rate structure.

Table 12 Proposed Recharge Water Surcharge Rate ($/AF)

	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Required Revenues from Rates (millions)	$1.01	$1.23	$1.57	$1.88	$2.24
Projected Demands (AF)	14,000	14,200	15,000	15,000	15,000
Recharge Surcharge Rate per AF	**$72**	**$87**	**$105**	**$125**	**$149**
Direct Usage Rate per AF	$505	$520	$536	$552	$569
Total Recharge Rate per AF	**$577**	**$607**	**$641**	**$677**	**$718**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

3.2 Potential Fixed Charges

As an alternative to the current variable-only rate structure, IEUA is recommending developing a fixed charge component to the recycled and recharge water funds. The implementation of a fixed charge, combined with a commodity charge, would provide revenue stability for both the Recycled Water and Recharge Water programs. Given that cash flow and revenue requirements for each fund vary from year to year as seen in Table 9 and Table 10, the addition of a fixed charge would provide a more consistent revenue source to support a portion of the fixed costs and insulate the funds from years of low demand or large capital expenditures.

In addition to the Alternative 1 (current rate structure), IEUA is considering the following rate alternatives as a basis for implementing a fixed charge.

Alternative 2 - Member agency **three-year rolling average** direct use and recharge water demands.

Alternative 3 - Member agency **number of EDUs**.

Alternative 4 - Member agency **three-year rolling average** for fixed revenue requirements related to all recycled water direct use and **number of EDUs** for recharge water related fixed revenue requirements.

Alternative 5 - Member agency **number of MEUs** for fixed revenue requirements related to all recycled water direct use and **number of EDUs** for recharge water related fixed revenue requirements.

3.2.1 Fixed Charge Expenses

There are various cost components within the groundwater recharge and direct use activities that are consistent year over year in order to maintain the delivery of recycled and recharge water to the Agency's users. This analysis focused on developing fixed charges to sufficiently cover the Agency's annual debt service costs, less any other contributions toward debt service.

Under the fixed charge rate alternatives, the Watermaster and the Regional Wastewater Capital Improvement fund transfers are projected to continue to cover all of debt service costs for the Recharge Water fund; therefore, no fixed charge component is necessary for the recharge rate. Under the options presented below, the proposed recharge surcharge would be equal to the surcharge presented previously in Table 12 (i.e. $72 per AF in FY 2020/21 increasing to $149 per AF by FY 2024/25).

As shown in Table 13, the Agency applies property tax revenues and a transfer from the Regional Wastewater Capital Improvement fund to cover a portion of the Recycled Water fund debt service costs. As discussed previously, the Agency can also use a portion of One Water connection fee revenues to cover a share of debt service on the excess capacity of existing system assets, as well as future debt service for growth related projects. Moving forward, the Agency intends to take advantage of this ability and allocate a portion of connection fee revenues to cover eligible Recycled Water debt service costs. The use of connection fee revenues in this manner will help to smooth the year-over-year changes in fixed revenue collection and help the Agency account for fluctuations in the annual connection fee revenues cause by varying development.

Table 13 Direct Use Fixed Charge Revenue Requirement

Budget Item	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Debt Service	$9.12	$9.47	$9.42	$9.41	$9.18
Short Term Inter-Fund Loan	3.00	3.00	5.00	6.00	5.50
Fixed Offsetting Revenues & Transfers					
Property Tax - Debt and Capital	$(2.17)	$(2.17)	$(2.17)	$(2.17)	$(2.17)
Debt Service Transfer from Regional Wastewater Capital Fund	(2.54)	(2.54)	(2.54)	(2.67)	(2.67)
Connection Fee Contribution for Debt Service	-	(0.10)	(1.63)	(2.25)	(1.15)
Direct Use Fixed Rate Revenue Requirement	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

The revenue requirements previously presented in Table 9 represent the total amount of revenue that must be recovered through rates for the Recycled Water fund. If a fixed charge component is implemented, the total revenue requirement would be split between the fixed and variable charges.

Fixed charges would be set to recover the fixed rate revenue requirements shown in Table 13, the remaining rate revenue requirement, after subtracting the fixed rate component from the total, is the variable component that is used to develop a reduced variable rate per AF for direct recycled water use as shown in Table 14. Like the current rate structure, the presented direct usage rates would be assessed to all recycled water demands (direct and recharge).

Table 14 shows the calculation of the variable revenue requirement and the resulting direct use and total recharge rates. By implementing a fixed charge, the variable rate component for the direct use and recharge water funds will decrease. Because the fixed and variable revenue requirements are consistent in the fixed charge options analyzed, the direct use rate is the same for all fixed charge options. If a fixed charge is included, the proposed direct recycled water variable rate for FY 2020/21 would decrease from $505/AF to $302/AF, and the recharge water variable rate (a combination of the direct recycled rate and the recharge surcharge) would decrease from $577/AF to $374/AF.

Table 14 Direct Use Variable Revenue Requirement

Budget Item	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Total Revenue Requirement	$18.42	$19.09	$20.09	$20.70	$21.61
Less: Fixed Rate Revenue Requirement	$(7.41)	$(7.66)	$(8.08)	$(8.32)	$(8.69)
Variable Rate Revenue Requirement	**$11.01**	**$11.43**	**$12.01**	**$12.38**	**$12.92**
Recycled & Recharge Water Demands (AF)	36,500	36,700	37,500	37,500	38,000
Direct Recycled Water Rate ($/AF)	**$302**	**$311**	**$320**	**$330**	**$340**
Recharge Surcharge ($/AF)	$72	$87	$105	$125	$149
Total Recharge Rate ($/AF)	**$374**	**$398**	**$425**	**$455**	**$489**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

3.2.2 Alternative 2: Three-year Rolling Average Demands

The Agency is considering rate alternatives to allocate fixed charge costs. The second option is based on the three-year rolling average of recycled and recharge water demands. The allocated fixed revenue collection for each year would be apportioned to each recycled water user based on their proportionate share of three year rolling average demands. This methodology recognizes that the Agency constructed and operates the system, and plans for future improvements, to provide capacity to serve expected member agency demands. Thus, the historic member agency demands are used as a measure of the system capacity, and fixed costs, required to serve each user's demands.

The calculation relies on total recycled water usage from each agency (recycled and recharge) since the greater recycled water system (transmission, distribution, etc.) is necessary to provide water for direct use as well as recharge. Table 15 shows the projected three- year rolling average consumption for each recycled water user. The overall fixed revenue collected each year would remain consistent with projections because the Agency would adopt the total fixed revenues to be collected, rather than a unit rate.

Table 15 Total Recycled and Recharge Water Three-Year Rolling Average Demands

User	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
City of Ontario	11,962	12,225	13,326	13,491	13,564
City of Chino – Includes SB County	7,699	7,946	8,873	8,971	9,007
City of Chino Hills	2,982	3,083	3,358	3,409	3,439
City of Upland	1,966	2,030	2,161	2,206	2,237
City of Fontana	2,653	2,671	2,838	2,917	2,981
CVWD	4,408	4,460	4,803	4,913	4,997
City of Montclair	882	906	973	993	1,008
Total Recycled & Recharge Three Year Rolling Average Demand	**32,552**	**33,320**	**36,333**	**36,900**	**37,233**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in acre-feet (AF).

The overall fixed revenue requirements to be allocated among the other users is the fixed rate revenue requirement shown in Table 13. Each user's share is set by multiplying the fixed revenue requirement by their share of three-year rolling average consumption.

The values shown in Table 16 are based on projected demands for each user and are for illustrative purposes. If this rate structure is adopted, the three-year rolling average that is used to allocate the fixed revenues to each user would be updated each year based on the three previous years of deliveries.

Table 16 Alternative 2 FY 2020/21 Fixed Revenue Allocation Example

User	Three-Year Rolling Average Demand		Allocated Fixed Revenues
	AF	**%**	**$ millions**
City of Ontario	11,962	36.7%	$2.72
City of Chino	7,699	23.7%	1.75
City of Chino Hills	2,982	9.2%	0.68
City of Upland	1,966	6.0%	0.45
City of Fontana	2,653	8.2%	0.60
CVWD	4,408	13.5%	1.00
City of Montclair	882	2.7%	0.20
Total	**32,552**	**100%**	**$7.41**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 17 shows the estimated fixed revenues from each user under three-year rolling average for each year of the analysis.

Table 17 Alternative 2 Fixed Revenues by User

User	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
City of Ontario	$2.72	$2.81	$2.96	$3.04	$3.17
City of Chino	1.75	1.83	1.97	2.02	2.10
City of Chino Hills	0.68	0.71	0.75	0.77	0.80
City of Upland	0.45	0.47	0.48	0.50	0.52
City of Fontana	0.60	0.61	0.63	0.66	0.70
CVWD	1.00	1.03	1.07	1.11	1.17
City of Montclair	0.20	0.21	0.22	0.22	0.24
Total Fixed Revenues	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

3.2.3 Alternative 3: Number of EDUs

The third option that IEUA is considering for allocation of fixed charges is a rate based on the number of EDUs that each user of recycled and/or recharge has. This is in line with the amount of recycled water entitlements assigned to each user based on the Regional Sewage Service Contract. Table 18 summarizes actual EDUs for each IEUA member agency as of FY2018/19.

Based on the number of EDUs of each user, their share of each fixed revenue requirement would be collected annually.

Table 18 Alternative 3 EDUs by User and Projected Share of Fixed Charge Revenue Requirement

User	# EDUs (FY 2018/19)	% EDUs (FY 2018/19)	Projected Share of Direct Recycled Fixed Revenues
City of Ontario	772,176	22.5%	22.5%
City of Chino	370,820	10.8%	10.8%
City of Chino Hills	305,993	8.9%	8.9%
City of Upland	318,093	9.3%	9.3%
City of Fontana	689,243	20.1%	20.1%
CVWD	825,343	24.1%	24.1%
City of Montclair	144,563	4.2%	4.2%
Total EDUs	**3,426,229**	**100.0%**	**100.0%**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 19 shows an example of the fixed revenues that would be collected from each user based on EDUs under Alternative 3. Fixed revenues are apportioned to each user by multiplying each user's share of fixed revenues (Table 18) by the overall fixed revenue requirement. If this rate structure is adopted, the EDUs that are used to allocate the fixed revenues to each user would be updated each year.

Table 19 Alternative 3 Fixed Revenues by User

User	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
City of Ontario	$1.67	$1.73	$1.82	$1.88	$1.96
City of Chino	0.80	0.83	0.87	0.90	0.94
City of Chino Hills	0.66	0.68	0.72	0.74	0.78
City of Upland	0.69	0.71	0.75	0.77	0.81
City of Fontana	1.49	1.54	1.63	1.67	1.75
CVWD	1.79	1.85	1.95	2.00	2.09
City of Montclair	0.31	0.32	0.34	0.35	0.37
Total Fixed Revenues	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

3.2.4 Alternative 4: Three-year Rolling Average Demands and Number of EDUs

The fourth option that IEUA is considering is a combination of Alternatives 2 and 3. In this option, the allocated fixed revenue collection is further allocated based on the types of projects that past debt proceeds were used to fund. An analysis of the outstanding debt in the Recycled Water fund showed that 28.75 percent of debt proceeds were used to fund infrastructure related to serving recharge facilities, the remaining 71.25 percent of proceeds were used to construct facilities benefitting all types of usage. Since the fixed charges are set to recover debt service

costs less offsetting revenues, the amount of fixed revenue to be collected can be allocated as related to recharge usage or related to all usage based on the use of debt proceeds. Table 20 shows the allocated fixed revenue requirements.

Table 20 Fixed Revenue Requirements Allocated Based on Debt

RW Fixed Charge Revenues	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Fixed Rate Revenue Requirement	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**
Related to Recharge Use – 28.75%	$2.13	$2.20	$2.32	$2.39	$2.50
Related to All Recycled Water Use – 71.25%	$5.28	$5.46	$5.75	$5.93	$6.19

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

Under this option, fixed revenue requirements related to all recycled water use for each year would be apportioned to each recycled water user based on their proportionate share of total three year rolling average demands, as shown in Table 15. Because each agency's recharge entitlements are based on their share of EDUs, the fixed revenue requirements related to recharge water for each year would be apportioned to each recharge water user based on the number of EDUs that each user of recharge water has, as outlined in Table 18.

Table 21 shows the allocation of the share of fixed revenue requirements related to all recycled water usage to each user based on three year rolling average.

Table 21 Alternative 4 FY 2020/21 All Recycled Water Use Fixed Revenue Allocation Example

User	Three-Year Rolling Average Demand		Allocated Fixed Revenues
	AF	**%**	**$ millions**
City of Ontario	11,962	36.7%	$1.94
City of Chino	7,699	23.7%	1.25
City of Chino Hills	2,982	9.2%	0.48
City of Upland	1,966	6.0%	0.32
City of Fontana	2,653	8.2%	0.43
CVWD	4,408	13.5%	0.71
City of Montclair	882	2.7%	0.14
Total	**32,552**	**100%**	**$5.28**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 22 shows the allocation of the share of fixed revenue requirements related to recharge allocated to each user based on EDUs.

Table 22 Alternative 4 FY 2020/21 Recharge Water Fixed Revenue Allocation Example

User	# EDUs (FY 2018/19)	% EDUs (FY 2018/19)	Allocated Recharge Water Fixed Revenues
	#	%	$ millions
City of Ontario	772,176	22.5%	0.48
City of Chino	370,820	10.8%	0.23
City of Chino Hills	305,993	8.9%	0.19
City of Upland	318,093	9.3%	0.20
City of Fontana	689,243	20.1%	0.43
CVWD	825,343	24.1%	0.51
City of Montclair	144,563	4.2%	0.09
Total	**3,426,229**	**100.0%**	**$2.13**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

Table 23 shows an example of the fixed revenues that would be collected from each user based on the three-year rolling average and EDUs under Alternative 4.

Table 23 Alternative 4 Fixed Revenues by User

User	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
City of Ontario	$2.42	$2.50	$2.63	$2.71	$2.82
City of Chino	1.48	1.54	1.66	1.70	1.77
City of Chino Hills	0.67	0.70	0.74	0.76	0.80
City of Upland	0.52	0.54	0.56	0.58	0.60
City of Fontana	0.86	0.88	0.92	0.95	1.00
CVWD	1.23	1.26	1.32	1.37	1.43
City of Montclair	0.23	0.24	0.25	0.26	0.27
Total Fixed Revenues	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

3.2.5 Alternative 5: MEUs and EDUs

The last alternative that IEUA is considering for the allocation of fixed revenue collection is similar to Alternative 4; however it apportions fixed revenue requirements related to all usage based on each member agency's proportionate share of recycled water MEUs. Like Alternative 4 fixed revenue requirements related to recharge water are allocated based on each user's share of EDUs.

Table 24 summarizes the amount of recycled water MEUs for each IEUA member agency as of FY 2018/19 and their proportionally allocated fixed revenue requirements related to all recycled water usage.

Table 24 Alternative 5 Recycled Water MEUs by User and Projected Share of Fixed Charge Revenue Requirement

User	# MEUs (FY 2018/19)	% MEUs (FY 2018/19)	Allocated Fixed Revenues
	#	%	$ millions
City of Ontario	4,471	35%	1.82
City of Chino[2]	4,545	35%	1.85
City of Chino Hills	1,708	13%	0.70
City of Upland	613	5%	0.25
City of Fontana	131	1%	0.05
CVWD	1,282	10%	0.52
City of Montclair[3]	193	1%	0.08
Total	**12,942**	**100%**	**$5.28**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.
(2) City of Chino MEUs estimated based on recycled water usage.
(3) City of Montclair MEUs based on reported MEUs from Monte Vista Water District.

The allocated recharge water fixed revenue collection for each year would be apportioned to each recycled water user based on their proportionate share of EDUs, as previously outlined in Alternative 4 and shown in Table 22.

Table 25 shows an example of the fixed revenues that would be collected from each user based on MEUs and EDUs under Alternative 5. Total fixed revenues are apportioned to each user by multiplying each user's share of MEUs by the total direct use fixed revenues (Table 24) and multiplying each user's share of EDUs by the total recharge water fixed revenues (as shown in Table 22).

Table 25 Alternative 5 Fixed Revenues by User

User	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
City of Ontario	$2.30	$2.38	$2.51	$2.59	$2.70
City of Chino	2.08	2.16	2.27	2.34	2.45
City of Chino Hills	0.89	0.92	0.97	1.00	1.04
City of Upland	0.45	0.46	0.49	0.50	0.53
City of Fontana	0.48	0.50	0.53	0.54	0.57
CVWD	1.04	1.07	1.13	1.16	1.22
City of Montclair	0.08	0.08	0.09	0.09	0.09
Total Fixed Revenues	**$7.41**	**$7.66**	**$8.08**	**$8.32**	**$8.69**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

3.2.6 Fixed Charge Revenue Comparison

The above fixed charge alternatives provide the Agency with different ways to recover fixed revenues for the recycled and recharge water funds. Under each scenario, the total revenues from each user would be equal to their allocated share of fixed costs plus their variable charges

based on their usage in each year and the rates shown in Table 11 and Table 12 for the current rate structure or Table 14 for the fixed structure alternatives. Table 26 shows an example of the total revenue calculation under Alternative 2 for FY 2020/21.

Table 26 FY 2020/21 Total Revenue Calculation Example

User	Direct Use	Recharge	Variable Revenues	Fixed Revenues (Alt 2)	Total Revenues
Rate	**$302.00**	**$374.00**	**$ millions**	**$ millions**	**$ millions**
	AF	**AF**			
City of Ontario	10,309	3,093	$4.27	$2.72	$6.99
City of Chino	7,424	1,504	2.80	1.75	4.56
City of Chino Hills	2,118	1,256	1.11	0.68	1.79
City of Upland	831	1,336	0.75	0.45	1.20
City of Fontana	143	2,697	1.05	0.60	1.66
CVWD	1,307	3,507	1.71	1.00	2.71
City of Montclair	369	607	0.34	0.20	0.54
Total	**22,500**	**14,000**	**$12.03**	**$7.41**	**$19.43**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

Table 27 illustrates the projected total revenue to be recovered for both the direct use and groundwater recharge rates by each user under the current structure, a three-year rolling average demands structure, an EDU-based structure, a three-year rolling average and EDU-based structure, and an MEU- and EDU-based structure. Table 28 presents the percent of total revenue to be collected for each alternative, by each user for FY 2020/21 through FY 2024/25. There are more modest changes among users when comparing the current structure to the proposed three-year rolling average (Alternative 2) and three-year rolling average and number of EDUs (Alternative 4) fixed charges. There are larger differences between the current structure and the number of EDUs (Alternative 3), and MEUs and EDUs (Alternative 5) methods for recovering the fixed rate revenue requirement. This is also illustrated in Figure 2.

Table 27 FY 2020/21 Total Recycled Water Revenue by User, Direct and Recharge

User	Alt 1: Current Structure	Alt 2: Three-Year Rolling Average	Alt 3: Number of EDUs	Alt 4: Three-Year Rolling Avg. & EDUs	Alt 5: MEUs & EDUs
City of Ontario	$6.99	$6.99	$5.94	$6.69	$6.57
City of Chino	4.62	4.56	3.61	4.28	4.89
City of Chino Hills	1.79	1.79	1.77	1.78	2.00
City of Upland	1.19	1.20	1.44	1.27	1.20
City of Fontana	1.63	1.66	2.54	1.91	1.53
CVWD	2.68	2.71	3.49	2.93	2.74
City of Montclair	0.54	0.54	0.65	0.57	0.08
Total Revenue	**$19.43**	**$19.43**	**$19.43**	**$19.43**	**$19.43**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes. All values in millions of dollars.

Table 28 Five Year Average Revenue Comparison, User Percent Share of Total Revenues

User	Alt 1: Current Structure	Alt 2: Three-Year Rolling Average	Alt 3: Number of EDUs	Alt 4: Three-Year Rolling Avg. & EDUs	Alt 5: MEUs & EDUs
City of Ontario	35.4%	35.5%	30.2%	34.0%	33.4%
City of Chino	23.3%	23.2%	18.3%	21.8%	24.7%
City of Chino Hills	9.2%	9.2%	9.1%	9.2%	10.2%
City of Upland	6.3%	6.3%	7.5%	6.6%	6.3%
City of Fontana	8.8%	8.8%	13.3%	10.1%	8.2%
CVWD	14.2%	14.2%	18.2%	15.4%	14.5%
City of Montclair	2.8%	2.8%	3.4%	3.0%	2.7%
Total Revenue	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
(1) Presented totals may vary from values above due to rounding for presentation purposes.

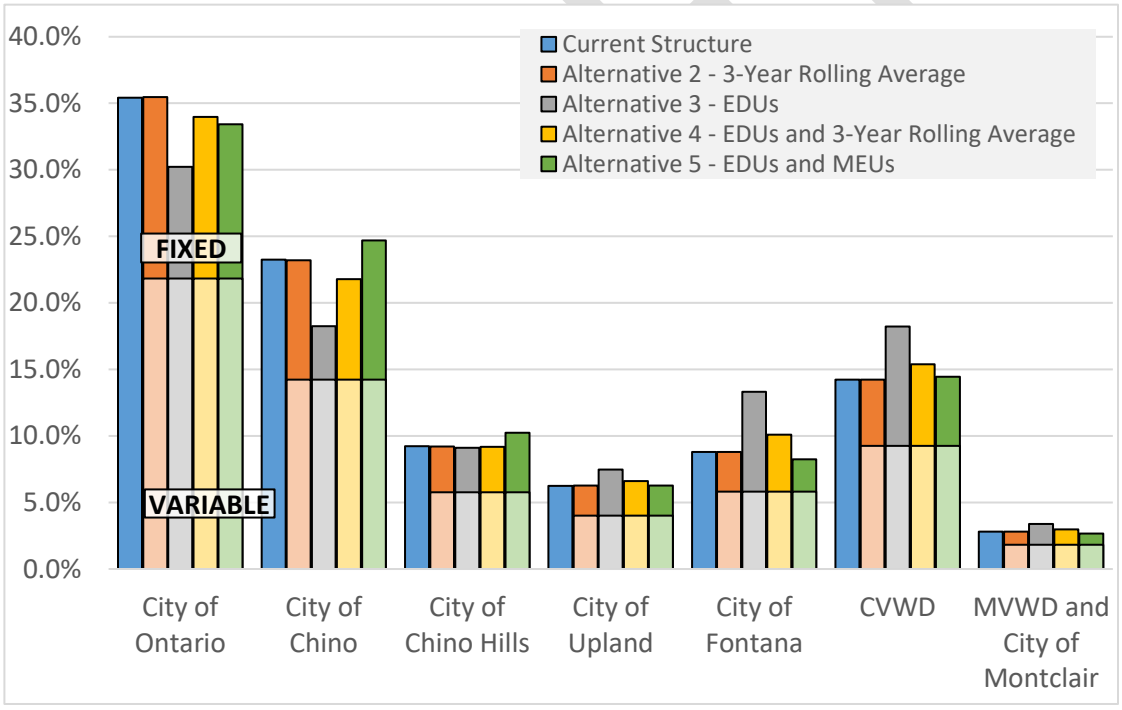
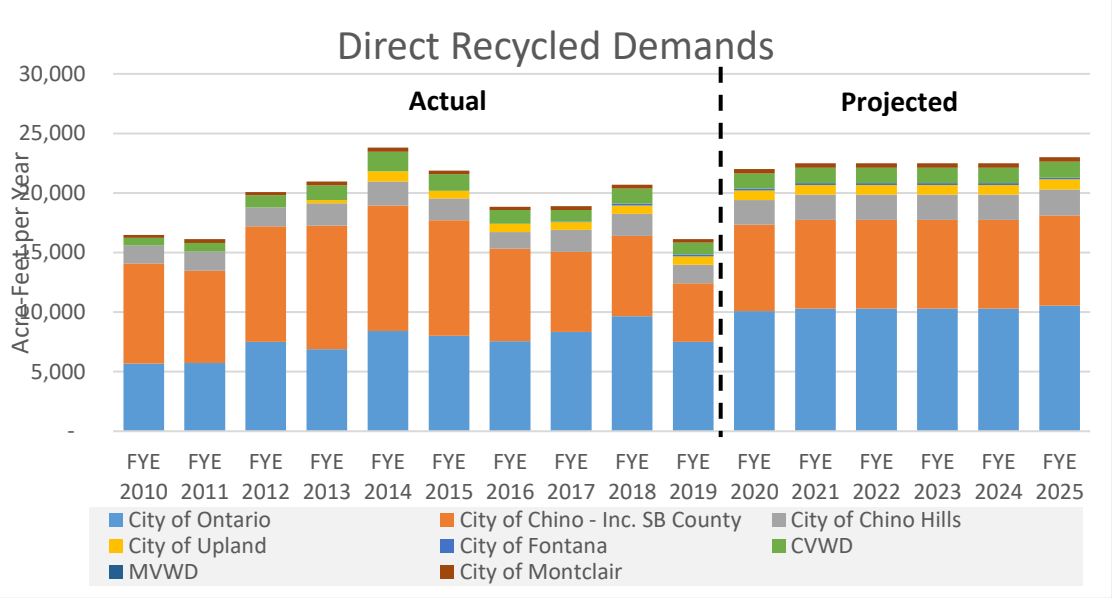


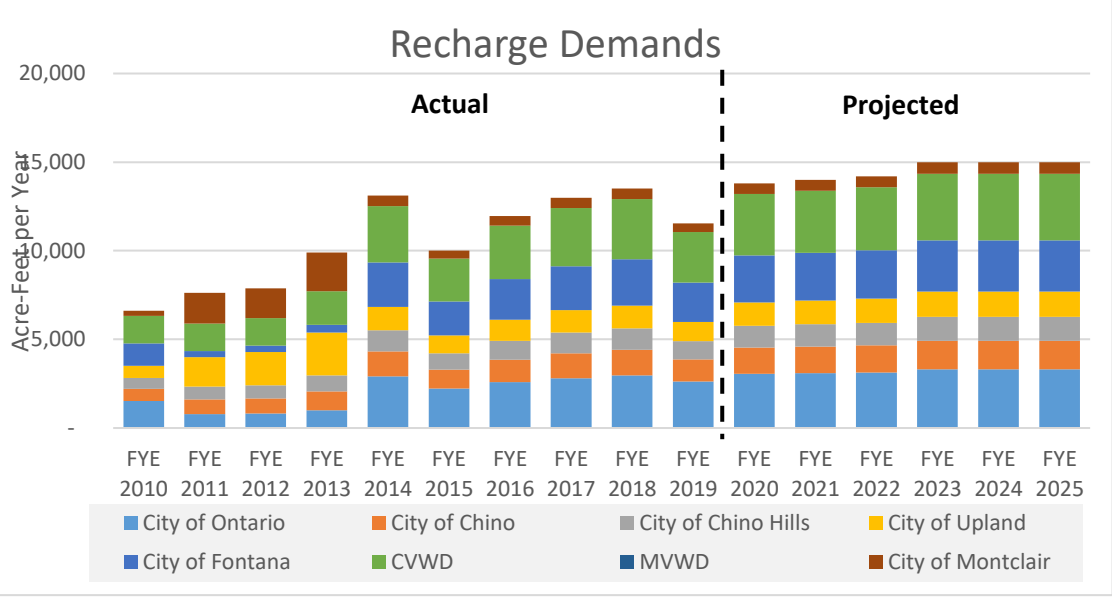
Figure 2 Percent of Total Recycled and Recharge Fixed Charge Revenues, by User

Appendix A

HISTORIC AND PROJECTED DEMANDS

Direct Recycled Water and Recharge Water demands for each member agency are shown in the figures below. Given total direct and recharge water demands projected by IEUA, demands by user were projected based on their 3-year average share of direct or recharge demands during FY 2016/17 through FY 2018/19. Additional detail is provided in the tables on the following pages.





Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

												FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025

Historic and Projected Demands

Demands (AF) - Direct Usage	Actual												Projected					
User	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	3-Yr Avg	%	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
City of Ontario	5,678	5,744	7,493	6,894	8,427	8,018	7,566	8,352	9,653	7,511	8,505	46%	10,080	10,309	10,309	10,309	10,309	10,538
City of Chino - Inc. SB County	8,408	7,724	9,721	10,364	10,527	9,695	7,753	6,712	6,742	4,922	6,125	33%	7,259	7,424	7,424	7,424	7,424	7,589
City of Chino Hills	1,494	1,612	1,566	1,890	2,002	1,827	1,394	1,837	1,857	1,548	1,747	9%	2,071	2,118	2,118	2,118	2,118	2,165
City of Upland	-	-	-	264	869	636	719	654	695	709	686	4%	813	831	831	831	831	850
City of Fontana	-	-	-	-	-	-	-	52	158	143	118	1%	139	143	143	143	143	146
CVWD	659	734	1,019	1,231	1,652	1,400	1,146	976	1,262	996	1,078	6%	1,278	1,307	1,307	1,307	1,307	1,336
City of Montclair	241	304	288	327	339	308	278	305	318	289	304	2%	360	369	369	369	369	377
Total AF Sold	**16,480**	**16,116**	**20,087**	**20,969**	**23,816**	**21,884**	**18,856**	**18,888**	**20,684**	**16,118**	**18,564**	**100.00%**	**22,000**	**22,500**	**22,500**	**22,500**	**22,500**	**23,000**
San Bernardino County	1,251	1,251	1,450	1,407	1,611	1,371	536	265	261	162								
City of Chino	7,157	6,473	8,271	8,957	8,916	8,324	7,217	6,447	6,481	4,760								
City of Chino Total	**8,408**	**7,724**	**9,721**	**10,364**	**10,527**	**9,695**	**7,753**	**6,712**	**6,742**	**4,922**								

Demands (AF) - Recharge	Actual												Projected					
User	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	3-Yr Avg	%	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
City of Ontario	1,530	789	813	1,004	2,923	2,222	2,590	2,811	2,960	2,633	2,801	22%	3,049	3,093	3,137	3,314	3,314	3,314
City of Chino	682	827	856	1,057	1,397	1,076	1,264	1,397	1,446	1,244	1,362	11%	1,483	1,504	1,526	1,612	1,612	1,612
City of Chino Hills	611	719	736	910	1,193	912	1,065	1,179	1,214	1,018	1,137	9%	1,238	1,256	1,274	1,345	1,345	1,345
City of Upland	680	1,668	1,883	2,414	1,324	1,007	1,191	1,265	1,281	1,084	1,210	10%	1,317	1,336	1,355	1,431	1,431	1,431
City of Fontana	1,265	338	350	429	2,501	1,927	2,299	2,467	2,628	2,232	2,442	19%	2,658	2,697	2,735	2,889	2,889	2,889
CVWD	1,561	1,559	1,564	1,900	3,176	2,406	3,009	3,295	3,396	2,836	3,176	25%	3,456	3,507	3,557	3,757	3,757	3,757
City of Montclair	290	1,725	1,678	2,191	595	468	533	569	586	495	550	4%	599	607	616	651	651	651
Total AF Sold	**6,619**	**7,625**	**7,880**	**9,905**	**13,108**	**10,017**	**11,951**	**12,984**	**13,510**	**11,542**	**12,679**	**100%**	**13,800**	**14,000**	**14,200**	**15,000**	**15,000**	**15,000**

Demands (AF) - Total	Actual												Projected					
User	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	FYE 2018	FYE 2019	3-Yr Avg	%	FYE 2020	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
City of Ontario	7,208	6,533	8,306	7,899	11,350	10,240	10,156	11,163	12,613	10,144	11,307	36%	13,129	13,402	13,447	13,623	13,623	13,852
City of Chino	9,090	8,551	10,577	11,421	11,923	10,770	9,017	8,109	8,188	6,166	7,488	24%	8,742	8,928	8,950	9,036	9,036	9,201
City of Chino Hills	2,105	2,330	2,303	2,800	3,194	2,739	2,459	3,016	3,071	2,566	2,884	9%	3,309	3,374	3,391	3,463	3,463	3,510
City of Upland	680	1,668	1,883	2,678	2,192	1,643	1,910	1,919	1,976	1,793	1,896	6%	2,130	2,167	2,186	2,263	2,263	2,281
City of Fontana	1,265	338	350	429	2,501	1,927	2,299	2,519	2,786	2,376	2,560	8%	2,798	2,839	2,878	3,032	3,032	3,035
CVWD	2,220	2,292	2,582	3,131	4,828	3,806	4,155	4,272	4,657	3,832	4,254	14%	4,734	4,813	4,863	5,064	5,064	5,093
City of Montclair	531	2,029	1,966	2,517	934	775	811	874	904	784	854	3%	959	976	984	1,019	1,019	1,027
Total AF Sold	**23,099**	**23,741**	**27,967**	**30,875**	**36,923**	**31,901**	**30,806**	**31,872**	**34,194**	**27,660**	**31,242**	**100%**	**35,800**	**36,500**	**36,700**	**37,500**	**37,500**	**38,000**

Historic and Projected Demands

3-Year Rolling Average Total Demands

User	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
City of Ontario	11,962	12,225	13,326	13,491	13,564
City of Chino	7,699	7,946	8,873	8,971	9,007
City of Chino Hills	2,982	3,083	3,358	3,409	3,439
City of Upland	1,966	2,030	2,161	2,206	2,237
City of Fontana	2,653	2,671	2,838	2,917	2,981
CVWD	4,408	4,460	4,803	4,913	4,997
City of Montclair	882	906	973	993	1,008
Total AF Sold	**32,552**	**33,320**	**36,333**	**36,900**	**37,233**

Actual EDUs

User	FYE 2019	%	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
City of Ontario	772,176	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%
City of Chino	370,820	10.8%	10.8%	10.8%	10.8%	10.8%	10.8%
City of Chino Hills	305,993	8.9%	8.9%	8.9%	8.9%	8.9%	8.9%
City of Upland	318,093	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
City of Fontana	689,243	20.1%	20.1%	20.1%	20.1%	20.1%	20.1%
CVWD	825,343	24.1%	24.1%	24.1%	24.1%	24.1%	24.1%
City of Montclair	144,563	4.2%	4.2%	4.2%	4.2%	4.2%	4.2%
Total EDUs	**3,426,229**	**100%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Appendix B

FINANCIAL PROJECTIONS

Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

Financial Forecast Summary

Recycled Water (WC) Fund - This fund accounts for direct use activities and a portion of recharge water activity

All Values in $ Millions

Presented totals may vary from sum of values above due to rounding for presentation purposes.

Recycled Water (WC) Fund	Table 1a Direct Use Activity 2020/21	2021/22	2022/23	2023/24	2024/25	Table 1b Recharge Activity 2020/21	2021/22	2022/23	2023/24	2024/25
Sales Revenue										
Recycled Water Sales w/o Increase	$17.89	$17.98	$18.38	$18.38	$18.62	-	-	-	-	-
Adopted Increase	0.54	1.11	1.72	2.33	2.99	-	-	-	-	-
Recharge Sales w/o Increase	-	-	-	-	-	$0.84	$0.85	$0.90	$0.90	$0.90
Adopted Increase	-	-	-	-	-	0.17	0.38	0.67	0.99	1.35
Total Sales Revenue	**$ 18.42**	**$ 19.09**	**$ 20.09**	**$ 20.70**	**$ 21.61**	**$ 1.01**	**$ 1.23**	**$ 1.57**	**$ 1.88**	**$ 2.24**
Operating Revenue										
Interest Revenue	$ 0.95	$ 0.94	$ 1.23	$ 1.36	$ 1.44	$ -	$ -	$ -	$ -	$ -
JPA Cost Reimbursement	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	**$ 0.95**	**$ 0.94**	**$ 1.23**	**$ 1.36**	**$ 1.44**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Non-Operating Revnue										
Property Tax	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ 2.17	$ -	$ -	$ -	$ -	$ -
Connection Fees	6.42	6.67	6.93	7.20	7.48	-	-	-	-	-
Loans	3.48	-	-	-	-	-	-	-	-	-
Grants	1.35	-	-	-	-	-	-	-	-	-
Capital Cost Reimb	0.09	0.09	0.09	0.09	0.10	-	-	-	-	-
Total Non-Operating Revenue	**$ 13.51**	**$ 8.93**	**$ 9.19**	**$ 9.47**	**$ 9.75**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Operating Expense										
Employment	$ 4.46	$ 4.79	$ 5.02	$ 5.24	$ 5.70	$ 0.91	$ 0.92	$ 0.92	$ 0.92	$ 0.93
Utilities	2.88	2.97	3.06	3.15	3.25	-	-	-	-	-
Materials & Supplies	0.12	0.13	0.14	0.16	0.18	0.05	0.05	0.05	0.06	0.06
Other Expenses	3.00	2.65	2.57	2.61	3.11 (1)	0.28	0.34	0.40	0.36	0.31 (1)
Total Operating Expense	**$ 10.47**	**$ 10.54**	**$ 10.80**	**$ 11.16**	**$ 12.24**	**$ 1.25**	**$ 1.31**	**$ 1.37**	**$ 1.34**	**$ 1.30**
Non-Operting Expense										
Debt Service	$ 12.12	$ 12.47	$ 14.42	$ 15.41	$ 14.68	$ -	$ -	$ -	$ -	$ -
Capital	2.30	1.50	5.31	4.00	3.96	-	-	-	-	-
Total Non-Operating Expense	**$ 14.42**	**$ 13.97**	**$ 19.73**	**$ 19.41**	**$ 18.64**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Transfers In/(Out)										
Capital Contribution (to GG)	$ (0.02)	$ (0.01)	$ (0.01)	$ (0.02)	$ (0.03) (2)	$ -	$ -	$ (0.01)	$ (0.11)	$ (0.22) (2)
Connection Fee Allocation (to WW, RW,GG)	(4.53)	(1.39)	(1.25)	(2.45)	(0.72) (3)	-	-	-	-	-
Debt Service (from RC, RO)	2.54	2.54	2.54	2.67	2.67 (4)	-	-	-	-	-
Operating Support (to GG)	(0.05)	(0.01)	(0.04)	(0.03)	(0.00) (5)	(0.71)	(0.75)	(0.78)	(0.81)	(0.87) (5)
Total Transfers In/(Out)	**$ (2.05)**	**$ 1.13**	**$ 1.24**	**$ 0.17**	**$ 1.91**	**$ (0.71)**	**$ (0.75)**	**$ (0.79)**	**$ (0.92)**	**$ (1.08)**

(1) Other Expenses include contract work and special projects, professional fees and services, and other administrative and miscellaneous expenses.

(2) WC fund contributes 3.4% of GG fund capital project costs and IEUAs share of RW fund capital expense

(3) WC fund allocates a portion of connection fee receipts for project costs that support investments in integrated water resource management

(4) Regional funds support a portion debt service costs in the WC and RW funds

(5) WC fund supports 3.4% operating project costs in the GG fund and basin maintenance expense in the RW fund per the Peace I and II agreements with CBWM.

Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

Financial Forecast Summary

Recharge Water (RW) Fund - Accounts for basin activities as part of the joint agreement with Chino Basin Watermaster, San Bernardino County Flood Control District, and Chino Basin Water Conservation District

Table 2

All Values in $ Millions

Recharge Activity Reimbursement agreement

Presented totals may vary from sum of values above due to rounding for presentation purposes.

Recharge Water (RW) Fund Recharge Activity	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	
Sales Revenue						
Recycled Water Sales w/o Increase	-	-	-	-	-	
Adopted Increase	-	-	-	-	-	
Recharge Sales w/o Increase	-	-	-	-	-	
Adopted Increase	-	-	-	-	-	
Total Sales Revenue	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	
Operating Revenue						
Interest Revenue	$ 0.16	$ 0.19	$ 0.20	$ 0.20	$ 0.20	
JPA Cost Reimbursement	1.08	1.11	1.14	1.18	1.21	
Total Operating Revenue	**$ 1.24**	**$ 1.30**	**$ 1.34**	**$ 1.37**	**$ 1.41**	
Non-Operating Revnue						
Property Tax	$ -	$ -	$ -	$ -	$ -	
Connection Fees	-	-	-	-	-	
Loans	3.76	0.14	-	-	-	
Grants	11.52	-	-	-	-	
Capital Cost Reimb	0.66	0.94	1.06	1.19	1.31	
Total Non-Operating Revenue	**$ 15.95**	**$ 1.08**	**$ 1.06**	**$ 1.19**	**$ 1.31**	
Operating Expense						
Employment	$ 0.68	$ 0.72	$ 0.75	$ 0.78	$ 0.83	
Utilities	0.07	0.07	0.07	0.08	0.08	
Materials & Supplies	0.10	0.10	0.11	0.11	0.11	
Other Expenses	0.94	0.96	0.99	1.02	1.05	(1)
Total Operating Expense	**$ 1.79**	**$ 1.85**	**$ 1.92**	**$ 1.99**	**$ 2.07**	
Non-Operting Expense						
Debt Service	$ 1.32	$ 1.51	$ 1.50	$ 1.50	$ 1.50	
Capital	13.18	0.29	0.50	0.75	1.00	
Total Non-Operating Expense	**$ 14.51**	**$ 1.80**	**$ 2.00**	**$ 2.25**	**$ 2.50**	
Transfers In/(Out)						
Capital Contribution (from WC)	$ -	$ -	$ 0.01	$ 0.11	$ 0.22	(2)
Connection Fee Allocation (from WC)	3.03	0.07	0.12	0.17	0.23	(3)
Debt Service (from RC)	0.66	0.69	0.69	0.69	0.69	(4)
Operating Support (from WC)	0.71	0.75	0.78	0.81	0.87	(5)
Total Transfers In/(Out)	**$ 4.40**	**$ 1.51**	**$ 1.59**	**$ 1.78**	**$ 2.00**	

(1) Other Expenses include contract work and special projects, professional fees and services, and other administrative and miscellaneous expenses.

(2) WC fund contributes 3.4% of GG fund capital project costs and IEUAs share of RW fund capital expense

(3) WC fund allocates a portion of connection fee receipts for project costs that support investments in integrated water resource management

(4) Regional funds support a portion debt service costs in the WC and RW funds

(5) WC fund supports 3.4% operating project costs in the GG fund and basin maintenance expense in the RW fund per the Peace I and II agreements with CBWM.

Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

Financial Forecast Summary

Combined WC fund (Recharge water expense) and RW fund activity

Table 1b and Table 2

All Values in $ Millions

Direct use and total Recharge Activity

Presented totals may vary from sum of values above due to rounding for presentation purposes.

Combined (WC and RW funds) Recharge Water Activity	**2020/21**	**2021/22**	**2022/23**	**2023/24**	**2024/25**	
Sales Revenue						
Recycled Water Sales w/o Increase	-	-	-	-	-	
Adopted Increase	-	-	-	-	-	
Recharge Sales w/o Increase	$0.84	$0.85	$0.90	$0.90	$0.90	
Adopted Increase	0.17	0.38	0.67	0.99	1.35	
Total Sales Revenue	**$ 1.01**	**$ 1.23**	**$ 1.57**	**$ 1.89**	**$ 2.25**	
Operating Revenue						
Interest Revenue	$ 0.16	$ 0.19	$ 0.20	$ 0.20	$ 0.20	
JPA Cost Reimbursement	1.08	1.11	1.14	1.18	1.21	
Total Operating Revenue	**$ 1.24**	**$ 1.30**	**$ 1.34**	**$ 1.37**	**$ 1.41**	
Non-Operating Revnue						
Property Tax	$ -	$ -	$ -	$ -	$ -	
Connection Fees	-	-	-	-	-	
Loans	3.76	0.14	-	-	-	
Grants	11.52	-	-	-	-	
Capital Cost Reimb	0.66	0.94	1.06	1.19	1.31	
Total Non-Operating Revenue	**$ 15.95**	**$ 1.08**	**$ 1.06**	**$ 1.19**	**$ 1.31**	
Operating Expense						
Employment	$ 1.59	$ 1.64	$ 1.67	$ 1.70	$ 1.76	
Utilities	0.07	0.07	0.07	0.08	0.08	
Materials & Supplies	0.15	0.15	0.16	0.17	0.17	
Other Expenses	1.22	1.30	1.39	1.38	1.36	(1)
Total Operating Expense	**$ 3.04**	**$ 3.16**	**$ 3.29**	**$ 3.33**	**$ 3.37**	
Non-Operting Expense						
Debt Service	$ 1.32	$ 1.51	$ 1.50	$ 1.50	$ 1.50	
Capital	13.18	0.29	0.50	0.75	1.00	
Total Non-Operating Expense	**$ 14.51**	**$ 1.80**	**$ 2.00**	**$ 2.25**	**$ 2.50**	
Transfers In/(Out)						
Capital Contribution (from WC)	$ -	$ -	$ 0.01	$ 0.11	$ 0.22	(2)
Connection Fee Allocation (from WC)	3.03	0.07	0.12	0.17	0.23	(3)
Debt Service (from RC)	0.66	0.69	0.69	0.69	0.69	(4)
Operating Support (from WC)	0.71	0.75	0.78	0.81	0.87	(5)
Total Transfers In/(Out)	**$ 4.40**	**$ 1.51**	**$ 1.59**	**$ 1.78**	**$ 2.00**	

(1) Other Expenses include contract work and special projects, professional fees and services, and other administrative and miscellaneous expenses.

(2) WC fund contributes 3.4% of GG fund capital project costs and IEUAs share of RW fund capital expense

(3) WC fund allocates a portion of connection fee receipts for project costs that support investments in integrated water resource management

(4) Regional funds support a portion debt service costs in the WC and RW funds

(5) WC fund supports 3.4% operating project costs in the GG fund and basin maintenance expense in the RW fund per the Peace I and II agreements with CBWM.

Appendix C

CAPITAL PROJECTS

Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

Capital Improvement Projects (CIP)

Project Number	Project Title	Note	Growth - One Water	Replacement	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Recharge Water Fund - RW - Capital Projects									
EN22008	GWR Asset Management	Overall MEU Growth	23%	77%	$ -	$ 250,000	$ 500,000	$ 750,000	$ 1,000,000
IS21008	GWR Infrastracture Replacement Project	Overall MEU Growth	23%	77%	$ 30,000	$ -	$ -	$ -	$ -
RW15003	Recharge Master Plan Update Projects	Overall MEU Growth	23%	77%	$ 9,750,000	$ 40,041	$ -	$ -	$ -
RW15004	Lower Day Basin RMPU Improvements	Overall MEU Growth	23%	77%	$ 3,404,044	$ -	$ -	$ -	$ -
	Recharge Water Fund - RW - Capital Projects				**$ 13,184,044**	**$ 290,041**	**$ 500,000**	**$ 750,000**	**$ 1,000,000**
Recycled Water Fund - WC - Capital Projects									
EN15002	1158 Reservoir Site Cleanup	Overall MEU Growth	23%	77%	$ 1,000,000	$ -	$ -	$ -	$ -
EN17032	RP-4 Outfall Repair from Mission Blvd to	Overall MEU Growth	23%	77%	$ -	$ 1,000,000	$ 4,000,000	$ -	$ -
EN19003	RP-1 Outfall Parallel Line	Overall MEU Growth	23%	77%	$ -	$ -	$ 230,000	$ 1,925,000	$ 960,000
EN22009	WC Asset Management	Overall MEU Growth	23%	77%	$ -	$ 500,000	$ 1,000,000	$ 2,000,000	$ 3,000,000
EN20022	1299 Reservoir Paint/Coating Repairs and	No Growth Allocation	0%	100%	$ 100,000				
EN22004	1158 East Reservoir Re-coating/painting	No Growth Allocation	0%	100%	$ 1,200,000				
EN24005	1630 West Reservoir Paint/Coating Repair	No Growth Allocation	0%	100%			$ 75,000		
EN24006	930 Reservoir Paint/Coating Repairs and	No Growth Allocation	0%	100%				$ 75,000	
Subtotal	**Recycled Water Fund - WC - Capital Projects**				**$ 2,300,000**	**$ 1,500,000**	**$ 5,305,000**	**$ 4,000,000**	**$ 3,960,000**

Inland Empire Utilites Agency

Recycled and Recharge Water Rate Study

Capital Improvement Projects (CIP)

Project Number	Project Title	Note	Growth - One Water	Replacement	FYE 2021	FYE 2022	FYE 2023	FYE 2024	FYE 2025
Recycled Water Fund - WC - Contract Work/Special Projects									
EN16035	WC Planning Documents	Overall MEU Growth	23%	77%	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 500,000
EN18021	Prado Basin AMP Annual Monitoring	No Growth Allocation	0%	100%	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
EN19030	WC Asset Management (Assessment Only)	No Growth Allocation	0%	100%	$ 250,000	$ 250,000	$ 250,000	$ 250,000	$ 250,000
EN20017	WC Emergency O&M Projects FY 19/20	No Growth Allocation	0%	100%	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
EN20031	Recycled Water Program Strategy 2020	Overall MEU Growth	23%	77%	$ 250,000	$ -	$ -	$ -	$ -
EN20049	Reservoir Maintenance (Repair/Improve)	No Growth Allocation	0%	100%	$ 50,000	$ -	$ -	$ -	$ -
EN20050	Reservoir Maintenance (Access)	No Growth Allocation	0%	100%	$ -	$ -	$ 20,000	$ -	$ -
EN21036	WC On Call/ Small Projects 20/21	No Growth Allocation	0%	100%	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000
EN25031	Recycled Water Program Strategy 2025	Overall MEU Growth	23%	77%	$ -	$ -	$ -	$ -	$ 250,000
WR16001	Water Softener Removal Rebate Program	Overall MEU Growth	23%	77%	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000
WR20029	Upper SAR HCP & Integrated Model-Recycled Water Bene	Overall MEU Growth	23%	77%	$ 90,000	$ 88,000	$ -	$ -	$ -
Subtotal	**Recycled Water Fund - WC - Contract Work/Special Projects**				**$ 1,365,000**	**$ 1,063,000**	**$ 995,000**	**$ 975,000**	**$ 1,475,000**
Total	**Recycled Water Fund - WC**				**$ 3,665,000**	**$ 2,563,000**	**$ 6,300,000**	**$ 4,975,000**	**$ 5,435,000**
Recharge Water (RW) One Water Connection Fee Eligible Projects Cost					**$ 3,032,330**	**$ 66,709**	**$ 115,000**	**$ 172,500**	**$ 230,000**
Recycled Water (WC) One Water Connection Fee Eligible Projects Cost					**$ 382,950**	**$ 439,990**	**$ 1,277,650**	**$ 977,500**	**$ 1,100,550**