



# **2016 Rate Study Report**

## **East Whitewater Sub-basin Replenishment Fund**

MARCH 14, 2016

March 14, 2016

Katherine Godbey  
Director of Finance, Coachella Valley Water District  
75515 Hovley Lane East  
Palm Desert, CA 92260

Dear Ms. Godbey:

Hawksley Consulting is pleased to provide this East Whitewater Replenishment Program financial plan and rate recommendation report (Report). This Report encompasses a great deal of effort from not only Hawksley Consulting, but also from you and your staff. We are very thankful for the time and dedication put into the study by the Coachella Valley Water District. Our efforts were completed using standard cost allocation and rate setting principles established by the American Water Works Association (AWWA) and in compliance with the State of California Water Code.

The enclosed Report is a comprehensive but not exhaustive description of our analysis methodology and findings.

Sincerely,



Mark Hildebrand  
Project Manager

# Executive Summary

## 2016 East Whitewater RAC Rate Study Report

Coachella Valley Water District (CVWD) engaged Hawksley Consulting, a subsidiary of MWH Global, to study CVWD's East Whitewater Replenishment Program's finances and develop recommendations for updating the East Whitewater Replenishment Assessment Charge (RAC) rates. CVWD currently operates its Replenishment Program as three separate "areas of benefit"; the East Whitewater River Sub-basin Area of Benefit, the West Whitewater River Sub-basin Area of Benefit, and the Mission Creek Sub-basin Area of Benefit (each Benefit Area is also referred to as a service area in this Report). This Report focuses on the East Whitewater River Sub-basin Area of Benefit.

The purpose of this Report is to assess CVWD's East Whitewater Replenishment Program rate revenue requirements, to evaluate the cost of providing service to customers, and to present rate recommendations for equitably collecting revenue based on the proportionate cost of providing service. RAC rates are levied in accordance with State of California Water Code Sections 31630 – 31639.

Hawksley Consulting used standard water utility ratemaking practices to calculate the proposed rates as promulgated by the American Water Works Association (AWWA). The methodology used in this Report is consistent with industry standards established by AWWA's M1 Manual (Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1 (Sixth Edition), which documents many of the standards used by professionals in the water utility rate-setting industry. The basis for the proposed rate schedules comply with all requirements as stipulated by State of California law.

The Report's revenue requirements analysis compares the revenues of the East Whitewater Sub-basin Replenishment Fund (Replenishment Fund) to its operating and capital costs to determine the adequacy of the existing rates to recover the Replenishment Program's costs. State of California Water Code Sections 31630 – 31639 only allows for a uniform volumetric rate to be charged to groundwater producers.

The O&M budget is projected to oscillate between \$9 million and \$11 million between FY2016 to FY2024, with the largest changes being attributable to water purchases and environmental QSA (Quantification Settlement Agreement) Mitigation payments. East Whitewater Replenishment Program has an expected capital improvement plan (CIP) of approximately \$44 million over the next 5 years, most of which is for the Oasis Expansion Project that provides infrastructure needed to deliver nonpotable water to groundwater producers for in-lieu groundwater replenishment.

The Replenishment Fund receives the large majority of its revenue from property taxes. CVWD proposes to increase the current RAC rate of \$59 / acre foot to \$66 / acre foot effective July 1, 2016. Given the subsequent sufficiency of RAC rate revenue and property tax revenue, the Report recommends keeping the East Whitewater RAC rate at \$66 / acre foot for the remainder of the planning period.

# Coachella Valley Water District 2016 East Whitewater RAC Rate Study Report

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# 1. INTRODUCTION

Coachella Valley Water District (CVWD) engaged Hawksley Consulting, a subsidiary of MWH Global, to study CVWD's East Whitewater Replenishment Program's finances and develop recommendations for updating the East Whitewater Sub-basin Replenishment Assessment Charge (RAC) rates. The rates recommended in this East Whitewater Sub-basin RAC Rate Study Report (Report) reflect CVWD's cost of providing replenishment services to customers in the East Whitewater Sub-basin service area (see Appendix A for a map of the area of benefit). This Report includes a long-range financial plan and culminates in a recommended five-year rate schedule for the RAC rates.

## 1.1 SYSTEM OVERVIEW

CVWD is a special district governed by a five-member Board of Directors. It was formed in 1918 to protect and conserve local water sources. Among other services, CVWD uses imported Colorado River water to artificially replenish the aquifer at three sites throughout the Coachella Valley. In response to declining groundwater levels in the eastern Coachella Valley after 1980, CVWD began a pilot groundwater replenishment program to benefit groundwater conditions in the eastern Coachella Valley in 1997. In 2009, the Thomas E. Levy Groundwater Replenishment Facility became fully operational, with a design capacity of 40,000 acre-feet per year. Since 1997, more than 250,000 acre-feet of imported Colorado River water has been delivered to the groundwater replenishment facilities located in the eastern Coachella Valley.

CVWD is authorized by State Water Code to levy and collect replenishment assessment charges (RACs) from groundwater producers within the areas that benefit from groundwater replenishment. CVWD has implemented RAC programs in three separate "areas of benefit"; the East Whitewater River Sub-basin Area of Benefit, the West Whitewater River Sub-basin Area of Benefit, and the Mission Creek Sub-basin Area of Benefit (each area of benefit is also referred to in this Report as a service area). These three areas of benefit have their own RAC rates and their respective funds are largely managed separately. This Report focuses on the East Whitewater River Sub-basin Area of Benefit and associated East Whitewater River Sub-basin Replenishment Fund (Replenishment Fund).

## 1.2 PURPOSE OF THE REPORT

The purpose of this Report is to assess CVWD's East Whitewater Replenishment Program rate revenue requirements, to evaluate the cost of providing service to customers, and to present rate recommendations for equitably collecting revenue based on the proportionate cost of providing service. RAC rates are levied in accordance with State of California Water Code Sections 31630 – 31639 and California Constitution article XIII D, section 6.

CVWD is a community-oriented utility dedicated to serving its customers and the environment with reliable, economical, and high-quality domestic water, sanitation, stormwater protection, flood control, agricultural irrigation/drainage, groundwater replenishment and imported water services. The financial planning associated with this Report furthers these goals by developing rates that support CVWD's financial goals and policies.

## 1.3 PROJECT METHODOLOGY

Hawksley Consulting used standard water utility ratemaking practices to calculate the proposed rates as promulgated by the American Water Works Association (AWWA). The basis for the proposed rate schedules follows industry-accepted cost-of-service principles and complies with all requirements as stipulated by State of California law.

This project followed three major phases:

1. **Financial planning** compares the overall revenues of the East Whitewater Sub-basin Replenishment Program to its overall revenue requirements in order to determine the rate adjustments needed over a multi-year period. The revenue requirements methodology used in this Report is consistent with industry standards established by AWWA's M1 Manual<sup>1</sup>, which documents many of the standards used by professionals in the water utility rate-setting industry. This Report's revenue requirements analysis compares the revenues of the utility to its operating and capital costs to determine the adequacy of the existing rates to recover the replenishment program's costs. The revenue requirements are analyzed through the development of a long-term financial plan. Based on the best information currently available, the current financial plan incorporates projected operations and maintenance costs, capital expenses, debt issuances and service, and growth assumptions to estimate annual revenue requirements.
2. A **cost-of-service analysis** is used to proportionally allocate the revenue requirements for a utility service among the utility's various customer classes. In this case, there is only one class of customer, therefore, the cost-of-service requirements are limited to ensuring that the RAC rates do not collect more than the Replenishment Fund's revenue requirements.
3. The final part of the analysis, **rate design**, determines how rate revenues will be collected from customers in a manner that respects the results of the cost-of-service analysis while also addressing CVWD goals and objectives for pricing. In this case the rate design is dictated by the enabling legislation (State of California Water Code Sections 31630 – 31639) which limits the RAC rate structure to uniform volumetric rate (see Section 2.3.2) and California Constitution article XIII D, section 6.

## 1.4 INTENDED USE AND USERS OF THIS REPORT

This Report is intended to provide a summarized discussion of the technical analysis completed by Hawksley Consulting in completing the associated Report. As such, this Report explains our methodologies, materials considered, key assumptions, findings and recommendations. No other use is intended or implied. This Report and its contents are the property of CVWD. CVWD may choose to distribute this Report to others; however this Report itself was prepared solely for the use of CVWD.

## 1.5 SOURCES OF INFORMATION USED IN THIS REPORT

We have reviewed a number of documents provided by CVWD during the course of our study. A summary of the key information reviewed includes, but is not limited to:

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<sup>1</sup> Principles of Water Rates, Fees and Charges: Manual of Water Supply Practices M1 (Sixth Edition).

1. Actual revenues and expenses for Fiscal Year (FY) 2013 through FY2015 and forecasts for FY2016 through FY2027 (“FY 2016-2020 Revised Budget for RAC & Domestic COSS - October 28 Meeting - Mark H.xls”)
2. Ten-year Capital Improvement Plan (“10 - year NPW CIP 2016 – 2025.xls”)
3. Debt Service Schedule (“Debt Service Schedule - 01.12.15.xls”)
4. Projected State Water Project revenues (“SWP - Cash Flow.xls”)
5. Historical Replenishment Program water use (“FY 2015 RAC consumption.xls”)
6. Reserve policies (adopted February 2014)
7. CVWD cost allocation summary (“803 distribution percentages AA.xls”)
8. State of California Water Code (specifically Sections 31630 – 31639)
9. Memorandum regarding “Use of State Water Project Tax Revenues for Water Replenishment Programs in the Lower Coachella Valley”, from Gerald D. Shoaf (Redwine and Sherrill), November 15, 2012

In addition, this Report is based on the results produced by the financial model for the Replenishment Fund (“East Whitewater Replenishment Financial Plan final.xls”), which may reference additional data sources. All such documents are on file with CVWD.

## 1.6 ACRONYMS

AF	acre foot
AWWA	American Water Work Association
CIP	Capital Improvement Plan
CVWD	Coachella Valley Water District
CVWMP	Coachella Valley Water Management Plan
DSC	debt service coverage
FY	fiscal year ending June 30
MGD	millions of gallons per day
O&M	operation and maintenance
QSA	Quantification Settlement Agreement
RAC	Replenishment Assessment Charge

## 2. FINANCIAL PLAN

As a first step, Hawksley Consulting evaluated the long-term financial sustainability of the Replenishment Program by projecting CVWD's future expenses for a ten-year period. By also projecting future revenues with existing rates, the analysis yields the required change in rate revenue needed over a ten-year period. As detailed below, the financial plan model considers the costs of operations and maintenance (O&M), capital, and debt, while also accounting for non-rate revenue, reserve targets and financial performance metrics.

### 2.1. RESERVE POLICIES

CVWD has adopted target reserve policies in order to maintain sufficient working capital in CVWD's enterprise funds so as to mitigate current and future risks and promote stable services and revenues. The stated objectives of CVWD's reserve policies are:

- To establish sound formal fiscal reserve guidelines to ensure strong fiscal management that guide future CVWD decisions.
- To build adequate reserves over time. This action will provide CVWD with resources to help stabilize CVWD's finances, and position it more easily to absorb economic downturns or large-scale emergencies.
- To help smooth rates from year to year, and to promote equity over the years to ratepayers.
- To provide funding for current and future replacement of existing assets as they reach the end of their useful lives.
- To assist CVWD in meeting its short-term and long-term obligations and to ensure that CVWD maintains the highest possible credit rating.

CVWD's Reserve Policy was last updated in February 2016. The following are CVWD's reserve policies as adopted by the Board:

**Operating Reserves** – The Operating Reserves cover operating costs for an established period of time. This reserve ensures continuity of service regardless of cash flow, and is considered working capital to be used to fund current expenses as needed. The Board recommends maintaining operating reserves at 90 days, or 25% of current year budgeted expenses (less depreciation).

**Rate Stabilization** – This reserve is intended to smooth rate volatility during short to mid-term rate revenue loss, property tax revenue loss and/or higher than anticipated budget costs that cannot be supported by normal revenues. Rate Stabilization funds can be used to balance the budget if revenues are projected to be 10% less than prior year actual revenues, or if expenses are projected to be 10% more than prior year actual expenses. The Board recommends establishing the reserve at the higher of 10% of current year budgeted rate revenues (which is an amount that could be lost if customers conserve at a higher level) or 10% of total costs less depreciation (which could occur due to increased water and power costs).

**Capital Improvement Program** – This reserve is designated for funding capital assets and is designed to stabilize funding for capital by accumulated “pay-as-you-go” reserves. This reserve can also be used in concurrence with outside funding sources. This reserve fund is generally established for capital items/projects with a cost of \$10,000 or more and a useful life of one year or greater. The Board has recommended that this reserve should be set at the 5-year average of the CIP.

**Emergency Reserve** – This reserve helps to ensure continued service to CVWD's customers and service area for events which are impossible to anticipate or budget. The ability of CVWD to quickly restore facilities and services is critical to the public health and safety of our residents. This fund will assist



in covering emergency cash needs for any reason. The Board recommends that this reserve be maintained at one percent (1.0%) of the net capital assets.

**Vehicle Replacement Reserve** – This reserve provides capital replacement funding as CVWD’s rolling stock is depreciated over its useful life. The Board recommends that the target amount be set at a five-year average of the capital improvement plan (CIP).

**QSA Mitigation Reserve** – This QSA (Quantification Settlement Agreement) Mitigation reserve is maintained at a level that is equal to the average remaining annual QSA Mitigation payments.

Table 2-1 summarizes the Replenishment Fund’s reserve targets in FY 2016.

**Table 2-1 – Summary of Reserve Targets**

Reserve	Approximate FY2016 Target
Operating	\$2,354,000
Rate Stabilization	\$678,000
Capital Improvement	\$3,492,000
Emergency	\$539,000
Vehicle Replacement	\$92,000
QSA Mitigation	\$1,753,000

The rates that are recommended in this Report have been developed with the intent of managing reserve levels in such a way that targets are met by the end of the study period.

## 2.2. REPORT GENERAL ASSUMPTIONS

The financial plan model employs assumptions to calculate future year revenues and expenses where budget projections are not available. The financial plan model uses the most recent audited financial information and Board adopted budgets for the study period.

### 2.2.1. INFLATION ASSUMPTIONS

All forecasted O&M budget values were provided by CVWD and included inflation assumptions, which are generally assumed to inflate at a rate of 3% to 3.5%, with exception of utility costs which were assumed to inflate at a rate of 7%.

### 2.2.2. GROUNDWATER CONSUMPTION ASSUMPTIONS

CVWD does not expect increases in the use of groundwater in the East Whitewater area of benefit over the next ten years. In fact, the area of benefit is expected to experience a 42% decrease in groundwater production during the 5-year cost of service period due to conservation and due to increased use of surface water through new connections to the existing canal and through the future Oasis project, which will impact the revenues Replenishment Fund. The projected groundwater production values are provided in Appendix B.

All groundwater consumption projections have been provided by CVWD staff.

### 2.2.3. DEBT FINANCING ASSUMPTIONS

Debt service coverage (DSC) is an important indicator of a utility's indebtedness and ability to pay for debt. DSC is calculated by dividing net revenue and the annual debt service payments. At this time, CVWD doesn't have a formal DSC policy because the agency hasn't historically issued debt. While this Report does not recommend the issuance of debt for the Replenishment Fund, scenarios were considered that involved the issuance of debt. In those instances, a minimum DSC of 1.75 was assumed. We have assumed that debt would carry an interest rate of 5%, an amortization period of 30 years, and a one-time issuance cost of 1.5%.

## 2.3. REPLENISHMENT FUND FINANCIAL PLAN

This financial plan measures the Replenishment Fund's revenue requirements versus its sources of revenues

### 2.3.1. REVENUE REQUIREMENTS

The Replenishment Fund's costs can be divided into O&M costs and capital costs.

#### 2.3.1.1. O&M EXPENDITURES

The O&M budget projections for the study period are summarized in Table 2-2 and Appendices A & B. All cost projections are based on CVWD staff's best available data as well as the assumption that CVWD's Canal Rates will be adopted as recommended by the Report.

While most projected O&M expenditures are consistent with historical spending, the QSA Mitigation costs have changed recently and merit further explanation. CVWD adopted the Coachella Valley Water Management Plan (CVWMP) in 2002 and updated it in 2010 and 2014. The Plan's purpose is to eliminate overdraft in the Indio (Whitewater River) Sub-basin and it identifies programs for implementation that conserve, recharge, and import water to the Coachella Valley. The QSA which was signed in 2003 is one of the water importation programs identified in the CVWMP. The QSA increases CVWD's Colorado River water allocation to 459,000 acre-feet per year by 2026 and provides additional water not only for irrigation but also for direct and in-lieu groundwater replenishment benefitting the Whitewater River. QSA mitigation costs have been allocated to CVWD's East and West Replenishment Assessment Funds because they exist to fund direct and in-lieu groundwater replenishment of the Whitewater River Sub-basin, including the costs to import and recharge water from the Colorado River and to implement programs providing incentives to use reclaimed water or Colorado River water in place of groundwater. The cost of QSA mitigation is needed to import additional Colorado River water for direct and in-lieu groundwater replenishment. The QSA mitigation costs are allocated between East and West Replenishment Assessment Funds in proportion to the amount of QSA water delivered to each area of benefit.

The negative values for "Less District Labor" are labor costs that are capitalized since they are associated with capital improvements projects.

**Table 2-2 – Current and Forecasted O&M Expenses**

	<i>Actuals</i> 2015	<i>Budget</i> 2016	<i>Projected</i> 2017	<i>Projected</i> 2018	<i>Projected</i> 2019
Salaries and Benefits	\$1,030,295	\$1,222,000	\$1,259,000	\$1,297,000	\$1,336,000
Supplies & Services	964,017	1,204,000	1,212,000	1,254,000	1,298,000
Utilities	984,868	1,122,000	1,200,000	1,284,000	1,374,000
Canal Water Purchases	3,316,237	3,468,000	3,424,560	4,017,740	4,254,100
QSA Mitigation Payments	0	2,508,000	3,713,000	3,280,000	4,392,000
Payments to Other Agencies	7,500	8,000	8,000	8,000	8,000
Capital Outlay	35,421	19,000	19,000	19,000	19,000
Less District Labor	0	-133,095	-625,725	-448,350	-66,330
<b>Total Operating Expenses</b>	<b>\$6,338,338</b>	<b>\$9,417,905</b>	<b>\$10,209,835</b>	<b>\$10,711,390</b>	<b>\$12,614,770</b>
<i>Change over previous year</i>		48.6%	8.4%	4.9%	17.8%

	<i>Projected</i> 2020	<i>Projected</i> 2021	<i>Projected</i> 2022	<i>Projected</i> 2023	<i>Projected</i> 2024
Salaries and Benefits	\$1,376,000	\$1,417,000	\$1,460,000	\$1,504,000	\$1,549,000
Supplies & Services	1,343,000	1,390,000	1,439,000	1,489,000	1,541,000
Utilities	1,470,000	1,573,000	1,683,000	1,801,000	1,927,000
Canal Water Purchases	4,414,080	4,750,000	4,892,500	5,039,275	5,190,453
QSA Mitigation Payments	830,000	352,000	1,284,000	1,288,000	1,300,000
Payments to Other Agencies	8,000	8,000	8,000	8,000	8,000
Capital Outlay	19,000	19,000	19,000	19,000	19,000
Less District Labor	-46,500	-47,895	-49,332	-50,812	-52,336
<b>Total Operating Expenses</b>	<b>\$9,413,580</b>	<b>\$9,461,105</b>	<b>\$10,736,168</b>	<b>\$11,097,463</b>	<b>\$11,482,117</b>
	-25.4%	0.5%	13.5%	3.4%	3.5%

The Replenishment Fund is accelerating the repayment of an internal loan to the Domestic Fund, which is expected to be repaid by FY2021 (see Appendix B). This was a 15-year internal loan in the amount of \$60.3 million established in 2013 to repay the Domestic Fund for the construction of the Thomas E. Levy Replenishment Facility.

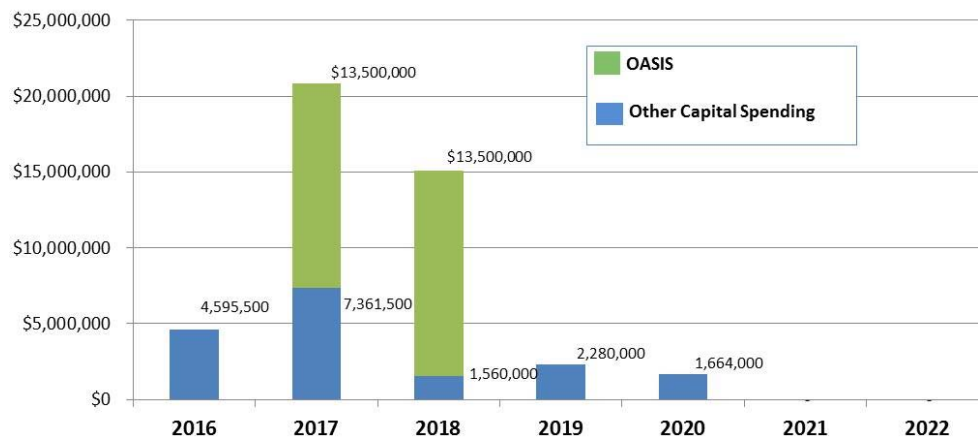
### 2.3.1.2. CAPITAL SPENDING

CVWD maintains a long-range fiscal perspective through the use of a CIP to maintain the quality of CVWD infrastructure. The capital spending projections in the financial plan model are based on CVWD's CIP. Detailed capital spending projections are provided through FY2024 in Appendix C.

East Whitewater Replenishment Program has an expected CIP of approximately \$44 million over the next 5 years (after inflation) most of which is for the Oasis expansion project that provides infrastructure needed to deliver nonpotable water to groundwater producers for in-lieu groundwater replenishment.

Figure 2-1 provides a summary of the projected capital spending over the next 5 years.

**Figure 2-1 – Capital Spending Projection**



Appendix B provides a detailed summary of the Replenishment Fund’s financial forecast.

**2.3.2. EXISTING REVENUE**

Water Code Sections 31630 – 31639 authorizes CVWD to charge a uniform (per acre foot) RAC rate to groundwater producers who collectively pump more than 25 acre-feet of water in any year from a well or multiple wells located within the designated areas of benefit. The revenues from RAC rates can only be used for the purpose of paying: a) specific charges listed in California Water Code Section 31633 imposed under contract between CVWD and the state for an imported water supply from the State Water Project; b) the cost of recharging the groundwater with imported water from the State Water Project; c) the cost of recharging the groundwater with water from other sources; d) the cost of treating and distributing reclaimed water for use in place of groundwater; and e) the cost of implementing incentive programs to use Colorado River water or reclaimed water in place of groundwater.

The Replenishment Fund receives rate revenue from RAC rates, State Water Project tax revenues, as well as interest earnings from invested reserves.

The RAC rates are currently \$59 / AF and CVWD proposes to increase the rate to \$66 on July 1, 2016.

Table 2-3 shows a summary of the Replenishment Fund’s projected revenues through FY 2024 assuming no rate adjustments. The \$13.1 million “Other Charge” in FY15 was a transfer-in from West Whitewater and Mission Creek Replenishment Funds for redevelopment revenues that were incorrectly receipted to the State Water Project reserves. The negative \$5.3 million Other Charge in FY2016 was a transfer to the Canal Fund for reimbursement of costs paid by the Canal Fund to restore conveyance capacity of the canal that had been negatively impacted by subsidence due to groundwater pumping.

**Table 2-3 – Current and Projected Revenues**

	<i>FY2015</i>	<i>FY2016</i>	<i>FY2017</i>	<i>FY2018</i>	<i>FY2019</i>
	Actual	Budget	Forecast	Forecast	Forecast
Rate Revenue	\$6,445,602	\$6,781,504	\$6,201,674	\$5,440,232	\$4,965,164
Other Charges	13,140,337	(5,331,000)	0	0	0
SWP Tax Fund	10,682,677	17,770,000	20,072,000	21,269,000	22,491,000
Property Tax	0	6,399,000	0	0	0
Investment Income	0	159,202	151,916	91,087	73,944
<b>Total Operating Revenues</b>	<b>\$30,268,616</b>	<b>\$25,778,706</b>	<b>\$26,425,590</b>	<b>\$26,800,318</b>	<b>\$27,530,107</b>
<i>Change over previous year</i>		-14.8%	2.5%	1.4%	2.7%

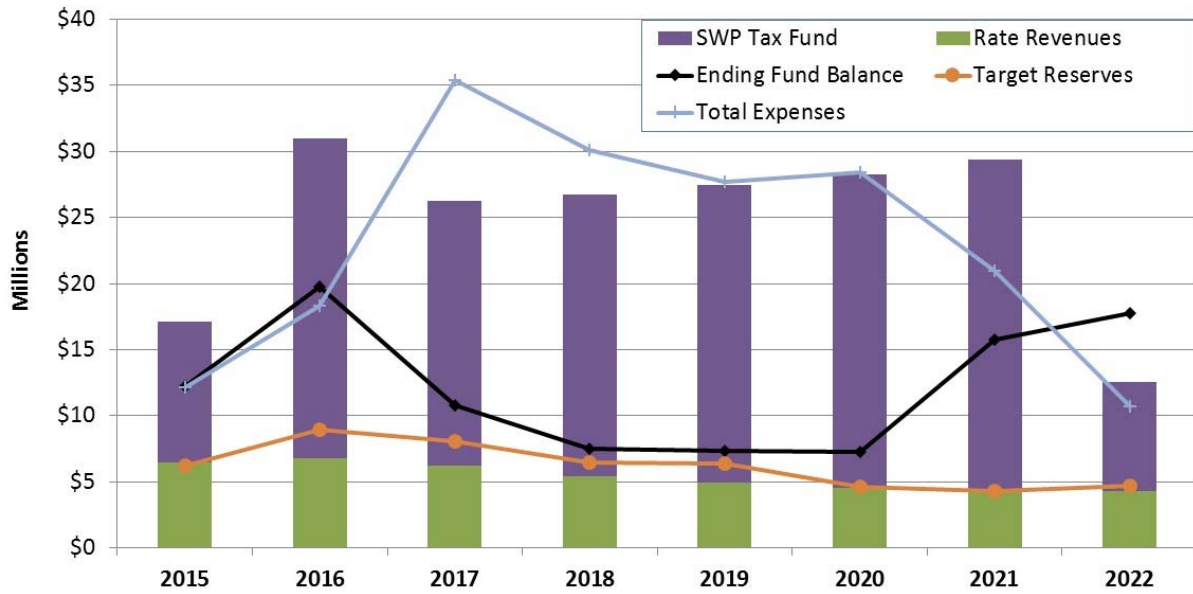
  

	<i>FY2020</i>	<i>FY2021</i>	<i>FY2022</i>	<i>FY2023</i>	<i>FY2024</i>
	Forecast	Forecast	Forecast	Forecast	Forecast
Rate Revenue	\$4,502,042	\$4,396,442	\$4,290,842	\$4,185,242	\$4,185,242
Other Charges	0	0	0	0	0
SWP Tax Fund	23,736,000	25,007,000	8,246,000	8,510,000	8,780,000
Property Tax	0	0	0	0	0
Investment Income	72,662	114,543	166,713	185,373	202,631
<b>Total Operating Revenues</b>	<b>\$28,310,704</b>	<b>\$29,517,984</b>	<b>\$12,703,555</b>	<b>\$12,880,614</b>	<b>\$13,167,872</b>
<i>Change over previous year</i>	2.8%	4.3%	-57.0%	1.4%	2.2%

## 2.4. REPLENISHMENT FUND PROJECTIONS

Figure 2-2 and Appendix B show the projected financial condition of the Replenishment Fund if no rate adjustments are made and no new debt is issued. While the Replenishment Fund currently has healthy reserves, the increase in capital spending in the next few years will deplete those reserves. The loan repayment schedule to the Domestic Fund has been modified such that reserves will not drop below zero (although the reserves will be below target levels from FY2017 to FY 2020). After the completion of the increase capital spending FY2020, the reserve levels are expected to recover within one year. In fact, in order to not build excessive reserves for the Replenishment Fund, it is recommended to restructure the distribution of SWP property tax revenue starting in FY2022 (see Figure 2-2).

**Figure 2-2 – Replenishment Fund with No Rate Adjustments**



### 3. RECOMMENDED FINANCIAL STRATEGY

As previously mentioned, CVWD plans to propose an increase to the existing RAC rates of \$59/AF to \$66 / AF. This increase, and previous increases, have been driven primarily by decreases in groundwater production (see Appendix B), as well as increases in expenses and capital spending. Groundwater production will continue to decrease in the East Whitewater River Subbasin Area of Benefit as the Coachella Valley Water Management Plan in-lieu replenishment projects are implemented.

Aside from the pending rate increase to \$66 /AF, this Report recommends no additional increase to the RAC rate and no new debt for the Replenishment Fund during the planning period. While dropping below target reserve levels for several years (see Appendix B and Figure 2-2) is typically against CVWD policy, it is clear that short-term capital spending is causing the drop. Going forward, the combination of RAC rates and property tax revenues are sufficient to support the fund during future years of more typical capital spending. The sufficiency of these revenue sources is evidenced in FY2022 when the capital spending levels subside and the reserve levels are quickly re-established. For purposes of documentation, Table 3-1 shows the recommended RAC rates over the study period.

**Table 3-1 – Established and Recommended RAC Rate Schedule**

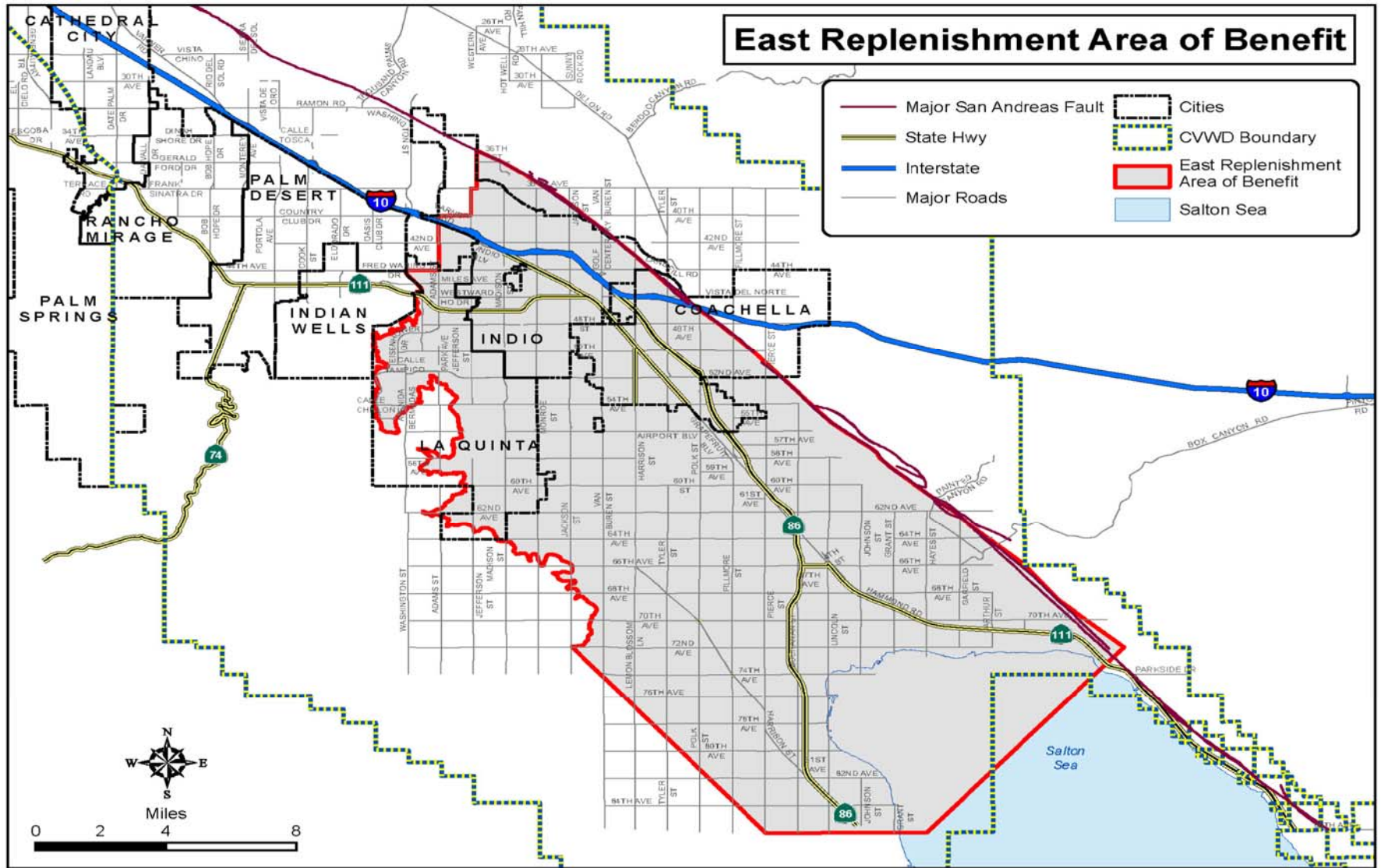
	<b>Current</b>	<b>Proposed</b>				
	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>FY 2020</b>	<b>FY 2021</b>
<b>Percent Increase</b>	13.5%	11.9%	0.0%	0.0%	0.0%	0.0%
<b>RAC Rate (\$/AF)</b>	\$59.00	\$66.00	\$66.00	\$66.00	\$66.00	\$66.00

## 4. CONCLUSION

This Report used methodologies that are aligned with industry standard practices for rate setting as promulgated by AWWA and all applicable law, including Proposition 218. The District's East Whitewater Sub-Basin Replenishment program service rates reflect the cost of providing the associated service.



# Appendix A – East Whitewater Sub-Basin Area of Benefit



### Appendix B – East Whitewater Sub-basin Replenishment Fund Proforma

	FY2015 Actual	FY2016 Budget	FY2017 Forecast	FY2018 Forecast	FY2019 Forecast	FY2020 Forecast	FY2021 Forecast	FY2022 Forecast	FY2023 Forecast	FY2024 Forecast
<b>Rate Revenue Increase</b>	<b>na</b>	<b>na</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
Rate (\$/AF)	\$52.81*	\$59.00	\$66.00	\$66.00	\$66.00	\$66.00	\$66.00	\$66.00	\$66.00	\$66.00
Groundwater Production	122,055	114,941	93,965	82,428	75,230	68,213	66,613	65,013	63,413	63,413
	* average rate based on actual revenue and sales									
<b>Revenues</b>										
Rate Revenue	\$ 6,445,602	\$ 6,781,504	\$ 6,201,674	\$ 5,440,232	\$ 4,965,164	\$ 4,502,042	\$ 4,396,442	\$ 4,290,842	\$ 4,185,242	\$ 4,185,242
Other Charges	13,140,337	(5,331,000)	-	-	-	-	-	-	-	-
SWP Tax Fund	10,682,677	17,770,000	20,072,000	21,269,000	22,491,000	23,736,000	25,007,000	8,246,000	8,510,000	8,780,000
Property Tax	-	6,399,000	-	-	-	-	-	-	-	-
Investment Income	-	159,202	151,916	91,087	73,944	72,662	114,543	166,713	185,373	202,631
<b>Total Revenues</b>	<b>\$ 30,268,616</b>	<b>\$ 25,778,706</b>	<b>\$ 26,425,590</b>	<b>\$ 26,800,318</b>	<b>\$ 27,530,107</b>	<b>\$ 28,310,704</b>	<b>\$ 29,517,984</b>	<b>\$ 12,703,555</b>	<b>\$ 12,880,614</b>	<b>\$ 13,167,872</b>
<b>Operating Expenses</b>										
Salaries, Wages, and Benefits (less labor transfer to Capital budget)	\$ 1,030,295	\$ 1,222,000	\$ 1,259,000	\$ 1,297,000	\$ 1,336,000	\$ 1,376,000	\$ 1,417,000	\$ 1,460,000	\$ 1,504,000	\$ 1,549,000
Supplies & Services	964,017	1,204,000	1,212,000	1,254,000	1,298,000	1,343,000	1,390,000	1,439,000	1,489,000	1,541,000
Utilities	984,868	1,122,000	1,200,000	1,284,000	1,374,000	1,470,000	1,573,000	1,683,000	1,801,000	1,927,000
Water Purchases	3,316,237	3,468,000	3,424,560	4,017,740	4,254,100	4,414,080	4,750,000	4,892,500	5,039,275	5,190,453
QSA Mitigation and Water Purchase	-	2,508,000	3,713,000	3,280,000	4,392,000	830,000	352,000	1,284,000	1,288,000	1,300,000
Minor Capital Outlay	35,421	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000	19,000
Payment to Other Agencies	7,500	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
<b>Total Operating Expenses</b>	<b>\$ 6,338,338</b>	<b>\$ 9,417,905</b>	<b>\$ 10,209,835</b>	<b>\$ 10,711,390</b>	<b>\$ 12,614,770</b>	<b>\$ 9,413,580</b>	<b>\$ 9,461,105</b>	<b>\$ 10,736,168</b>	<b>\$ 11,097,463</b>	<b>\$ 11,482,117</b>
<b>Net Revenues</b>	<b>\$ 23,930,278</b>	<b>\$ 16,360,801</b>	<b>\$ 16,215,755</b>	<b>\$ 16,088,928</b>	<b>\$ 14,915,337</b>	<b>\$ 18,897,124</b>	<b>\$ 20,056,879</b>	<b>\$ 1,967,387</b>	<b>\$ 1,783,151</b>	<b>\$ 1,685,755</b>
<b>Debt Service</b>										
Debt Service Payments (existing)	\$ 4,460,292	\$ 4,292,000	\$ 4,292,000	\$ 4,318,000	\$ 12,792,000	\$ 17,334,000	\$ 11,538,000	\$ -	\$ -	\$ -
Debt Service Payments - (future)	-	-	-	-	-	-	-	-	-	-
<b>Total Debt Service</b>	<b>\$ 4,460,292</b>	<b>\$ 4,292,000</b>	<b>\$ 4,292,000</b>	<b>\$ 4,318,000</b>	<b>\$ 12,792,000</b>	<b>\$ 17,334,000</b>	<b>\$ 11,538,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
Capital Spending	\$ 1,330,811	\$ 4,595,500	\$ 20,861,500	\$ 15,060,000	\$ 2,280,000	\$ 1,664,000	\$ -	\$ -	\$ -	\$ -
Debt Proceeds	-	-	-	-	-	-	-	-	-	-
Cash-Funded Capital	1,330,811	4,595,500	20,861,500	15,060,000	2,280,000	1,664,000	-	-	-	-
<b>Total Revenue Requirements</b>	<b>\$ 12,129,441</b>	<b>\$ 18,305,405</b>	<b>\$ 35,363,335</b>	<b>\$ 30,089,390</b>	<b>\$ 27,686,770</b>	<b>\$ 28,411,580</b>	<b>\$ 20,999,105</b>	<b>\$ 10,736,168</b>	<b>\$ 11,097,463</b>	<b>\$ 11,482,117</b>
<b>Revenues Over (Under) Expenses</b>	<b>\$ 18,139,175</b>	<b>\$ 7,473,301</b>	<b>\$ (8,937,745)</b>	<b>\$ (3,289,072)</b>	<b>\$ (156,663)</b>	<b>\$ (100,876)</b>	<b>\$ 8,518,879</b>	<b>\$ 1,967,387</b>	<b>\$ 1,783,151</b>	<b>\$ 1,685,755</b>
Beginning Balance	\$ (5,876,000)	\$ 12,263,175	\$ 19,736,476	\$ 10,798,731	\$ 7,509,659	\$ 7,352,997	\$ 7,252,120	\$ 15,771,000	\$ 17,738,386	\$ 19,521,537
<b>Ending Balance</b>	<b>\$ 12,263,175</b>	<b>\$ 19,736,476</b>	<b>\$ 10,798,731</b>	<b>\$ 7,509,659</b>	<b>\$ 7,352,997</b>	<b>\$ 7,252,120</b>	<b>\$ 15,771,000</b>	<b>\$ 17,738,386</b>	<b>\$ 19,521,537</b>	<b>\$ 21,207,293</b>
Reserve Target	\$ 6,178,145	\$ 8,909,281	\$ 8,054,626	\$ 6,445,760	\$ 6,343,584	\$ 4,617,313	\$ 4,293,753	\$ 4,702,726	\$ 4,691,140	\$ 4,622,053
Over/(Under) Reserve Target	\$ 6,085,030	\$ 10,827,196	\$ 2,744,105	\$ 1,063,900	\$ 1,009,413	\$ 2,634,807	\$ 11,477,246	\$ 13,035,660	\$ 14,830,397	\$ 16,585,240

## Appendix C – Detailed Capital Spending Budget

	<b>FY2016 Budget</b>	<b>FY2017 Budget</b>	<b>FY2018 Budget</b>	<b>FY2019 Budget</b>	<b>FY2020 Budget</b>	<b>FY2021 Budget</b>	<b>21/22 Budget</b>	<b>22/23 Budget</b>	<b>23/24 Budget</b>	<b>Total</b>
Thomas E. Levy Groundwater Replenishment Facility Main Gate and Fence	40,000									40,000
Thomas E. Levy Groundwater Replenishment Facility Pond Intertie	136,500									136,500
L4 Pump Station Extension (Country Club, Dunes, Mountians Courses)	4,000,000	2,052,500								6,052,500
Bermuda Dunes Country Club Connection	260,000	3,800,000								4,060,000
Eagle Falls Golf Course Connection	-	55,000	660,000							715,000
Rancho Casa Blanca Golf Course Connection	-	50,000	735,000							785,000
The Quarry Country Club Golf Course Connection	-			150,000	1,550,000					1,700,000
PGA West Weiskopf Golf Course Connection				1,745,000						1,745,000
Palm Royal Country Club Connection	-		50,000	316,000						366,000
Indian Springs Golf Club Connection	-	1,400,000								1,400,000
OASIS Expansion		13,500,000	13,500,000							27,000,000
Vehicle Replacement	159,000	4,000	115,000	69,000	114,000					461,000
<b>Total East Valley Projects</b>	<b>4,595,500</b>	<b>20,861,500</b>	<b>15,060,000</b>	<b>2,280,000</b>	<b>1,664,000</b>	-	-	-	-	<b>44,461,000</b>