



2014

# Moulton Niguel Water District Long Range Financial Plan Report

# Long Range Financial Plan Report

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## EXECUTIVE SUMMARY

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The objective of the Long-Range Financial Plan (“LRFP”) is to identify strategies and actions to ensure sufficient financial resources to enable the Moulton Niguel Water District (“MNWD” or “District”) to achieve its mission and to utilize those financial resources effectively. The plan projects the operating budget and incorporates the capital improvement program in order to determine the financial impact of future operating and capital needs and develops strategies to address those needs.

The LRFP projects financial and operational data of key operational aspects of the District such as: rate revenue, property tax revenue, cell tower leases, water purchases, utility costs, salaries and benefits, other revenues and expenses, capital expense cash flows, long-term investments, and debt service. This detailed information is linked to a summarized pro forma income statement and balance sheet to enable the District to review the impact of ongoing and future changes to MNWD’s operating cash, assets, liabilities, and fund balances. The long-range financial planning model also monitors the impacts of changes in future financial plans on the key financial ratios that the District is required to maintain for debt covenants and credit-rating purposes.

District staff, in consultation with the Board of Directors and the District’s Financial Advisor, inputs the broad-based planning parameters for the Long-Range Financial Planning model. The long-range financial planning model (also known as the “Ten-Year Cash Flow Model”) is District built, owned and operated. Updates are continually made to the model to reflect changes in existing assumptions and future outlooks to create adaptive financial management strategies. The long-range planning and annual operating and capital budgeting processes are interrelated and form a single planning and budgeting system.

The availability of funds required to finance the capital construction and operations of the District is tracked through the model. Capital typically spans across a long time horizon, hence, a ten-year plan enables the District to plan out the financing needs for future capital expenditures and determine the ability of the District to fund them through internal fund-balance reserves, grants, state loans, revenues or the issuance of debt. The main output from the long range financial plan is the identification of revenue adjustments needed to maintain the long term financial health of the District. The report includes the detailed assumptions, analyses and plans driving these results.

The District has historically maintained a strong financial position based upon conservative planning and budgeting, maintenance of adequate unrestricted cash balances, and solid debt service coverage. A major objective of the LRFP is to ensure that this strong performance continues into the future through timely and thoughtful financial analysis, budgeting, and planning. The District’s debt obligations were recently affirmed at “AAA” by Fitch Ratings with a Stable Rating Outlook.

# 1 INTRODUCTION

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Moulton Niguel Water District (District) provides water, recycled water, and wastewater service to approximately 170,000 people in South Orange County. The District's service area includes the Cities of Aliso Viejo, Laguna Niguel, Laguna Hills, and Mission Viejo, as well as portions of the City of Dana Point. All of the District's potable water supply is currently imported by the Metropolitan Water District of Southern California, treated at the Robert B. Diemer Filtration Plant in Yorba Linda and conveyed to the District via two transmission mains: the East Orange County Feeder #2 and the Allen-McColloch Pipeline. The District owns capacity in four transmission lines: the Joint Transmission Main (43 cubic feet per second [cfs]), the Eastern Transmission Main (10 cfs), the Allen-McCulloch Pipeline (35.1 cfs), and the South County Pipeline (35 cfs).

The District operates and maintains over 700 miles of distribution pipeline ranging in size from 4 inches to 54 inches in diameter. The District has 26 steel and 2 pre-stressed concrete operational-storage reservoirs on 18 sites located at the top of each of the 7 pressure zones for a total storage capacity of 70 million gallons (MG). The District also owns capacity in three potable water reservoirs operated by other water districts – 0.7 MG of storage capacity in South Coast Water District's Zone VB-1 Reservoir, 13 MG in El Toro Water District's R6 Reservoir, and 83 MG in Santa Margarita Water District's Upper Chiquita Reservoir. The District serves areas ranging in elevation from approximately 140 feet above mean sea level (ASL) to approximately 930 feet ASL through various pressure zones. The District has 27 pump stations to pump water from the lower pressure zones to the higher-pressure zones.

Historically, MNWD had average potable water sales of approximately 30,500 AF and recycled water sales of approximately 7,500 AF. The current five year average potable sales are at 26,600 AF with each of the last three years below the five year average due to aggressive conservation programs and the water budget based rate structure. The current five year average recycled water sales are 6,800 AF.

The District's Capital Improvement Program has transitioned to largely repair and replacement of assets as opposed to construction of new facilities for expansion to meet new growth. The proactive Capital Improvement Program results in approximately \$230 million of expenditures over the next 10 years.

## 2 DISTRICT STRATEGIC GOALS & POLICIES

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Moulton Niguel Water District's vision is to "lead the way, work together, and provide excellence in service". The District is a community oriented agency dedicated to serving its customers and the environment with reliable, economical, and high quality water and wastewater service. The LRFP furthers these goals by developing a financial strategy to implement needed capital investments while ensuring that the District's financial goals and policies, detailed in this section, are met.

### 2.1 CAPITAL FINANCING POLICY

The District shall utilize financing to achieve the following goals:

- Achieve an equitable allocation of capital costs/charges between current and future system users
- Continue to provide manageable rates in the near and medium term
- Minimize rate volatility
- Expedite critical infrastructure projects when needed

Capital financing shall include funding from the following revenues: capital reserves, grants, general obligation bonds, revenue bonds, certificates of participation, lease/purchase agreements, and other financing obligations permitted to be issued or incurred under California law.

Revenues net of all expenses should be maintained at a minimum 175 percent (%) of the maximum annual debt service for financial planning purposes. Annual adjustments to the District's rates will be made as necessary to maintain a minimum 175% debt service coverage ratio. Setting the coverage ratio at this level is central to the District maintaining a very strong credit rating, which in turn allows the District to have easy access to the capital markets and the ability to borrow at low interest rates. Historically the District has maintained debt service coverages in excess of 200%. Moulton Niguel Water District is currently rated AA+ by Standard and Poor's and AAA by Fitch Ratings.

### 2.2 RESERVE POLICY

The complex nature of the District's financial liabilities and risk exposure necessitate a robust reserve policy to plan for an uncertain future. There are a range of risk profiles that pose financial constraint to the District's operations ranging from needing cash on hand due to the difference in timing between revenue and expenditures to the possibility of asset failures due to natural disaster. In order to guard against the impact these risks may have on the District, reserves are set up to buffer revenue and expense volatility and reduce the need for large rate increases. This policy establishes the level of reserves necessary for maintaining the District's credit worthiness and for adequately providing for:

- Funding infrastructure replacement and refurbishment
- Economic uncertainties, extraordinary costs, and other financial impacts
- Loss of significant revenue sources such as property tax receipts or connection fees
- Local disasters or catastrophic events
- Losses not covered by insurance

- Future debt or capital obligations
- Cash flow requirements

The District's Reserve Policy was last updated in August 2014.

### 2.2.1 General Reserves

#### A. **General Operating Reserve**

The General Operating Reserve will provide liquidity for funding day-to-day operating expenses. The General Operating Reserve will support the District's cash flow needs during normal operations. There is often a delay between the receipt of revenues and the payment of expenses and it is prudent financial planning to set up a reserve to mitigate or eliminate the risk of monthly shortfalls. The target amount of General Operating Reserve will equal four months of operating expenses allowing for both monthly and bi-monthly cash flow fluctuations.

#### B. **Self-Insurance Reserve**

Self-insurance Reserve will fund property and liability insurance deductibles, losses exceeding insurance limits, and unemployment claims. The target amount of Self-Insurance Reserve will equal five times the current JPIA property insurance deductible (current deductible is up to \$50,000). The Self-Insurance Reserve will be maintained in the District's General Fund.

#### C. **Rate Stabilization Reserve**

Since one of the biggest risks and impacts on rates would be a loss of property tax revenues, to avoid large fluctuations in customer water and wastewater rates, the District will fund a Rate Stabilization Reserve to provide for losses of revenue, significant increases in water purchase costs, and other extraordinary financial impacts to revenues and expenses. The target amount of Rate Stabilization Reserve will be set equal to fifty percent of the District's 1% ad valorem property tax revenue. The Rate Stabilization Reserve will be maintained in the Rate Stabilization Fund.

### 2.2.2 Capital Improvement Reserves

The Replacement and Refurbishment (R&R) Reserve and the Emergency Reserve will constitute the District's Capital Reserves. Key objectives for accumulating these Reserves are to fund projects identified in the Long Range Financial Plan and the Ten-Year Financial Plan, to reduce the volatility of water and wastewater rate increases and to quickly repair critical assets in the event of a natural disaster or facility failure.

#### A. **Replacement and Refurbishment (R&R) Reserve**

The R&R Reserve will fund the replacement and refurbishment of existing assets in conjunction with the District's Asset Management Plan. The target's amount of R&R Reserve will equal the annual average of the ten-year expected capital spending on R&R

projects as outlined in the District's 10-year Capital Improvement Plan. All amounts will be maintained in a separate R&R Fund.

**3. Emergency Reserve**

The Emergency Reserve will provide funds to enable the District to quickly repair critical assets in the event of a natural disaster or facility failure. The target amount of the Emergency Reserve will equal 2% of the historic costs of the District's assets, as outlined in current guidelines from the Federal Emergency Management Agency (FEMA). All amounts will be maintained in a separate Emergency Fund.

**2.2.3 Debt Service Reserve**

The District will fund Debt Service Reserves, which are held in trust with a third party trustee as provided for in bond covenants. Increases and decreases to these reserves will be consistent with bond covenants. The District's accounting records show these amounts in various debt funds.

**2.2.4 Procedure for Using Reserve Funds**

**A. General Operating, and Self-Insurance**

General Operating, and Self-Insurance Reserves can be used at any time to meet cash flow requirements of District operations. Authority to use the funds will be consistent with the District's Purchasing Policy.

**B. Rate Stabilization Reserve**

The Rate Stabilization Reserve can be used at any time to meet cash flow requirements of District operations. The use of the Rate Stabilization Reserve will require Board authorization.

**C. Replacement and Refurbishment, and Emergency Reserves**

The Board of Directors will authorize use of the Replacement and Refurbishment Reserve during the budget process. The Emergency Reserve is also available for unplanned (unbudgeted) capital replacement and emergency expenditures in the event of a natural disaster or facility failure. When appropriate, the Board may adopt Reimbursement Resolutions as necessary to advance reserves prior to obtaining external capital financing. Authorization for the use of Capital Improvement Reserves for unplanned capital replacement will be consistent with the District's Purchasing Policy.

**2.2.5 Procedure for Replenishing Reserve Funds**

**A. General Operating, Self-Insurance and Rate Stabilization Reserves**

General Reserves are replenished from the District's revenues with the General Operating and Self-Insurance Reserves taking precedence to the Rate Stabilization Reserve. General

Operating and Self Insurance Reserves will be replenished by the end of each fiscal year. The Rate Stabilization Reserve will be replenished as soon as possible with replenishment to commence within 12 months of any Rate Stabilization Reserve draw to bringing the reserve in line with targets.

**B. Replacement and Refurbishment, and Emergency (Capital) Reserves**

The R&R Reserve is replenished at year end from net operating revenues. The Emergency Reserve is replenished from the District's revenue as quickly as possible after an emergency outside of the budgeting process. The District's General Manager or Director of Finance/Treasurer will do a full review of the District's Long Range Financial Plan and cash flow models to determine if corrective actions are needed to replenish the funds in the event of a draw on the Emergency Reserve.

#### 2.2.6 Procedure for Monitoring Reserve Levels

The General Manager or Director of Finance/Treasurer will submit a reserve analysis to the Board of Directors upon the occurrence of the following events:

- Board of Directors' consideration of the annual budget;
- Board of Directors' consideration of a water and wastewater rate increase; and
- When a major change in conditions threatens the reserve levels established within this Policy.

If the analysis indicates projected or actual individual reserve levels would fall 10% or more below the target levels outlined in this Policy, at least one of the following actions shall be included with the analysis:

- An explanation of why the reserve levels are not at the targeted level; and/ or
- Actions needed to bring reserve levels within the target levels prescribed.

In addition, the District will utilize the internal Long Range Financial Plan and 10 year and monthly cash flow models to determine forecasted reserve target shortfalls and report on needed corrective actions.

## 2.2.7 Summary of Reserve Targets

Table 1

Reserve	Target
Self-Insurance Reserve	\$250,000
Replacement and Refurbishment	\$17,061,912
Rate Stabilization	\$10,663,995
General Operating	\$20,262,901
Emergency	\$6,884,925
Debt Service Reserves	\$9,406,042
<b>Total Reserves</b>	<b>\$64,529,776</b>

*Note: Reserve Targets are based on end of Fiscal Year 2014 financial information and are subject to change.*

## 2.3 FINANCIAL POLICIES

The General Manager is authorized to implement the following Financial Policies to ensure the financial goals are being achieved in the District's day-to-day operations.

### 2.3.1 Financial Reporting

All District's accounting and financial reporting systems will be maintained in conformance with all state and federal laws, Generally Accepted Accounting Principles (GAAP), standards of the Governmental Account Standards Board (GASB), and strives to meet the stringent requirements of the Government Finance Officers Association (GFOA) Award for Excellence in Financial Reporting requirements.

An Annual Audit will be performed by an independent public accounting firm; with an Audit Opinion to be included with the District's published Comprehensive Annual Financial Report (CAFR).

### 2.3.2 Financial Plans

The District will use a two-year budget as a short-term planning tool, while continuing to emphasize long-range planning and ongoing effective District management.

The second planning tool will be a 10-Year Cash Flow Model that includes all relevant revenues and expenditures pertaining to the District.

### 2.3.3 Budget Appropriations

The District will strive to maintain a balanced operating budget for all funds, with total ongoing revenues equal to or greater than total ongoing expenditures, so that at year-end, all these funds have a positive fund balance and the General Fund reserve balance is maintain as required.

### 2.3.4 Enterprise Funds - Rates

The District will set water and wastewater rates at levels which, in addition to other revenues and available cash balances, fully cover the total direct and indirect costs – including operations and maintenance, capital outlay, reserve requirements, and cash flow and debt service requirements.

The District will review and adjust enterprise fees and rate structure as required to ensure that they remain appropriate, equitable and reflect the cost of service.

Article XIII D of Proposition 218 requires that fees for water and wastewater services meet strict cost of service requirements including:

1. Revenues for the fee cannot exceed the cost to provide the service
2. Revenues for the fee cannot be used for something other than what the fee was imposed for
3. Property owner must be able to use or have service immediately available to them

In addition, the District will utilize water for beneficial use and target wasteful usage using its water budget based rate structure.

**California Constitution Article X Section 2:** *“It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. [...]”*

### 2.3.5 Capital Management – Infrastructure

The District will maintain a long-range fiscal perspective through the use of Capital Improvement Plan (CIP) to maintain the quality of District water and wastewater infrastructure. The purpose of a long-term CIP is to systematically plan, schedule, and finance capital projects to ensure cost-effectiveness, as well as conformance to established District policies. The Plan will be updated annually in conjunction with the District’s budget preparation, including anticipated funding sources.

### 2.3.6 Risk Management

The District will identify and quantify all areas of financial and operating risk, and prepare contingencies for those risks, including legal liabilities, infrastructure maintenance, refurbishment and replacement, emergency response, contract and employee obligations.

### 2.3.7 Investments

Investments and cash management are the responsibility of the District Treasurer or designee. The District’s primary investment objective is to achieve a reasonable rate of return while minimizing the potential for capital losses arising from market changes or issuer default. Accordingly, the following factors will be considered in determining individual investment placements: 1.) Safety, 2.) Liquidity, and 3.) Yield. The priorities of these factors are further established by the adopted Statement of Investment Policy.

### 2.3.8 Procurement

The purchasing and procurement system will encourage on all purchases and sales to the extent required by law for Special Districts or by District policy competition. The District’s Purchasing Policy was last updated in September of 2014.

### 3 MODELING ASSUMPTIONS

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The District's 10 Year Cash Flow Model ("Model") uses the most recent audited financial information and Board adopted budgets for the applicable years in the Model. The District's fiscal year (FY) starts July 1 of each year. For example, Fiscal Year 2014 runs from July 1, 2013 to June 30, 2014.

The Model employs assumptions to calculate future year revenues, expenses, and cash balances. Model assumptions are reviewed as necessary and each time the Model is significantly updated. Where reasonable, the District utilizes inflation projections by the California Department of Finance for the Los Angeles region.

Staff and consultants reviewed and revised the Model assumptions for the October 2014 Long Range Financial Plan.

#### 3.1 INFLATION ASSUMPTIONS

- Utilities: there are three percentages assumed in the Model. The first is 3.9% for the first year of the Model, 3.6% for the second year of the model and 3.4% for the third year of the model. Years four through 10 assume a 3.6% inflation rate which is the average over the first three years. The first three years are based on the California Department of Finance's projection for electricity and fuel rates in Southern California.
- Benefits: there are three percentages assumed in the Model. The first is 0.7% for the first year of the Model. The second is 5.5% for the next two years of the Model. The third is 1.8% for years four through ten of the Model. The first three years of the Model percentages represent staff's estimate at this time of what health and retirement increases could be in the near future based on the current four year Memorandum Of Understanding with the Moulton Niguel Water District Employee Association (MOU), which expires June 30, 2017. Beginning with the first pay period in FY 2016 and FY 2017, the employees and the District will share future total plan cost increases for the HMO and PPO health plans on a 50/50 basis. The Model assumes the inflation rate of 1.8% or the CPI average rate for the long-term average CPI rate for Southern California as calculated by the California Department of Finance. Historically, and incorporated into the current MOU, the District has been industry leading in apportioning the pension liabilities between the employee and the employer. At the conclusion of the current MOU, District employees in Tier 1 will be contributing their full share of the pension liability, equal to 7%. Employees in Tiers 2 and 3 have been paying their full share of the pension liability since 2009 and 2013 respectively.
- Salaries: there are three percentages assumed in the Model. The first is 2.5% for the first year of the model for performance based salary increases. In years two and three the Model uses 4.5%, the sum of 2.5% for performance based salary increases and 2.0% for cost of living adjustments. Years four through ten assume a 2.5% annual increase for performance based salary increases. The first three years of the Model's assumptions are taken from the District's MOU. The remaining six years reflect the average annual increases for performance based salary increases. The District has been very proactive throughout the years to ensure that costs associated with salaries are appropriate to retain a quality work force while being fiscally prudent. The current

adopted MOU takes into consideration salary increases based on performance as well as cost of living adjustments based on the change to the CPI with a minimum increase of 2% and maximum increase of 3.25% for fiscal years 2016 and 2017.

- General: general inflation factors used in the Model are shown in Table 2. Updated CPI factors used are from data provided by the California Department of Finance.
- South Orange County Wastewater Authority (SOCWA): an inflation factor of 1.8% is used in the Model. Operational expenses (SOCWA) can vary from year to year. Due to the variety of expenses bundled into SOCWA’s operating costs, the costs are inflated using the average long-term CPI rate by the California Department of Finance.
- Cell Tower Revenue: a 1.8% factor is used in the Model. Cell tower revenue is projected forward with the General Inflater representative of regional CPI trends forecast by the California Department of Finance. Nextel and Metro PCS are in the process of decommissioning 13 cell tower sites throughout the District. The Model accounts for the inflation of retained sites and the decommissioning of sites as the lease contracts expire.
- Capital: The Capital Improvement Plan is inflated using a 0.5 % inflation rate to reflect both the uncertainty in future capital expenses and in the uncertainty of the rate of inflation on those expenses.

Table 2

Inflation Factors					
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Utilities	3.9%	3.6%	3.4%	3.6%	3.6%
Benefits	3.5%	5.5%	5.5%	1.8%	1.8%
Salaries	2.5%	4.5%	4.5%	2.5%	2.5%
Property	2.0%	2.0%	2.0%	2.0%	2.0%
General	1.8%	1.8%	1.8%	1.8%	1.8%
Investment Return	1.5%	2.0%	3.0%	3.0%	3.0%

Inflation Factors					
	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Utilities	3.6%	3.6%	3.6%	3.6%	3.6%
Benefits	1.8%	1.8%	1.8%	1.8%	1.8%
Salaries	2.5%	2.5%	2.5%	2.5%	2.5%
Property	2.0%	2.0%	2.0%	2.0%	2.0%
General	1.8%	1.8%	1.8%	1.8%	1.8%
Investment Return	4.0%	4.0%	4.0%	4.0%	4.0%

### 3.2 WATER SUPPLY ASSUMPTIONS

The water supply portfolio used as a base case to project the cost of the water the District purchases is based on projects currently under construction such as the Baker Water Treatment Plant (Baker) or current supplies from the Metropolitan Water District of Southern California (MWD) via the Municipal Water District of Orange County (MWDOC). In addition, in the Long Range Water Reliability Plan, the District is evaluating other long term projects to further reduce District demand of imported supplies. The Model has the capacity to analyze these projects as the scope and timeline becomes more certain. Currently, the District imports all of its potable water supplies from MWD via MWDOC. In FY 2016, Baker is planned to start operations and ramps up to full capacity in FY 2017. The Baker Water Treatment plant will provide the District approximately 8,471 acre feet annually from treating untreated MWD water. Internally, the District has non-revenue water of 11% which reflects the previous five years' average. Non-revenue water may consist of water used on District properties, water used for operational purposes such as hydrant flushing, or water loss due to leaks or meter inaccuracies. Currently, the District is evaluating water loss control programs to lower this value, but to maintain a conservative estimate, the District is projecting water loss at current levels. Water purchases/supply is set in the Model from calculated demand adjusted by the 11% non-revenue water.

Table 3

Water Supply	FY 2015	FY 2016	FY 2017
<b>Usage (Calculated from revenue projections for future years)</b>			
Usage (AF)	25,634	25,634	25,634
Non-Revenue Water	11%	11%	11%
Total Demand w/Water Loss (AF)	28,802	28,802	28,802
<b>Supply Portfolio</b>			
Treated Imported Water (AF)	28,802	27,362	20,331
Untreated Imported Water (AF)	-	1,440	8,471

*Note: For Fiscal Years 2018 and beyond, the base case for the Financial Plan assumes the same supply portfolio and usage as in FY 2017.*

Below are the projected supply cost escalation rates based on information from MWD staff. In Section 6 of this document, the Model has an additional scenario at twice the baseline cost

increases. These scenarios provide bounds on how volatile cost trends can impact District operation.

Table 4

Projected Rates and Charges Rates and Charges Effective January 1st	Proposed	Projections				
	2014	2015	2016	2017	2018	2019
MWD's Readiness-to-Serve Charge (\$Millions)	\$ 166	\$ 158	\$ 152	\$ 152	\$ 152	\$ 157
RTS	17%	-5%	-4%	0%	0%	3%
MWD's Capacity Charge (\$/cfs)	\$ 8,600	\$ 10,700	\$ 10,300	\$ 10,400	\$ 10,500	\$ 11,100
Capacity Charge	34%	24%	-4%	1%	1%	6%
<b>MWD TREATED Full Service Rate Projection by MWD Staff</b>						
MWD's Treated Tier 1	\$ 890	\$ 925	\$ 946	\$ 978	\$ 1,007	\$ 1,040
	\$ 43	\$ 35	\$ 21	\$ 32	\$ 29	\$ 33
	5.1%	3.9%	2.3%	3.4%	3.0%	3.3%
MWDOC Melded Rate*	To Be Determined Annually by MWDOC					
MWDOC Increment Rate**	\$ 3.00	\$ 1.00	\$ -	\$ -	\$ -	\$ -
<b>Total MWDOC Rate (\$/AF)</b>	<b>\$ 893.00</b>	<b>\$ 926.00</b>	<b>\$ 946.00</b>	<b>\$ 978.00</b>	<b>\$ 1,007.00</b>	<b>\$ 1,040.00</b>
MWDOC Meter Charge (\$/meter)	\$ 8.00	\$ 8.50	\$ 9.50	\$ 9.50	\$ 9.75	\$ 10.00

Projected Rates and Charges Rates and Charges Effective January 1st	Projections				
	2020	2021	2022	2023	2024
MWD's Readiness-to-Serve Charge (\$Millions)	\$ 167	\$ 187	\$ 212	\$ 234	\$ 258
RTS	6%	12%	13%	10%	10%
MWD's Capacity Charge (\$/cfs)	\$ 11,100	\$ 11,400	\$ 11,800	\$ 12,000	\$ 12,100
Capacity Charge	0%	3%	4%	2%	1%
<b>MWD TREATED Full Service Rate Projection by MWD Staff</b>					
MWD's Treated Tier 1	\$ 1,083	\$ 1,122	\$ 1,160	\$ 1,203	\$ 1,248
	\$ 43	\$ 39	\$ 38	\$ 43	\$ 45
	4.1%	3.6%	3.4%	3.7%	3.7%
MWDOC Melded Rate*	To Be Determined Annually by MWDOC				
MWDOC Increment Rate**	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total MWDOC Rate (\$/AF)</b>	<b>\$ 1,083.00</b>	<b>\$ 1,122.00</b>	<b>\$ 1,160.00</b>	<b>\$ 1,203.00</b>	<b>\$ 1,248.00</b>
MWDOC Meter Charge (\$/meter)	\$ 10.25				

Source: Metropolitan Water District of Southern California.

[\*] Due to lower than expected water sales and the amount in the Tier 2 contingency fund, MWDOC does not anticipate paying Tier 2 rates, therefore the MWDOC Melded Rate is currently suspended and set at "0". MWD Staff will monitor the fund and demand projections annually to determine if the melded rate needs to be reinstated.

[\*\*] MWDOC's increment rate will decrease annually ending in 2016 per the MWDOC settlement agreement with the member agencies. MWDOC's revenue will be collected on the Meter Charge.

Utilizing all the factors detailed above results in the annual operating revenue requirement projections shown in Table 5. Note that FY 2015 and FY 2016 are based on the current biannual budget. FY 2017 and beyond are projected based on the costs in FY 2016.

Table 5

Revenue Requirements	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Water Purchases	\$ 28,514,417	\$ 28,790,898	\$ 28,894,760	\$ 29,796,280	\$ 30,809,912
O&M	\$ 11,696,198	\$ 11,009,831	\$ 11,287,422	\$ 11,571,658	\$ 11,863,767
Salaries	\$ 9,565,115	\$ 10,192,137	\$ 10,650,783	\$ 10,917,053	\$ 11,189,979
Benefits	\$ 4,106,504	\$ 4,323,317	\$ 4,553,652	\$ 4,635,252	\$ 4,718,193
SOCWA	\$ 8,450,820	\$ 8,630,000	\$ 8,782,992	\$ 8,940,381	\$ 9,100,355
JPA	\$ 1,050,370	\$ 1,254,000	\$ 1,296,127	\$ 1,342,945	\$ 1,391,453

Revenue Requirements	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Water Purchases	\$ 32,105,621	\$ 33,457,850	\$ 34,744,329	\$ 36,108,427	\$ 37,581,872
O&M	\$ 12,163,991	\$ 12,472,579	\$ 12,789,789	\$ 13,115,888	\$ 13,451,151
Salaries	\$ 11,469,729	\$ 11,756,472	\$ 12,050,384	\$ 12,351,643	\$ 12,660,434
Benefits	\$ 4,802,494	\$ 4,888,175	\$ 4,975,257	\$ 5,063,760	\$ 5,153,705
SOCWA	\$ 9,262,954	\$ 9,428,214	\$ 9,596,176	\$ 9,766,879	\$ 9,940,362
JPA	\$ 1,441,714	\$ 1,493,790	\$ 1,547,748	\$ 1,603,654	\$ 1,661,580

### 3.3 DEBT FINANCING ASSUMPTIONS

In evaluating future financing needs the Model makes assumptions on the initial and ongoing costs associated with issuing debt. Below in Table 6 are the projected terms for debt issuance mechanisms the District has historically implemented. These are based on conservative estimates of long-term trends. The District will work with its Financial Advisor and financing team to secure the optimum rates and terms at the time of issuance.

Table 6

Debt Mechanism	Interest Rate	Term (Years)	Issuance Cost
<b>Certificates of Participation</b>	5.0%	30	\$250,000
<b>General Obligation Bonds</b>	5.0%	30	\$250,000
<b>State Revolving Fund Loans</b>	2.7%	20	\$150,000

## 4 REVENUE REQUIREMENTS AND CURRENT REVENUE

### 4.1 REVENUE REQUIREMENTS

The revenue requirements for the District are composed of two components:

- Annual operating costs that rise in proportion to specific inflators, outlined in Figure 1.
- Capital costs that are one-time expenses, such as new infrastructure, studies or repairs.

Table 7 below shows the summary of district-wide revenues, new debt issuances and revenue requirements.

Table 7

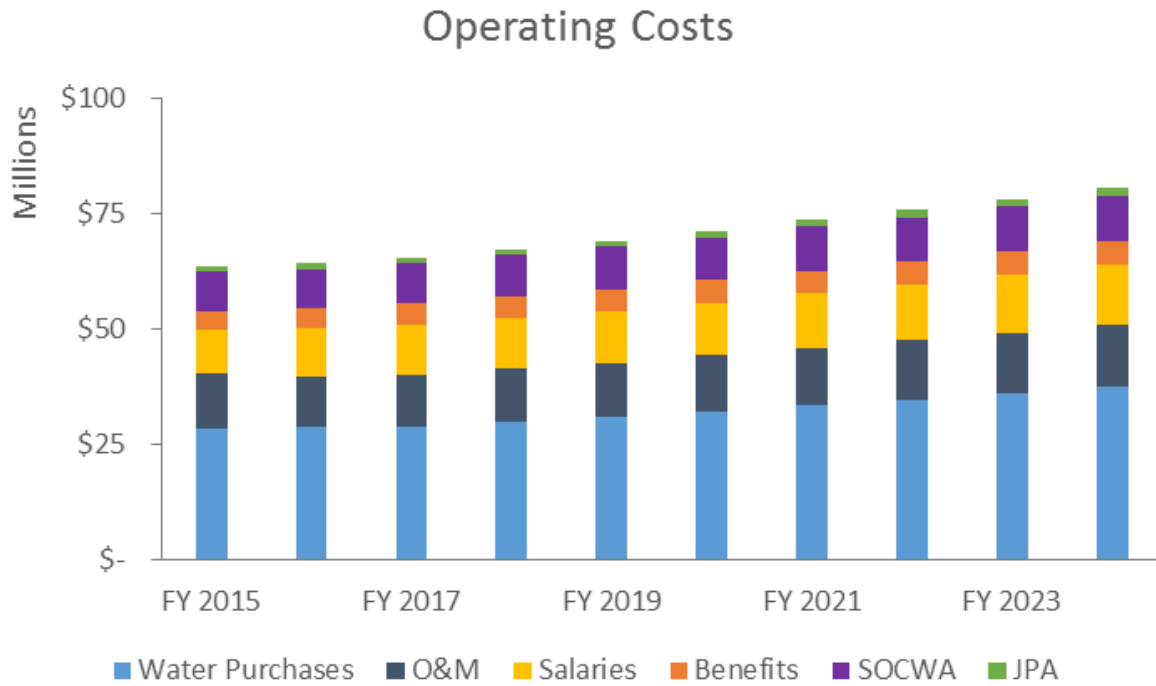
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
<b>Revenue</b>					
Current Rate Revenue	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523
Proposed Adjustments	\$ 832,567	\$ 5,113,512	\$ 8,251,223	\$ 10,759,856	\$ 13,104,227
Non-Rate Revenue	\$ 37,789,257	\$ 35,083,587	\$ 34,920,757	\$ 30,499,338	\$ 30,900,482
Debt Issuance	\$ -	\$ -	\$ 29,750,000	\$ -	\$ -
<b>Revenue Requirements</b>					
Debt Service	\$ 15,532,173	\$ 15,385,635	\$ 17,310,474	\$ 12,357,982	\$ 12,008,634
Operating Expenses	\$ 23,172,809	\$ 24,399,454	\$ 25,283,555	\$ 25,835,630	\$ 26,399,981
Capital Expenses	\$ 47,094,872	\$ 44,081,261	\$ 29,973,214	\$ 10,247,403	\$ 12,168,732

	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Revenue</b>					
Current Rate Revenue	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523	\$ 47,649,523
Proposed Adjustments	\$ 15,532,646	\$ 18,059,040	\$ 20,687,399	\$ 23,421,880	\$ 26,266,807
Non-Rate Revenue	\$ 32,176,470	\$ 31,117,566	\$ 31,579,037	\$ 32,047,149	\$ 32,509,634
Debt Issuance	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Revenue Requirements</b>					
Debt Service	\$ 11,725,018	\$ 10,234,232	\$ 10,227,717	\$ 10,031,239	\$ 8,843,644
Operating Expenses	\$ 26,976,890	\$ 27,566,652	\$ 28,169,565	\$ 28,785,936	\$ 29,416,080
Capital Expenses	\$ 15,092,287	\$ 16,039,949	\$ 15,779,281	\$ 18,318,156	\$ 19,865,093

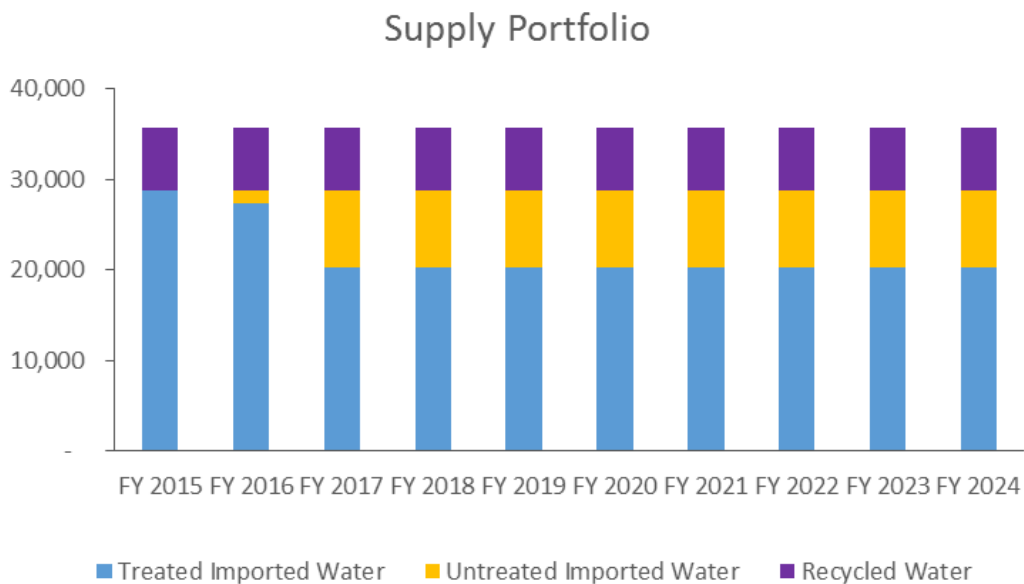
The following figures and charts will breakdown the overall revenues and revenue requirements into their components and Section 5 will show the plan moving forward. Operations and maintenance expenses in the Long Range Financial Plan use actual FY 2014 expenses and budgeted expenses for FY 2015 and FY 2016. After FY 2016, operating expenses are projected based on the inflation factors discussed in Section 0. Figure 1 depicts a breakdown of operating costs over the next 10 years into their major components.

Figure 1



The largest operating expense is water purchases. Currently, the District purchases all of its potable water supply from the MWD via MWDOC. However, in 2017 the regional Baker Water Treatment Plant will come online to ultimately meet approximately 25% of total potable water demand. Recycled water makes up 22% of average total water demand. Figure 2 shows the forecast water supply portfolio.

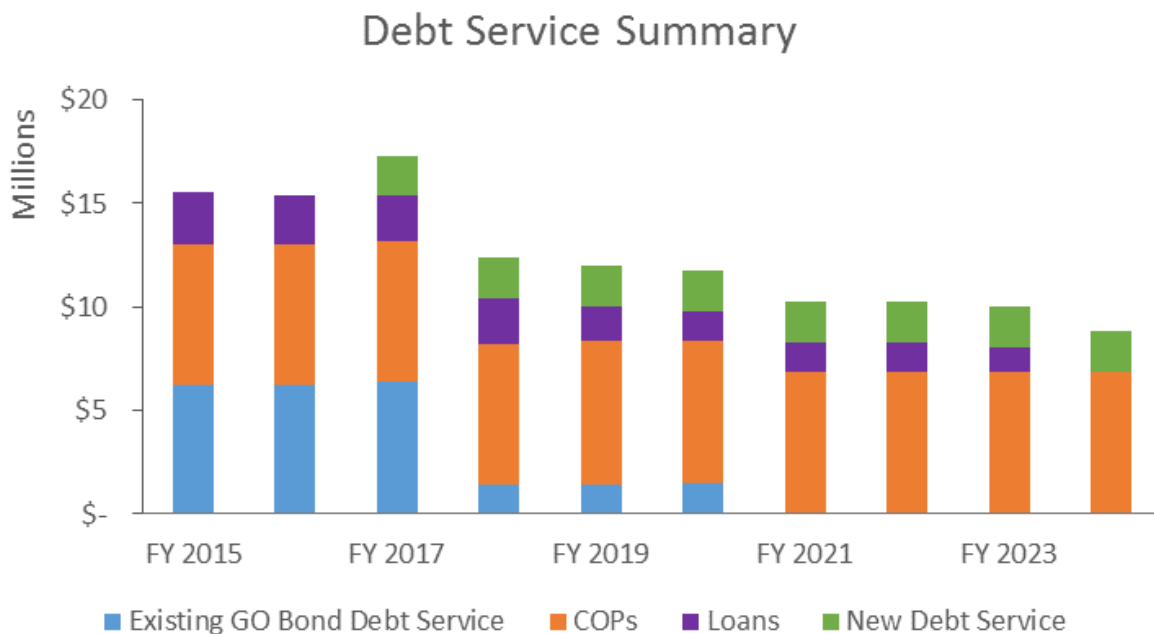
Figure 2



The Model has the capability to analyze the financial impacts of a mixed portfolio with specified supply allocations based on projects currently discussed such as expanded recycled water deliveries, groundwater banking, water transfers, local ocean desalination and brackish desalination of the San Juan Basin aquifer. The supply portfolio presented above is the base case used unless specified in a given scenario.

The financial plan includes the existing debt service schedules and debt projected issuances to smooth out large expected capital projects. The baseline case projects a debt issuance of a Certificate of Participation in 2017 for \$30 million to smooth rate revenue adjustments in the near term. Figure 3 provides a breakdown of both District-wide existing debt service by category and a projected debt issuance in FY 2017 to fund capital expenditures and smooth rate adjustments.

Figure 3



*Note: Loans include DWR, 3 SRF, and 2 CIEDB Loans. The General Obligation bonds have bi-annual ad valorem property tax revenue equal to its bi-annual debt service payments.*

Capital expenses are projected for Fiscal Years 2015 through 2024 from the District’s 10 Year Capital Improvement Plan. Due to a combination of aging infrastructure with forecasted replacement and rehabilitation as well as large regional capital projects, the District has an expected CIP of approximately \$230 Million over the next 10 years. \$25 million of that is for the Baker Water Treatment Plant to increase local water reliability. Currently, the District has budgeted for upgrades to its headquarters and plant facilities with net capital expenditures of \$23 million over the next three years. Additionally, the District has approximately \$62 million in capital expenses over the next ten years attributable to its share of capital investments with the South Orange County Wastewater Authority. Figure 4 provides a summary of the major capital expenses in the District’s 2014 Capital Improvement Plan.

Figure 4

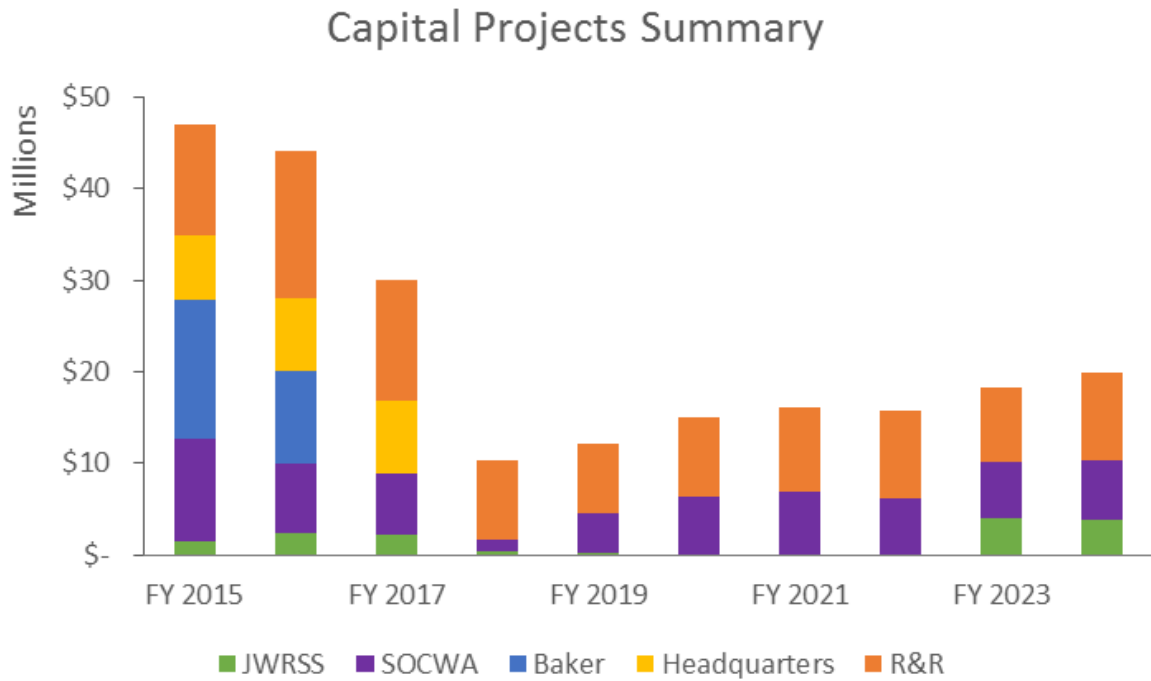
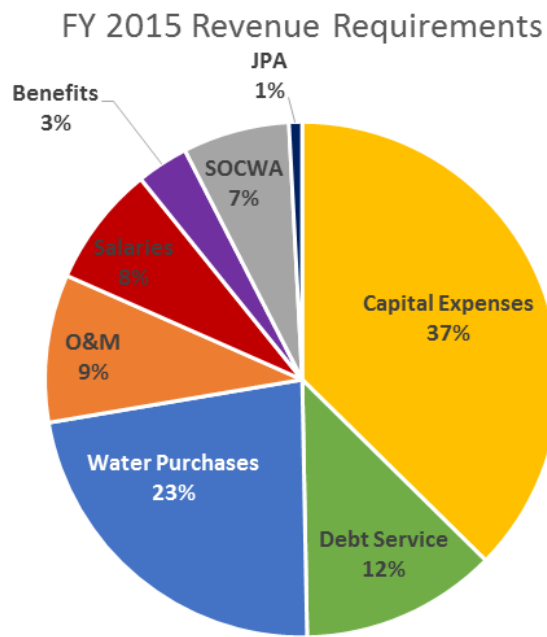


Figure 5 below shows combined operating and capital revenue requirements for FY2015, the first year of the model.

Figure 5



## 4.2 CURRENT REVENUE

The two largest sources of revenue derive from rate revenue from the three systems (water, recycled water, and wastewater) and ad valorem property tax revenue collected from taxable property owners within the District's service area.

### 4.2.1 Water Rates

The current water volumetric rate structure is composed of five tiers with the following tier widths for residential customers:

Tier 1 = Up to the Indoor Water Budget

Tier 2 = Indoor Water Budget up to the Outdoor Water Budget

Tier 3 = Usage above the water budget up to 125% of the water budget

Tier 4 = Usage above 125% of water budget up to 150% of the water budget

Tier 5 = Usage above 150% of water budget

The indoor water budget, or Tier 1, is determined by allotting 65 gallons per capita per day (gpcd), multiplying by the number of days in the billing cycle and the number of people in the household. Originally, customers are assumed to have four people in the household for single family residential and two to three people for multi-family housing. If a customer has a different household size, they can file a variance to adjust the number of people used to calculate their indoor water budget. The equation for Tier 1 is as follows:

**Tier 1.** Indoor Allocation = (Household Size) x (65 GPCD) x (Conversion Factor) x (Days Billed)

The outdoor water budget, or Tier 2, is determined from irrigation area, crop factor and local climate condition as measured by evapotranspiration. The conversion factor converts from gallons to hundred cubic feet (ccf). The District used a combination of geospatial analysis and in-person site visits to determine the irrigable area for each meter. The crop coefficient used is for turf grass or 0.8, currently the most common landscape feature in the District's service area. The equation for Tier 2 is as follows:

**Tier 2.** Outdoor Allocation = (ETo) x (Irrigation Area) x (Conversion Factor) x (Crop Coefficient)

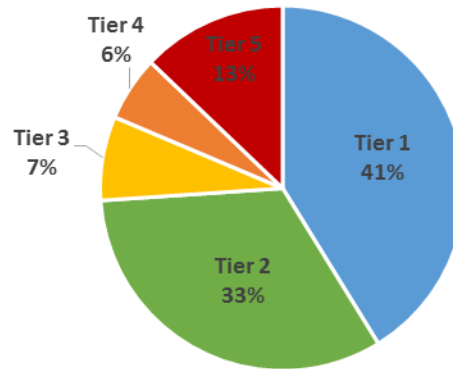
Most commercial customers have two metered connections, an irrigation meter and a commercial meter. To determine the water budget for commercial meters, the District uses a 3-year average of each month to determine the total water budget. The first 20 hundred cubic feet (ccf) of a commercial meter's allocation is in Tier 1. The remainder of the commercial meter's water budget is in Tier 2. All irrigation accounts have their Tier 1 and Tier 2 water budgets based on the outdoor allocation equation with the first 20 units of the outdoor allocation allotted to Tier 1.

For all customers, usage above the basic use allocation results in payment of higher rates, increasing to over \$11 per ccf in Tier 5. The revenue derived from the Tiers 4 and 5 above the Tier 2 rate is used to fund conservation and water use efficiency programs, education, outreach, and program administration. In addition, the water use efficiency revenue can be used to study and/or construct new water supply projects.

Figure 6 presents the respective revenue share received from each of the water budget tiers for Fiscal Year 2013-14 usage:

Figure 6

Current Volumetric Revenue by Tier



The District provides potable water and recycled water to customers via volumetric metered rates. Each customer receives a monthly or bi-monthly bill. Single family residential and residential irrigation customers are billed monthly while commercial, commercial irrigation and multi-family customers are billed bi-monthly. The District’s allocation-based rate structure was implemented on July 1, 2011, and is shown in Table 8 for residential customers.

Table 8

Water Budget Based Rate Structure July 2011 to Present (Residential Tier Widths)		
Tier	Allocation	Rate (per ccf)
1	Up to Indoor Water Budget	\$1.38
2	Indoor Water Budget up to Total Water Budget	\$1.54
3	From 101 to 125% Water Budget	\$2.75
4	From 126 to 150% Water Budget	\$5.51
5	Above 151% of Water Budget	\$11.02

The current rate structure for the commercial and irrigation customers is also a five tier allocation-based rate structure with Tier 3 up to 110 percent of the water budget and Tier 4 up to 120 percent of the water budget with the Irrigation rate structure shown in Table 9 and the Commercial Rate Structure shown in Table 10.

*Table 9*

<b>Water Budget Based Rate Structure July 2011 to Present (Irrigation Tier Widths)</b>		
<b>Tier</b>	<b>Allocation</b>	<b>Rate (per ccf)</b>
<b>1</b>	First 20 ccf	\$1.38
<b>2</b>	20 ccf up to Total Water Budget	\$1.54
<b>3</b>	From 101 to 110% Water Budget	\$2.75
<b>4</b>	From 111 to 120% Water Budget	\$5.51
<b>5</b>	Above 121% of Water Budget	\$11.02

*Table 10*

<b>Water Budget Based Rate Structure July 2011 to Present (Commercial Tier Widths)</b>		
<b>Tier</b>	<b>Allocation</b>	<b>Rate (per ccf)</b>
<b>1</b>	First 20 ccf	\$1.38
<b>2</b>	20 ccf up to Total Water Budget	\$1.54
<b>3</b>	From 101 to 110% Water Budget	\$2.75
<b>4</b>	From 111 to 120% Water Budget	\$5.51
<b>5</b>	Above 121% of Water Budget	\$11.02

Recycled water rates follow a similar water budget based rate structure and are shown in Table 11 and Table 12.

Table 11

Water Budget Based Rate Structure July 2011 to Present (Recycled Water)		
Tier	Allocation	Rate (per ccf)
1	First 20 ccf	\$1.23
2	20 ccf up to Total Water Budget	\$1.23
3	From 101 to 110% Water Budget	\$2.20
4	From 111 to 120% Water Budget	\$4.41
5	Above 121% of Water Budget	\$8.81

Table 12

Water Budget Based Rate Structure July 2011 to Present (Recycled Water w/ Storage)		
Tier	Allocation	Rate (per ccf)
1	First 20 ccf	\$1.11
2	20 ccf up to Total Water Budget	\$1.11
3	From 101 to 110% Water Budget	\$1.98
4	From 111 to 120% Water Budget	\$3.97
5	Above 121% of Water Budget	\$7.93

Single family residential water meters are all assumed to be either 5/8", 3/4" or 1" and billed at the same current monthly rate of \$10.36 per month. The District applies both a monthly service charge and volumetric usage charge for private fire protection. These charges are reflected below in Table 13.

Table 13

Fire Protection Charges	
Description	Rate
Volumetric Usage per ccf	\$2.29
Monthly Meter Charge	\$12.56

Non-residential customers who are billed bi-monthly have the following bi-monthly charges reflected in Table 14.

Table 14

Basic Service Charge (Non-Residential Bi-Monthly Customers)	
Meter Size	Bi-Monthly Rate
5/8", 3/4", 1"	\$20.72
1 1/2"	\$69.06
2"	\$110.50
3"	\$241.74
4"	\$414.40
6"	\$863.34
8"	\$1,243.20
10"	\$2,002.94

#### 4.2.2 Wastewater Rates

The wastewater system has two customer groupings: residential customers and non-residential customers. Residential customers are billed at the volumetric rate schedule reflected in Table 15 in addition to a monthly charge of \$11.14.

Table 15

<b>Wastewater Volumetric Rate Structure (Residential)</b>	
<b>Tier Width</b>	<b>Rate (per ccf)</b>
Up to 25 ccf	\$0.88
Above 25 ccf	\$0.00

Non-residential customers (typically commercial) are assigned to one of the 4 classes below based on land-use; the rates for each of the non-residential customer classes are based on strength assumptions for a given land use and the rates are shown in Table 16:

Class 1: Typical users include residential, bank, car washes, churches, department and retail stores, Laundromats, professional offices, schools and colleges.

Class 2: Typical users include beauty and barber shops, hospital and convalescent facilities, commercial laundry, repair shops, service stations and veterinary hospitals.

Class 3: Typical users include hotels with dining facilities, markers with garbage disposals, mortuaries and fast-food restaurants.

Class 4: Typical users include restaurants, auto-steam-cleaning facilities and bakeries.

Table 16

<b>Wastewater Volumetric Rate Structure (Non-Residential)</b>	
<b>Customer Class</b>	<b>Rate (per ccf)</b>
Class 1	\$0.88
Class 2	\$1.19
Class 3	\$1.51
Class 4	\$1.82

In addition to the volumetric charge, the wastewater system applies a current bi-monthly charge of \$22.28 to all non-residential or bi-monthly customers.

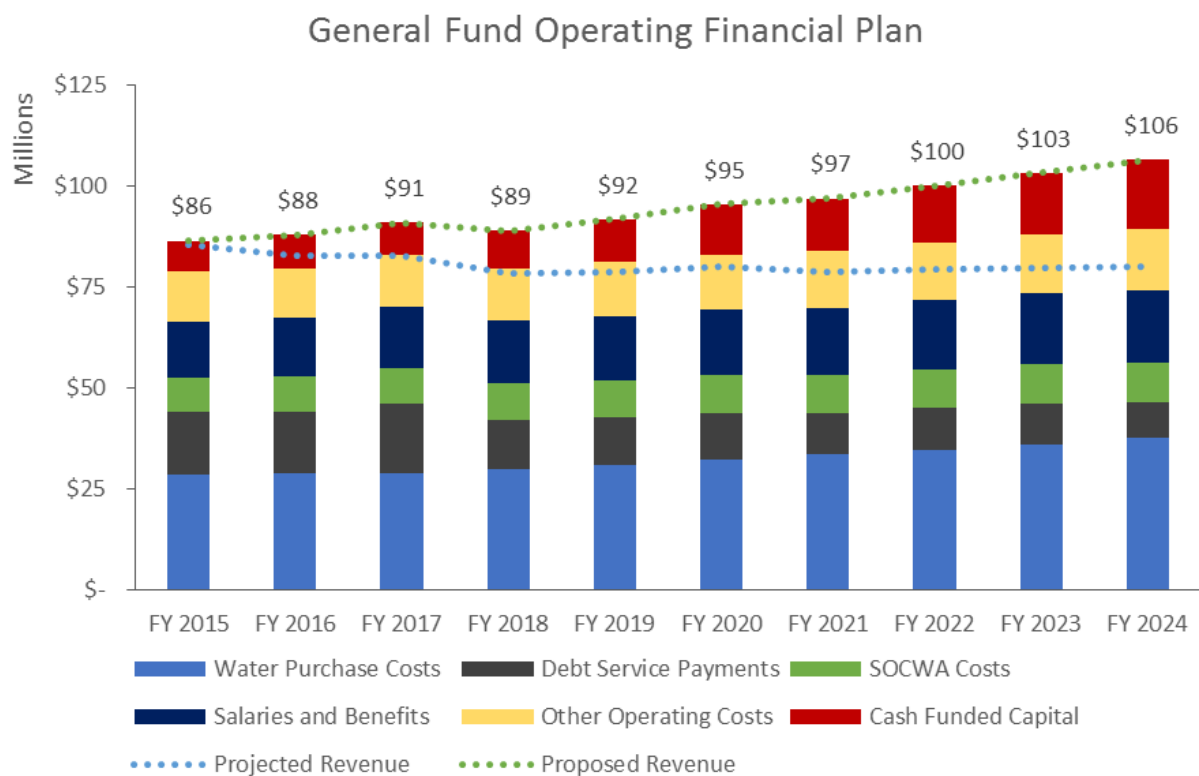
## 5 PROPOSED FINANCIAL PLAN

The LRFPI incorporates both the revenue requirements and assumed inflationary factors for future operating costs. The District is currently planning to draw down cash reserves to target reserve levels adopted in the District’s Reserve Policy in order to fund capital improvement projects in the near future then structure rate adjustments and debt financing to maintain cash balances at targeted reserve levels in the future.

### 5.1 GENERAL FUND SUMMARY

Figure 7 is the operating financial plan that breaks down the major component costs and compares the proposed revenue stream to the status quo.

Figure 7

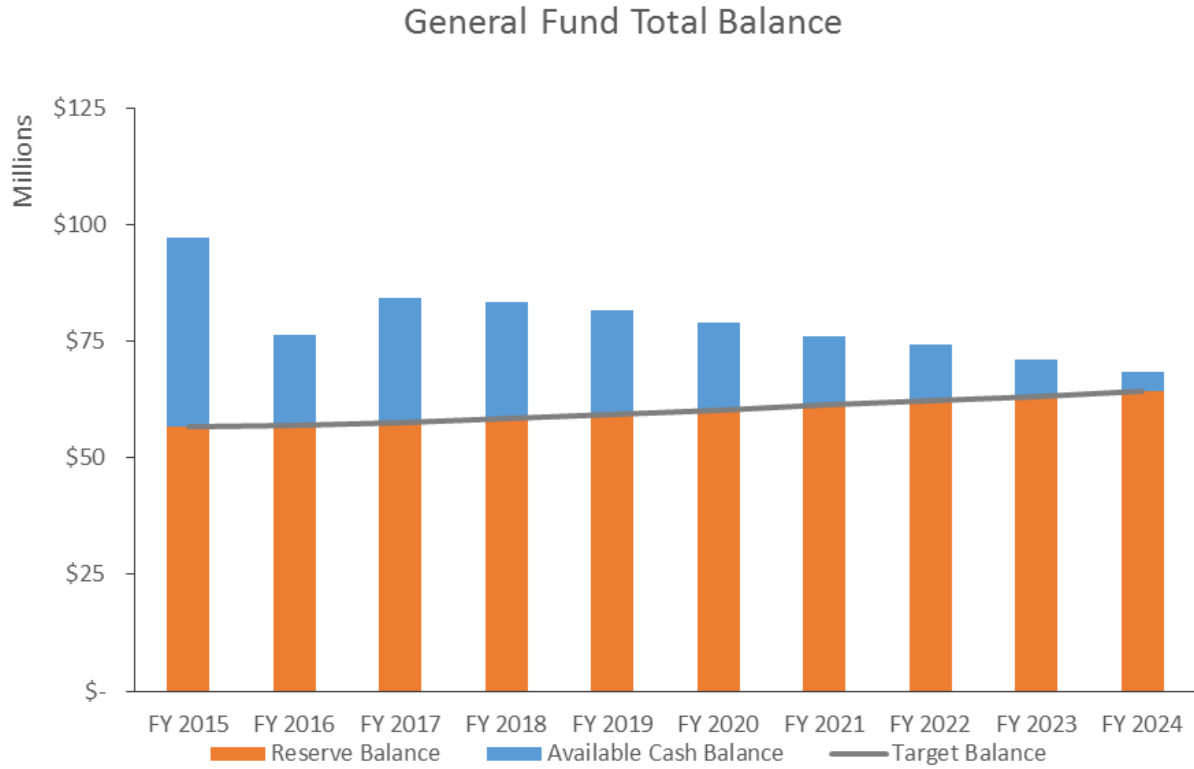


Operating Net is total revenue net operating expenses that is used to cash fund the most of the Capital Improvement Plan. These funds can also be used to replenish reserve funds if they drop below reserve targets. The proposed revenue requirements equate to a 7% revenue increase occurring April 1, 2015 and 7% on January 1, 2016. When structuring future rate increases and debt issuance, the District needs to be cognizant of the impacts to the debt coverage ratio for which the District has a policy minimum of 1.75x.

In addition, the proposed revenue adjustments provide adequate cash balances to meet the current reserve policy cash requirements. Projected available cash balances and reserve cash balances are shown

in Figure 8. Available cash balances can be used to cash fund capital projects and provide additional policy options and the ability to meet unforeseen risks.

Figure 8



The current debt coverage ratio has approached the policy minimum coverage ratio of 1.75 as shown in Figure 9. The proposed revenue adjustments bring the coverage ratio back above the benchmark coverage ratio, which represents the industry average for AAA rated public agencies of 2.06. Starting in Fiscal Year 2018, debt payments start to decrease on the 2009 Certificates of Participation and the 2014 General Obligation Bonds. As these bonds expire the debt coverage ratio climbs and provides room for future debt issuances.

Figure 9

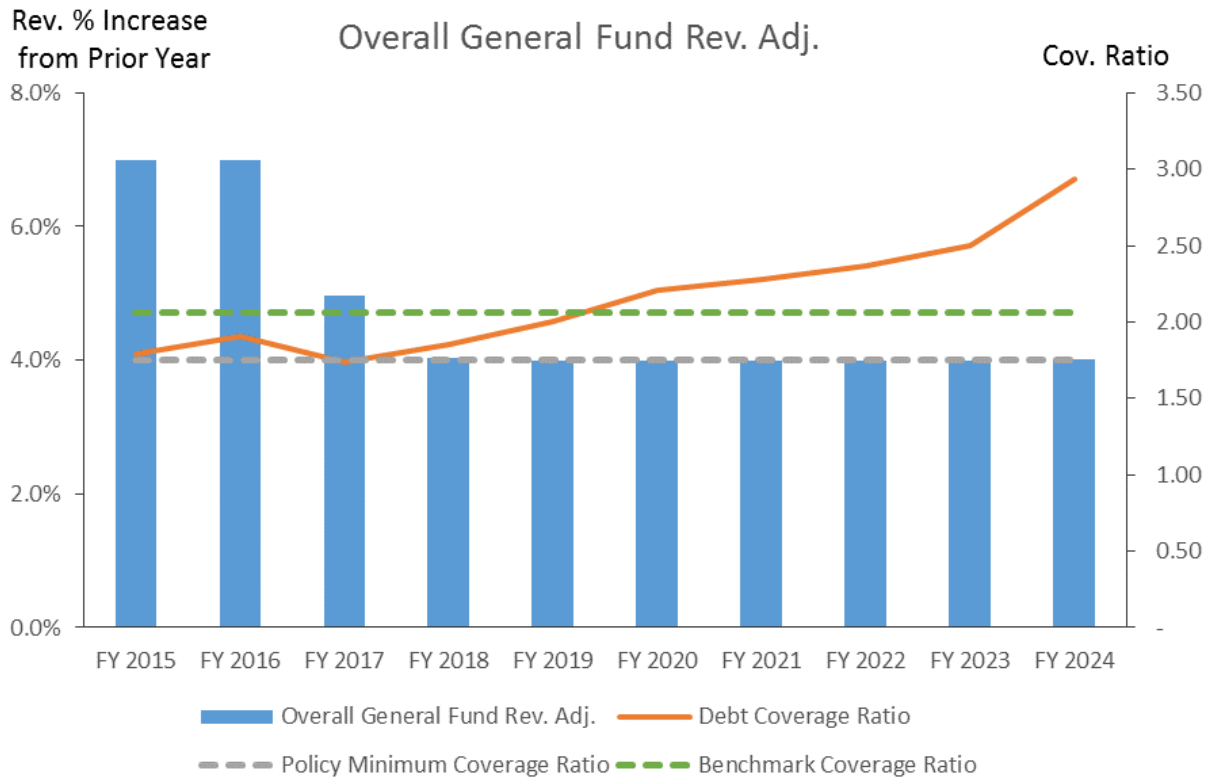


Table 17 below, the Pro-Forma, shows the overall revenues, operating expenses, debt service, capital expenses, and fund balances for the General Fund. Ending cash balances are broken down by funds allocated to meet specific reserve requirements per the District’s reserve policy and available cash for capital projects.

Table 17

# Water, Recycled Water, and Sewer General Fund Pro-Forma

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>Revenue</b>										
Potable Water Sales	\$ 26,590,296	\$ 28,526,809	\$ 29,977,791	\$ 31,218,836	\$ 32,373,933	\$ 33,571,769	\$ 34,813,924	\$ 36,102,039	\$ 37,437,815	\$ 38,823,014
Sewer Sales	\$ 17,116,794	\$ 19,113,474	\$ 20,539,641	\$ 21,584,365	\$ 22,566,211	\$ 23,581,691	\$ 24,642,867	\$ 25,751,796	\$ 26,910,626	\$ 28,121,605
Recycled Water Sales	\$ 4,774,999	\$ 5,122,751	\$ 5,383,314	\$ 5,606,177	\$ 5,813,606	\$ 6,028,709	\$ 6,251,771	\$ 6,483,087	\$ 6,722,961	\$ 6,971,711
Ad Valorem Property Tax Revenue	\$ 21,848,500	\$ 22,063,500	\$ 22,520,214	\$ 22,986,527	\$ 23,462,642	\$ 23,965,648	\$ 24,480,064	\$ 25,006,173	\$ 25,544,264	\$ 26,094,636
Cellular Lease Income	\$ 1,740,000	\$ 1,720,000	\$ 1,631,340	\$ 1,609,630	\$ 1,541,185	\$ 1,560,736	\$ 1,588,581	\$ 1,616,881	\$ 1,645,643	\$ 1,674,874
Connection Fees	\$ 616,846	\$ 1,238,160	\$ 179,150	\$ 179,150	\$ 179,150	\$ 179,150	\$ 179,150	\$ 179,150	\$ 179,150	\$ 179,150
Tax Credit Subsidy	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147	\$ 1,331,147
AMP RPOI	\$ 23,663	\$ 21,915	\$ 21,915	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Income	\$ 4,034,466	\$ 600,452	\$ 496,793	\$ 496,793	\$ 496,793	\$ 496,793	\$ 496,793	\$ 496,793	\$ 496,793	\$ 496,793
General Obligation Property Tax	\$ 6,227,747	\$ 6,240,500	\$ 6,365,900	\$ 1,419,500	\$ 1,449,875	\$ 1,490,375	\$ -	\$ -	\$ -	\$ -
Investment Income	\$ 1,966,889	\$ 1,867,913	\$ 2,374,298	\$ 2,476,591	\$ 2,439,689	\$ 3,152,621	\$ 3,041,831	\$ 2,948,893	\$ 2,850,151	\$ 2,733,034
<b>Total Revenues</b>	<b>\$ 86,271,346</b>	<b>\$ 87,846,622</b>	<b>\$ 90,821,503</b>	<b>\$ 88,908,716</b>	<b>\$ 91,654,231</b>	<b>\$ 95,358,639</b>	<b>\$ 96,826,129</b>	<b>\$ 99,915,959</b>	<b>\$ 103,118,551</b>	<b>\$ 106,425,963</b>
<b>Revenue Requirements</b>										
Water Purchases	\$ 28,514,417	\$ 28,790,898	\$ 28,894,760	\$ 29,796,280	\$ 30,809,912	\$ 32,105,621	\$ 33,457,850	\$ 34,744,329	\$ 36,108,427	\$ 37,581,872
O&M	\$ 11,696,198	\$ 11,009,831	\$ 11,287,422	\$ 11,571,658	\$ 11,863,767	\$ 12,163,991	\$ 12,472,579	\$ 12,789,789	\$ 13,115,888	\$ 13,451,151
Salaries	\$ 9,565,115	\$ 10,192,137	\$ 10,650,783	\$ 10,917,053	\$ 11,189,979	\$ 11,469,729	\$ 11,756,472	\$ 12,050,384	\$ 12,351,643	\$ 12,660,434
Benefits	\$ 4,106,504	\$ 4,323,317	\$ 4,553,652	\$ 4,635,252	\$ 4,718,193	\$ 4,802,494	\$ 4,888,175	\$ 4,975,257	\$ 5,063,760	\$ 5,153,705
SOCWA	\$ 8,450,820	\$ 8,630,000	\$ 8,782,992	\$ 8,940,381	\$ 9,100,355	\$ 9,262,954	\$ 9,428,214	\$ 9,596,176	\$ 9,766,879	\$ 9,940,362
JPA	\$ 1,050,370	\$ 1,254,000	\$ 1,296,127	\$ 1,342,945	\$ 1,391,453	\$ 1,441,714	\$ 1,493,790	\$ 1,547,748	\$ 1,603,654	\$ 1,661,580
Existing GO Bond Debt Service	\$ 6,227,747	\$ 6,240,500	\$ 6,365,900	\$ 1,419,500	\$ 1,449,875	\$ 1,490,375	\$ -	\$ -	\$ -	\$ -
COPs	\$ 6,796,676	\$ 6,791,776	\$ 6,794,076	\$ 6,788,476	\$ 6,906,601	\$ 6,902,226	\$ 6,902,351	\$ 6,896,726	\$ 6,895,101	\$ 6,892,101
Loans	\$ 2,507,751	\$ 2,353,360	\$ 2,198,955	\$ 2,198,463	\$ 1,700,615	\$ 1,380,874	\$ 1,380,338	\$ 1,379,448	\$ 1,184,595	\$ -
New Debt Service	\$ -	\$ -	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543	\$ 1,951,543
<b>Total Debt Service</b>	<b>\$ 15,532,173</b>	<b>\$ 15,385,635</b>	<b>\$ 17,310,474</b>	<b>\$ 12,357,982</b>	<b>\$ 12,008,634</b>	<b>\$ 11,725,018</b>	<b>\$ 10,234,232</b>	<b>\$ 10,227,717</b>	<b>\$ 10,031,239</b>	<b>\$ 8,843,644</b>
<b>Total Revenue Requirements</b>	<b>\$ 78,915,597</b>	<b>\$ 79,585,818</b>	<b>\$ 82,776,211</b>	<b>\$ 79,561,550</b>	<b>\$ 81,082,293</b>	<b>\$ 82,971,519</b>	<b>\$ 83,731,312</b>	<b>\$ 85,931,400</b>	<b>\$ 88,041,489</b>	<b>\$ 89,292,746</b>
Revenues Over (Under) Expenses	\$ 7,355,749	\$ 8,260,803	\$ 8,045,292	\$ 9,347,166	\$ 10,571,938	\$ 12,387,120	\$ 13,094,816	\$ 13,984,559	\$ 15,077,062	\$ 17,133,217
<b>Change in Fund Balance</b>										
Capital Expenses	\$ 47,094,872	\$ 44,081,261	\$ 29,973,214	\$ 10,247,403	\$ 12,168,732	\$ 15,092,287	\$ 16,039,949	\$ 15,779,281	\$ 18,318,156	\$ 19,865,093
Bond Issuance New Cash	\$ -	\$ -	\$ 29,750,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Beginning Balance	\$ 151,978,955	\$ 112,239,832	\$ 76,419,375	\$ 84,241,453	\$ 83,341,216	\$ 81,744,423	\$ 79,039,255	\$ 76,094,123	\$ 74,299,401	\$ 71,058,308
Ending Balance	\$ 112,239,832	\$ 76,419,375	\$ 84,241,453	\$ 83,341,216	\$ 81,744,423	\$ 79,039,255	\$ 76,094,123	\$ 74,299,401	\$ 71,058,308	\$ 68,326,432
Reserves	\$ 56,554,635	\$ 56,933,832	\$ 57,584,302	\$ 58,396,100	\$ 59,270,909	\$ 60,246,197	\$ 61,253,612	\$ 62,251,563	\$ 63,289,280	\$ 64,377,077
Available Cash Balance	\$ 40,602,973	\$ 19,485,542	\$ 26,657,152	\$ 24,945,116	\$ 22,473,514	\$ 18,793,058	\$ 14,840,511	\$ 12,047,838	\$ 7,769,027	\$ 3,949,355
Debt Coverage Ratio	1.79	1.90	1.74	1.85	2.00	2.21	2.28	2.37	2.50	2.94

## 5.2 WATER USE EFFICIENCY FUND SUMMARY

The Water Use Efficiency fund has seen a large budget increase for Fiscal Years 2015 and 2016 compared to previous spending levels with an approximate doubling of the planned expenditures for rebates to help promote conservation efforts throughout the District. In particular, the turf removal rebates have projected large-scale projects with significant fund outlays. The District is evaluating the feasibility and effect of continued levels of spending at the multi-million dollar range in order to encourage more efficient water usage and is using the funds to target large rebate projects in the current drought. In addition, large regional water supply reliability projects are being evaluated in the Long Range Water Reliability Plan and may be funded by cash reserves in the Water Use Efficiency Fund.

The District has more than doubled the rebate expenses in the budget for FY 2015. Due to the extreme increase, the District will reevaluate if further increases are possible or if based on the results of the Long Range Water Reliability Plan and future needs, they should be redirected. The District's increased investment in conservation efforts and the rebate program draw down current Water Use Efficiency fund balances. As the fund balance decreases the District will revisit the optimal budgeting for projected fund revenues and expenses.

## 6 MANAGEMENT OF FINANCIAL RISK

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In evaluating the robustness of the District's finances, the Model may be used to test the sensitivity of the key assumptions. Three main assumptions were tested:

Scenario 1: Double the assumption on expected MWD rate increases. (~7% annual compound rate increase up from a projected approximately 3.5% to 4% average compound annual growth rate)

Scenario 2: 4% outdoor water demand reduction is analyzed from the flat demand shown in the Long Range Financial Plan as the baseline.

Scenario 3: Repair and replacement CIP actual spending at 75% of adopted budgeted.

### 6.1 SCENARIO 1: INCREASED COST OF WATER

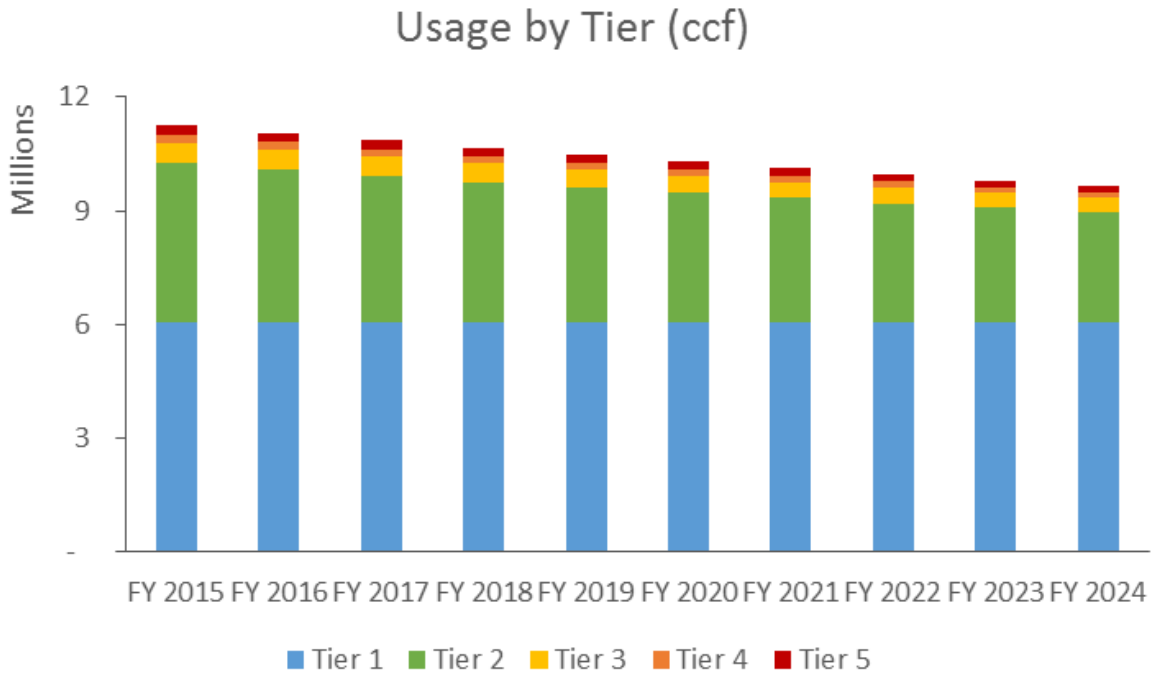
Assuming MWD's estimated annual rate increases on the wholesale supply cost double to approximately a 7% increase annually compounded, supply costs by FY 2024 increase to \$46.3 million, up from the baseline scenario of FY 2024 supply costs at \$36.5 million. The net effect is a decrease from a baseline ending balance in FY 2024 from \$73.6 million to \$24.1 million. The average annual compounded water cost increase in Southern California from 2001 to 2011 was approximately 7%. Hence, while MWD predicts more modest rate increases, historical supply price changes support a more costly future. In order to make the District's LRFP more robust to fluctuations in supply costs, one option is for the Board of Directors to adopt a policy to pass-through any MWD rate increases or newly imposed charges. AB 3030 allows for water and wastewater agencies to adopt in its Proposition 218 process the discretion to make adjustments to rates in future years based on changes to wholesale or inflation in future years outside of the Prop. 218 process with 30 days of notice to all customers. Another option is to issue more debt in the early years (FY 2016 to 2018) to smooth out the large capital expenditures and gradually raise rates to meet increases in water supply costs. A third option, is that the District could simply wait and issue larger rate increases if supply costs outpace expectations. One possible shortfall of this strategy is any delay in raising rates to meet the increased supply costs would result in an even larger than expected rate increase to make up for the difference in revenue and expenses. This can be offset by the use of the District's rate stabilization reserve.

### 6.2 SCENARIO 2: CONSERVATION

Moulton Niguel Water District has invested heavily in the past three years to instill a conservation ethic in its service area through the combination of a water budget based rate structure and aggressive conservation rebate programs. The baseline financial plan assumed status quo water usage at FY 2014 levels. In order to evaluate the robustness of the District's finances to further reductions in water consumption, a scenario is evaluated where annual outdoor water demands are reduced by 4%

With annual outdoor water conservation of 4% per year between FY 2015 and FY 2024 the net reduction in outdoor demand of this aggressive conservation is 34% resulting in a FY 2024 net demand of 9.6 million ccf. Figure 10 shows the decreases to outdoor and over-allocation usage with 4% compounded annual demand reduction.

Figure 10



The District’s rates are structured so that any incremental revenue collected from the higher tiers is allocated to the Water Use Efficiency fund for conservation effort expenditures. Therefore, the decrease in sales from the higher tiered water does not affect the District’s General Fund or daily operating revenues. This flexibility in finance structure allows the District to focus conservation efforts without concern for the financial impacts of decreased water sales.

In the near future the District is intending to include methods of implementing the various water supply response levels of its Water Shortage Contingency Plan through the rate structure. This additional rate structure mechanism will allow the District to react timely and appropriately to any decrease in water supply.

### 6.3 SCENARIO 3: ADJUSTED CIP SPENDING

Repair and replacement cost contained in the CIP represents \$100 million out of the \$230 million adopted 10-year CIP budget. If actual spending for repair and replacement CIP is at 75% of the budgeted expenditures, the revenue adjustment for FY 2016 and beyond is reduced by 1.9% in order to maintain ending cash balances above target in FY2024. This represents a \$2.5 million annual reduction in projected expenses.

Repair and replacement CIP represents funding needed to offset the wear and tear from time and use to the infrastructure needed to operate the water system. Lowering spending could have long-term financial consequences greater than the immediate term cost savings with necessity of emergency repairs and regional economic loss from outages.

## 7 FINANCIAL MANAGEMENT TOOLS

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When considering revenue requirements and the need to periodically increase revenues the District has a number of tools that may be utilized as outlined in this section.

### 7.1 FINANCIAL POLICIES

The District proactively manages its financial policies as part of its ongoing fiduciary responsibility. Any revision to current financial policies will change the District's cash and investments portfolios which will result in adjustments to future required revenues.

### 7.2 OPERATIONAL EFFICIENCIES

The District is continually looking for ways to create operational efficiencies while maintaining a high level of service. Historically the District utilized consulting firms to conduct planning and analytical tasks but the District recently started utilizing more in-house staff to perform these functions with the assistance of outside expertise. Maintenance of in house expertise will enable the District to perform this analysis on a more frequent basis.

Options available to the District continue to include outsourcing or contracting certain services, or continuing to develop more efficient processes to achieve current District operations. As each opportunity is assessed, the District evaluates the cost of internally maintain the operation compared to outsourcing or contracting out the services. Each evaluation also includes the comparison of quality of work product and service provided in addition to a cost analysis.

### 7.3 COOPERATIVE AGREEMENTS

The District continually looks for ways to save rate payers money in order to mitigate the effects of future cost increases. This can be achieved in part by seeking out cooperative agreement opportunities for both capital and operational needs. The District coordinates with surrounding agencies on capital projects that may bring regional water reliability benefit and costs sharing. They also look to find operational cost savings by participating in shared service opportunities with other local agencies.

### 7.4 OUTSIDE FUNDING SOURCES

The District is continually monitoring markets and the industry to identify any applicable outside funding sources that may be relevant to District capital improvements or operations, such as grant funding opportunities or low rate debt. The District is also frequently monitoring economic markets to realize savings on current debt obligations.

### 7.5 RATES AND FEES

The District can use the rate structure to determine revenue generated from each system and recovery of costs from variable or fixed revenue components. In addition to system rate revenue the District will also periodically review its miscellaneous fees and charges to determine applicability and adjustments needed to recover the cost of operation applicable to the fees.

## 7.6 DISTRICT OWNED PROPERTY

The District owns a number of properties that house District facilities as well as multiple vacant properties. The District has the ability to evaluate future projected needs for each property and aspire to achieve the maximum value possible from each asset. Property management options include the expanding operations, leasing land, or exchange or sale of District owned land to maximize potential revenues from that source.

Each of the components in this section are reviewed on a periodic basis and updated if necessary to reflect changes to operations, the economy or the environment.

## 8 CONCLUSIONS & RECOMMENDATIONS

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As the District transitions its focus from developing infrastructure to maintaining and replacing infrastructure, the LRF in conjunction with other long-term planning efforts provide a roadmap for future needs and actions. Currently, the District is evaluating the rate structures for all three enterprise systems, implementing an aggressive Capital Improvement Plan, and evaluating local and regional supply reliability projects in the Long Range Water Reliability Plan. The updated Model provides the ability to evaluate the outputs of these planning processes in addition to changes in financial determinants such as usage. With all the future considerations to account for, the Model provides a tool to create adaptive management strategies to be evaluated as major assumptions fluctuate.

In order to maintain District financial stability based on expected future expenditures and revenues, the following overall adjustments to revenue collected are suggested in Table 18:

*Table 18*

General Fund Revenue Adjustments		
Implementation Day & Month	Implementation Year	Revenue Adjustment
April 1	FY 2015	7.0%
January 1	FY 2016	7.0%
January 1	FY 2017	5.0%
January 1	FY 2018 – FY 2024	4.0%

The revenue adjustments in Table 18 represent needed additional revenue collected from rates but could be offset from non-rate revenue growth beyond baseline assumptions and achieved utilizing the financial management tools outlined in section 7 of this report. The District will diligently monitor the major variables that impact recommendations such as:

- Capital Improvement Plan budgeting and spending
- Credit markets
- Water usage distribution and conservation
- MWD and MWDOC wholesale rate adjustments

The proposed revenue adjustments maintain the District’s debt coverage ratio above the Board adopted policy to maintain a 1.75 coverage ratio. In addition, the revenue generates the needed funds to meet the funding requirements of Ten Year Capital Improvement Plan with the caveat that the Financial Plan assumes a \$30 million debt issuance in FY 2017. Lastly, the Financial Plan maintains reserve and available cash balances to hedge risk exposure for the agency. The District will provide updated recommendations based on any significant changes to the baseline reflected in this Financial Plan.