

## FOOTHILL MUNICIPAL WATER DISTRICT RATES AND CHARGES

As a water wholesale agency, Foothill Municipal Water District (FMWD or District) does not directly charge residential and other end-use customers for supplies. Instead, FMWD distributes imported water that it receives from the Metropolitan Water District of Southern California (MWD or Metropolitan) to its member agencies. The FMWD member agencies deliver water to their retail customers based on the cost of service to those agencies.

These costs are broken into the following categories:

- I. MWD Charges**
  - a. Full Service Treated Imported Water Commodity Rate – Tier 1/Tier 2
  - b. Readiness-to-Serve Charge
  - c. Capacity Charge
- II. Energy Charges**
- III. FMWD Charges**
  - a. Administrative and Operations and Maintenance Charge
  - b. Capital Improvement and Rehabilitation Charge
  - c. Assessment for Kinneloa Irrigation District

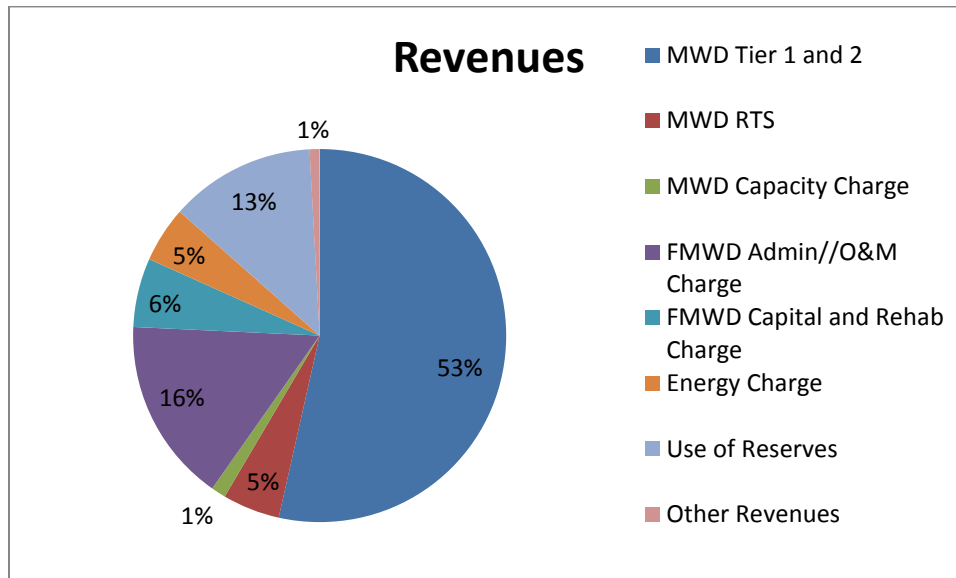
In order to derive the charges, FMWD staff must first prepare a budget. FMWD staff prepares a budget on a fiscal year basis. Once the preliminary budget is prepared, FMWD staff reviews it, along with associated preliminary rates and charges and reserve levels, with its retail agencies for comments. FMWD staff next reviews these items with the District’s Finance Committee for further input. Staff then reviews the revised preliminary budget, rates and charges and reserves again with the retail agencies for any further input. The District then holds a Board workshop where the preliminary budget, rates and charges and reserves are reviewed. Revisions are again presented to the retail agencies. A final preliminary budget, rates and charges and reserve levels are presented to the Board in June for action.

The table below shows the expenses from the preliminary budget adopted for fiscal Year (July through June) 2013-2014:

	<b>FY 2012-2013 Budget</b>	<b>FY 2013-2014 Budget</b>
MWD Charges	\$ 7,606,996	\$ 7,731,053
Energy Charges	\$ 551,103	\$ 624,445
FMWD Charges*	\$ 3,305,357	\$ 4,584,065
<b>Grand Total</b>	<b>\$ 11,463,456</b>	<b>\$ 12,939,562</b>

\*FMWD Charges includes Administrative and Operation and Maintenance Charge, Capital Improvement and Rehabilitation Charge, Assessment for Kinneloa Irrigation District, and Depreciation

The chart below reflects the revenues from rates and charges used to pay the expenses listed above. FMWD charges make up about 20% of revenues for the District. In addition, in fiscal year 2013-2014, the District has the unusual situation of using about \$1.6 million from reserves that had been previously set aside with the intention of paying the replacement of emergency standby generators, a rather expensive capital project.



The discussion in the following pages describes the assessed rates and charges by FMWD and identifies the amounts for each retail agency. All charges are on a calendar year basis although budgets are set on a fiscal year (July through June) basis.

## I. MWD Charges

FMWD is currently 100 percent reliant on imported water supplies from MWD to distribute to its member agencies. **FMWD passes through all of the rates and charges associated with purchasing MWD imported water into its service area to its member agencies proportional to their own imported water purchases.** The MWD Rate Structure applicable to FMWD is provided below:

### *Purchase Orders*

Effective January 1, 2003, the District entered into a ten-year purchase order agreement with MWD. The agreement established an Initial Base Firm Demand (IBFD) for the District of 12,219 acre-feet per year. A tier 1 limit was established for water purchases which totaled 90% of the IBFD or 10,997 acre-feet per year. Purchases greater than the Tier 1 rate limit are purchased at the Tier 2 rate.

Additionally, the District also committed to purchase 60% of its IBFD for the entire length of the ten year purchase order contract or 73,314 acre-feet. As of December 31, 2012, the District had purchased 103,506 acre-feet. Although the agreement was set to expire effective December 31, 2012, it was extended for two more years through December 31, 2014. Historically, Metropolitan included a water rate for replenishment service. This rate made water supplies available for local storage at a discount compared to the full service rate in exchange for the ability of an agency to interrupt those deliveries when called upon by Metropolitan. Water sold under this rate was not included as part of the IBFD. This rate has been eliminated by Metropolitan. At its November 2012 meeting, Metropolitan's Board approved an action item to include historical replenishment deliveries in the Tier 1 limit. Thus, FMWD's IBFD increased to 13,081 acre-feet per year and its Tier 1 limit increased to 11,773 acre-feet per year. Its purchase order commitment based on the extended two-years and increased IBFD increased to 87,975 acre-feet for the twelve-year period. Foothill has already met this obligation with its purchases.

FMWD allocates the Tier 1 limit to its member agencies based on historic purchases by those agencies.

The following is each agencies modified IBFD and Tier 1 allocation (acre-feet per year):

<b>Agency</b>	<b>Base Allocation (IBFD)</b>	<b>Tier 1 Allocation</b>
Crescenta Valley Water District (CVWD)	2,393.3	2,154.0
La Cañada Irrigation District (LCID)	2,946.7	2,651.9
La Flores Water Company (LFWC)	776.2	698.6
Lincoln Avenue Water Company (LAWC)	1,813.9	1,632.5

Mesa Crest Water Company (MCWC)	744.2	669.8
Rubio Cañon Land & Water Assoc. (RCLWA)	1,037.9	934.1
Valley Water Company (VWC)	3,368.6	3,031.7
<b>TOTAL</b>	<b>13,080.8</b>	<b>11,772.6</b>

*MWD Full Service Treated Imported Water Commodity Rate – Tier 1/Tier 2*

The MWD imported water commodity rate is either Tier 1 or Tier 2 and is comprised of the following:

- **Tier 1 Supply Rate:** Recovers the cost of maintaining a reliable amount of supply.
- **Tier 2 Supply Rate:** Set at MWD’s cost of developing additional supply to encourage efficient use of local resources.
- **System Access Rate:** Recovers a portion of the costs associated with the delivery of supplies.
- **Water Stewardship Rate:** Recovers the cost of MWD’s financial commitment to conservation, water recycling, groundwater clean-up and other local resource management projects.
- **System Power Rate:** Recovers MWD’s power costs for pumping supplies to Southern California.
- **Treatment Surcharge:** Recovers the costs of treating imported water.

A table displaying these rates is provided below:

Category	Calendar Year 2013	Calendar Year 2014
Tier 1 Supply Rate (\$/AF)	\$140	\$148
Tier 2 Supply Rate (\$/AF)	\$290	\$290
System Access Rate (\$/AF)	\$223	\$243
Water Stewardship Rate (\$/AF)	\$41	\$41
System Power Rate (\$/AF)	\$189	\$161
Treatment Surcharge (\$/AF)	\$254	\$297
<b>Total Tier 1 Treated Rate (\$/AF)</b>	<b>\$847</b>	<b>\$890</b>
<b>Total Tier 2 Treated Rate (\$/AF)</b>	<b>\$997</b>	<b>\$1,032</b>

MWD has a meter at its connection with FMWD near the Rose Bowl. MWD charges FMWD monthly according to the amount of water taken the previous month through this meter at the connection.

FMWD, in turn, meters each of its retail agencies and charges the Tier 1 or Tier 2 rate based on monthly deliveries of imported water through each agency's meter and the above Tier 1 allocation to each agency.

*MWD Readiness-to-Serve Charge*

MWD's readiness-to-serve (RTS) charge recovers a portion of MWD's debt service costs associated with regional infrastructure improvements and is determined by the member agencies' firm imported deliveries for the past ten years. Each member agency of MWD is allocated a percentage share of this yearly fixed charge. A standby charge, assessed by MWD on tax rolls, is used to offset the RTS charge by agency. In October of each year, a reconciliation is made of the total amount assessed to FMWD versus the amount collected through the tax roll and the amount billed to FMWD through its water bill. If the amount collected is higher than the amount assessed, FMWD receives a credit on its water bill and passes it through to its agencies. If the amount collected is less than the amount assessed, FMWD has an additional charge for the difference on its water bill and must pass through this charge to its agencies.

A table displaying this charge and how it relates to FMWD is provided below:

	<b>CY 2013</b>	<b>CY 2014</b>
Total MWD RTS Charge	\$142,000,000	\$166,000,000
FMWD Share of RTS - %	0.61%	0.61%
FMWD Share of RTS - \$	\$866,200	\$1,011,235
Standby Charge Adjustment from MWD for FY 2012-13	\$(298,782)	\$(298,363)
<b>FMWD RTS Revenue Required</b>	<b>\$567,418</b>	<b>\$712,872</b>

FMWD allocates this charge among its own member agencies in the same methodology MWD has allocated its RTS to its member agencies. The charge is allocated in proportion to a ten-year rolling average of imported water sales on a per acre foot basis:

	<b>CY 2013 Annual Charge</b>	<b>CY 2014 Annual Charge</b>
CVWD	\$114,343	\$143,202
LCID	\$139,462	\$178,840
LFWC	\$33,571	\$41,831
LAWC	\$69,903	\$82,249
MCWC	\$36,302	\$46,657
RCLWA	\$40,011	\$45,367
VWC	\$133,826	\$174,727
<b>Total</b>	<b>\$567,418</b>	<b>\$712,872</b>

*MWD Capacity Charge*

The MWD capacity charge was developed to recover the costs of providing distribution capacity use during peak summer demands. The aim of this charge is to encourage member agencies to reduce peak day demands during the summer months (May 1 – September 30) and shift usages to the winter months (October 1 – April 30), which will result in more efficient utilization of MWD existing infrastructure and defers capacity expansion costs. Currently, MWD’s capacity charges for CY 2013 and CY 2014 are \$6,400/cfs and \$8,600/cfs respectively.

The capacity charge is applied to an agency’s maximum usage rate, which is the highest daily average usage (per cfs) for the past three summer periods. A table displaying this charge to FMWD for CY 2013 is provided below:

Peak Flow 2009 (cfs)	Peak Flow 2010 (cfs)	Peak Flow 2011 (cfs)	3-Year Max (cfs)	Capacity Charge
24.3	20.2	19.0	24.3	\$155,520

FMWD uses the peak daily flow to allocate the capacity charge to its retail agencies. The peak daily flow at FMWD’s service connection may not match the flows to the retail agencies for the same day due to operational requirements. For CY 2013, the capacity charge to the retail agencies based on their flow during the FMWD peak is as follows:

Agency	Flow for CY 2013 Charge	Percentage of Flow for CY 2013 Charge	CY 2013 Annual Charge
CVWD	6.1	27%	\$41,427
LCID	6.5	28%	\$44,143
LFWC	0.9	4%	\$6,112
LAWC	4.3	19%	\$29,202
MCWC	1.7	7%	\$11,545
RCLWA	-	0%	-
VWC	3.4	15%	\$23,090
<b>Total</b>	<b>22.9</b>	<b>100%</b>	<b>\$155,520</b>

A table displaying this charge to FMWD for CY 2014 is provided below:

Peak Flow 2010 (cfs)	Peak Flow 2011 (cfs)	Peak Flow 2012 (cfs)	3-Year Max (cfs)	Capacity Charge
20.2	19.0	17.6	20.2	\$173,720

For CY 2014, the capacity charge to the retail agencies based on their flow during the FMWD peak is as follows:

<b>Agency</b>	<b>Flow for CY 2014 Charge</b>	<b>Percentage of Flow for CY 2014 Charge</b>	<b>CY 2014 Annual Charge</b>
CVWD	3.4	19%	\$33,560
LCID	4.9	28%	\$48,365
LFWC	0.9	5%	\$8,883
LAWC	3.7	21%	\$36,521
MCWC	1.4	8%	\$13,819
RCLWA	-	0%	-
VWC	3.3	19%	\$32,573
<b>Total</b>	<b>17.6</b>	<b>100%</b>	<b>\$173,720</b>

## II. ENERGY CHARGES

FMWD operates two pump stations to lift water to three pressure zones within its service area. Both pump stations require significant amounts of energy to accomplish these lifts and are served by two separate electrical utility providers.

Each retail agency is charged power costs based on the proportionate amount of energy used for delivering water to that agency compared to other agencies times the amount of the energy bill for that month or portion of month. Bills are tendered in arrears. If an agency causes an increase in the peaking charge by a power provider, that agency is assessed increased charges.

The following table shows the total paid for energy by retail agency for CY 2012. It also shows the amount of water that was delivered to that agency and the acre-foot cost:

	<b>Actual Costs for CY 2012</b>	<b>CY 2012 Sales</b>	<b>Average Dollars Per AF</b>
CVWD - Main Plant	\$70,483	1,514.7	\$47
CVWD Berkshire	\$126,768	1,514.7	\$84
LCID - Main Plant	\$114,017	2,443.3	\$47
LCID - Berkshire	\$107,147	1,284.1	\$83
LFWC	\$25,153	465.9	\$54
LAWC	\$9,671	185.5	\$52
MCWC	\$29,782	639.7	\$47
RCLWA	-	-	-
VWC	\$122,710	2,621.0	\$47

Please note that FMWD must use both pump stations to deliver water to Crescenta Valley Water District and parts of La Cañada Irrigation District.



### III. FMWD CHARGES

Because of the large amount of rehabilitation work required for FMWD's distribution system and minor amount of variable costs associated with FMWD's budget outside of imported water, the Board decided effective January 1, 2010 to change FMWD's rates to charges proportional to each agency's use of the FMWD system. These charges are the Administration and Operations and Maintenance Charge and the Capital Improvement and Rehabilitation Charge.

These charges also support FMWD being able to obtain financing should it be needed by increasing its rating with credit agencies, thus decreasing the interest rate of the financing. When FMWD began its rehabilitation program, it was not able to obtain financing because of its low reserve levels and then in place rate structure.

#### *Administration and Operations and Maintenance Charge*

The Administrative and Operations and Maintenance Charge is based on the adopted budget and uses a ten-year average of deliveries to account for the charge by retail agency. A recent change in the charge now includes groundwater pumping rights leased by another agency outside of FMWD to its retail agencies as deliveries. This change has been adopted due to the fact that although an agency is able to temporarily roll off of FMWD, FMWD still has to continue maintaining the system and paying expenses with both maintaining the system and administrative costs of existing. Without the relabeling of groundwater leases, there was a cost shift to those agencies which did not temporarily roll off the system to maintain the system for agencies that would then roll back on the system. This ten-year average was also frozen so agencies can have predictability in charges.

A table displaying the calendar year 2013 and 2014 FMWD Administration and Operations and Maintenance charge is shown below:

	<b>CY 2013 Charge</b>	<b>CY 2014 Charge</b>
CVWD	\$380,339	\$382,995
KID	\$7,234	\$7,210
LCID	\$467,915	\$474,973
LFWC	\$112,809	\$111,038
LAWC	\$264,557	\$274,107
MCWC	\$120,753	\$122,534
RCLWA	\$177,607	\$156,278
VWC	\$537,836	\$540,123
<b>Total</b>	<b>\$2,069,050</b>	<b>\$2,069,257</b>

#### *Capital Improvement and Rehabilitation Charge*

The District assesses a Capital Improvement and Rehabilitation Charge for improvements, repairs or replacement made to the District's infrastructure where the value is greater than

\$10,000. This charge is again based on a ten-year average of deliveries including groundwater leased from an agency outside of FMWD. The District only assesses for those facilities used by the agency when the District is moving water. The charge also shows the District's investment in development of new supplies. This charge is based on forecasted demands by each agency in the Water Resources Plan.

Shown below is a table reflecting the 2013 and 2014 Capital Improvement and Rehabilitation Charge:

	<b>CY 2013 Charge</b>	<b>CY 2014 Charge</b>
CVWD	\$204,665	\$204,665
KID	\$(281)	-
LCID	\$204,473	\$204,473
LFWC	\$19,937	\$19,937
LAWC	\$26,000	\$38,997
MCWC	\$37,475	\$37,475
RCLWA	\$52,977	\$52,977
VWC	\$220,872	\$220,872
<b>Total</b>	<b>\$766,118</b>	<b>\$779,396</b>

*Assessment for Kinneloa Irrigation District*

Although Kinneloa Irrigation District is a retail agency of FMWD, it is not physically connected to FMWD's distribution system and has never taken imported water from FMWD. It is unlikely that in the next 20 years, Kinneloa would take any imported water. Should something happen to its wells, it is anticipated that Kinneloa would have Pasadena pump its groundwater and deliver it to them using an interconnection. However, FMWD still spends some administrative time on Kinneloa and there are costs incurred through Board meetings. These costs are collected through a charge established specifically for Kinneloa.

The charge is based on the number of meters Kinneloa has on June 30 of each year compared to the number of meters within the rest of the retail agencies have on June 30 of each year. That percentage of meters is then used to calculate the administrative and professional service charge for Kinneloa. Additionally, an estimate of MWD's readiness-to-serve charge that is collected on Kinneloa's tax roll and property taxes are subtracted from the amount owed by Kinneloa. For fiscal year 2013-2014, Kinneloa has 2.38% of all meters within the retail agencies' service areas. The administrative and professional service costs allocated for Kinneloa are \$15,921, the RTS offset is estimated at \$7,125 and property tax offset is estimated at \$791. Thus the total charge on Kinneloa's invoice from FMWD is \$8,004.