

## Smart Meters Saving Money, Increasing Efficiency

Eastern Municipal Water District (EMWD) has embarked on a multi-year effort to install automated meters, which will improve customer service options, save on labor costs and minimize water loss.

EMWD plans to install 44,000 of the meters this year as part of an accelerated installation plan for Automated Metering Infrastructure, commonly known as AMI, that was authorized by the Board of Directors in 2014. The program is one example of the ways EMWD is investing in projects and equipment to benefit customers.

### Automated meter installations

**2017:** 44,000

**2018:** 32,000

**2019:** 5,000



So far, approximately 76,000 highly efficient devices have been installed, accounting for nearly half of EMWD's 151,299 meters. The project is scheduled for completion in June 2019.

The real advantage of AMI technology is that it provides a remote data link between the meter and the water district for real-time monitoring. Unlike traditional drive-by or walk-by meter reading, AMI technology allows for near hands-free evaluation with fewer vehicle trips and employee hours.

These smart meters provide daily information about how much water is used by individual customers and can alert them when they are nearing their water budget. With AMI, EMWD will be able to issue leak detection notifications and plans an online site where customers can access information about their water use.

The \$12 million AMI program is funded in part by grants from the California Department of Water Resources for programs that increase water conservation and energy savings and reduce carbon emissions.

### NOTICE OF PUBLIC HEARING

**Date:** November 15, 2017

**Time:** 9 a.m.

**Location:** Eastern Municipal Water District Board Room  
2270 Trumble Road, Perris, CA 92570

The Board of Directors of Eastern Municipal Water District (EMWD) will conduct a public hearing to consider changes to the water and sewer rate structures and rates set forth herein. The proposed changes are based on a cost of service study that was completed and adopted by the Board in March 2017.

Any customers or property owners may appear at the hearing to make comments regarding the proposed change. To file an opposition, property owners and tenants of real property who are directly liable to pay water bills may submit a written protest.

Written protests may be mailed or delivered in-person to **Eastern Municipal Water District, Attention: 2017 Proposed Rates, PO Box 8300, Perris, CA 92572-8300**. Protests must include: your name, parcel number and/or service address, and your signature. Protests submitted by email or other electronic means do not count as formal written protests. All written protests must be received prior to the conclusion of the public hearing.

More information about the proposed changes is available in this document and online at: [www.emwd.org/ProposedRates](http://www.emwd.org/ProposedRates).

*EMWD is a government agency that provides services based on the actual cost of operation and maintenance. The EMWD Board of Directors adopts a biennial operating budget that goes into effect on July 1, each year. Part of that process is setting rates. One of EMWD's critical business objectives is to keep costs, and therefore rates, as low as possible for all customers. When compared with other agencies providing similar services in the surrounding area, EMWD's rates are consistently among the lowest.*

## EMWD to Consider Extending Budget-Based Rates for More Non-Residential Customers



After years of analyzing data and water use patterns, EMWD is establishing water budgets and tiered rates for additional commercial, industrial and irrigation (CII) customers.

The proposed rate structure is similar to one that has been used for EMWD's residential and landscape customers for almost a decade. Individualized water budgets coupled with inclining tiered rates are an effective tool for encouraging water use efficiency.

EMWD is proposing budget-based rates for the following customer classes: churches and libraries; mortuaries and cemeteries; office buildings; schools; ag-horse farms; looped multi-family residential; and looped landscape only.

Water budgets for these non-residential customers would be based on industry-standard methodology, which considers factors such as

the type of business, historical average use and amount of irrigated landscaping. For example, a small office building would be expected to have lower demand than a horse farm.

Water budgets are designed to give customers the water they need for efficient use indoors and out, and they help customers understand what is reasonable water usage. Customers who stay within their budget pay the lowest rates for water, but those who exceed it fall into the upper, more expensive price tiers.

EMWD's conservation and planning staff will work toward transitioning all CII customers to budgets and tiered rates over the next several years.

# Non-Residential Budget Methodology



Tenant Type Description	Proposed Indoor Budget	Proposed Outdoor Budget
Church or Library	Average indoor usage (80% if indoor & outdoor)	Landscape x ET factor x Conservation factor (if applicable)
Mortuaries/Cemeteries	Average indoor usage (80% if indoor & outdoor)	Landscape x ET factor x Conservation factor (if applicable)
Office Buildings	Average indoor usage (80% if indoor & outdoor)	Landscape x ET factor x Conservation factor (if applicable)
Schools	5 gallons per student per day	Landscape x ET factor x Conservation factor (if applicable)
Ag-Horse Farm+	55 gallons per person per day	Landscape x ET factor x Conservation factor (if applicable)
Looped-MFR+	55 gallons per person per day (proportioned to each meter based on past usage)	Landscape x ET factor x Conservation factor (if applicable; proportioned to each meter based on past usage)
Looped-Landscape Only	N/A	Landscape x ET factor x Conservation factor (if applicable; proportioned to each meter based on past usage)

**EMWD adopted water budgets and tiered rates in 2009 for residential customers and commercial landscape-only accounts. At the time, it was anticipated that other commercial accounts would also transition to this rate structure. EMWD's Board of Directors is considering the following changes to start next year:**

1. Transition the customer types noted in the table above to a budget-based rate structure as specified.
2. Align the Conservation Factor (CF) for all outdoor water budgets to reflect current water efficiency trends and a mix of conventional turf and drought-tolerant landscapes as follows:

- » **Non-functional\* landscape areas installed before June 1, 2015**, would be 70 percent of the evapotranspiration (ET) rate, the measure of irrigation needs based on rainfall, temperature and other climate factors.
- » **Non-functional\* landscape areas installed after June 1, 2015**, would be 50 percent of the ET.
- » **Functional\* landscape areas** would be 100 percent of the ET.

*\* Functional landscape areas include turf as a surface for recreation and sports fields. All other landscape areas are considered non-functional.*

*+ These tenant types will be reclassified to residential as of December 1, 2017 and subject to the proposed residential rate structure. For more information, please visit [www.emwd.org/ProposedRates](http://www.emwd.org/ProposedRates).*

# Understanding the proposed water rate structure

Under the proposed new rate structure, some non-residential customers would transition from a uniform water rate to a three-tiered rate system based on a water budget allocation that takes into account efficient indoor and outdoor use.

Under a tiered rate system, total water budget would be covered in Tier 1. Tier 2 and 3 rates cover any usage in excess of the total budget.

If approved by EMWD's Board of Directors, the new structure and rates would take effect January 1, 2018, with another rate adjustment on January 1, 2019. The seven commercial, industrial and irrigation (CII) customer types that would be affected by this change are listed page 3.

Indoor water budgets would vary among CII customers because of differences in water

use and the numbers of people served.

For churches, libraries, mortuaries, cemeteries and office buildings, the proposed Tier 1 budgets would be based on average indoor use, or 80 percent of average use if outdoor irrigation is also considered. Schools would be budgeted 5 gallons per student, per day, and ag-horse farms would be allocated 55 gallons per person, per day.

Outdoor budgets would be based on a formula that multiplies the amount of irrigated property by the evapotranspiration rate and a conservation factor that takes climate and plant types into consideration.



## CURRENT INDIVIDUALIZED WATER BUDGET & TIER ALIGNMENT



\*60 gallons per person per day  
\*\* Conservation factor up to 1.0

## PROPOSED INDIVIDUALIZED WATER BUDGET & TIER REALIGNMENT



\* 55 gallons per person per day & Conservation factor up to 0.8

*The Conservation Factor (CF) is based on a landscape's water use efficiency. A yard with less grass and more low-water landscaping along with more efficient irrigation systems would have a lower CF. When the CF decreases, so does the percentage of the evapotranspiration rate -- the varying amount of irrigation needed to keep plants alive, based on climate -- which is changing from 100 percent to 80 percent for homes built prior to September 2008.*



## HOW YOUR WATER BUDGET IS CALCULATED

The proposed rates were calculated to recover the costs of providing water service, and to proportionately allocate those costs among customers. EMWD would use the following formulas to determine monthly water budgets, which cover efficient water use. Customers who stay within their water budgets pay the lowest cost for water.

### LOOPED MULTI-FAMILY RESIDENTIAL:

Outdoor:

$$BU = LA \times ET \times CF \quad \text{(if applicable)*}$$

\*proportioned to each meter based on past usage

Indoor:

55 gallons per person per day (proportioned to each meter based on past usage)

### LOOPED LANDSCAPE:

Outdoor:

$$BU = LA \times ET \times CF \quad \text{(if applicable)*}$$

\*proportioned to each meter based on past usage

Indoor:

N/A

### CHURCHES, LIBRARIES, MORTUARIES, CEMETERIES, OFFICE BUILDINGS AND AG-HORSE FARMS:

Outdoor:

$$BU = LA \times ET \times CF \quad \text{(if applicable)}$$

Indoor usage for churches, libraries, mortuaries, cemeteries, office buildings and ag-horse farms:

80% if indoor & outdoor

Indoor usage for schools:

5 gallons per student, per day

Indoor usage for Ag-Horse Farms:

55 gallons per person, per day

LA = Landscape Area in square feet

ET = Evapotranspiration

CF = Conservation Factor

BU = Billing units (1 BU = 100 cubic feet, or 748 gallons)

The formulas above are used to determine a customer's total water budget.

## Proposed Non-Residential Water Rates

Water Consumption Rates per Billing Unit (BU)	Proposed	
	Effective 1/1/2018	Effective 1/1/2019
Tier 1: Budgeted	\$3.44	\$3.55
Tier 2: Excessive	\$7.00	\$7.21
Tier 3: Wasteful	\$11.68	\$12.02

*Proposed rate changes would adjust the current rate structure from 4 tiers to 3 tiers. Please note: For accounts on A202 rates, please visit [www.emwd.org/ProposedRates](http://www.emwd.org/ProposedRates) for more information.*

Non-Tiered Water Consumption Rates	Current	Proposed	
		Effective 1/1/2018	Effective 1/1/2019
A101	\$2.98	\$2.95	\$3.02
A201	\$2.98	\$2.95	\$3.02
A202+	\$1.45	\$1.71	\$1.96
A301	\$3.03	\$2.95	\$3.02

+ Please visit [www.emwd.org/ProposedRates](http://www.emwd.org/ProposedRates) for more information.

Daily Service Charge based on Meter Size	Current	Proposed	
		Effective 1/1/2018	Effective 1/1/2019
5/8 inch	\$0.39	\$0.39	\$0.42
3/4 inch	\$0.39	\$0.39	\$0.42
1 inch	\$0.39	\$0.53	\$0.57
1.5 inches	\$1.02	\$1.47	\$1.58
2 inches	\$1.90	\$2.28	\$2.45
3 inches	\$6.32	\$4.44	\$4.77
4 inches	\$9.98	\$6.87	\$7.38
6 inches	\$18.67	\$13.62	\$14.63

Visit [website](http://www.emwd.org/ProposedRates) for larger meter sizes and proposed rates.

Water Supply & Reliability Capital Projects Charge Per Equivalent Meter Size	Current Monthly	Proposed Monthly*	
		Charge Effective 1/1/2018	Charge Effective 1/1/2019
	\$3.25	\$3.35	\$3.65

\* Amount will be prorated based on billing cycle.

# EMWD Drought Stages

Congratulations EMWD customers for continuing to use water wisely! EMWD adopted its Water Shortage Contingency Plan (WSCP) to regulate the delivery and consumption of water during water shortages. The higher stages of the WSCP are designed to encourage customers to reduce water use by temporarily reducing customer water budgets in varying stages depending on the severity of the shortage. EMWD's Board of Directors has the authority to initiate or terminate water shortage contingency measures described in the WSCP, and takes such actions as needed in public meetings.



**Stage 1: Supply Watch** – Up to 10 percent voluntary reduction of water use.

**Stage 2: Supply Alert** – Up to 25 percent voluntary reduction of water use. Currently EMWD asks that customers voluntarily save 10 percent.

**Stage 3: Mandatory Waste Reduction** – Enforced through changes to the water budget-based tiered rates as follows:

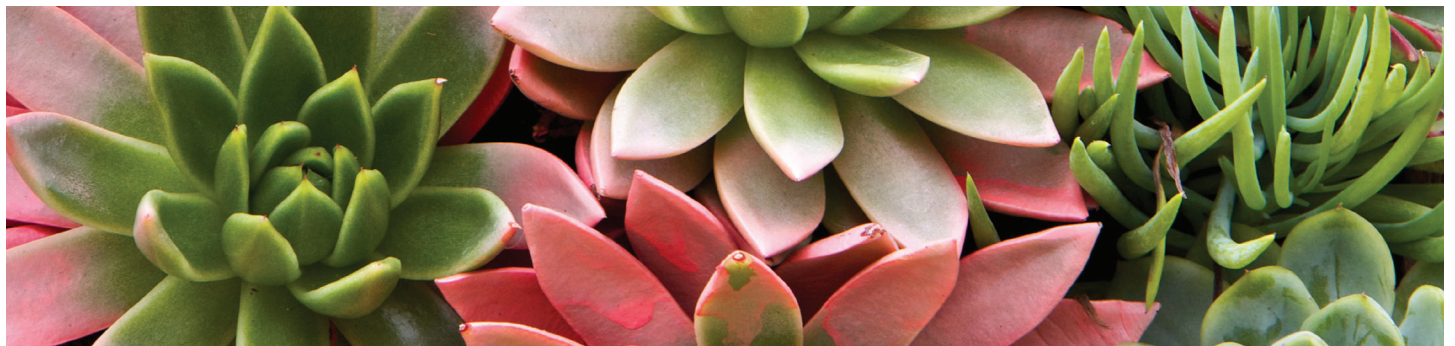
**Stage 3a:** No variances or adjustments allowed for filling swimming pools, establishing landscapes, or leaks that are not repaired within 48 hours;

**Stage 3b:** Tier 3 (*Excessive water use*) allocations reduced by 50 percent;

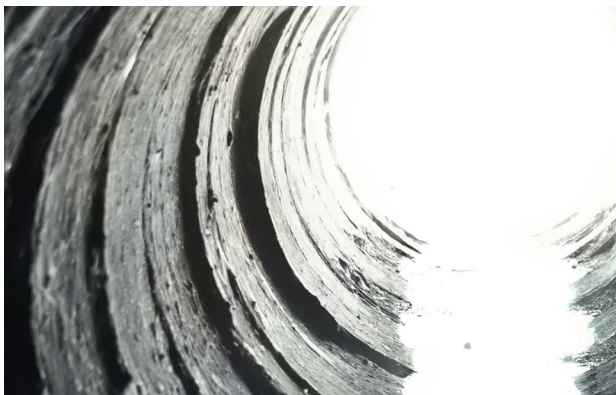
**Stage 3c:** Tier 3 allocations are eliminated.

**Stages 4 and 5: The Water Shortage Contingency Plan** – Reduces customers' water budgets by varying amounts, depending on the severity of

the shortage. As described on page 4, under normal conditions, customers who stay within budget are charged at the lowest rates in tiers 1 and 2. In stages 4 and 5, budgets are reduced, which would cause a customer going over budget to be charged at a Tier 4 rate.



# EMWD Proposed Sewer Service Rates



Many different components go into the operation of the sewer system, such as electricity, regulatory requirements, the operation and maintenance of collection pipes and lift stations to preserve pressure, and treatment. These costs must be considered when setting sewer rates.

EMWD's sewer rates are calculated using a baseline Daily Service Charge.



Area Served (Full Service)	Current Daily Service Charge (DSC) per Equivalent Dwelling Unit (EDU)	Proposed DSC per EDU as of 1/1/2018	Proposed DSC per EDU as of 1/1/2019
Includes areas in and around Hemet, San Jacinto, and Winchester	\$0.807	\$0.85	\$0.90
Includes areas in and around Moreno Valley	\$0.829	\$0.87	\$0.92
Includes areas in and around the City of Menifee (Sun City)	\$0.835	\$0.88	\$0.93
Includes areas in and around Temecula, Murrieta, and French Valley	\$0.957	\$1.00	\$1.06
Includes areas in and around Perris, Romoland, Homeland, and northern portions of Menifee	\$1.10	\$1.15	\$1.22
Canyon Lake <sup>+</sup>	\$1.825	+	+

+ EMWD bills customers in this area for sewer service rendered through Elsinore Valley Municipal Water District facilities, at the rate established by EVMWD.

Sewer System Capital Projects Charge per Equivalent Dwelling Unit	Current Monthly Charge*	Proposed Monthly Charge* for bills dated on or after 1/1/18	Proposed Monthly Charge* for bills dated on or after 1/1/19
	\$2.25	\$2.50	\$2.75

\*Amount will be prorated based on billing cycle.

## IMPORTANT INFORMATION INSIDE

Notice of Public Hearing for consideration of water and sewer rates and rate structure changes based on a cost of service study.

*Aviso de audiencia pública para la consideración de tarifas de agua y alcantarillado y cambios de estructura de tarifas basados en un estudio de costo de servicio.*

### EMWD's Mission

To deliver value to our customers and the communities we serve by providing safe, reliable, economical and environmentally sustainable water, wastewater and recycled water services.

### SPECIAL REPORT

#### **September 2017**

Visit us at [www.emwd.org](http://www.emwd.org)  
2270 Trumble Road, PO Box 8300,  
Perris, CA 92572-8300  
CO-218



CUSTOMER NAME  
OR CURRENT RESIDENT  
MAILING ADDRESS  
MAILING CITY, STATE ZIP

PRSR STD  
US POSTAGE  
PAID  
PERRIS, CA  
PERMIT NO.10