

TO: Andrew P. Powers, City Manager

FROM: Nader Heydari, Public Works Director

DATE: May 20, 2025

SUBJECT: Grant to Support California Data Collaborative Advanced Metering Infrastructure Membership Tier

RECOMMENDATION:

1. Authorize acceptance of the Metropolitan Water District (MWD) Member Agency Administered Program (MAAP) Grant from the Calleguas Municipal Water District to partially offset membership dues in the California Data Collaborative (CaDC) Advanced Metering Infrastructure (AMI) tier, in the amount of \$14,980 to support state regulatory water conservation compliance.
2. Approve budget appropriation and expense in FY 2024-25 in the amount of \$16,000, with \$14,980 from A/C #611-0000-437-9900 (Water Fund, Revenue From City/Dist/Agency/Other) and \$1,020 from A/C #611-0000-341-9900 (Water Fund, Net Position), to A/C #611-8025-686-6600 (Water Fund - Membership/Dues/Subscriptions).
3. Find that this action is not a project as defined under the California Environmental Quality Act.

LEVINE ACT ITEM: No

FINANCIAL IMPACT:

\$16,000 Increase to FY 2024-25 Water Fund Budget, partially offset by Grant Revenue. Currently, the City of Thousand Oaks Water is at the baseline membership level of \$11,000 with the CaDC. Moving to the AMI tier will result in a net increase of \$1,020 after the MWD contribution of \$14,980 is included.

BACKGROUND:

Making Water Conservation a California Way of Life Requirements

Developed under the direction of Executive Order B-37-16 and codified through Assembly Bill 1668 and Senate Bill 606, the "Making Water Conservation a California Way of Life" regulation establishes a long-term regulatory framework for

urban water conservation. It is intended to build water resilience amid growing climate pressures, population growth, and extended droughts.

Starting in 2025, all urban water suppliers will be required to develop and comply with annual urban water use objectives. These objectives are specific to each water agency and are calculated using a standardized formula composed of four core components:

1. Indoor Residential Water Use

A statewide standard of 47 gallons per capita per day (GPCD) applies through 2029, tightening to 42 GPCD beginning in 2030 to reflect more efficient indoor plumbing fixtures and behavioral changes.

2. Outdoor Residential Irrigation

Determined by the irrigable landscape area associated with residential parcels, regional evapotranspiration rates, and a state-defined efficiency factor. This component incentivizes efficient landscape design, drought-tolerant plantings, and smart irrigation technologies.

3. Commercial, Industrial, and Institutional (CII) Water Use

This component relies on performance-based measures. Agencies are required to identify and track “CII-dedicated irrigation meters” (separate meters for landscaping at CII sites) and to implement best management practices (BMPs) for water use efficiency within the CII sector. California Department of Water Resources (DWR) will provide guidelines for BMPs, and agencies must demonstrate active engagement with large CII customers to reduce wasteful water practices. Over time, agencies may also be required to conduct site-level water use evaluations and promote retrofits or operational changes that result in measurable savings.

4. Water Losses

This is based on each supplier’s validated water audit data and compliance with water loss performance standards adopted by the State Water Resources Control Board. It focuses on reducing “real losses” (leaks) through investments in system repair, pressure management, and leak detection.

The total urban water use objective for each agency is the sum of these four components. Agencies will be required to submit annual reports to the DWR, documenting their water use and progress toward meeting these objectives. DWR will be sending Landscape Area Measurements for CII customers to each water agency in 2025 to verify the data and which areas have functional turf. After this is completed, DWR will assign a maximum annual water budget for the City Water Agency and require compliance with the CII best practices.

CaDC Membership Benefits

The City water agency joined the CaDC in 2019 at the then basic membership level of \$10,000 to help us better understand customer water usage based on parcel size, irrigable area, weather, and household size, and help us to prepare for the new State water mandates. CaDC is a non-profit organization focused on harnessing the power of big data to solve water agency issues. CaDC imports our water agency data into a cloud-based database and provides an extensive suite of analysis tools.

The tools have been developed by CaDC in partnership with leading universities, including Stanford University, University of California Los Angeles, University of Southern California, University of California Riverside, and University of California Davis, and by leveraging state and federal grant opportunities using member agency dues to meet match requirements. This has enabled CaDC to develop a software tool, Wavelet, to assist its members in tracking compliance with state mandates. The more advanced tools and analysis in Wavelet are dependent on having access to AMI data. A commercial competitor offers a similar platform that would cost the City water agency \$100,000 in the first year for set-up costs and \$45,000 annually thereafter.

DISCUSSION/ANALYSIS:

City of Thousand Oaks Water was approved for a \$14,980 grant from the Calleguas Municipal Water District, as part of the pre-approved MWD MAAP funding supporting state regulatory compliance. The grant is exclusively to be used for the purchase of either of the software platforms, and the grant amount is based on the number of meter connections.

Standard meters are read monthly, which masks large spikes that signal leaks or inefficient operations. AMI meters track water usage on an hourly basis. The Wavelet AMI tier tracks and analyzes water demand data and spikes to help staff find and prioritize inefficient use, classify customers, assign water budgets, measure landscape areas, and generate reports to comply with the State Water Resources Control Board Urban Water Use Objective Framework developed under the Making Water Conservation a California Way of Life statutory and regulatory requirements.

When combined, these software systems help retail water agencies comply with the state mandates by:

- Tracking usage compared to their Framework target and individual Standards by year
- Viewing service area usage trends over time and comparing to Evapotranspiration (Eto) and precipitation trends

- Viewing a map of color-coded customers based on water use with the ability to create custom groups for potential water-efficiency programming
- Viewing up-to-date aerial imagery of each customer (including residential, CII, Dedicated Irrigation Meters, etc.) in their service area along with customer water use over time compared to DWR provided Eto and precipitation, DWR Landscape Area Measurement (LAM) data, a water efficient budget based on regulatory Standards, demographic data, and usage compared to other nearby or similar customers
- Calculating landscape areas for all customers
- Classifying CII customers into the required sub-categories
- Creating groups of customers for water-use efficiency programs and to track usage over time
- Generating reports for compliance reporting, such as the top inefficient water users and customers by sub-categories

The new regulations associated with the State's Making Water Conservation a California Way of Life Program are complex. Alternate pathways to meet the requirements include hiring a consultant, adding staff, or selecting the vendor providing a similar commercial product. By joining with a group of water agencies, the City is able to pool resources and access additional support. In addition, many of the members of the CaDC are active in the state hearings, workshops, and regulatory processes, and the City benefits from their representation and knowledge.

Because of the complexity of the State regulations, MWD is providing funds to its member agencies to facilitate compliance. Acceptance of the MWD MAAP funds and moving to the CaDC AMI tier membership will allow for comparisons to be made among similar commercial businesses to identify anomalies and to track compliance with the state mandates.

This action meets City Council's Top Ten Priority #6, "Environmental Sustainability."

COUNCIL GOAL COMPLIANCE:

Meets the following City Council goal:

C. Operate City government in a fiscally and managerially responsible and prudent manner to ensure that the City of Thousand Oaks remains one of California's most desirable places to live, work, visit, recreate, and raise a family.

PREPARED BY: John Brooks, Sr. Analyst