



Santa Clara Valley Water District

File No.: 23-0808

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Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM Water Conservation and Demand Management Committee

Government Code § 84308 Applies: Yes No
(If "YES" Complete Attachment A - Gov. Code § 84308)

SUBJECT:

Water Supply Master Plan 2040 Conservation and Stormwater Capture Project Update - "No Regrets" Package Implementation.

RECOMMENDATION:

Receive information on the "No Regrets" package implementation. This is a discussion item, and no action is required.

SUMMARY:

As part of the Water Supply Master Plan 2040 development, Santa Clara Valley Water District's (Valley Water) Board of Directors (Board) approved a "No Regrets" package for implementation in September 2017. The "No Regrets" package of conservation and stormwater capture projects and programs is broadly supported by stakeholders, relatively low cost, and can be implemented independently of other projects and programs in the Water Supply Master Plan 2040. These projects and programs include:

- 1) Advanced Metering Infrastructure
- 2) Leak Repair Incentives
- 3) Graywater Rebate Program Expansion
- 4) Model Water Efficiency New Development Ordinance
- 5) Stormwater Capture

This memo provides an update on the efforts and progress to date on the implementation of the "No Regrets" package. Valley Water is currently in the process of updating the Water Supply Master Plan. The "No Regrets" package will remain part of the updated plan for continued implementation as Staff develops and improves programs to increase savings rates required to meet the long-term water conservation savings targets of 99,000 acre-feet per year by 2030 and 110,000 acre-feet per year by 2040.

ADVANCED METERING INFRASTRUCTURE (AMI)

Advanced Metering Infrastructure (AMI) in concert with a proposed customer-side leak repair incentive program are critical elements to have in place by 2040. AMI facilitates customer engagement with their water usage and enables water retailers to track water usage remotely and frequently.

In 2019, Valley Water partnered with the Bay Area Water Supply and Conservation Agency (BAWSCA) on a study to identify each water retailer's metering and related system, data gaps, and potential for collaborative procurement for AMI as an option for the region. This study, performed by Manage Water Consulting, Inc. and Don Schlenger and Associates, was completed in June 2019. BAWSCA and Valley Water held a joint meeting to review the findings of the study with water retailers from the BAWSCA and Valley Water service areas. The meeting included presentations from project leads of several pilot studies funded by Valley Water's Water Conservation Research Grant Program (funding through Safe, Clean Water), including San Jose Water Company, City of Mountain View and Purissima Hills Water District.

Based on this research and stakeholder engagement, Staff developed AMI Program Guidelines in 2020 to encourage the installation of AMI meters, and to maximize their savings potential by pairing the meters with software that will give near real-time water data on an accessible online database, leak alerts, and water use reports. These guidelines were updated in a stakeholder review process concluding in May 2023 with input from water retailers currently or potentially interested in participating in the AMI Program. The guidelines were presented to the Retailer Water Conservation Subcommittee prior to finalizing.

As of July 2023, Valley Water has cost-sharing agreements providing four million in AMI funding in the following service areas:

- City of Morgan Hill (approx. 17,000 AMI meters funded),
- City of Milpitas (approx. 16,700 AMI meters funded), and
- City of Palo Alto (approx. 21,000 AMI meters funded in June 2023).

Additionally, Purissima Hills Water District has received funding for approximately 1,000 AMI meters through the Safe, Clean Water Program, while the City of Gilroy has funded approximately 14,400 AMI meters through an Integrated Resources Water Management Proposition 1 grant applied for with Valley Water support. While AMI implementation progress across service areas varies, an estimated 48,000 AMI meters have been installed to date in the county through a combination of Valley Water cost-share agreement funding, Valley Water grant funding, and Valley Water support for external grant funding.

Valley Water's goal is to collaborate with retailers and cities throughout our service area to implement AMI through incentives, grants, and support letters (i.e., IRWM, California Public Utilities Commission, etc.). The conservation budget includes dedicated funding to assist in the implementation of this program.

LEAK REPAIR INCENTIVES

Though customers are alerted of possible leaks much more quickly with AMI, a trained workforce is required to fix leaks expeditiously. Valley Water and BAWSCA determined the need for a leak certification (i.e., establishing a licensing program) or certificate program to provide professionals with the necessary skills to identify and repair leaks. After completing this proposed training program, professionals will be placed on a reliable, objective resource list for landlords and homeowners to address leaks.

To conduct comprehensive research and offer training framework recommendations, Valley Water and BAWSCA collaborated on a contract in 2021 with the California Water Efficiency Partnership (CalWEP), a non-profit organization aiming to maximize urban water efficiency and conservation throughout California. The research and deliverables from this partnership will be utilized by Staff to determine logistical aspects of the future training program as well as to develop an RFP to procure a vendor responsible for managing and operating the future program. Phase 1 is complete and encompassed surveying agencies from multiple regions, interviewing and facilitating focus groups with industry experts, and conducting extensive online research. This process highlighted the interest and need across California for an affordable, relevant, and accessible leak detection and repair training program that highlights the importance of water conservation. Phase 2 will be completed later in Summer 2023.

Additionally, Valley Water is conducting two pilots focused on low-income, disadvantaged, or underrepresented communities:

Leak Assessment and Repair Pilot

This vendor-supported pilot is leveraging an existing program between Richard Heath and Associates, Inc. (RHA) and Pacific Gas and Electric's (PG&E's) Energy Savings Assistance (ESA) Program. The program retrofit leaking fixtures and sprinklers, in addition to performing a meter-check for leaks and providing water conservation resources.

Toilet Repair and Retrofit Pilot

This pilot is being performed concurrently with the Leak Assessment and Repair Pilot. This pilot project replaces 1.6 or greater gallon per flush (gpf) toilets with high-efficiency, WaterSense-certified 0.8 gpf toilets. To date, 43 toilet retrofits have taken place and an additional 25 are expected to take place for the month of July.

A total of 211 households have been served through both pilots. The pilots are expected to wrap up in mid-August. Staff will then evaluate water savings and resource requirements to determine whether evolving pilots into a full program is cost-effective in meeting the long-term water conservation savings targets.

GRAYWATER REBATE PROGRAM EXPANSION

In partnership with the non-profit Ecology Action between June 2019 and June 2020, the Graywater Direct Installation Program completed 307 site assessments and installed 71 laundry-to-landscape

graywater systems. 64% of low-income participants chose the no-cost, self-installation option. Ecology Action provided construction assistance to all 36 self-installations throughout the installation process.

These graywater systems replaced potable water irrigation on nearly 31,700 square feet of landscaped area, resulting in a project water savings of 522,386 gallons/year, or 32.1 acre-feet over a 20-year project life. The average 2020 value in water utility bill savings for each participating household was \$48/year. This pilot also trained 20 landscape professionals including 3 licensed contractors who performed work as subcontractors under Ecology Action.

Though at the time the pilot occurred, it was not deemed cost-effective to continue as a standalone program, Valley Water is considering including comparable installation services under its planned procurement to replace the current Lawn Busters Program with Our City Forest. The Outdoor Conservation Direct Install Program Request for Proposal update was discussed at the November 2022 Water Conservation and Demand Management Committee.

Valley Water has continued to develop its Graywater Laundry to Landscape Rebate Program by partnering with cost-sharing retailers to double the overall rebate from \$200 to \$400 in those service areas. In addition to the direct install pilot, Valley Water has issued an additional 42 rebates, for a total of 113 Graywater Laundry to Landscape systems installed in Santa Clara County. While Valley Water does not currently plan to rebate for more advanced Graywater systems, we have provided additional graywater system resources including guides, evaluation tools, virtual workshops and webinars, informational and instructional videos, and a list of local graywater installers available at www.watersavings.org <<http://www.watersavings.org>>.

MODEL WATER EFFICIENCY NEW DEVELOPMENT ORDINANCE

The Model Water Efficiency New Development Ordinance (MWENDO), developed in 2015 by the Santa Clara County Water Efficient New Development Task Force, composed of representatives from Santa Clara County, several cities, Valley Water, Sustainable Silicon Valley, and Joint Venture Silicon Valley, is intended to be adopted by jurisdictions in Santa Clara County to ensure water use efficient in new development. The ordinance, which has received support from the local Sierra Club chapter, is designed to be customizable depending on cities' needs and includes a variety of water efficiency measures for new developments such as:

- Single-Family Residential
- Multi-Family Residential and Nonresidential Projects
- Commercial Facilities

Valley Water continues to monitor actions related to the adoption of MWENDO and provide staff support to municipalities as part of ongoing efforts to support cities' and the County's interests in expanding water efficiency measures. To assist jurisdictions with MWENDO adoption, Valley Water has developed a template staff/Council agenda report, a cost-effectiveness study, and instructions for filing with the California Building Standards Commission (CBSC) and California Energy Commission (CEC). So far, Valley Water has reached out to every jurisdiction in the county at the City Manager or

City Council level for their consideration and adoption of the MWENDO. At this time, no cities in Santa Clara County have yet officially adopted MWENDO, however, some cities already have many of these measures as part of their existing municipal code and may consider additional measures to be included as part of the upcoming 2025 building code adoption cycle.

While the 2022 version of California's Title 24 building code update was effective January 1, 2023, jurisdictions can adopt additional reach codes like MWENDO at any time. Currently, Valley Water is finalizing updates to the ordinance to reflect the latest Title 24 updates and water conservation reach code best practices. The revised MWENDO will include a supplemental provision to encourage cities and the County to prohibit irrigation of decorative, non-functional turf with potable water on CII sites within their jurisdictions.

STORMWATER CAPTURE

Stormwater capture can have water quality, water supply, flood management, environmental, and community (e.g., aesthetics, recreation, and education) benefits. The "No Regrets" package proposed evaluating stormwater capture projects to develop at least 1,000 acre-feet per year (AFY) on average of stormwater water supply (which brings the 2040 target from 109,000 to 110,000 acre-feet saved per year). To this end, Valley Water is evaluating, and in part implementing, two different scales of stormwater capture projects - "centralized" and "decentralized":

"Centralized" projects are those that capture water from multiple parcels and/or are municipal projects, including "green streets" projects and stormwater recharge on open space (e.g., Flood-Managed Aquifer Recharge). "Decentralized" projects focus primarily on keeping stormwater onsite and/or private citizen projects. Valley Water has implemented two decentralized programs - rain barrel/cistern rebates and rain garden rebates.

Centralized Projects

To support the evaluation of centralized projects, Valley Water led the development of the Storm Water Resources Plans (SWRP) for the northern part of Santa Clara County flowing to the Bay and for the South County area flowing towards Pájaro Watershed. The SWRPs develop, prioritize, and plan "centralized" stormwater projects in Santa Clara County that are typically located on public lands. Valley Water will continue to track city and County efforts, develop partnerships where there may be complementary project interests; and seek grant funding for partnership projects.

In addition to the SWRPs, staff are also investigating the potential to use open space for stormwater recharge. An example of this type of project is in the Central Valley where floodwaters are diverted onto some orchards to recharge the aquifer. The planned flooding for groundwater recharge is referred to as flood-managed aquifer recharge (Flood-MAR). Staff are monitoring the pilot projects to determine impacts and benefits to crops, water quality, and water supply. As noted by the California Department of Water Resources (DWR), "complex technical, legal, and institutional barriers and challenges affect the planning and implementation of Flood-MAR projects" including water rights, permitting, and environmental considerations. However, recognizing the broad potential benefits of Flood-MAR, DWR is leading the statewide efforts to evaluate these issues with stakeholders with the

goal of expanding Flood-MAR on agricultural lands and working with landscapes throughout California. Staff are engaging in these statewide efforts. In addition, Valley Water recently completed a preliminary feasibility analysis on Flood-MAR in Santa Clara County. The study indicates there may be sites that could support stormwater recharge, but site level analyses would need to be done to determine project feasibility. The preliminary feasibility study will be presented to the WCADM and EWRC in August.

Decentralized Projects

Regarding “decentralized” projects, Valley Water launched Rainwater Capture rebates under its Landscape Rebate Program on January 1, 2019. This program, which encourages customers to participate in decentralized stormwater capture, includes rebates for rain barrels, cisterns, and rain gardens.

The program rebate amounts are as follows: \$35 per qualifying rain barrel installed to collect rainwater from existing downspouts; \$0.50 per gallon for diverting existing downspouts to qualifying cisterns; and \$1 per square foot of roof area diverted (up to \$300 per site) into an installed rain garden to collect roof water runoff. Cities of Cupertino, Milpitas, Morgan Hill, and Santa Clara as well as San José Municipal Water Services have or currently cost share with Valley Water to increase Rainwater Capture rebate amounts. Since 2019, 56 cisterns (50,345 gallons), 657 rain barrels, and 90 rain garden (from ~61,000 sq ft of roof surface) rebates have been issued. Additional details are available at <https://valleywater.dropletportal.com/overview/>.

ENVIRONMENTAL JUSTICE IMPACT:

There are no Environmental Justice impacts associated with this item.

ATTACHMENTS:

Attachment 1: PowerPoint Presentation

Attachment 2: Water Conservation Flyer

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138

Water Conservation Rebates and Programs



Say YES to Saving Water!

Valley Water's water conservation rebates and programs are designed to make water conservation easier, helping you say YES to saving water. Learn more about all of our conservation programs and resources by visiting watersavings.org.

Online Shopping Cart

Valley Water offers free water conservation devices that can help you save water. You can request free water efficient devices and free resources to evaluate your water use efficiency. Visit cloud.valleywater.org/shopping-cart to order your FREE gear and literature today!

Landscape Rebate Program

The Landscape Rebate Program can help you create beautiful drought resilient landscapes. Get started by finding more information at valleywater.dropletportal.com. Make sure you submit an online application for approval and schedule a pre-inspection **before beginning any work** on your project.

Rebate Caps

The following landscape rebate site caps apply to the combined program components, including Landscape Conversion, Large Landscape Lawn to Mulch, Irrigation Equipment Upgrade and Rainwater Catchment.

- \$3,000 for single-family or multi-family residential properties (4 or fewer units)
- \$100,000 for all commercial, industrial, institutional properties or multi-family residential properties (5 or more units)

Rebate rates and caps may be higher in some areas. Other programs are capped separately.

Landscape Conversion

Any property with qualifying high-water using landscapes (i.e., lawn or functional swimming pools) can receive a rebate of at least \$2 per square foot (sq. ft.) for converting to a drought resilient landscape.

Large Landscape Lawn to Mulch

Any commercial, industrial, institutional properties or multi-family residential properties can receive a rebate of at least \$1 per sq. ft. for converting a qualifying lawn to a minimum of 3 inches of mulch (minimum 15,000 sq. ft. lawn area). The irrigation system watering any trees in the converted lawn area needs to be converted to a low-flow irrigation system. Golf course options are offered.



A converted low-water use garden featuring California poppies in bloom.

Irrigation Equipment Upgrade

Rebates are offered for replacing old, inefficient irrigation equipment with new, qualifying high-efficiency equipment, including:

- High-efficiency nozzles (up to \$5 each)
- Rotor sprinklers or spray bodies with pressure regulation and or check valves (up to \$20 each)
- Rain Sensors (up to \$50)
- Flow sensors, hydrometers, and dedicated landscape meters (up to \$1,000)
- Smart irrigation controllers (up to \$300-\$2,000 each)
- Sprinkler to In-Line Drip Conversion (\$0.25 per sq. ft.)

Rainwater Capture

Rainwater capture or diversion projects collecting rainwater from existing downspouts can receive rebates for the following:

- Rain barrels up to 199 gallons (up to \$35 per barrel)
- Cisterns 200 gallons or more (\$0.50 per gallon)
- Rain gardens (\$1 per sq. ft. of roof area diverted, up to \$300)

Graywater Rebate Program

Receive at least \$200 per home for transforming your clothes washer into a graywater system. Plants don't need drinking water to thrive: reuse graywater in your yard! Apply online and find how-to videos at watersavings.org. No pre-inspection is required but **wait for approval before beginning any work**.

Landscape Surveys

Request to have your landscape and irrigation system surveyed by a trained irrigation professional for FREE. Following the survey, the specialist will provide you with a customized report, outlining any apparent leaks or inefficiencies, suggestions for irrigation scheduling, and recommendations for money-saving landscape rebates. Whether your landscape is small or large, we have a program to fit your needs.

- **Water Wise Outdoor Survey Program**

A Water Wise Outdoor Survey is for landscapes at single-family, small commercial, industrial, institutional properties or multi-family residential sites up to half an acre. To get started, have a recent copy of your water bill on hand and submit a request at valleywater.org/outdoor-survey.

Call **408-630-2000** or email waterwise@valleywater.org with questions. If you are a customer of San Jose Water Company, please contact them directly to schedule a CATCH survey at **408-279-7900** or customer.service@sjwater.com.

- **Large Landscape Program**

A Large Landscape Survey is for landscapes at commercial, industrial, institutional properties or multi-family residential common areas with over half an acre. Also, free landscape water budgets are available for some properties, which compare your actual irrigation use to a property specific budget. Visit waterfluence.com to see if your property already receives this free benefit. Request a survey at watersavings.org.

Commercial and Facility Rebates

Receive up to \$100,000 for replacing or updating equipment with water-efficient technology that results in measurable water savings. This custom rebate based on the measured amount of water saved is available to qualifying facilities including facilities like businesses, schools, hospitals and government buildings. The rebate is \$4 per 100 cubic ft. of water saved per year, or 100% of the project cost (excluding labor and taxes), whichever is less.

Fixture Replacement Program

Replace old qualifying fixtures for FREE! Inefficient fixtures can be replaced for free by licensed plumbers at qualifying commercial, industrial, institutional properties or multi-family residential properties. Inefficient fixtures that qualify include toilets, urinals, showerheads, faucet aerators, and pre-rinse spray valves. Sign up at blusinc.com, call **800-597-2835**, or customerservice@blusinc.com.

Submeter Rebate Program

Submeters can save 10-30% of water used! Received at least \$150 per installed water submeter by upgrading from a single meter. Accessory dwelling units (ADUs or granny units), mobile home parks, apartments, and condominium complexes can qualify. There is no rebate cap when all eligibility requirements are met.

Report Water Waste

Help local residents and businesses preserve our shared water supply by confidentially reporting water waste and violations of outdoor water-use restrictions. Any specific notes like location, date and time, or frequency will help our inspectors follow up. To report water waste, you may do one of the following:

- Use our Access Valley Water app (by downloading or using the QR code)
- Email waterwise@valleywater.org
- Call **408-630-2000**



CONTACT US

To find out the latest information on Valley Water projects or to submit questions or comments, use our **Access Valley Water** customer request system at access.valleywater.org.



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