

**MEMORANDUM**

FC 14 (01-02-07)

TO: Board of Directors**FROM:** Water Conservation and
Demand Management
Committee**SUBJECT:** Water Conservation and Demand
Management Committee Meeting Summary
for April 26, 2019**DATE:** May 14, 2019

This memorandum summarizes agenda items from the meeting of the Water Conservation and Demand Management Committee held on April 26, 2019.

Attendees:

Board Members in attendance were: Director Nai Hsueh-District 5, Director Linda J. LeZotte-District 4, and Director Richard P. Santos-District 3.

Staff members in attendance were: Glenna Brambill, Jerry De La Piedra, Vanessa De La Piedra, Rachael Gibson, Samantha Greene, Garth Hall, Karen Koppett and Metra Richert.

Guests in attendance were: Michael Bolzowski, Brian Boyer, Anthony Eulo, Diane Foronda, Andy Gere, Curt Rayer, William Sherman and Bill Tuttle.

ACTION ITEMS**4.1 UPDATE ON MODEL WATER EFFICIENT NEW DEVELOPMENT ORDINANCE (MWENDO)**

Ms. Rachael Gibson reviewed the following:

Agenda Memo Summary:

Through an awareness campaign and working directly with cities that have developed MWENDO or expressed an interest in it, staff will encourage and support adoption of the Ordinance, with the goal of a 100% adoption rate. Staff level conversations have already occurred in Mountain View, Cupertino, and San Jose, and staff is scheduling meetings to begin discussing the ordinance adoption process for each city, town, and Santa Clara County, including each jurisdiction's timeline, policy development, public comment, Council processes, and implementation of MWENDO.

Staff will provide regular updates to the Water Conservation & Water Demand Management Committee and will work with Directors so they may participate in the process for Ordinance adoption, track progress, and inform strategic action.

BACKGROUND:

In 2015, the Santa Clara County Water Efficient New Development Task Force (Task Force) was formed, including representatives from Santa Clara County, cities (Cupertino, Morgan Hill, Mountain View, Palo Alto, and Sunnyvale), Valley Water, Sustainable Silicon Valley, and Joint Venture Silicon Valley. The goal of the Task Force was to develop a Model Water Efficient New Development Ordinance (MWENDO) for consideration and adoption by Santa Clara County cities and towns. Adoption of MWENDO would ensure new development meets strong water efficiency standards to extend the region's water supplies.

The Task Force met for approximately eighteen (18) months, conducting research on existing ordinances of other jurisdictions containing similar requirements. The Task Force then synthesized key content from these ordinances and developed the initial draft of MWENDO. The Task Force solicited input from a variety of other stakeholders, including the California Water Commission, the Santa Clara County/City Managers' Association, Cities Association of Santa Clara County, water retailers, and building officials. Valley Water Board of Directors advisory committees also provided input, including the Agricultural Water Advisory Committee, the Environmental and Water Resources Committee, and the Landscape Committee.

As part of the No Regrets Package within the 2017 Water Supply Master Plan passed by the Board in September 2017, the Board approved using Valley Water resources to encourage municipalities to adopt an ordinance for enhancing water efficiency standards in new and retrofitted developments.

Valley Water procured the technical assistance of a qualified sustainability consulting firm on behalf of the Task Force in September 2018, with additional input from the California Building Standards Commission and the California Energy Commission.

In order to encourage and support cities' and towns' adoption of MWENDO, staff is pursuing the following rollout plan:

- A. Generate awareness and ignite interest in MWENDO from Santa Clara County's cities and towns. This will be accomplished by giving a presentation to the Santa Clara County (SCC) Cities Association Board of Directors to reignite interest and initiate Valley Water support to those cities and towns interested in adopting the ordinance. Key policymakers who will be integral to the adoption of MWENDO sit on the SCC Cities Association Board of Directors.
- B. Engage and support the following jurisdictions that participated in the development of MWENDO and have expressed interest in the Ordinance, and assist based on their specific needs, timeline, and processes:
 - a. Cupertino
 - b. Mountain View
 - c. Morgan Hill
 - d. Palo Alto
 - e. San Jose
 - f. Santa Clara County
 - g. Sunnyvale
- C. Conduct subsequent follow up with the following cities to determine their interest, needs, timeline, and processes:
 - a. Campbell
 - b. Gilroy
 - c. Los Altos
 - d. Los Altos Hills
 - e. Los Gatos
 - f. Milpitas
 - g. Monte Sereno
 - h. Santa Clara
 - i. Saratoga

By rolling out the plan in this fashion, staff can build momentum region-wide for adoption of MWENDO across the county.

Committee discussion:

If the Ordinance is rolled out, make sure the Committee has a chance to review the final version.

Mr. Jerry De La Piedra and Mr. Garth Hall advised the Committee the Ordinance was brought to them in 2018 and the final version will come back to the Committee.

The Committee took no action.

4.2 WATER SUPPLY MASTER PLAN CONSERVATION AND STORMWATER CAPTURE PROJECT UPDATE

Ms. Metra Richert reviewed the following:

Agenda Memo Summary:

This is a status update for conservation and stormwater capture projects and programs, also known as the "No Regrets" package, specified in the update to Valley Water's Water Supply Master Plan. 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 that might be included in the Water Supply Master Plan. 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

The Board approved beginning planning for implementing the No Regrets package at their September 19, 2017 meeting, and an update on implementation was presented to the Committee on April 30, 2018, October 31, 2018 and on February 15, 2019.

- 1) **Advanced Metering Infrastructure (AMI)**
This component of the No Regrets package is being presented to this committee in a separate agenda item.
- 2) **Leak Repair Incentives**
No updates at this time, as staff anticipate implementing a leak repair incentive program after studying AMI results, in coordination with the water retailers.
- 3) **Graywater Rebate Program Expansion**
The Board approved the Graywater Direct Installation Program on July 10, 2018. In partnership with the non-profit Ecology Action, a workforce of contractors, landscape designers, and other landscape professionals received training to install code-compliant graywater systems in March 2019. Trainings included Saturday sessions where the workforce received hands-on experience installing laundry-to-landscape graywater systems and information to effectively maintain these types of graywater systems. Staff will be discussing options with Ecology Action to educate program participants in properly maintaining their systems. Initial feedback was positive: some participants expressed a desire to have similar trainings offered in the future, trainings in Spanish, and trainings that include hands-on experience installing permitted graywater systems.

Using the trained workforce, up to 100 low-income/underserved Santa Clara County residents will have graywater laundry-to-landscape systems installed by June 30, 2020 or until funding is expended, whichever comes first. Among their efforts to identify qualifying low-income/underserved participants, Ecology Action reached out to Our City Forest (the nonprofit that implemented our Lawn Busters Program) and UC Master Gardeners. Information for the direct installation service is now highlighted on ValleyWater.org. Conservation and Communications staff have developed social-media marketing for NextDoor and Facebook to post in biweekly intervals for the duration of the service.

Through the community-based social marketing campaign developed by Water Conservation and Communications staff, a yard sign and post card are being developed. The yard sign will help raise awareness of properties that use graywater. It will be made available to participants in both the Graywater Direct Installation Program and the Graywater Rebate Program. The post card will be used as part of a pilot strategy to mail directly to properties that meet preliminary graywater requirements using a parcel database previously developed.

- 4) **Model Water Efficiency New Development Ordinance**
The Model Water Efficiency New Development Ordinance has been finalized. Valley Water's Office of Government Relations is developing a strategic plan for rolling out the model ordinance, which will be presented to this committee in a separate agenda item.
- 5) **Stormwater Capture**
Stormwater capture can have water quality, water supply, flood management, environmental, and community (e.g., aesthetics, recreation, and education) benefits. Included in the "No Regrets" package are two different scales of stormwater capture projects - "centralized" and "decentralized":

"Centralized" projects are those that capture water from public parcels, including multiple parcels and "green streets," and agricultural parcels. Staff are developing three centralized stormwater projects - two municipal stormwater capture basins and stormwater recharge on agricultural land.

“Decentralized” projects focus primarily on keeping stormwater onsite and/or private citizen projects. Staff have developed two decentralized programs - rain barrel/cistern rebates and rain garden rebates.

Staff in the Water Utility Enterprise and Watersheds participated in the development of the Storm Water Resources Plan (SWRP) to develop, prioritize, and plan for multi-benefit “centralized” stormwater projects in the Santa Clara groundwater sub-basin of Santa Clara County eligible for future State grant funds. The proposed stormwater projects are located on public lands and streets. Through this plan, Upper Penitencia Creek was identified as an area for potential stormwater detention and recharge, and a conceptual project design was developed. Conceptual project designs were also developed for multiple municipal projects throughout northern Santa Clara County. The SWRP was completed in December 2018 and is available at http://scvurppp.org/scvurppp_2018/wp-content/uploads/2019/01/SCB_SWRP_FINAL_12-21-18_with_TOC_links.pdf.

Valley Water’s next steps are to continue to track city and County efforts to implement their projects in the SWRP; develop partnerships where such projects overlap with Valley Water interests in water supply, flood protection, and stream stewardship; and seek grant funding for partnership projects. With regard to Upper Penitencia Creek, staff are continuing to develop the project and are seeking funding for implementation. A review of the proposed Upper Penitencia stormwater project, as well as its context within the entire project, was provided at the last Water Conservation and Demand Management Committee meeting on March 25, 2019. Valley Water is also leading the effort to develop a South County Storm Water Resources Plan in collaboration with south county agencies.

In addition to the SWRP, staff are also investigating the potential to use agricultural lands for stormwater recharge. An agricultural land recharge program may help maximize the benefits of existing open space by using the agricultural lands as temporary recharge sites during the wet winter months. An example of this process is in the Central Valley where some almond growers allow their fields to flood during the winter to recharge the aquifer. The planned flooding for groundwater recharge is referred to as flood-managed aquifer recharge (Flood-MAR) and different methods are currently being piloted in the Central Valley and in the lower Pajaro River watershed. 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. Locally, staff are working with the Open Space Authority and Santa Clara County Planning to develop a planning and piloting approach to explore the potential implementation of agricultural land recharge in Santa Clara County. Staff presented an update on Flood-MAR activities regionally and statewide to the Agricultural Water Advisory Committee and informed the committee that staff are developing a draft Flood-MAR workplan. The Agricultural Water Advisory Committee communicated that Flood-MAR sounded like a promising water supply option. In addition, at the committee meeting, staff were invited by the Loma Prieta Resource Conservation District to present on Flood-MAR and other projects related to the Llagas groundwater sub-basin.

Regarding “decentralized” projects, Valley Water launched the new Rainwater Capture 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.

The program is included in our larger Landscape Rebate Program, and there have been several applications submitted for these rebates already. In fact, one customer has completed their project, which included installing a 4,800-gallon cistern system and reaching the total rebate cap of \$2,000. Rebates for 11 rain barrels have been issued so far and three rain garden projects are in process.

Water Conservation and Communications staff are working together to promote this program to the community. Several rainwater capture workshops are being offered throughout the county by the California Native Plant Society and BAWSCA to promote the rebate and rainwater capture. Staff is also in process of creating a rain garden installation video with a member of the Landscape Committee.

There has been some positive attention with the local media (newspaper articles, a local television station) and in the community. Staff will continue to explore partnerships with other water retailers or cities that either have their own program currently or may be interested in cost sharing. Currently, three agencies/cities are in the process of adding Rainwater Capture to their cost sharing agreements with Valley Water.

Committee discussion:

Rain barrels, gray water rebate program and training home owners versus renters, specific criteria on a case-by-case basis, outreach efforts (have staff work together with Ms. Rachael Gibson's unit) and does the system have shut off capabilities.

The Committee took no action.

4.3 WATER SUPPLY MASTER PLAN – ADVANCED METERING INFRASTRUCTURE

Ms. Metra Richert reviewed the following:

Agenda Memo Summary:

This is a status update for the Advanced Metering Infrastructure (AMI) Program, which is a part of the conservation and stormwater capture projects and programs, also known as the “No Regrets” package, specified in the update to the Santa Clara Valley Water District's (Valley Water) Water Supply Master Plan.

BACKGROUND:

The purpose of the AMI Program is to encourage the installation of AMI meters, and to maximize their savings potential by pairing the meters with software that will give real-time water data on an accessible online database, leak alerts, and home water use reports.

AMI is an integrated system of smart meters, communication networks, and data management systems that enables two-way communication between utilities and customers. In the water sector, AMI can help detect leaks, increase customer awareness of water use, and improve communication between retailers and their customers.

IMPLEMENTATION:

In order to determine the kind of AMI program that would be the most effective, staff worked with the local water retailers to get their feedback in terms of AMI needs and program recommendations. Additionally, Valley Water staff held a one-day workshop focusing on AMI in July 2017 that was attended by water suppliers from across the Bay Area. Valley Water and the Bay Area Water Supply & Conservation Agency also held a workshop in March 2019 to address local AMI pilot implementation strategies and results, and to identify opportunities for regional coordination on AMI planning and implementation.

On October 31, 2018, staff presented the proposed program, which involves establishing cost-sharing agreements with local water retailers, to the Board's Water Conservation and Demand Management Committee (Committee). To maximize participation and flexibility, Valley Water presented four options to the Committee, designated here as “ORIGINAL OPTIONS,” as follows:

ORIGINAL OPTION 1: New AMI Conversion Combined with Home Water Use Reports - Valley Water will rebate 50 percent of the cost of an AMI conversion, up to \$70 per conversion. Additionally, Valley Water will fund 50 percent of the cost of the software linked to AMI, up to \$4.50 per home per year, when combined with home water use reports.

ORIGINAL OPTION 2: Employment of AMI Conversion Combined with Home Water Use Reports - Valley Water will rebate \$10 per AMI conversion currently in operation annually for 7 years. If water retailer had previously received funding from Valley Water for AMI conversion those conversions will not be eligible for additional funding. Valley Water will fund 50 percent of the cost of the software linked to AMI, up to \$4.50 per home per year, when combined with home water use reports.

ORIGINAL OPTION 3: AMI Conversion Only - Valley Water will rebate 50 percent of the cost of an AMI conversion, up to \$70 per conversion.

ORIGINAL OPTION 4: Water Use Reports Only - Valley Water will rebate 50 percent of the cost of Home Water Use Reports, up to \$4.50 per home per year. No AMI or meter type requirement. Valley Water currently has this program in place.

Although the Committee agreed with the four options as presented, the program has not launched yet as staff has received additional questions/concerns from several of the investor owned utilities, including:

1. How will Valley Water ensure the region is receiving the benefit it is paying for?
2. The California Public Utilities Commission (CPUC) has not yet allowed investor owned utilities to include AMI projects in their rate base.
3. There's a financial disincentive for investor owned utilities to participate given how their rates are structured (i.e., they receive a return on investment on capital projects and must wait to receive CPUC approval for these investments) – is there then a fairness issue if they are paying through Valley Water groundwater charges for a program that they may not participate in?
4. Does Valley Water have the ability to fund a capital project that will be owned by another agency?
5. Should groundwater rates be used to fund water conservation programs that save water from the Hetch Hetchy system?

To address the first three questions/concerns outlined above, staff is proposing to modify the four previously presented options as follows:

OPTION 1: Eliminate this option as it does not account for measuring an ongoing benefit before issuing the full funding.

OPTION 2: Keep as is but clarify that funding in years 2 through 7 will be contingent upon documentation that a benefit (e.g., water savings) was achieved in the previous year(s). Clarify that Valley Water's funding may be used for either capital and/or operation and maintenance (O&M) costs.

OPTION 3: Eliminate this option as it does not account for measuring an ongoing benefit before issuing the full funding.

OPTION 4: Keep as is, no change

Regarding question #4 above (i.e. Valley Water's ability to fund capital projects owned by other agencies), the District Act allows Valley Water to collect groundwater charges to pay for the costs of constructing, maintaining and operating facilities that conserve or distribute water within Valley Water groundwater charge zones. The goal of each proposed AMI option is to detect in real-time and minimize water losses from water conveyance infrastructure. The District Act does not limit Valley Water from making reasonable investments to encourage development of facilities that will protect and augment water supplies within Valley Water groundwater charge zones simply because Valley Water does not acquire ownership of those facilities. Like other Valley Water conservation programs, reasonable costs to incentivize water use efficiency may be paid with water utility revenue since water use efficiency is considered in-lieu recharge, which is one of the purposes for which groundwater charges may fund pursuant to Section 26.3 of the District Act.

Finally, regarding question #5 above, in earlier years Valley Water did not offer its water conservation programs to residents in areas that were 100 percent served by the Hetch Hetchy system. However, in the late 1990s/early 2000s, Valley Water's Board of Directors made the decision to offer our water conservation programs countywide. Valley Water staff have been implementing our water conservation programs consistent with that decision ever since.

Committee discussion:

AMI Pilot program highlights, in-depth guidelines, metering, benefits of monthly billing, leak detection.

Mr. William Sherman had a question on rate payers and Mr. Anthony Eulo stated that leak detection is difficult but the leak alerts are very helpful.

Mr. Andy Gere and Mr. Curt Rayer thanked Valley Water staff for working with San Jose Water Company on the pilot program and were also available to answer questions.

Mr. Garth Hall gave input on the 2nd Option referenced in materials as a beneficial feature.

Ms. Diane Foronda of City of Santa Clara attended the Bay Area Water Supply and Conservation Agency's (BAWSCA) AMI Workshop and was thankful for the presentation and collaboration with the cost-sharing of AMI.

The Committee took no action.

If you have any questions or concerns, you may contact me at, gbrambill@valleywater.org or 1.408.630.2408.

Thank you!

Glenna Brambill, Management Analyst II,
Board Committee Liaison
Office of the Clerk of the Board

THIS PAGE INTENTIONALLY LEFT BLANK