

July 18, 2022

MEETING NOTICE

WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE

Members of the Water Conservation and Demand Management Committee:

Director Nai Hsueh, Committee Vice Chair
Director Barbara F. Keegan
Director Linda J. LeZotte, Committee Chair

Staff Support of the Water Conservation and Demand Management Committee:

Rick L. Callender, Esq., Chief Executive Officer
Melanie Richardson, Assistant Chief Executive Officer
Aaron Baker, Chief Operating Officer, Water Utility
Rachael Gibson, Chief of External Affairs
J. Carlos Orellana, District Counsel
Gregory Williams, Deputy Operating Officer, Raw Water Division
Vincent Gin, Deputy Operating Officer, Water Supply Division
Sam Bogale, Deputy Operating Officer, Treated Water Operations & Maintenance Division
Marta Lugo, Assistant Officer, Office of Government Relations
Bart Broome, Assistant Officer, Office of Government Relations
Antonio Alfaro, Government Relations Advocate, Office of Government Relations
Kirsten Struve, Assistant Officer, Water Supply Division
Vanessa De La Piedra, Groundwater Management Manager, Groundwater Monitoring and Analysis Unit
Metra Richert, Unit Manager of the Water Supply Planning and Conservation Unit
Samantha Greene, Senior Water Resources Specialist, Water Supply Planning & Conservation Unit
Jing Wu, Senior Water Resources Specialist, Water Supply Planning & Conservation Unit
Justin Burks, Senior Water Conservation Specialist, Water Supply Planning & Conservation Unit

The regular meeting of the Water Conservation and Demand Management Committee is scheduled to be held on **Monday, July 25, 2022, at 11:00 a.m., in the Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118.**

The meeting agenda and corresponding materials are located on our website:
<https://www.valleywater.org/how-we-operate/committees/board-advisory-committees>



Water Conservation and Demand Management Committee Meeting

Public and non-presenting staff Join Zoom Meeting
<https://valleywater.zoom.us/s/92597340524>

Meeting ID: 925 9734 0524

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Meeting ID: 925 9734 0524



Santa Clara Valley Water District Water Conservation and Demand Management Committee Meeting

**HQ Boardroom
5700 Almaden Expressway
San Jose CA 95118**

REGULAR MEETING AGENDA

**Monday, July 25, 2022
11:00 AM**

District Mission: Provide Silicon Valley safe, clean water for a healthy life, environment and economy.

BOARD REPRESENTATIVES:

Director Nai Hsueh, Committee Vice Chair
Director Barbara F. Keegan
Director Linda J. LeZotte, Committee Chair

All public records relating to an item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at the Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarters Building, 5700 Almaden Expressway, San Jose, CA 95118, at the same time that the public records are distributed or made available to the legislative body. Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend Board of Directors' meeting. Please advise the Clerk of the Board Office of any special needs by calling (408) 265-2600.

Mr. Vincent Gin
Ms. Kirsten Struve
(Staff Liaisons)

Ms. Glenna Brambill, (COB Liaison)
Management Analyst II
gbrambill@valleywater.org
1-408-630-2408

Note: The finalized Board Agenda, exception items and supplemental items will be posted prior to the meeting in accordance with the Brown Act.

Santa Clara Valley Water District
Water Conservation and Demand Management Committee
REGULAR MEETING
AGENDA

Monday, July 25, 2022

11:00 AM

HQ Boardroom

*****IMPORTANT NOTICES AND PARTICIPATION INSTRUCTIONS*****

Santa Clara Valley Water District (Valley Water) Board of Directors/Board Committee meetings are held as a “hybrid” meetings, conducted in-person as well as by telecommunication, and is compliant with the provisions of the Ralph M. Brown Act.

To maximize public safety while still maintaining transparency and public access, members of the public have an option to participate by teleconference/video conference or attend in-person. To observe and participate in the meeting by teleconference/video conference, please see the meeting link located at the top of the agenda. If attending in-person, you are required to wear a mask.

In accordance with the requirements of Gov. Code Section 54954.3(a), members of the public wishing to address the Board/Committee at a video conferenced meeting, during public comment or on any item listed on the agenda, should use the “Raise Hand” tool located in the Zoom meeting link listed on the agenda, at the time the item is called. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

Valley Water, in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in Valley Water Board of Directors/Board Committee meetings to please contact the Clerk of the Board’s office at (408) 630-2711, at least 3 business days before the scheduled meeting to ensure that Valley Water may assist you.

This agenda has been prepared as required by the applicable laws of the State of California, including but not limited to, Government Code Sections 54950 et. seq. and has not been prepared with a view to informing an investment decision in any of Valley Water’s bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in the information in this agenda are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such statement. The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of Valley Water’s bonds, notes or other obligations and investors and potential investors should rely only on information filed by Valley Water on the Municipal Securities Rulemaking Board’s Electronic Municipal Market Access System for municipal securities disclosures and Valley Water’s Investor Relations website, maintained on the World Wide Web at <https://emma.msrb.org/> and <https://www.valleywater.org/how-we-operate/financebudget/investor-relations>, respectively.

Under the Brown Act, members of the public are not required to provide identifying information in order to attend public meetings. Through the link below, the Zoom webinar program requests entry of a name and email address, and Valley Water is unable to modify this requirement. Members of the public not wishing to provide such identifying information are encouraged to enter "Anonymous" or some other reference under name and to enter a fictional email address (e.g., attendee@valleywater.org) in lieu of their actual address. Inputting such values will not impact your ability to access the meeting through Zoom.

Join Zoom Meeting:
<https://valleywater.zoom.us/j/92597340524>

Meeting ID: 925 9734 0524
Dial by phone
1-669-900-9128,,92597340524#

1. CALL TO ORDER:

1.1. Roll Call.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON THE AGENDA.

Notice to the Public: Members of the public who wish to address the Committee on any item not listed on the agenda should access the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Committee Chair in order requests are received and granted speaking access to address the Committee. Speakers comments should be limited to two minutes or as set by the Chair. The law does not permit Committee action on, or extended discussion of, any item not on the agenda except under special circumstances. If Committee action is requested, the matter may be placed on a future agenda. All comments that require a response will be referred to staff for a reply in writing. The Committee may take action on any item of business appearing on the posted agenda.

3. APPROVAL OF MINUTES:

3.1. Approval of Minutes.

[22-0861](#)

Recommendation: Approve the June 27, 2022, Meeting Minutes

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: 06272022 WCaDMC DRAFT Mins](#)

Est. Staff Time: 5 Minutes

4. REGULAR AGENDA:

- 4.1. Monthly update on progress towards achieving Valley Water's water use reduction target and water conservation efforts related to the drought emergency. [22-0862](#)
- Recommendation: Receive an update on progress towards meeting the Board's call for water use reduction in response to the water shortage emergency condition and water conservation efforts relevant to the overall drought emergency response and provide feedback to staff.
- Manager: Kirsten Struve, 408-630-3138
- Attachments: [Attachment 1: PowerPoint Presentation](#)
[Attachment 2: June Drought Response Report](#)
- Est. Staff Time: 15 Minutes
- 4.2. Draft Ordinance Establishing Zones of Controlled Drinking Water Well Construction for the Purified Water Project. [22-0864](#)
- Recommendation: Receive information on the draft ordinance establishing zones of controlled drinking water well construction for Valley Water's Purified Water Project at the Los Gatos Recharge System and provide feedback to staff, including any proposed modifications to the draft ordinance.
- Manager: Gregory Williams, 408-630- 2867
- Attachments: [Attachment 1: Draft Well Construction Zone Ordinance](#)
[Attachment 2: PowerPoint Presentation](#)
- Est. Staff Time: 15 Minutes
- 4.3. Evaluating Water Conservation Program Opportunities. [22-0865](#)
- Recommendation: Receive and discuss information on how staff evaluate potential water conservation programs, and provide feedback to staff.
- Manager: Kirsten Struve, 408-630-3138
- Attachments: [Attachment 1: PowerPoint Presentation](#)
[Attachment 2: Hot Water Re-circulation Pilot Study](#)
[Attachment 3: Water Conservation Flyer](#)
- Est. Staff Time: 15 Minutes

4.4. Standing Items Report.

[22-0866](#)

- Recommendation:
- A. This agenda item allows the Committee to receive verbal or written updates and discuss the below subjects. These items are generally informational; however, the Committee may request additional information from staff:
 - B. This is informational only and no action is required. *Staff may provide a verbal update at the 7/25/2022, meeting if there is reportable/updated information.*
 - 1. Sustainable Groundwater Management Act (SGMA)
 - 2. Flood MAR
 - 3. Agricultural Water Use Baseline Study

Manager: Candice Kwok-Smith, 408-630-3193

Est. Staff Time: 10 Minutes

4.5. Review Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda.

[22-0867](#)

Recommendation: Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

Manager: Candice Kwok-Smith, 408-630-3193

Attachments: [Attachment 1: 2022 WCaDMC Work Plan](#)

Est. Staff Time: 5 Minutes

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE REQUESTS.

This is an opportunity for the Clerk to review and obtain clarification on any formally moved, seconded, and approved requests and recommendations made by the Committee during the meeting.

6. ADJOURN:

6.1. Adjourn to Regular Meeting at 11:00 a.m., on Monday, August 29, 2022.

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Santa Clara Valley Water District

File No.: 22-0861

Agenda Date: 7/25/2022

Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management Committee

SUBJECT:

Approval of Minutes.

RECOMMENDATION:

Approve the June 27, 2022, Meeting Minutes

SUMMARY:

A summary of Committee discussions, and details of all actions taken by the Committee, during all open and public Committee meetings, is transcribed and submitted for review and approval.

Upon Committee approval, minutes transcripts are finalized and entered into the District's historical records archives and serve as historical records of the Committee's meeting.

ATTACHMENTS:

Attachment 1: 06272022 WCaDMC Draft Minutes

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193

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WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE MEETING

DRAFT MINUTES

MONDAY, JUNE 27, 2022

A regular meeting of the Water Conservation and Demand Management Committee was held on June 27, 2022, at 5700 Almaden Expressway, in San Jose, California.

1. CALL TO ORDER

Committee Chair Director Linda J. LeZotte called the meeting to order at 11:03 a.m.

1.1. ROLL CALL

Committee Board Members in attendance were: Committee Vice Chair, Director Nai Hsueh (District 5), Director Barbara F. Keegan (District 2), and Committee Chair, Director Linda J. LeZotte (District 4) establishing a quorum.

Staff members in attendance were: Joseph Aranda, Aaron Baker, Roseryn Bhusdabourg, Neeta Bijoor, Glenna Brambill, Justin Burks, Vanessa De La Piedra, Phil Dolan, Paola Giles, Vincent Gin, Samantha Greene, Jason Gurdak, Alexander Johanson, Cindy Kao, Matt Keller, Candice Kwok-Smith, Jess Lovering, Isabella Millet, Carolos Orellana, Michael Potter, Colin Resch, Metra Richert, Don Rocha, Ashley Shannon, Nicholas Simard, Kirsten Struve, Sherilyn Tran, Gregory Williams, and Jing Wu.

Guest Agencies in attendance were: Brian Boyer (Cinnabar Hills Golf Club), Katja Irvin (Sierra Club Loma Prieta Chapter), and Kurt Elvert, John Tang, and Bill Tuttle (San Jose Water Company-SJWC).

Public in attendance were: Hon. Jim Beall, Arthur M. Keller, Ph.D., Christophe LaBelle, and Julia Nussbaum.

2. TIME OPEN FOR PUBLIC COMMENT ON ANY ITEM NOT ON AGENDA

There was no one present who wished to speak.

3. APPROVAL OF MINUTES

3.1 APPROVAL OF MINUTES

It was moved by Director Nai Hsueh, seconded by Director Barbara F. Keegan, and carried unanimously, to approve the minutes of the May 19, 2022, Water Conservation and Demand Management Committee meeting as presented.

4. ACTION ITEMS

4.1. MONTHLY UPDATE ON PROGRESS TOWARDS ACHIEVING VALLEY WATER'S WATER USE REDUCTION TARGET AND WATER CONSERVATION EFFORTS RELATED TO THE DROUGHT EMERGENCY

Ms. Neeta Bijoor reviewed the materials as outlined in the agenda items.

The Water Conservation and Demand Management Committee discussed the following: Water rates, survey responses and breakdown, tailoring messaging, development and growth concerns-drought's impact and challenges, Water Supply Master Plan (WSMP) short term vs. long term goals and planning, restaurants serving water, and continued water conservation efforts.

Public comments:

Katja Irvin had a question on the water waste complaints and the link for complaint process. Dr. Arthur Keller had a question on water retailers' usage and the modification of the 'green' regulations.

Mr. Justin Burks, Mr. Matt Keller, Ms. Kirsten Struve, Mr. Aaron Baker, and Mr. John Tang (San Jose Water) were available to answer questions.

The Water Conservation and Demand Management Committee took no action

4.2. WATER FIXTURE REPLACEMENT PROGRAM ONE YEAR UPDATE

Mr. Alexander Johanson reviewed the materials as outlined in the agenda items.

The Water Conservation and Demand Management Committee discussed the following: toilet types, vendor list, cost-sharing opportunities, county-wide partnerships, cooperative agreements, and other programs.

The Water Conservation and Demand Management Committee took no action.

4.3. COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, AND MULTI-FAMILY RESIDENTIAL (CII/MF) WATER CONSERVATION PROGRAMS

Mr. Justin Burks reviewed the materials as outlined in the agenda items.

The Water Conservation and Demand Management Committee discussed the following: outreach to condominiums, management companies, high density/multi-dwelling/homeowners' associations, realtors,

Public comment:

Dr. Arthur Keller suggested having a program "cash for grass."

The Water Conservation and Demand Management Committee took no action.

4.4. STANDING ITEMS REPORT

Committee Chair Director Linda J. LeZotte reviewed the materials as outlined in the agenda items.

Attachment 1

Page 2 of 4

There were no verbal updates for:

1. Sustainable Groundwater Management Act (SGMA)
2. Flood MAR
3. Agricultural Water Use Baseline Study

The Water Conservation and Demand Management Committee took no action.

4.5 REVIEW WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE WORK PLAN, THE OUTCOMES OF BOARD ACTION OF COMMITTEE REQUESTS; AND THE COMMITTEE'S NEXT MEETING AGENDA


Ms. Glenna Brambill and Kirsten Struve reviewed the materials as outlined in the agenda items.

The Water Conservation and Demand Management Committee discussed the following: requested MAP process – figure out a way to bring items to the committee, WSMP is an important document (may be too technical-so possibly having a workshop type board meeting) and would like to also engage the community.

The July Agenda Items:

- Drought/outreach update/water waste statistics further discussion
- Drought Plan vulnerability assessment
- Draft Ordinance for the Proposed Drinking Water Well Control Zones for the Purified Water Project

Future agenda items:

- Drought vs. long term planning
- Ag Baseline study (August/September)
-  Ms. Samantha Greene gave a brief update, the study has completed their collection data and will be able to have a report late summer with a completed study by year's end
- Information on hot water recirculation pumps and what the options are (easy and cheap)/how do we rebate?/inclusion in MWENDO – look at evaluating it
- AMI update (prompted by SJWC approval)

The Water Conservation and Demand Management Committee took the following action:

It was moved by Director Nai Hsueh, seconded by Director Barbara F. Keegan, and carried unanimously, approved requesting that the Board consider approving a Board Workshop on the Water Supply Master Plan (WSMP) MAP process to engage all that would benefit (Board, Committee and Community) when staff is ready.

The Committee's next scheduled meeting is at 11:00 a.m. on July 25, 2022. Also noted to change the August meeting from August 22nd to August 29th.

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE'S REQUESTS

Ms. Glenna Brambill stated there was one action item for Board consideration.

Agenda Item 4.5

The Water Conservation and Demand Management Committee unanimously, approved requesting that the Board consider approving a Board Workshop on the Water Supply Master Plan (WSMP) MAP process to engage all that would benefit (Board, Committee and Community) when staff is ready.

6. ADJOURNMENT

Committee Chair Director Linda J. LeZotte adjourned at 12:41 p.m., to the next scheduled meeting.

Glenna Brambill
Board Committee Liaison
Office of the Clerk of the Board

Approved:



Santa Clara Valley Water District

File No.: 22-0862

Agenda Date: 7/25/2022

Item No.: 4.1.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management Committee

SUBJECT:

Monthly update on progress towards achieving Valley Water's water use reduction target and water conservation efforts related to the drought emergency.

RECOMMENDATION:

Receive an update on progress towards meeting the Board's call for water use reduction in response to the water shortage emergency condition and water conservation efforts relevant to the overall drought emergency response and provide feedback to staff.

SUMMARY:

On June 9, 2021, the Valley Water Board of Directors through Resolution 21-68 declared a water shortage emergency condition pursuant to California Water Code §350, called for water use reduction of 15% compared to 2019, and urged the County of Santa Clara (County) to proclaim a local emergency. Valley Water Resolution 22-20 amended Valley Water Resolution 21-68 on April 12, 2022, to call for no more than 2 days of irrigation in a week for ornamental lawns and prohibit excessive runoff, midday irrigation, and irrigation after rainfall. On May 24, 2022, the Board approved Ordinance 22-02 to enforce these restrictions.

In 2022, the County and California entered the third year of drought, and experienced the driest January, February and March on record. In 2021 and 2022, Valley Water's Federal and State imported water allocations were drastically reduced to historic lows. On March 28, 2022, Governor Gavin Newsom issued Executive Order N-7-22 to call on local water suppliers to move to Stage 2 of their water shortage contingency plans, at a minimum. The U.S. Drought Monitor Report from July 7, 2022, indicates that the County is in severe drought. The northern Sierra Nevada snowpack, a primary source of imported water, is 16% of normal as of June 13, 2022. Staff will provide additional updates regarding latest drought conditions.

The California Department of Water Resources has announced a 2022 SWP allocation of 5 percent, which equates to an allocation of 5 TAF for Valley Water. DWR has approved Valley Water's request for additional water to meet our critical human health and safety needs. The U.S. Bureau of Reclamation Central Valley Project (CVP) water supply allocations for south-of-Delta CVP contractors, including Valley Water, are currently set to a municipal and industrial allocation of public health and safety water only and an agricultural allocation of zero percent. Reclamation has approved Valley Water's request for public health and safety water.

Groundwater levels in June have continued the seasonal decline, which typically occurs in summer

due to higher temperatures, increased water demand, and associated increased pumping. Greater than average declines in groundwater levels are expected this year because of the drought. Achieving the Board's water use reduction target is essential to minimize the risk of resumed subsidence in North County and wells going dry, particularly in South County. That risk increases as the drought persists.

Consequently, conservation is an important strategy to help reach the 15% call for water use reduction and mitigate negative impacts.

Water Conservation Outreach

Valley Water's "Say Yes" water conservation campaign entered its second month with the distribution of a partner toolkit to retailers and agencies. The toolkit includes downloadable creatives ranging from GIFs to video and web banners. Public signs on buses and billboards were deployed. Drought awareness materials for hotels, restaurants and public entities have been added to the shopping cart. These include restaurant table tents, hotel towel reuse door hangers and tents, mirror clings and yard signs.

Say YES to Saving Water video and radio commercials are now playing on digital and streaming platforms. A video featuring Chair Pro Tem Varela urging residents to say YES to saving water was published on Valley Water's YouTube page, Valley Water's Be Heard Drought page and social media channels. An explanatory video on Valley Water's percolation ponds and why many appear dry during times of drought as well as the first of five Landscape Rebate success stories featuring local program applicants were distributed on our social channels.

Media interest in June 2022 focused on the Board's approval of the watering restrictions enforcement ordinance, the Delta Conveyance Project and the Pacheco Reservoir and San Luis Expansion Projects. The Speakers Bureau Program held four drought presentations in June.

Water Conservation Programs

Valley Water launched a new component of the Landscape Rebate Program, the Large Landscape Lawn to Mulch Rebate. The new rebate category will be eligible to commercial, industrial, institutional (CII) and multifamily sites who remove a minimum of 15,000 square feet of lawn and replace it with mulch. Existing trees within the converted lawn areas must be irrigated with low flow drip irrigation. The new rebate will also include provisions for golf courses to convert irrigated turf to native grass seed in out-of-play areas. This program will help support sites in complying with California's CII ban of irrigation of non-functional turf, which became effective in June 2022. In addition, the maximum rebate for commercial, industrial, institutional, and multi-family properties was increased to \$100,000 per property.

Valley Water hosted a webinar in June focusing on Tree Care During Times of Drought with about 80 in attendance on Zoom and Facebook Live. Also, the June Do-It-Yourself Lawn Busters workshop, in partnership with local non-profit Our City Forest, was a success with 13 volunteers in attendance to learn how to convert a resident's turfgrass lawn into a low-water use landscape. Valley Water ran a new promotional campaign on the Shopping Cart (eCart) Program that resulted in significant

increases in participation.

Countywide Water Use Reduction

Water savings in the county is trending in the right direction with water savings in May greater than in April. Countywide water savings was 2% in May 2022 compared to May 2019, and was 9% in May 2022 compared to May 2020. May was the first month in 2022 with water savings compared to 2019 use, showing that the county is making progress in reducing water use. Santa Clara County's cumulative water savings from June 2021 - May 2022 is 3%, compared to 2019. In terms of the cumulative savings from July 2021 - May 2022 compared to 2020, Santa Clara County savings is 8% while the State's is 2%.

Water Waste Enforcement

At the May 24th Board meeting, Valley Water passed Resolution 22-02 to establish mandatory outdoor conservation measures for properties served potable water directly or indirectly from Valley Water sources. These mandatory measures include limiting irrigation of non-functional turf to a maximum two days per week, and not irrigating any outdoor landscape during and within 48 hours of measurable rainfall, between 9 AM and 6 PM, or in a manner that causes runoff. The Water Waste Program is continuing its educational mission while enforcing the mandatory outdoor measures. The ordinance effective date was June 1, 2022. Over 500 water waste complaints were received in June. Of these, over 200 of the complaints received are enforceable, as they relate to the restrictions listed in our enforcement ordinance and to Valley Water supplies, and the remaining relate to other types of water waste. The most common complaint was related to runoff. Valley Water is addressing these complaints and coordinating with retailers to avoid duplication of efforts.

ATTACHMENTS:

Attachment 1: PowerPoint

Attachment 2: June 2022 Drought Response Report

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138

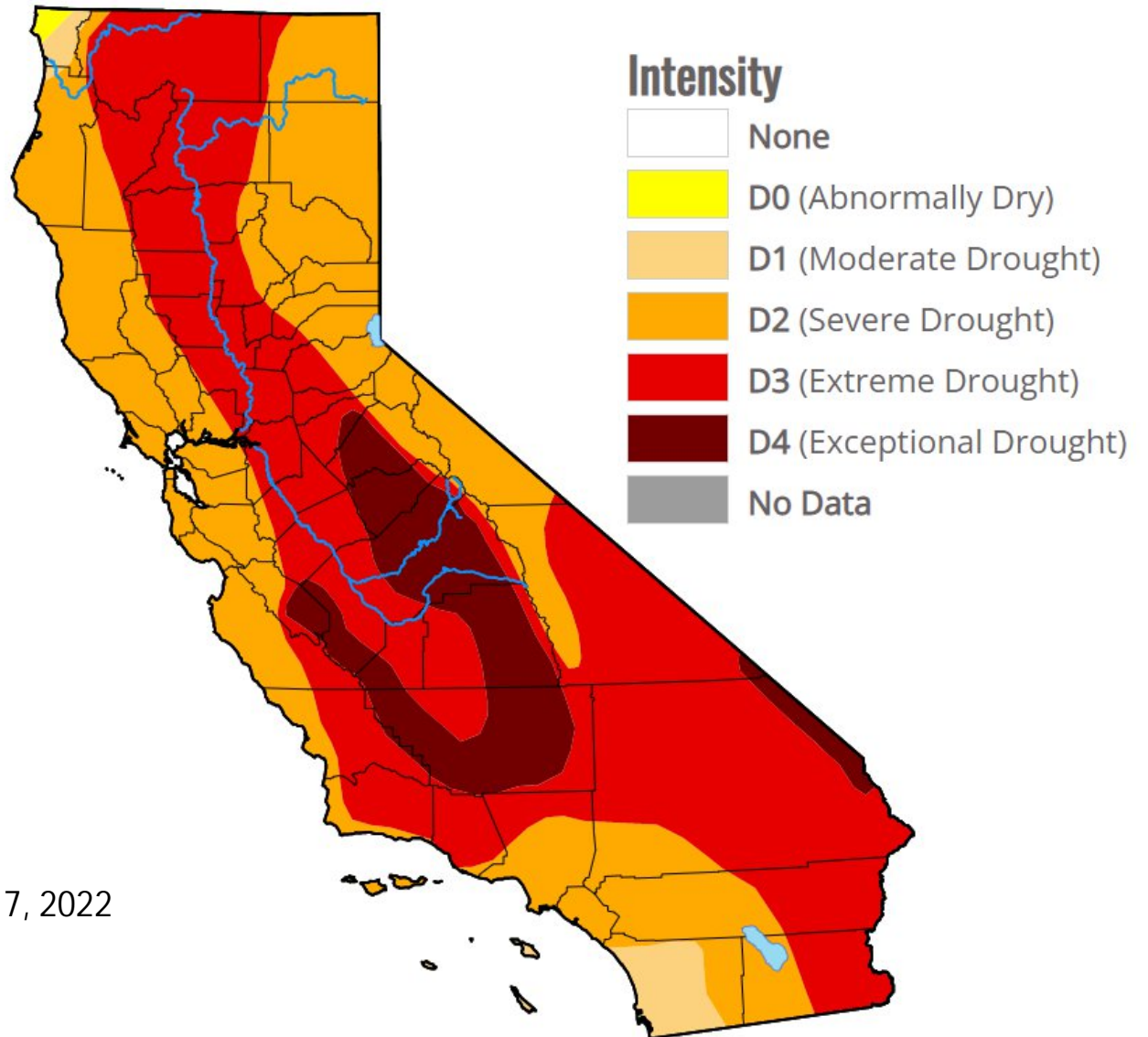
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Monthly Drought Emergency Response and Water Supply Update

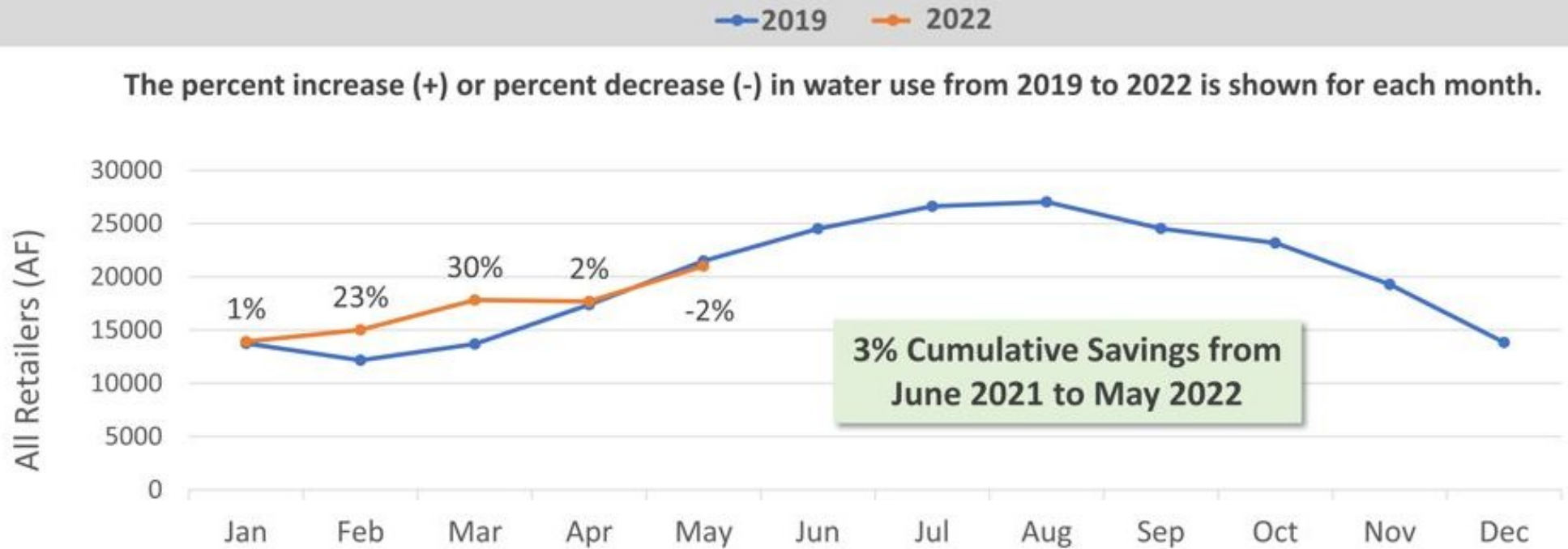
Water Conservation and Demand Management Committee
July 25, 2022

Severe Drought



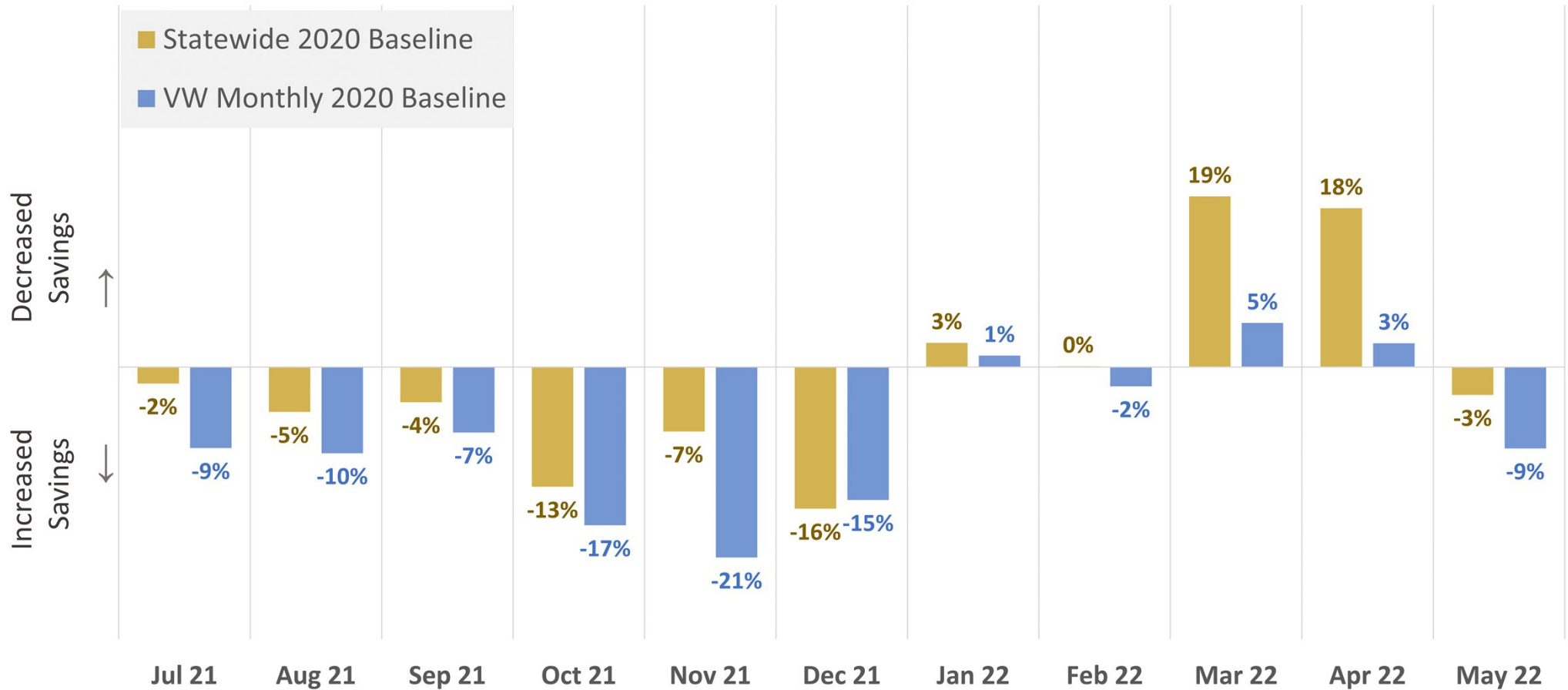
Data source: U.S. Drought Monitor, July 7, 2022

Countywide Water Savings



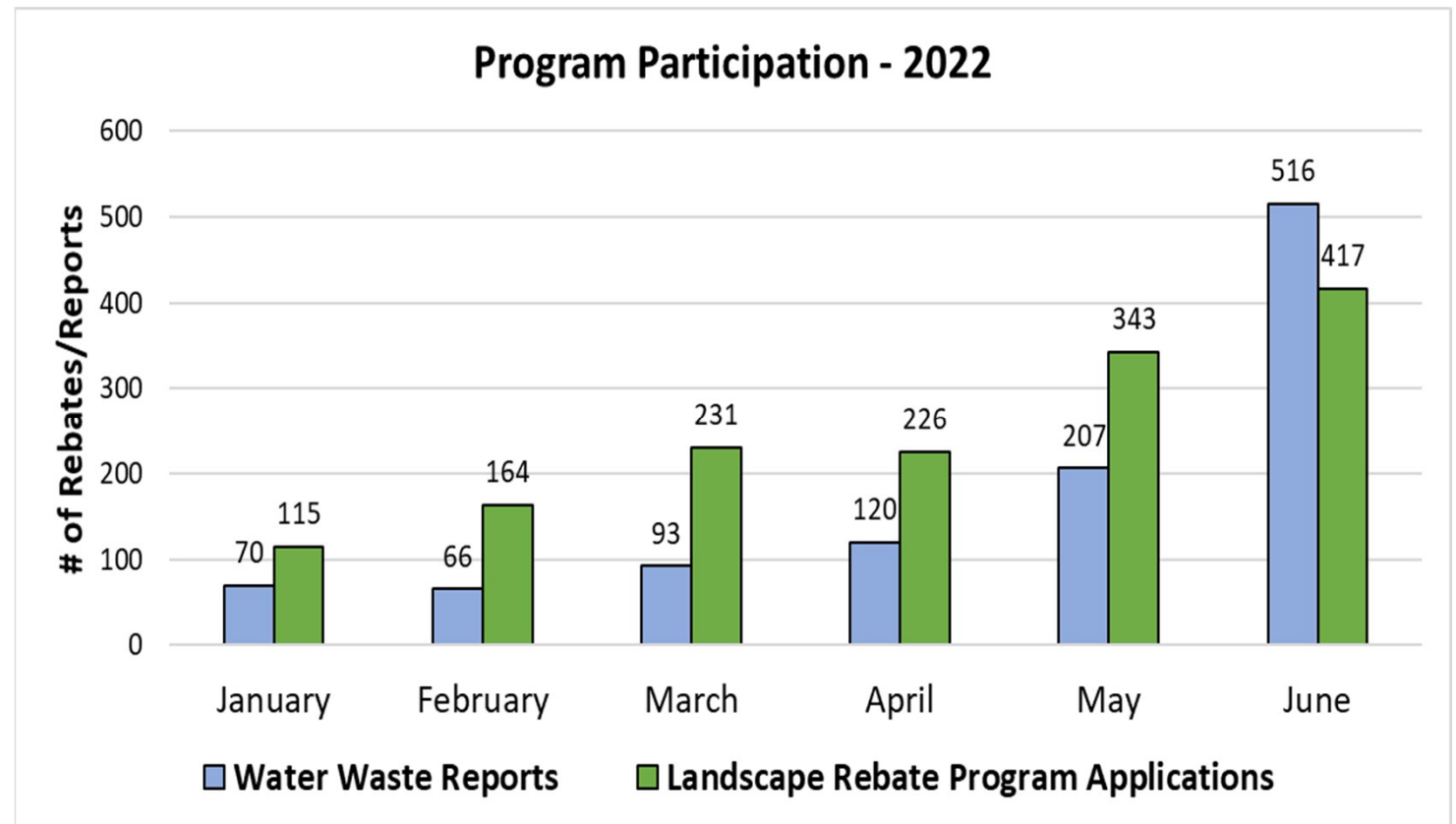
Water use headed in the right direction

County compared to State Savings



Water Conservation

- Participation remains high
- E-cart
 - 6,342 orders
- Water waste enforcement
- Commercial program enhancements



Water Use Reduction Enforcement Updates

June 2022

Total Complaints	516
Enforceable Complaints	224

Restriction	Percent
Runoff	55%
Watering from 9 AM - 6 PM	23%
More than 2 days of watering per week	19%
Watering within 48 hours of rainfall	3%

Our county continues to face a severe drought!

This is a reminder from Valley Water about the need to use water wisely.

A water waste inspector stopped by today for the following reason(s):

- ☐ Broken plumbing, sprinkler, or irrigation system
- ☐ Use of water that results in flooding or runoff onto the sidewalk, gutter, or street
- ☐ Use of water for washing down paved or hard surfaces
- ☐ Running irrigation sprinklers for more than 15 minutes per day per station
- ☐ Watering within restricted hours of
- ☐ Limit on water days per week:
- ☐ Other:



Case number: Inspection: Your water retailer:

Recommended action:

Failure to comply with water waste restrictions may result in future enforcement action, including fines.
If you have any additional questions regarding this notice or water waste restrictions in your area, please contact us at 408-630-2000 or waterwise@valleywater.org.

As the inspector that visited you may not be in the office, please reference your address or case number above.

Thank you for using this reminder to use water wisely.

 **LET'S SAY YES TO SAVING WATER**
WaterSavings.org 

SCAN ME!

valleywater.org/find-my-retailer
To learn more information about your water retailer and water use restrictions, scan this QR code or visit valleywater.org/find-my-retailer

 watersavings.org
To learn more about the water conservation programs and resources below, scan this QR code, visit watersavings.org or call the Water Conservation Hotline at 408-630-2954.

Valley Water offers the following water conservation programs to help all residents and businesses of Santa Clara County conserve water.

WATER WISE SURVEY PROGRAM
Outdoor irrigation survey offered to properties with less than a half-acre of landscaping—a trained irrigation professional will complete a comprehensive evaluation of your irrigation system for free.
San Jose Water Company customers should call 408-279-7900 or visit sjwater.com/4atch for an outdoor water checkup.

LANDSCAPE REBATE PROGRAM
Offers rebates to convert lawns and pools to low water use landscapes, upgrading existing irrigation equipment to high-efficiency irrigation equipment, and to install rainwater capture systems like rain barrels and more!

GRAYWATER REBATE PROGRAM
Offers rebates for properly connecting a clothes washer to a graywater irrigation system, as well as online resources for learning about other types of graywater systems.

FREE WATER-SAVING EQUIPMENT & MATERIALS
Low-flow showerheads, high-efficiency faucet aerators, toilet flappers and other devices are available for free through the online shopping cart.

LARGE LANDSCAPE PROGRAM
Eligible properties greater than a half-acre can schedule a free landscape field survey to receive irrigation efficiency recommendations.

COMMERCIAL & FACILITY REBATES
Includes water-efficient technology rebates for upgrading equipment in facilities and submeter rebates for residential properties including Accessory Dwelling Units (ADUs) and more!

EVENTS
Local water conservation events can be found at both watersavings.org and southbaygreengardens.org.

 **Valley Water**
Clean Water • Healthy Environment • Flood Protection

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CII non-functional turf irrigation ban

- Coordinating with retailers to add CII non-functional turf irrigation ban to ordinance
- Water Conservation and Demand Management Committee in August
- Amended Ordinance for Board consideration in September

Drought, Conservation and Enforcement Outreach

- Say YES to Saving Water campaign partner toolkit
- Media and public outreach materials on ordinance enforcement
- Say YES videos
- Speakers Bureau presentations
- Lawn signs



Hotel, Restaurant and Business Signage



QUESTIONS



Drought Emergency Response Report

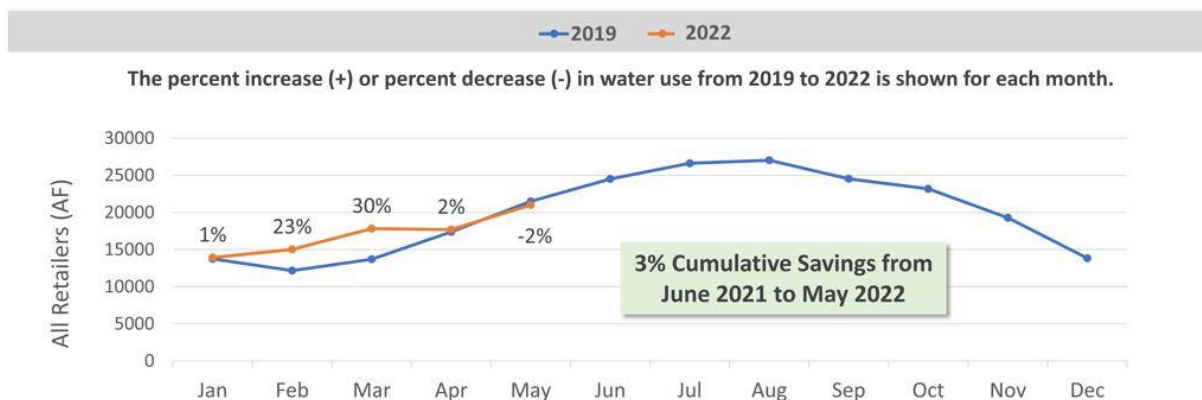
JUNE 2022

Drought Resolution Implementation

On June 9, 2021, the Board adopted Valley Water Resolution 21-68 which declared a water shortage emergency condition pursuant to California Water Code §350, called for water use reduction of 15% compared to 2019, and urged the County of Santa Clara (County) to proclaim a local emergency. The County adopted a Resolution ratifying the proclamation of a local emergency due to the drought on June 22, 2021. California's Governor included Santa Clara County as part of a drought emergency proclamation on July 8, 2021, and this proclamation included all California counties on October 19, 2021. Valley Water activated its Emergency Operations Center (EOC) on June 16, 2021 to assist with resolution implementation and other drought-related efforts. Valley Water Resolution 22-20 amended Valley Water Resolution 21-68 on April 12, 2022 to call for no more than 2 days of irrigation in a week for ornamental lawns and prohibit excessive runoff, midday irrigation, and irrigation after rainfall. On May 24, 2022, the Board approved Ordinance 22-02 to enforce these restrictions. The ordinance was published in a newspaper, and Valley Water is closely coordinating with water retailers as part of the implementation process.

Retailer Water Use Reduction

The graph below depicts total water use from the 13 retailers in Santa Clara County to help track progress towards achieving Valley Water's 15% call for water use reduction made in June 2021.



- Water savings in the county is trending in the right direction with water savings in May greater than in April.
- Countywide water savings was 2% in May 2022 compared to May 2019, and was 9% in May 2022 compared to May 2020. May was the first month in 2022 with water savings compared to 2019 use, showing that the county is making progress in reducing water use.
- Santa Clara County's cumulative water savings from June 2021 – May 2022 is 3%, compared to 2019.
- On June 1, 2022, Valley Water began enforcing outdoor water waste restrictions against runoff, midday watering, and watering after rainfall, and a limit of two days a week of watering for non-functional turf.

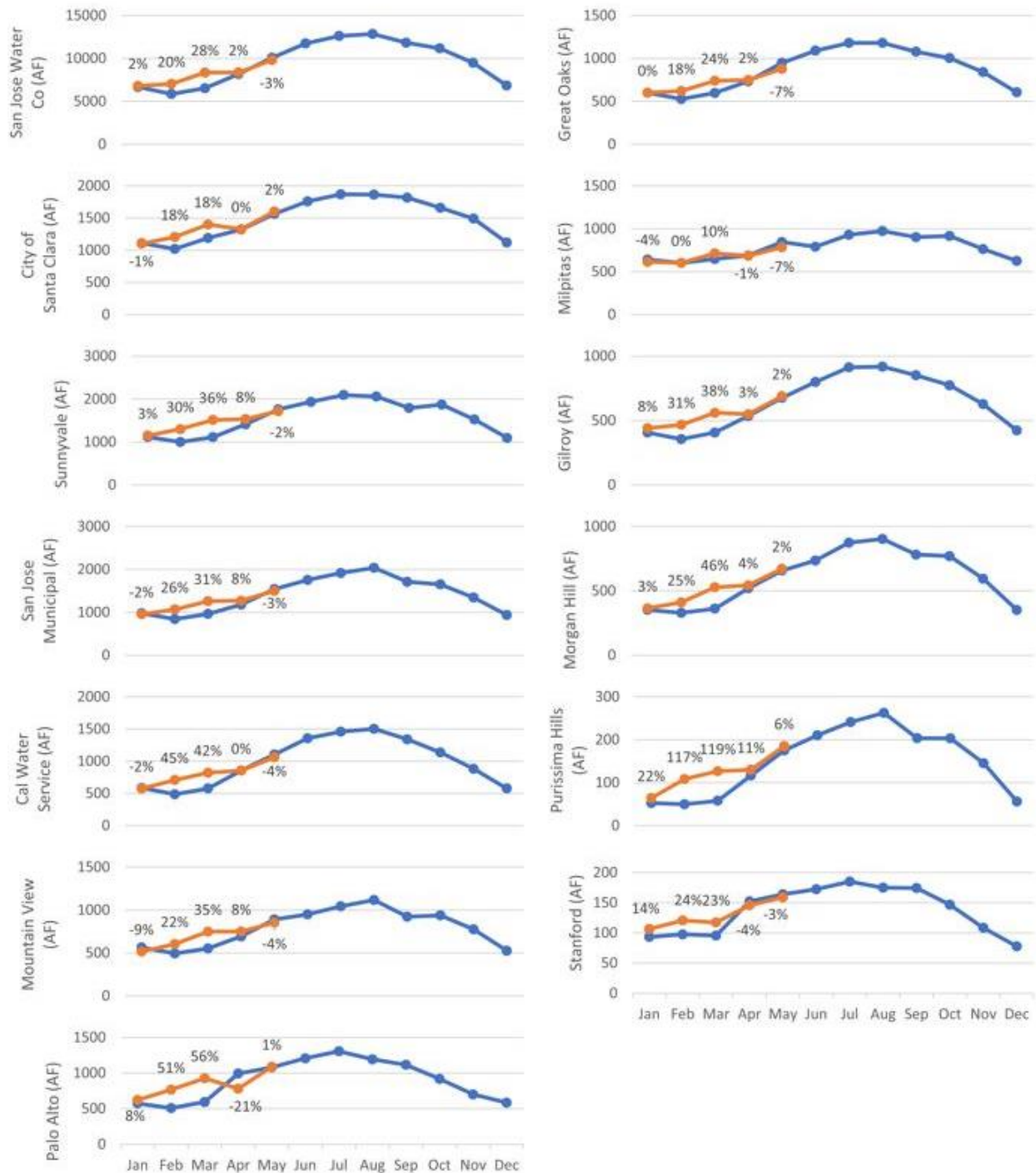
- Valley Water continues its conservation and drought-messaging with the “Say Yes to Saving Water” campaign. The multilingual, multi-platform campaign encourages residents, businesses, farms, and others to follow watering restrictions and take actions, both large and small, that can increase water savings.

These graphs depict water use by each of Valley Water’s 13 retailers to help track progress towards achieving the 15% call for water use reduction made in June 2021. Note that City of Palo Alto Utilities (Palo Alto) and Purissima Hills Water District (Purissima) normally do not use Valley Water sources of water. A large proportion of water used by the City of Mountain View Public Works (Mountain View) and Stanford Utilities (Stanford) is not from Valley Water sources.

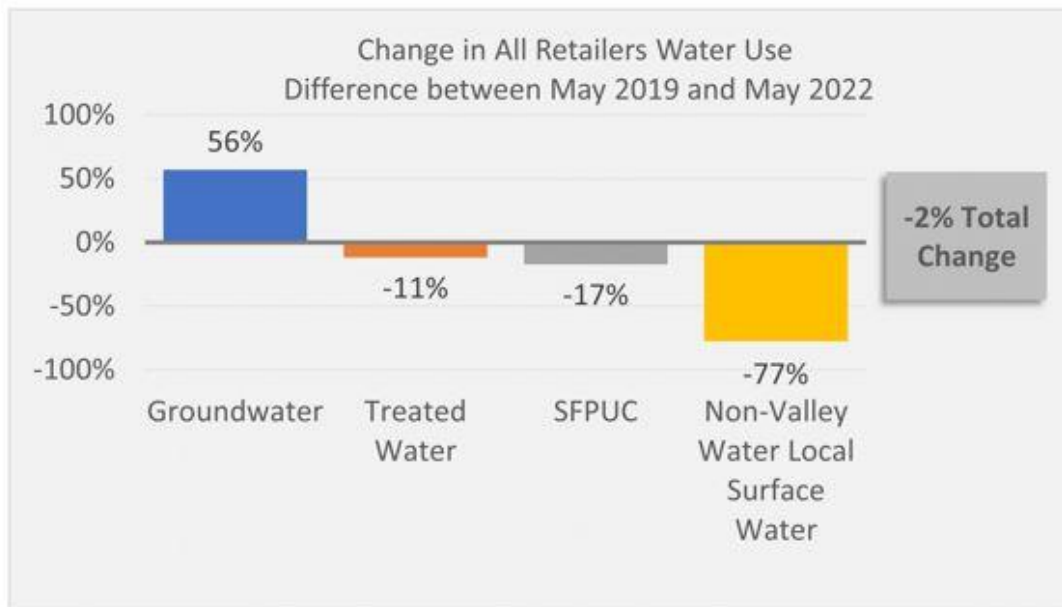
Monthly Water Use by Retailer (AF)

— 2019 — 2022

The percent increase (+) or percent decrease (-) in water use from 2019 to 2022 is shown for each month.



The graph below depicts changes between the retailers' different types of water use and shows that Valley Water retailers' total water use in January 2022 was 2% higher than in January 2019. As expected, the proportion of groundwater use tends to increase during drought.



The table below shows Valley Water retailers' water usage volumes by type.

Water Retailer	Total Water Use in Acre-Feet (May 2019)					Total Water Use in Acre-Feet (May 2022)				
	Groundwater	Treated Water	SFPUC	Non-Valley Water Local Surface Water	SUM	Groundwater	Treated Water	SFPUC	Non-Valley Water Local Surface Water	SUM
San Jose Water Company	1,610	6,570	-	1,890	10,080	4,200	5,180	-	440	9,820
Santa Clara, City	810	460	290	-	1,570	1,040	310	250	-	1,600
Sunnyvale	10	320	1,430	-	1,760	10	810	900	-	1,720
San Jose Municipal Water	90	980	480	-	1,540	80	1,010	410	-	1,500
California Water Service	260	840	-	-	1,110	380	680	-	-	1,060
Palo Alto	-	-	1,080	-	1,080	-	-	1,090	-	1,090
Mountain View	20	90	790	-	890	10	90	750	-	850
Great Oaks	950	-	-	-	950	880	-	-	-	880
Milpitas	-	200	650	-	850	-	320	470	-	780
Gilroy	680	-	-	-	680	690	-	-	-	690
Morgan Hill	660	-	-	-	660	670	-	-	-	670
Purissima Hills Water	-	-	180	-	180	-	-	190	-	190
Stanford	-	-	160	-	160	-	-	160	-	160
Total	5,090	9,460	5,050	1,890	21,500	7,960	8,410	4,210	440	21,010

Collaboration with the County, Retailers, and Cities

- As of June 30, 2022, 14 cities in Santa Clara County have implemented a maximum two-day irrigation schedule, including five cities that have taken additional formal action to their elected boards in response to the ongoing drought emergency and Valley Water's Amended Resolution 22-20.
- In June, Valley Water continued to conduct outreach to the municipalities for their consideration and adoption of the Model Water Efficient New Development Ordinance (MWENDO), as part of ongoing efforts to support

cities' and the County's interests in expanding water efficiency measures. Currently, the County and four cities are considering aligning the adoption of new MWENDO measures as part of the upcoming Title 24 triennial building code update. The 2022 version of California's Title 24 is currently under development, with a publication date of July 1, 2022, and is expected to become effective on January 1, 2023.

Water Conservation Programs

Valley Water is actively promoting ways people can save water through rebates, free water-saving devices, and behaviors.

The Landscape Rebate Program (LRP) provides rebates for converting high-water use landscapes to low-water-use landscape, as well as retrofitting existing irrigation equipment with approved high-efficiency irrigation equipment. Valley Water launched a new component of the Landscape Rebate Program, the Large Landscape Lawn to Mulch Rebate. The new rebate category will be eligible to commercial, industrial, institutional (CII) and multifamily sites who remove a minimum of 15,000 square feet of lawn and replace it with mulch. Existing trees within the converted lawn areas must be irrigated with low flow drip irrigation. The new rebate will also include provisions for golf courses to convert irrigated turf to native grass seed in out-of-play areas. This program will help support sites in complying with California's CII ban of irrigation of non-functional turf, which became effective in June 2022. In addition, the maximum rebate for commercial, industrial, institutional, and multi-family properties was increased to \$100,000 per property.

Valley Water hosted a webinar in June focusing on Tree Care During Times of Drought with about 80 in attendance on Zoom and Facebook Live. Also, the June Do-It-Yourself Lawn Busters workshop, in partnership with local non-profit Our City Forest, was a success with 13 volunteers in attendance to learn how to convert a resident's turfgrass lawn into a low-water use landscape.

The Shopping Cart (eCart) Program offers free water-saving devices to homes and businesses. Valley Water ran a new promotional campaign that resulted in significant increases in participation, compared to the 868 orders in May.

- Estimated conservation program applications received for 2022 are shown below.

Program	April	May	June
Landscape Rebate Program Applications¹	222	343	417
Water-saving Device Orders	302	868	1,477

¹Starting July 1, 2021, the landscape rebate was increased from \$1 to \$2 per square foot and the maximum rebate was increased from \$2,000 to \$3,000 for single-family homes.

Water Waste Enforcement

Valley Water began enforcing outdoor water waste restrictions against runoff, midday watering, and watering after rainfall, and a limit of two days a week of watering for non-functional turf on June 1, 2022. The Water Waste Program is enforcing these restrictions while continuing its educational mission.

Program	April	May	June
Water Waste Reports	120	207	516

Complaints of violations against water waste restrictions are submitted by members of the public. 516 total water waste complaints were received in June 2022. 472 of the complaints received are enforceable, as they relate to the restrictions listed in Ordinance 22-02, and the remaining are not enforceable. Each complaint may include multiple reports of violations against water waste restrictions. Below is a breakdown of the numbers of water waste reports related to the

Attachment 2
Page 5 of 15

restrictions listed in Ordinance 22-02. Not all violations are verified by staff to be occurring, such as those related to watering after rainfall. Valley Water is working to differentiate reports from Valley Water water sources rather than other sources of water.

Enforceable Water Waste Reports	June 2022
More than 2 days of watering per week	98
Watering from 9AM-6PM	108
Watering within 48 hours of rainfall	13
Runoff	266

Drought and Water Conservation Outreach

- The “Say Yes” water conservation campaign entered its second month with the distribution of a partner toolkit to retailers and agencies. The toolkit includes downloadable creatives ranging from GIFs to video and web banners. Public signs on buses and billboards were deployed. Drought awareness materials for hotels, restaurants and public entities have been added to the shopping cart. These include restaurant table tents, hotel towel reuse door hangers and tents, mirror clings and yard signs.
- Staff published a watering restrictions enforcement FAQ and a water conservation enforcement 1-Pager on Valley Water’s Be Heard Drought page. Hard copies of the 1-pager were also printed for future public dispersal.
- 15 and 30-second Say YES to Saving Water video and radio commercials are now playing on digital and streaming platforms. A video featuring Chair Pro Tem Varela urging residents to say YES to saving water was published on Valley Water’s YouTube page, Valley Water’s Be Heard Drought page and social media channels. An explanatory video on Valley Water’s percolation ponds and why many appear dry during times of drought as well as the first of five Landscape Rebate success stories featuring local program applicants were distributed on our social channels.
- Valley Water’s Facebook webinar on watering trees during drought received more than one-thousand views on its YouTube channel. Staff also shared how businesses can get a rebate of up to \$100,000 through our commercial landscape rebate. An irrigation upgrade rebate animation and GIF was also deployed on our social media platforms.
- Media interest in June 2022 focused on the Board’s approval of the watering restrictions enforcement ordinance, the Delta Conveyance Project and the Pacheco Reservoir and San Luis Expansion Projects.
- The Speakers Bureau Program held four drought presentations in June. On June 13, Chair Pro Tem Varela offered welcoming remarks to Valley Water summer interns and was supported by staff who delivered the drought presentation. Also on June 13, Director Keegan gave a Zoom presentation to Winchester Orchard Neighborhood Association. On June 15, staff conducted an in-person presentation to Sons in Retirement: Branch 32 at Three Flames Restaurant in San José. On June 17, staff delivered a presentation to Chapter 23 of the California State Retirees at a Denny’s restaurant in San José.

- Statistics for public outreach efforts are shown below.

Outreach Type	June 2022
Social Media¹	
Impressions ²	6,648,504
Engagements ³	43,803
Link Clicks	8,455
Video Views	546,524
Website Page Views	
Water conservation webpages	47,046
BeHeard.ValleyWater.org/drought-information	864
Media	
Media Mentions ⁴	1,132
Speakers Bureau	
Presentations ⁵	4

¹Includes Facebook, Twitter, Instagram, and LinkedIn

²Impressions are the number of times a post is displayed in a newsfeed.

³Engagements are the number of times a user interacts with a post, such a retweet, click, and more.

⁴Includes TV, radio, social media, online and print

⁵ Office of Communications and Government Relations

Drought and Water Conservation Education

- In June, the Education Outreach team (EO) supported 16 educators and reached 497 students through 20 in-person and virtual presentations. EO attended a Summer Learning Kick-off Family Day at the Joyce Ellington Public Library and presented drought awareness messaging to the attendees. The EO team also supported summer camp programs with The Greene Scholars, Boys and Girls Club of Silicon Valley and 4-H Youth Development Program. All library program and camp attendees recited the Valley Water Water Conservation Pledge, signed the pledge poster, and received drought messaging water conservation stickers.
- The table below shows Educational Outreach efforts in 2022, all of which included drought and water conservation messaging.

Program	Apr 2022	May 2022	Jun 2022
Educators/Teachers	43	74	16
Classes/Groups	37	62	20
Students	1,078	1,788	497

- The Youth Commission Drought Awareness Toolkit is now available on the website at www.valleywater.org/youthcommission. The Toolkit provides various resources targeted toward youth/school-aged audiences. The site has information on the drought conditions, links to Valley Water's other conservation resource webpages, and how and what to share on social media to spread the word, including animated videos and an updated conservation pledge. The second phase of the social media campaign is slated to launch later this summer.

Committee Updates

- Drought-related updates are being provided regularly at Committee meetings to receive feedback and guidance. These updates were provided to the Water Conservation and Demand Management Committee in June 2022.
-

Water Supply Operations and Outlook

The total rainfall in San José during rainfall year 2021-22 was 8.35 inches or 59% of the long-term average for the valley floor. The rainfall year started on July 1, 2021, and ended on June 30, 2022.

Imported Water

- While storms in October and December 2021 provided a wet start to the water year, January through March 2022 were the driest combined first three months on record in California. While northern California received above average precipitation in April, major reservoir levels generally remain below average. As of June 30, 2022, the northern Sierra Nevada snowpack, a primary source of imported water, is at 16% of normal for this date.
- As of June 30, 2022, total state reservoir storage is below the historical average. Shasta Reservoir is at 50% of normal for this date, Oroville Reservoir is at 64% of normal for this date, and Folsom Reservoir is at 108% of normal for this date. Total storage in each of these three major reservoirs has decreased in June.
- As of June 30, 2022, storage in San Luis Reservoir is approximately 797 thousand acre-feet (TAF). San Luis Reservoir storage was reduced by approximately 121 TAF in June.
- Valley Water entered 2022 with over 65 TAF of imported supplies stored in San Luis Reservoir. This includes emergency transfer supplies purchased in 2021, previously undelivered State Water Project (SWP) supplies, and water recovered from the Semitropic Groundwater Bank. This amount is higher than normal and is intended to provide reliability in the event dry conditions continue in 2022, while also mitigating for the loss of storage in Anderson Reservoir.
- The California Department of Water Resources (DWR) has announced a 2022 SWP allocation of 5 percent, which equates to an allocation of 5 TAF for Valley Water. DWR has approved Valley Water's request for additional water to meet our critical human health and safety needs.
- The U.S. Bureau of Reclamation (Reclamation) Central Valley Project (CVP) water supply allocations for south-of-Delta CVP contractors, including Valley Water, are currently set to a municipal and industrial allocation of public health and safety water only and an agricultural allocation of zero percent. Reclamation has approved Valley Water's request for public health and safety water.
- Valley Water will continue to withdraw previously stored supplies from the Semitropic Groundwater Bank in 2022 if SWP and CVP allocations remain low. Staff continues to work with DWR and other Semitropic Banking partners and anticipates that at least 31.5 TAF would be available for delivery to Valley Water, which is the contractual minimum recovery amount at low SWP allocations.
- Valley Water previously executed several long-term water transfer agreements that could provide emergency transfer supplies in 2022, but transfer supply this year is severely limited due to the critically dry conditions across the state. To date in 2022, Valley Water has secured agreement for 18.3 TAF of emergency transfer supplies. Staff is also pursuing other water transfer opportunities for additional supplemental supplies.

Treated Water

- Increased level of the taste and odor compound, geosmin, was detected in source water from the South Bay Aqueduct during the month of June. Valley Water was able to proactively optimize the water treatment process and mitigate potential impact.
- Cyanotoxins levels had slight detection in San Luis Reservoir source water but were non-detect in treated water.
- No reportable water quality issue for the treated water delivered and no complaint was received from retailers for the month of June.

Groundwater Recharge

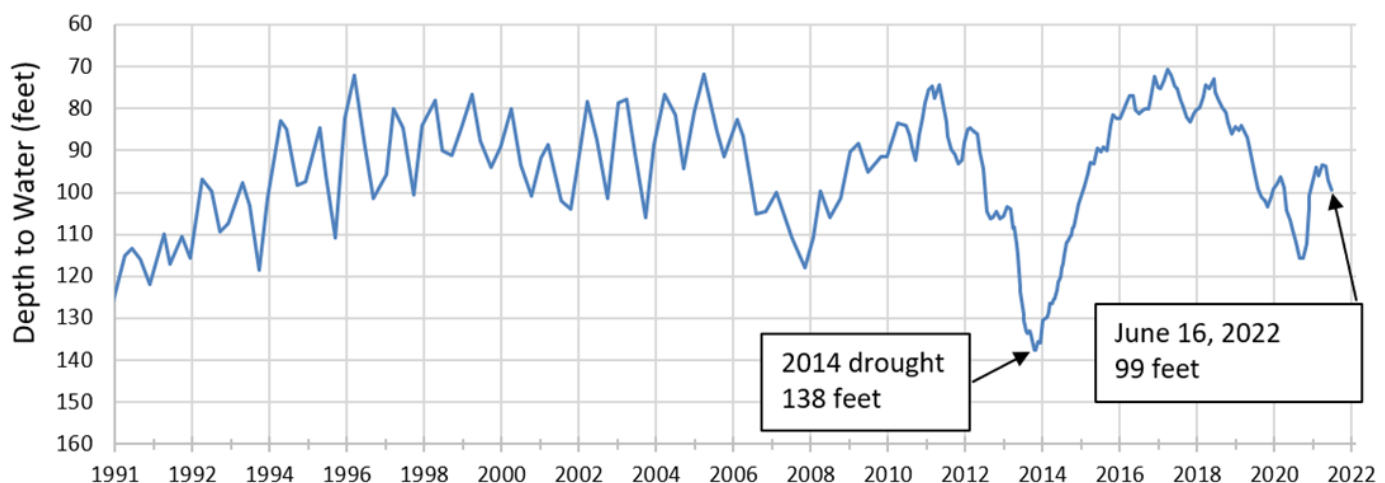
- Releases from local reservoirs continue, albeit at lower levels than normal due to the current low storage conditions.
- After the approval of Public Health & Safety water allocation by the US Bureau of Reclamation on May 18, 2022, Valley Water increased the release of imported water to Coyote Creek and percolation ponds for managed groundwater recharge. Hence, the number of recharge ponds in operation increased from 26 ponds to 55 ponds out of 102 ponds total countywide. Valley Water plans to maintain the higher recharge level through September.
- Valley Water's operations plan shows that the countywide managed aquifer recharge for calendar year 2022 is projected to be about 80% of average.

Groundwater Conditions:

Groundwater levels in June have continued the typical pattern of summer decline, but greater than average declines are expected this year because of the drought. Water use reduction is essential to minimize the risk of resumed subsidence in North County and wells going dry, particularly in South County. Five dry wells have been reported in June. The risk of dry wells and subsidence increases as the drought persists.

- North County Groundwater
 - o The current water level at the regional index well has decreased by about 2 feet since last month and is about 39 feet above the minimum water level in 2014. The water level at this well is about 10 feet higher compared to this time last year.
 - o Groundwater levels are more than 55 to 100 feet above thresholds established to minimize the risk of permanent subsidence.
 - o Two dry wells have been reported in June: both wells are in the foothills outside the groundwater benefit zone and groundwater basin. Since the onset of the current drought, a total of two dry wells have been reported in North County, all in the foothills where yield is generally less reliable.

Santa Clara Plain Index Well

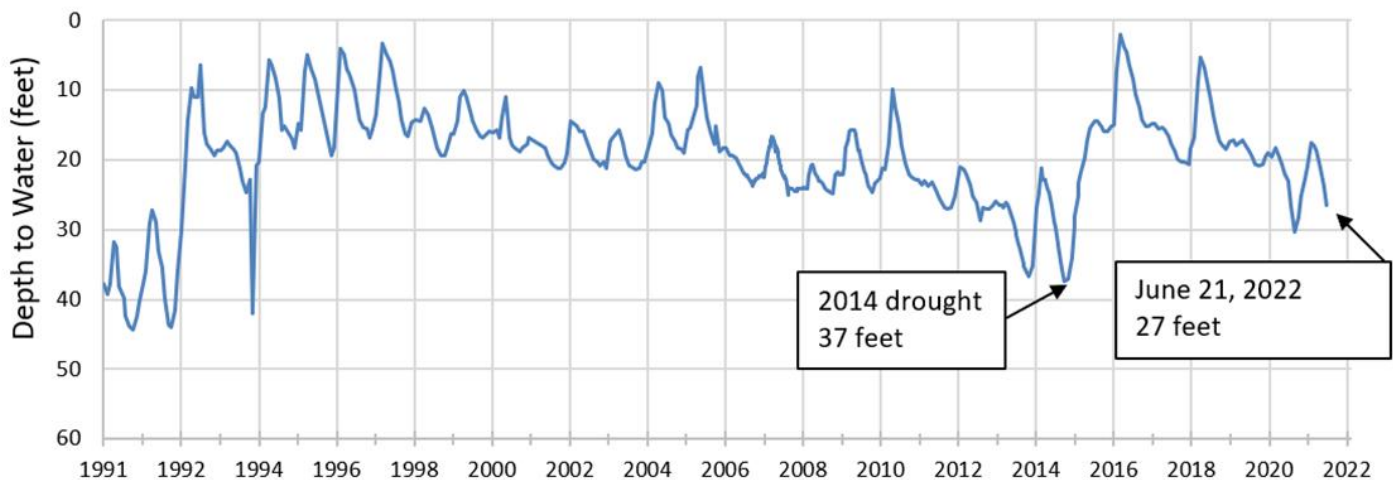


- South County Groundwater
 - o The current water level in the Coyote Valley and Llagas Subbasin regional index wells have each decreased by about 3 and 6 feet since last month and are about 10 and 22 feet, respectively, above the

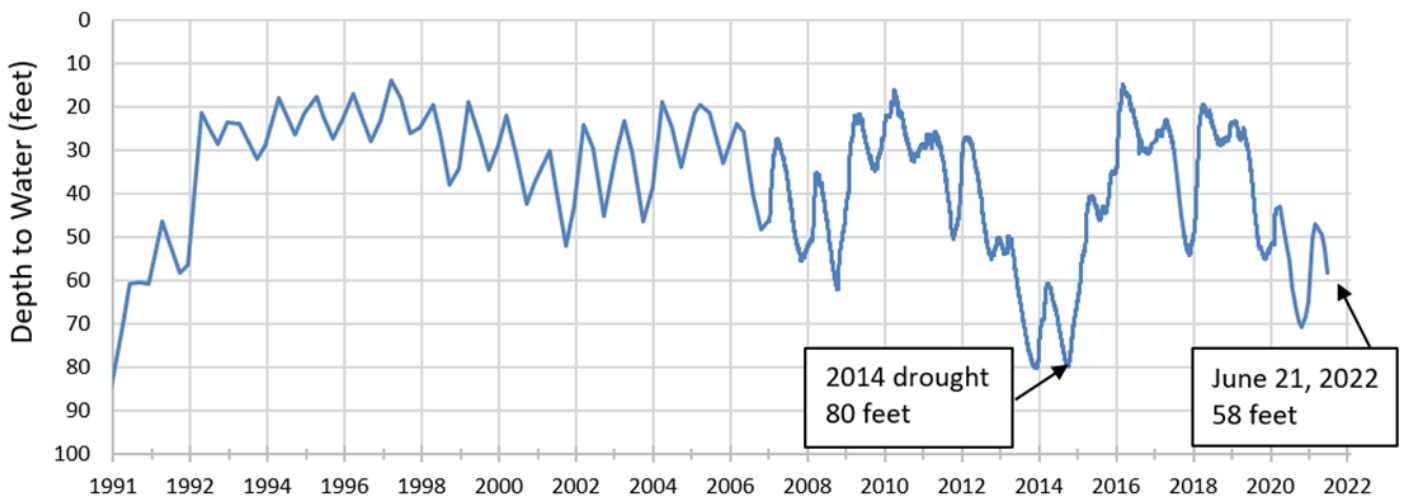
minimum water level in 2014. Additionally, the water levels in these wells are each about 4 and 3 feet, respectively, lower compared to this time last year.

- o Three dry wells have been reported in June: all are near the edge of or outside the Llagas Subbasin and only one is within the groundwater benefit zone. Since the onset of the current drought, a total of four dry domestic wells have been reported in South County, all in locations close to the foothills where yield is generally less reliable. Valley Water works to provide affected well owners with appropriate assistance, including information on available resources or billing support as needed.

Coyote Valley Index Well



Llagas Subbasin Index Well (San Martin)



State Coordination

- Effective June 10, 2022, commercial, industrial, and institutional (CII) non-functional turf must not be irrigated in California under regulations adopted by the State Water Resources Control Board.
- Budget Act of 2022 Signed by the Governor - Drought Funding Decisions Delayed
 - o On June 27 and June 30, Governor Gavin Newsom signed the bills that comprise the Budget Act of 2022, including numerous additional bills to implement the agreement between legislative leaders and the Governor.

- Currently, the enacted Budget Act and its supporting trailer bills do not include significant drought response funding. However, budget summary documents released by Legislature and the Governor indicate there will be a \$4.8 billion climate and energy resilience funding package to be enacted in August 2022. The package is expected to include \$2.8 billion in drought response and resilience funding over several years.
- Staff will continue to advocate for funding for drought response, water conservation, dam safety, recycled water, and other funding that could make Valley Water and the state more drought resilient.
- State Water Board Releases Updated Emergency Regulations for Water Right Curtailments
 - On June 27, the State Water Board released a draft for public comment of updated Emergency Water Right Curtailment Regulations for the Delta watershed, including the Sacramento and San Joaquin rivers, along with an updated methodology for determining when curtailments are necessary. In August 2021, the State Water Board adopted the regulations now in effect on an emergency basis and state law requires the agency to re-adopt the regulation 12 months after it was originally adopted.
 - Staff is reviewing the regulations which are a key factor in how the Department of Water Resources implements State Water Project water allocations for human health and safety purposes. The State Water Board is expected to adopt the amended emergency regulations on July 20. Staff will submit written comments and participate in the July 20 hearing if it is determined that doing so may advance Valley Water's interests.

Staffing and Resources

- Drought emergency expenses are expenditures supplemental to the regular budget that would not have been adopted had there been no drought. The budget for drought emergency costs included in the FY 2021-22 Adopted Budget are \$20 million for supplemental water and an additional \$3.3 million for water banking expenses to bring approximately 32,000 acre-feet of water banked at Semitropic Water Storage District into the county.
- On November 23, 2021, the Board approved establishment of the Drought Emergency project with a budget of \$6.5 million to fund two Limited Term Public Information Representatives to support expanded drought related communications with retailers, government agencies and the public. Funds also include expansion of the eCart program and various conservation rebate programs available to the public.
- On April 1, 2022, the United States Bureau of Reclamation (USBR) reduced the Municipal and Industrial water supply allocation of CVP contract water to public health and safety water only due to water shortage. Therefore, staff redirected associated CVP project and other Water Utility Enterprise operations project savings to the FY 2021-22 budget for emergency water purchases and water banking expenses (\$36 million). This brings total emergency drought budgets to \$42.5 million. Should additional funds be needed for drought related activities, budget adjustments will be brought to the Board.
- Expenses through the month of May FY22 totaled approximately \$33 million spent or encumbered primarily for emergency water purchases tied to contracts executed in FY21, relatively small draws of water from Semitropic Water Storage District in August, December, February and March, operating supplies and services including communications contracts, and labor expenses for staff time implementing Valley Water's drought response program. Staff anticipates encumbering approximately \$11 million in June for one existing and three new emergency water purchases contracts. More information will be forthcoming in the next Drought Report.
- A need for additional temporary staff was identified in order to support the drought emergency in FY23. Recruitments for four positions were approved to proceed which resulted in the successful offer to a candidate for the Temp Water Waste Inspector position. The remaining vacant temp recruitments were unsuccessful and staff are currently reviewing additional candidates with a goal to bring them on board in July 2022.

- (2) Temp Water Waste Inspector – starting July 2022
 - (2) Temp Office Specialist – starting July 2022
-

Expanded Opportunities

Agricultural Water Use Baseline Study

Valley Water is collaborating with a team from University of California-Merced (UCM) to complete an Agricultural Water Use Baseline Study to better understand current agricultural water use practices and identify opportunities to expand water conservation programs offered to the agricultural community.

Purified Water Project

The Purified Water Project will replenish groundwater supplies with purified water and expand usage of recycled and purified water, a drought-resilient, locally-controlled water source.

- Valley Water continued to develop the procurement and CEQA documents for the Purified Water Project.
- Valley Water continued outreach to cities and landowners along the pipeline route.
- Valley Water's Board approved a Project Management Consultant contract to provide consultant resources for the project.

Flood-Managed Aquifer Recharge (Flood-MAR) Study

Valley Water is collaborating with a team of water experts from the University of California system (referred to as UC Water) to complete a reconnaissance study for Flood-MAR implementation in Santa Clara County. The study began in 2021. Study deliverables include a GIS-based tool to identify potential sites for Flood-MAR projects in Santa Clara County and an evaluation of institutional/regulatory requirements for implementing Flood-MAR projects.

Drought Response Plan

Valley Water is developing a Drought Response Plan (DRP) to improve water supply reliability in Santa Clara County during times of future shortage through a WaterSMART grant from the Bureau of Reclamation. Valley Water's DRP will evaluate new approaches for determining when to request water use reductions from the public and develop a response framework to employ during future droughts.

- Valley Water's consultant is finishing a draft Vulnerability Assessment that evaluates the risks and impacts of drought in the county, focusing on key factors that increase Valley Water's vulnerability to drought, such as climate change, existing and potential regulations, infrastructure conditions, and future water quality conditions. The Assessment was shared with the DRP Task Force on June 30, 2022.

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Santa Clara Valley Water District

File No.: 22-0864

Agenda Date: 7/25/2022

Item No.: 4.2.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management Committee

SUBJECT:

Draft Ordinance Establishing Zones of Controlled Drinking Water Well Construction for the Purified Water Project.

RECOMMENDATION:

Receive information on the draft ordinance establishing zones of controlled drinking water well construction for Valley Water's Purified Water Project at the Los Gatos Recharge System and provide feedback to staff, including any proposed modifications to the draft ordinance.

SUMMARY:

To increase water supply reliability and help avoid groundwater depletion, the Santa Clara Valley Water District (Valley Water) plans to use highly treated recycled water (Purified Water) for groundwater replenishment at the existing Los Gatos Recharge System in Campbell. To meet state regulatory requirements, Valley Water is required by law to establish zones of controlled drinking water well construction (Well Control Zones) near the recharge ponds where purified water will be used. Within the primary Well Control Zone, the construction of new drinking water wells is prohibited as one of many safeguards for a purified water groundwater recharge project. Valley Water must also establish a secondary zone of potential controlled drinking water well construction.

Information on the Well Control Zones and the process to regulate groundwater extraction under the Sustainable Groundwater Management Act via Board Resolution 18-04 was provided at the November 22, 2021, and April 25, 2022, Water Conservation and Demand Management Committee (Committee) meetings. This agenda item presents the draft ordinance to establish the Well Control Zones for Committee feedback, including any suggested changes before the ordinance is brought to the Board of Directors for its consideration.

Draft Well Control Zones Ordinance

As discussed at the Committee meetings referenced above, a Valley Water ordinance is needed to establish the Well Control Zones to comply with state regulations. A draft ordinance has been prepared by staff seeking to minimize the area and potential parcels impacted to the greatest extent possible, while meeting regulatory requirements.

The draft ordinance (Attachment 1) contains the following sections:

-
- Establishes the need for and purpose of the ordinance (Section 1).
 - Describes the location of the Well Control Zones, affected areas and parcels, and notes that the boundary of the zones are subject to change based on further studies and regulatory review (Section 2).
 - Clarifies applicability only to drinking water wells (Section 2).
 - Describes limitations on drinking water wells, including the prohibition of new drinking water wells or connection of non-drinking water wells to residences or businesses within the primary Well Control Zone (Sections 3 and 4).
 - Documents how the Well Control Zones will be administered as part of the well permitting process, including the potential need for additional study by the applicant within the secondary Well Control Zone (Section 5).
 - Identifies the appeal process if a well construction permit is denied (Section 6).
 - Describes enforcement of the ordinance (Section 7).

As discussed in the April 2022 Committee meeting, approximately 1,000 parcels are included in the proposed well control zones. The owners of affected parcels have been notified of the proposal to limit drinking water well construction and Valley Water held a related public meeting on March 10, 2022. There was no public feedback on the Purified Water Project or the proposed Well Control Zones.

This ordinance is expected to have little to no impact on the property owners as all parcels in the area are served by San Jose Water Company. Valley Water records indicate only one water supply well within the proposed Well Control Zones. This well has not been used in several years. The owner has agreed to destroy the well and Valley Water is working with the owner to do so.

Staff will conduct additional outreach to affected parcel owners as the process to establish the Well Control Zones moves forward.

Next Steps

After incorporating any Committee feedback, staff plans to take the draft ordinance to the Board of Directors for its consideration. This is expected to occur in Fall 2022.

ATTACHMENTS:

Attachment 1: Draft Well Construction Zone Ordinance

Attachment 2: PowerPoint Presentation

UNCLASSIFIED MANAGER:

Gregory Williams, 408-630- 2867

**BOARD OF DIRECTORS
SANTA CLARA VALLEY WATER DISTRICT**

ORDINANCE NO. 22-XXX

**AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT ESTABLISHING ZONES
OF CONTROLLED DRINKING WATER WELL CONSTRUCTION AROUND INDIRECT
POTABLE REUSE PROJECT RECHARGE PONDS**

The Board of Directors of the Santa Clara Valley Water District (“Valley Water”) does hereby ORDAIN as follows:

SECTION 1 - PURPOSE OF ORDINANCE

The purpose of this Ordinance is to advance Valley Water’s Purified Water Project, which is an indirect potable reuse (“IPR”) project that will take treated wastewater effluent, purify such water using advanced treatment technologies, and spread such purified water into the Los Gatos Recharge System for groundwater recharge into the aquifer for later use as potable water (the “project”).

Regulations promulgated by the California State Water Resources Control Board, Division of Drinking Water (“DDW”), require that Valley Water establish, around these recharge ponds, “a boundary representing a zone of controlled drinking water well construction...” and “a secondary boundary representing a zone of potential controlled drinking water well construction.” (22 C.C.R. § 60320.100(e).) This ordinance establishes these required zones.

According to Valley Water’s records, at present, there are no active drinking water wells located within either the primary or secondary zones of controlled drinking water well construction set defined and forth in this Ordinance.

**SECTION 2 – APPLICABILITY
LOCATION AND LISTING OF AFFECTED AREAS & PARCELS**

a. Location of IPR Project Recharge Sites

The Los Gatos Recharge System sites for Valley Water’s IPR project are located near Los Gatos Creek in the City of Campbell. More specifically, these sites are shown on the map attached hereto as Exhibit A. A true and correct copy of this map will be made available for filing, recordation or posting with the Santa Clara County Assessor’s Office and Santa Clara County Department of Environmental Health.

b. Location of Primary Zone of Controlled Drinking Water Well Construction and Listing of Affected Properties

i. Around the project recharge sites, as indicated by the boundary of the solid red line shown on Exhibit A, is the primary zone of controlled drinking water well construction. All parcels of real property located within this red shaded (diagonal-lined) area shown on Exhibit A (i.e., between the recharge sites and red line) are in the primary zone of controlled drinking water well construction, regardless of their assigned Assessor Parcel Number.

DRAFT

**AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT ESTABLISHING ZONES
OF CONTROLLED DRINKING WATER WELL CONSTRUCTION AROUND INDIRECT
POTABLE REUSE PROJECT RECHARGE SITES**

Ordinance No. 22-XX

1) The exact boundary of the primary zone of controlled drinking water well construction is subject to change or amendment based on further studies and testing conducted by Valley Water and review by DDW. In the event that the boundary of this primary zone changes in the future, an amended map will be prepared and attached hereto as "Revised Exhibit A". A true and correct copy of such revised map will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health.

ii. The current Assessor Parcel Numbers ("APNs") of all parcels of real property located within this primary zone are listed on attached Exhibit B. A true and correct copy of this APN listing will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health.

1) The exact listing of all parcels located within this primary zone is subject to change or amendment based on further studies and testing conducted by Valley Water and review by DDW. In the event that the APNs of real properties located within this primary zone change in the future due to changes in the zone boundary, an amended list of APNs of affected properties will be prepared and attached hereto as "Revised Exhibit B". A true and correct copy of such revised listing will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health. In the event the parcels listed in Exhibit B or Revised Exhibit B are subdivided or otherwise modified by the property owner, this ordinance shall remain in effect for the modified parcels provided they are still located within the primary zone.

c. Location of Secondary Zone of Potential Controlled Drinking Water Well Construction and Listing of Affected Properties

i. Around the primary zone of controlled drinking water well construction, as indicated by the dashed blue line shown on Exhibit A, is the secondary zone of potential controlled drinking water well construction. All parcels of real property located within this area shown on Exhibit A (i.e., between red solid line and blue dashed line) are in the secondary zone of potential controlled drinking water well construction, regardless of their assigned Assessor Parcel Number.

1) The exact boundary of the secondary zone of potential controlled drinking water well construction is subject to change or amendment based on further studies and testing conducted by Valley Water and review by DDW. In the event that the boundary of the secondary zone changes in the future, an amended map will be prepared and attached hereto as "Revised Exhibit A". A true and correct copy of such revised map will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health.

ii. The current APNs of all parcels of real property located within this secondary zone are listed on attached Exhibit C. A true and correct copy of this APN listing will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health.

1) The exact listing of all parcels located within this secondary zone is subject to change or amendment based on further studies and testing conducted by Valley Water and review by DDW. In the event that the APNs of real properties located within this secondary zone change in the future due to changes in the zone boundary, an amended list of

**AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT ESTABLISHING ZONES
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APNs of affected properties will be prepared and attached hereto as "Revised Exhibit C". A true and correct copy of such revised listing will be made available for filing, recordation or posting with the Santa Clara County Assessor's Office and Santa Clara County Department of Environmental Health. In the event the parcels listed in Exhibit C or Revised Exhibit C are subdivided or otherwise modified by the property owner, this ordinance shall remain in effect for the modified parcels provided they are still located within the secondary zone.

d. Wells Excluded from Ordinance

This Ordinance applies only to drinking water wells, and not to any other kind of well located within the primary or secondary zone of controlled drinking water well construction – e.g., a monitoring well, a well that is used exclusively for outdoor irrigation, etc.

**SECTION 3 - REGULATION OF DRINKING WATER WELL CONSTRUCTION AND
OPERATION IN PRIMARY ZONE OF CONTROLLED DRINKING WATER WELL
CONSTRUCTION**

a. Until such time as DDW and Valley Water determine that drinking water wells may be safely constructed and operated within the primary zone of controlled drinking water well construction, or until such time as 22 C.C.R. § 60320.100(e) is repealed, substantively amended, or interpreted to not prohibit construction or operation of any drinking water well located within the primary zone of controlled drinking water well construction, no drinking water well may be permitted, installed, constructed, or operated on any parcel of real property located within this zone.

b. No existing well located within the primary zone of controlled drinking water well construction that is currently used for any purpose other than drinking water production (e.g., irrigation) may be connected to any residence or business establishment and used for the purpose of producing drinking water until DDW and Valley Water determine that drinking water wells may be safely constructed and operated within the primary zone of controlled drinking water well construction, or until such time as 22 C.C.R. § 60320.100(e) is repealed, substantively amended, or interpreted to not prohibit construction or operation of any drinking water well located within the primary zone of controlled drinking water well construction.

**SECTION 4 - REGULATION OF DRINKING WATER WELL CONSTRUCTION AND
OPERATION IN SECONDARY ZONE OF POTENTIAL CONTROLLED DRINKING WATER
WELL CONSTRUCTION**

a. Unless a well permit applicant has received written approval from Valley Water to install or construct, or modify, alter, or replace, or operate, a drinking water well within the secondary zone of potential controlled drinking water well construction, no drinking water well may be permitted, installed, constructed, or operated on any parcel of real property located within such secondary zone.

b. No existing well located within the secondary zone of controlled drinking water well construction that is currently used for any purpose other than drinking water production (e.g., irrigation) may be connected to any residence or business establishment and used for the purpose of producing drinking water unless the well owner has applied for and received written approval from Valley Water allowing this connection.

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SECTION 5 – ADMINISTRATION

This Ordinance will be administered in the following manner:

a. All applications for a permit for well construction activities (whether new, replacement, or alteration/modification) will be reviewed for compliance with this Ordinance.

b. For any parcel of real property located within the primary zone of controlled drinking water well construction, any application for a permit to construct a drinking water well will be denied unless and until such time as DDW and Valley Water determine that drinking water wells may be safely constructed and operated within the primary zone of controlled drinking water well construction, or until such time as 22 C.C.R. § 60320.100(e) is repealed, substantively amended, or interpreted so as to not prohibit construction or operation of any drinking water well located within the primary zone of controlled drinking water well construction.

i. Any permit issued pursuant to this Section shall have as a condition of the permit approval, a requirement that the applicant agree to indemnify and hold harmless Valley Water and its officers, agents, and employees from any and all actions or claims of any kind brought against it on account of any alleged injury or damages sustained by any person or property resulting from the issuance of the permit and the conduct of the activities authorized under said permit.

ii. Any permit issued pursuant to this Section may have, as a condition of permit approval, a requirement that the well applicant undertake mitigating activities prior to drinking water well construction or operation and/or may include restrictions or limitations on pumping (e.g., flow rate, total amount, drought or seasonal restrictions).

c. For any parcel of real property located within the secondary zone of potential controlled drinking water well construction, no application for a permit to construct a drinking water well will be approved, unless it is determined that the operation of such well complies with all applicable regulations and will not interfere with Valley Water's IPR project. Valley Water may require the applicant to submit supporting documentation and testing information by a professional geologist, certified hydrogeologist, or professional engineer to assess the potential impact of the well on Valley Water's IPR project. The burden of showing that a drinking water well may be safely operated in this secondary zone shall at all times be that of the applicant.

i. Any permit issued pursuant to this Section shall have as a condition of the permit approval, a requirement that the applicant agree to indemnify and hold harmless Valley Water and its officers, agents, and employees from any and all actions or claims of any kind brought against it on account of any alleged injury or damages sustained by any person or property resulting from the issuance of the permit and the conduct of the activities authorized under said permit.

ii. Any permit issued pursuant to this Section may have, as a condition of permit approval, a requirement that the well applicant undertake mitigating activities prior to drinking water well construction or operation and/or may include restrictions or limitations on pumping (e.g., flow rate, total amount, drought or seasonal restrictions).

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SECTION 6 – RIGHT TO HEARING

Any person aggrieved by the refusal to issue a permit, by the terms of a permit, or by any Valley Water decision made under this Ordinance, shall have the right of review and appeal.

a. The aggrieved person may, upon written request, have the matter reviewed by the Valley Water's Chief Executive Officer ("CEO") or his or her designee. Upon receipt of such a written request, the CEO or designee shall schedule the same for review within thirty (30) calendar days and give applicant at least fourteen (14) calendar days' written notice of the time and place of said review unless applicant agrees to a lesser time.

b. If the applicant is not satisfied with the results of the review by the CEO or designee, an appeal may be presented to the Board of Directors (Board).

c. The appeal to the Board shall be in writing and made within fourteen (14) calendar days after the CEO or designee's review. It shall specify the grounds upon which it is taken, and shall be accompanied by a filing fee as established by the Board. The Clerk of the Board shall set the appeal for hearing at the earliest practicable time, and shall notify the appellant, in writing, of the time so set at least five (5) days prior to the hearing. After the hearing, the Board may reverse in whole or in part, or may modify the order or determination appealed from. The action of the Board shall be final and conclusive.

SECTION 7 – ENFORCEMENT

This Ordinance will be enforced in the following manner:

a. Any well installed, constructed, modified, replaced, or operated in violation of this Ordinance is unlawful and shall be deemed a nuisance.

b. Any well installed, constructed, modified, replaced, or operated in violation of this Ordinance shall be destroyed in accordance with all laws and regulations at the sole expense of the well owner or operator.

c. Notice of Violation: Whenever Valley Water determines that a drinking water well has been installed or operated in violation of this Ordinance, Valley Water may record a Notice of Violation with the Office of the County Recorder. The owner(s) of the property, as revealed by the assessment roll, on which the violation is situated and any other person responsible for the violation shall be notified of the recordation, if their respective addresses are available.

d. The owner or operator of any well constructed, modified, replaced, or operated in violation of this Ordinance may be fined Five Hundred Dollars (\$500). Said fine shall be payable within thirty (30) days of its issuance.

e. The owner or operator of any well constructed, modified, replaced, or operated in violation of this Ordinance shall be responsible for reimbursing Valley Water for all of its cost or expense incurred in its enforcement efforts, including but not limited to, all staff time or outside contractor or consultant cost in conducting site inspections, reviewing plans or property records, and/or overseeing well destruction.

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f. Representatives of Valley Water shall have the right to enter upon any premises at all reasonable times to make inspections and tests for the purpose of such enforcement and administration. The representative shall first present proper credentials and demand entry. If premises are unoccupied, a reasonable effort will be made to locate the owner or other person having charge or control of same. If entry is refused, recourse will be had to such remedies as are provided by law to secure entry.

SECTION 8 – NO TAKING OF PROPERTY INTENDED

Nothing in this ordinance shall be interpreted to effect an unconstitutional taking of property of any person. If the Board determines, based on specific evidence in the administrative record, that the application of one or more of the provisions of this ordinance to a proposed use of land would effect an unconstitutional taking of private property, the Board shall disregard such provisions to the extent necessary to avoid such unconstitutional taking.

SECTION 9 – SEVERABILITY

If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of this ordinance. The Board hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid.

PASSED AND ADOPTED by the Board of Directors of Santa Clara Valley Water District by the following vote on _____, 2022.

AYES: Directors

NOES: Directors

ABSENT: Directors

ABSTAIN: Directors

SANTA CLARA VALLEY WATER DISTRICT

By: _____
JOHN L. VARELA
Chair, Board of Directors

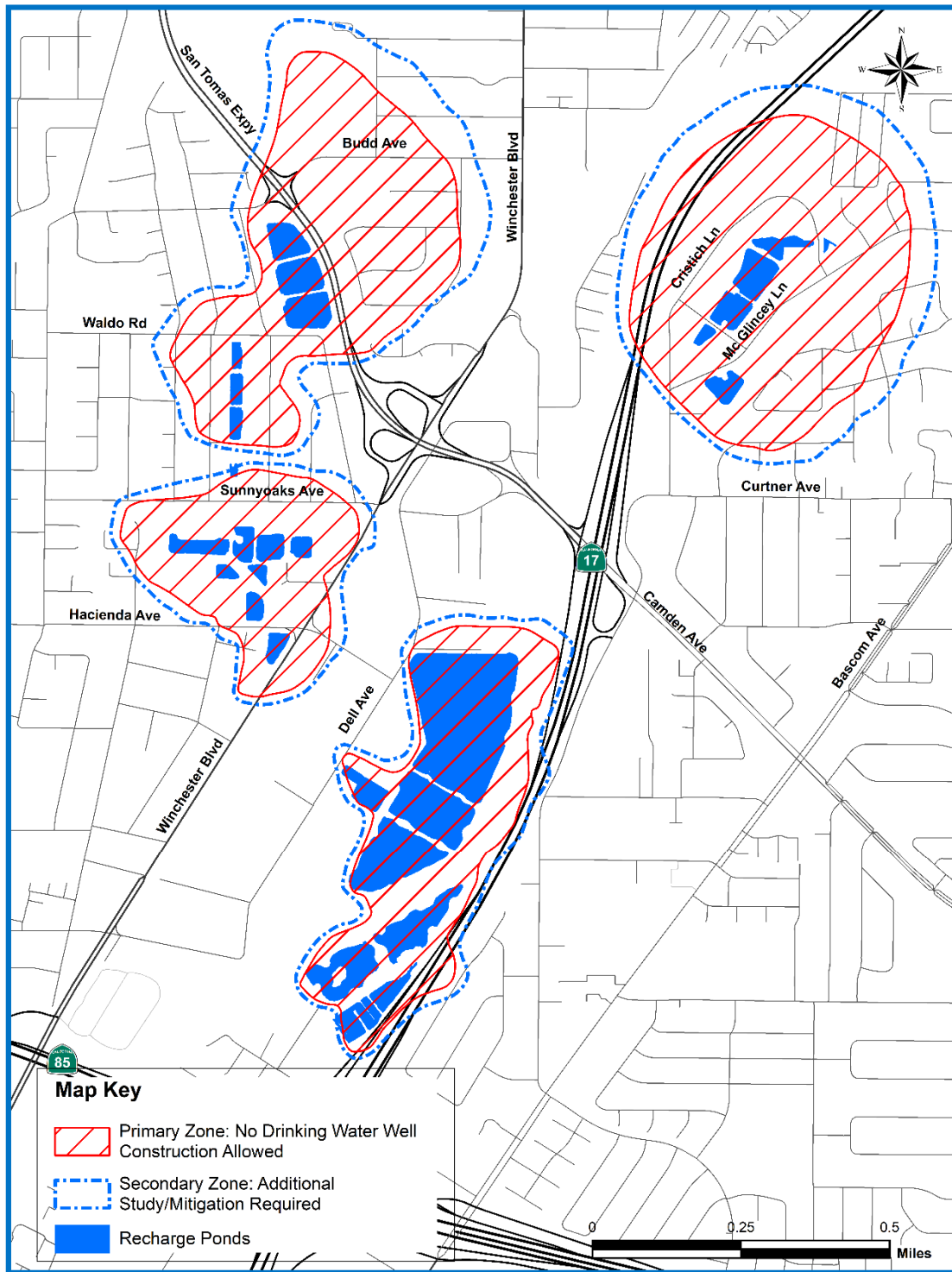
ATTEST: MICHELE L. KING, CMC

Clerk, Board of Directors

DRAFT
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Exhibit A: Map of Zones of Controlled Drinking Water Well Construction



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Exhibit B: List of Parcels in Primary Zone of Controlled Drinking Water Well Construction

List of Parcels included in Primary Zone of Controlled Drinking Water Well Construction						
30529001	30537012	30538020	30539028	40428019	40430022	40609024
30529002	30537013	30538021	30539029	40429004	40430026	40609025
30534012	30537014	30538022	30539030	40429006	40430027	40609027
30534013	30537015	30538023	40425015	40429012	40430028	40609028
30534014	30537016	30538024	40425016	40429013	40430029	40609030
30534015	30537017	30538025	40425017	40429014	40430030	40609031
30534016	30537018	30538026	40425018	40429015	40430032	40609032
30534017	30537019	30538027	40425019	40429016	40430034	40609033
30534018	30537020	30538028	40426012	40429021	40430035	40609034
30534019	30537021	30538029	40426013	40429022	40430036	40609035
30534020	30537022	30538030	40426014	40429023	40430037	40609036
30534021	30537023	30538031	40426015	40429024	40430038	40609037
30534022	30537024	30538032	40426016	40429025	40430039	40609038
30534023	30537025	30538033	40426017	40429026	40430040	40609039
30534024	30537026	30538034	40426018	40429029	40430041	40609040
30534043	30537027	30538035	40426044	40429030	40430042	40609041
30534044	30537028	30538036	40426045	40429031	40430043	40609042
30534045	30537029	30538037	40426046	40429033	40430044	40609043
30534046	30537030	30538038	40426047	40429034	40430045	40609044
30535004	30537031	30538041	40426048	40429035	40430046	40609045
30535005	30537032	30538042	40426049	40429036	40430047	40609046
30535006	30537033	30538043	40426050	40429037	40430048	40609047
30535007	30537034	30538044	40426051	40429039	40430049	40609048
30535008	30537035	30538045	40426052	40429040	40430055	40609049
30535009	30537036	30538046	40426053	40429041	40430056	40609050
30535010	30537037	30538047	40427002	40429042	40430067	40609051
30535011	30537038	30538048	40427003	40429045	40430068	40609052
30535012	30538001	30538049	40427004	40429046	40430069	40609053
30535013	30538002	30538050	40427005	40429048	40430070	40609054
30535015	30538003	30538051	40427006	40430001	40430071	40609055
30535016	30538004	30538052	40427007	40430002	40430072	40609056
30535017	30538005	30538053	40427008	40430003	40430073	40609057
30535018	30538006	30538054	40427009	40430004	40430074	40609058
30535019	30538007	30538055	40427010	40430005	40430075	40609059
30535021	30538008	30538056	40427011	40430006	40430076	40609060

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List of Parcels included in Primary Zone of Controlled Drinking Water Well Construction						
30537001	30538009	30538057	40427012	40430007	40430082	40609061
30537002	30538010	30538058	40427013	40430008	40430083	40609062
30537003	30538011	30538059	40427014	40430009	40431013	40609063
30537004	30538012	30539001	40427015	40430010	40431014	40609064
30537005	30538013	30539002	40427020	40430012	40609016	40609065
30537006	30538014	30539020	40427022	40430016	40609017	40609066
30537007	30538015	30539021	40427023	40430017	40609018	40609067
30537008	30538016	30539024	40427024	40430018	40609019	40609068
30537009	30538017	30539025	40428016	40430019	40609020	40609069
30537010	30538018	30539026	40428017	40430020	40609022	40610001
30537011	30538019	30539027	40428018	40430021	40609023	40610002
40610004	40635016	40639016	40645028	41230046	41233005	41237067
40610005	40635017	40639017	40645029	41230047	41233006	41237068
40610006	40635018	40639018	40645030	41230048	41233022	41238001
40610007	40635020	40639019	40645031	41230049	41233026	41238002
40610011	40635021	40639020	40645032	41231005	41234005	41238003
40610014	40635022	40639021	40645033	41231006	41234009	41238004
40610015	40635023	40639022	40645034	41231007	41234010	41238005
40610016	40636008	40644001	40645035	41231008	41234011	41238006
40610018	40636009	40644002	40645036	41231009	41234012	41238007
40611001	40636010	40644003	40645037	41231010	41234013	41238008
40612062	40636011	40644004	40645038	41231011	41234014	41238009
40612063	40636012	40644005	40645039	41231012	41234015	41238010
40612064	40636013	40644006	40645040	41231013	41234016	41238011
40612065	40636014	40644007	40645041	41231014	41234017	41238012
40612066	40636015	40644008	40645042	41231015	41234018	41238013
40612067	40636016	40644009	40645043	41231016	41235001	41238014
40612068	40636017	40644010	40645044	41231017	41235002	41238015
40612069	40636018	40644011	40645045	41231018	41235003	41238016
40612070	40637001	40644012	41201023	41231019	41235004	41238017
40612071	40637002	40644013	41203001	41231022	41235016	41238018
40612072	40637003	40645001	41203002	41231023	41235017	41238019
40612073	40637004	40645002	41229001	41231024	41235018	41238020
40612074	40637005	40645003	41229008	41231025	41235024	41238021
40612078	40637006	40645004	41229010	41232001	41235029	41238022
40612091	40637007	40645005	41229011	41232002	41235030	41238023
40612097	40637008	40645006	41229012	41232003	41235031	41238024
40612098	40637009	40645007	41229014	41232004	41235032	41238025
40612099	40637010	40645008	41229015	41232005	41235033	41238026

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List of Parcels included in Primary Zone of Controlled Drinking Water Well Construction						
40612100	40637011	40645009	41230010	41232006	41235034	41238027
40621016	40637012	40645010	41230011	41232007	41235035	41238028
40621024	40637013	40645011	41230012	41232008	41235036	41238029
40621025	40637014	40645012	41230025	41232009	41235037	41238030
40635001	40639001	40645013	41230026	41232010	41235058	41238031
40635002	40639002	40645014	41230027	41232011	41235059	41238032
40635003	40639003	40645015	41230028	41232012	41235060	41238033
40635004	40639004	40645016	41230029	41232013	41235061	41238034
40635005	40639005	40645017	41230030	41232014	41235062	41238035
40635006	40639006	40645018	41230031	41232015	41235063	41238036
40635007	40639007	40645019	41230032	41232016	41235064	41238037
40635008	40639008	40645020	41230033	41232017	41235065	41238038
40635009	40639009	40645021	41230034	41232019	41235066	41238039
40635010	40639010	40645022	41230036	41232020	41235067	41238040
40635011	40639011	40645023	41230037	41232021	41235068	41238041
40635012	40639012	40645024	41230038	41232022	41237061	41238042
40635013	40639013	40645025	41230039	41232023	41237062	41238043
40635014	40639014	40645026	41230040	41232024	41237065	41238044
40635015	40639015	40645027	41230041	41233003	41237066	41238045
41238046	41239011	41238066	41238086	42433069		
41238047	41239012	41238067	41238087	42433085		
41238048	41239013	41238068	41239001	42433092		
41238049	41239014	41238069	41239002	42433115		
41238050	41239015	41238070	41239008	42433117		
41238051	41239016	41238071	41239009	42433121		
41238052	41239017	41238072	41239010	42433122		
41238053	41239018	41238073	42404007	42439001		
41238054	41239019	41238074	42404008	42439023		
41238055	41239020	41238075	42404009	42444001		
41238056	41239032	41238076	42404010	42444012		
41238057	41239039	41238077	42404011	42445054		
41238058	41239040	41238078	42409067			
41238059	41240027	41238079	42409068			
41238060	42401095	41238080	42409112			
41238061	42402001	41238081	42433025			
41238062	42402010	41238082	42433037			
41238063	42402011	41238083	42433039			
41238064	42402012	41238084	42433054			
41238065	42404006	41238085	42433055			

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Exhibit C: List of Parcels in Secondary Zone of Controlled Drinking Water Well Construction

List of Parcels included in Secondary Zone of Controlled Drinking Water Well Construction					
30533045	40425002	40431001	41230014	41239004	42439025
30533046	40425003	40431011	41230023	41239005	42439026
30533074	40425013	40431012	41230024	41239006	42444029
30533075	40425014	40431015	41233004	41239007	42444032
30533076	40425020	40431016	41233007	41239030	42445031
30533077	40426010	40431018	41233008	41239031	42445055
30533078	40426011	40431019	41234004	41239033	30539004
30533079	40426019	40431032	41234008	41239037	30539019
30533080	40426020	40431033	41235012	41239038	40430023
30534009	40426036	40431034	41235013	41239041	40430025
30534010	40426037	40431035	41235014	41240009	41201008
30534011	40426038	40612077	41235015	41240010	41203009
30534025	40426039	40612079	41235019	41240011	41237025
30534026	40426040	40612080	41235020	41240012	41237053
30534027	40426041	40612089	41235021	41240013	42439002
30534028	40426042	40612090	41235022	41240024	42439014
30534037	40426043	40612095	41235044	41240025	30539023
30534038	40426054	40612096	41235045	41240026	30539031
30534039	40428001	40634036	41235046	41240028	30539032
30534040	40428002	40634037	41235047	41240029	40423029
30534041	40428014	40634038	41235048	41240030	40423030
30534042	40428015	40636007	41235049	41241008	40423031
30534047	40428020	40636019	41235050	41241009	40423032
30534048	40428024	40636020	41235051	42401075	40425001
30534049	40428025	40636021	41235052	42404012	40430053
30534050	40429003	40636022	41235053	42404013	40430054
30534051	40429007	40636023	41235054	42404039	40430057
30534052	40429011	40638014	41235055	42404040	40430062
30535001	40429017	40638015	41235056	42404041	40430063
30535002	40429019	40638018	41235057	42404042	40430064
30535020	40429020	40638019	41237019	42404069	40430065
30536004	40429027	40638020	41237020	42404070	40430066
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30536012	40429043	40638022	41237022	42433056	41229002
30536013	40429044	40638023	41237023	42433119	41229003
30539003	40430011	40638024	41237024	42433120	41230006

**AN ORDINANCE OF SANTA CLARA VALLEY WATER DISTRICT ESTABLISHING ZONES
OF CONTROLLED DRINKING WATER WELL CONSTRUCTION AROUND INDIRECT
POTABLE REUSE PROJECT RECHARGE SITES**

Ordinance No. 22-XX

List of Parcels included in Secondary Zone of Controlled Drinking Water Well Construction					
41230007	41237060	42439019			
41230008	41237063	42439021			
41230009	41237064	42439022			
41230013	41239003	42439024			
41237054	42439015				
41237057	42439016				
41237058	42439017				
41237059	42439018				



Zone of Controlled Drinking Water Well Construction for the Purified Water Project.

Presented by: George Cook, Groundwater Management Unit
Water Conservation and Demand Management Committee July 25, 2022



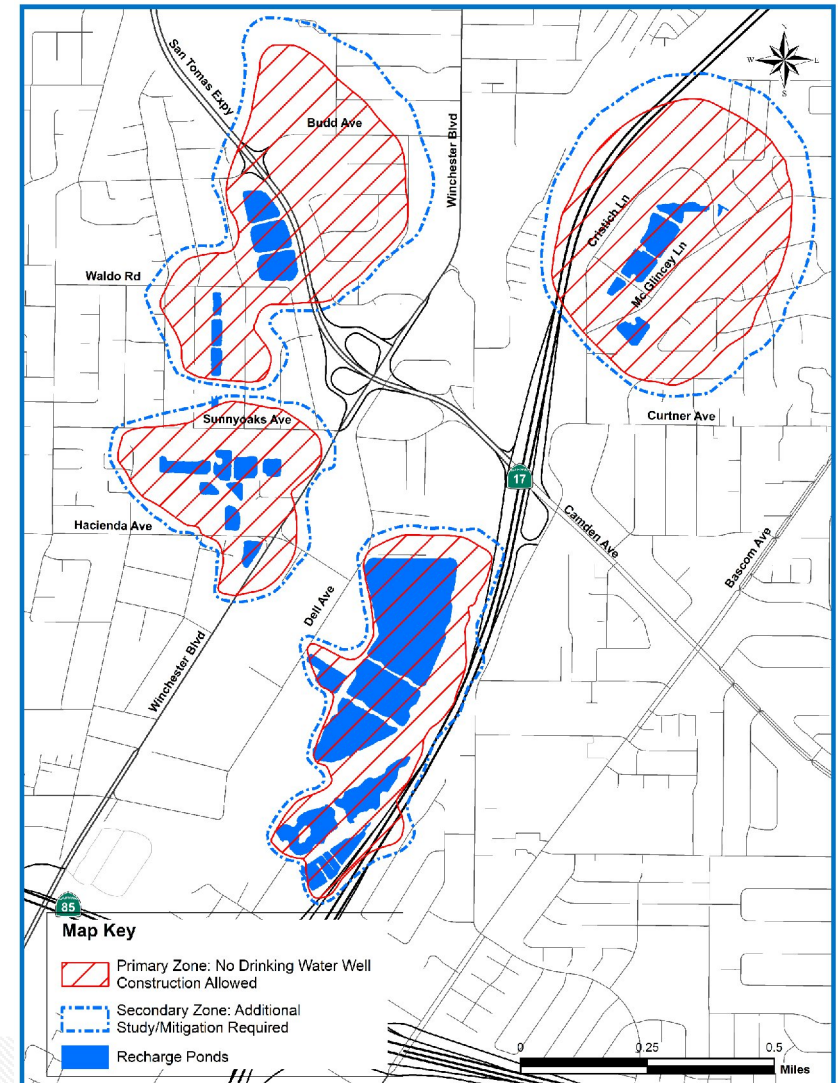
Background

November 2021 and April 2022 Committee items provided information on:

- State regulations requiring control of drinking water wells for purified water projects
- Proposed well control zones near Valley Water's Purified Water Project
- Process Valley Water must follow prior to regulating pumping per Board Resolution 18-04
- March 2022 public meeting

Draft Well Control Ordinance

- Describes the regulatory driver for the ordinance
- Establishes primary and secondary well control zones
- Identifies affected areas and parcels
- Establishes limitations on drinking water wells
- Describes how zones will be administered
- Provides for appeal by permit applicants
- Identifies enforcement



Proposed Next Steps

- Receive Committee feedback
- Finalize well control ordinance
- Conduct additional outreach to affected parcel owners
- Present ordinance for Board consideration in Fall 2022

Questions?



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Santa Clara Valley Water District

File No.: 22-0865

Agenda Date: 7/25/2022

Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM **Water Conservation and Demand Management Committee**

SUBJECT:

Evaluating Water Conservation Program Opportunities.

RECOMMENDATION:

Receive and discuss information on how staff evaluate potential water conservation programs, and provide feedback to staff.

SUMMARY:

At the June 2022 Water Conservation and Demand Management Committee (Committee), the Committee requested a discussion of hot water recirculation systems and whether these devices should be considered for rebates. This report provides a discussion on the evaluation staff conducts to develop our rebate programs. Valley Water has provided robust water conservation programs since 1992. The water conservation programs offered are periodically evaluated for cost effectiveness to ensure funds are being used efficiently to achieve the highest water savings possible. Ensuring the water conservation programs offered are cost effective is an important component toward meeting the Board's long-term conservation targets of 99,000 acre-feet per year (AFY) and 109,000 AFY by 2030 and 2040, respectively.

In October 2021, the Committee received Valley Water's updated Water Conservation Strategic Plan (Strategic Plan) to guide staff on how best to achieve the long-term targets including how to leverage existing programs more effectively and new programs to consider implementing. Valley Water staff tracks progress towards the long-term conservation targets using a custom, Excel-based Water Conservation Savings Model (Savings Model).

The purpose of this memorandum is to provide information on how staff evaluate potential water conservation programs by analyzing estimated water savings against the cost of offering a rebate or other type of incentive. The Savings Model is one of the primary tools used to perform this analysis.

Information about current water conservation programs can be found at www.watersavings.org <<http://www.watersavings.org>> and in the Water Conservation Program Flyer (Attachment 3).

Background

Valley Water uses the Savings Model to evaluate the cost effectiveness (\$/acre foot [AF]) of water conservation programs and progress towards Valley Water's long-term conservation targets. Over time programs have transitioned from focusing on indoor water conservation programs like high-efficiency toilet and clothes washer rebates to outdoor water conservation programs like the popular Landscape Rebate Program. Every year, Staff inputs annual participation totals from the prior fiscal year into the Savings Model to track progress towards the long-term conservation targets. The current drought has increased interest in the water conservation programs which will contribute to both short-term and long-term savings.

Evaluating Potential Conservation Programs

As new or improved water conservation devices are made available, staff uses the Savings Model to evaluate the cost-effectiveness of offering a new conservation program by analyzing the estimated water savings compared to the cost of offering a rebate or other type of incentive. The output of the Savings Model is a \$/AF value; this value, when compared to the values of other conservation programs, helps answer whether it makes sense financially or programmatically to increase water supply reliability. Staff will also review and analyze comparable programs offered by other water agencies throughout the region, state, and Western United States.

The Strategic Plan identified several key strategies to augment Valley Water's water conservation programs. Targeted marketing to expand participation to new customer groups as well as building on current successes of existing marketing strategies will be one of the most cost-effective means of generating additional water savings. Further expansion of the Large Landscape Program to more, smaller commercial properties, as well as leveraging outreach channels offered through this program will generate significant savings at only \$85/AF.

Hot Water Recirculation Systems

In response to feedback by the Committee, Staff evaluated the cost-effectiveness of offering a conservation program to incentivize the installation of hot water recirculation devices. A hot water recirculating system delivers hot water on demand to reduce wait time and waste while the water running from a faucet or shower is being heated. A recirculating pump sends cold water that is in the hot water line back to the water heater, instead of allowing it to run through the faucet and down the drain. Hot water recirculation systems typically cost between \$200-\$300 (excluding installation costs which could be significant) and can be retrofitted into most home plumbing systems.

Staff understands the interest behind these systems due to the perceived large water savings; however, the "Hot Water Re-Circulation Pilot Study" conducted by Valley Water in 2002 found that the water savings were insignificant following the installation of these systems (Attachment 2). In 2019, staff reevaluated this opportunity to offer a potential incentive for these devices, however, water savings had not changed significantly.

In response to public interest, staff added content on our website about hot water recirculation systems and the different types of water heaters (<https://www.valleywater.org/accordion/water-heater-information>). Additionally, hot water recirculation systems are included as a measure in the Model Water Efficient New Development

Ordinance, which staff are working with cities on adopting as they have their greatest cost-effectiveness when being installed for new construction.

Comparison to Other Conservation Programs

Staff analyzed the cost-effectiveness of a hot water recirculation rebate under two water savings scenarios: 900 gallons per year on the low-end and 3,100 gallons per year on the high-end based on the 2002 pilot's findings and comparable sources. Staff found that offering a rebate of \$200 equates to \$2,540/AF for the high-end of potential savings and \$6,623/AF for the low-end savings of potential savings. By comparison, turf conversion through the Landscape Rebate Program is \$1,063/AF and installing a laundry to landscape graywater system through the Graywater Rebate Program can be between \$530/AF and \$1,618/AF.

Another potential conservation program that has been evaluated within the Savings Model is an incentive for retrofitting dipper wells. Dipper wells are small basins with drains and faucets typically cut into a commercial food service facility's countertop, like typically seen at ice cream parlors or coffee shops. Used to rinse high-usage serving utensils as a labor- and time-saving device, conventional dipper wells can use up to 1 gallon per minute and operate continuously between 8 and 24 hours per day. A 2019 pilot study funded by Valley Water to evaluate new dipper-well technologies, which use pressure switch technology or heated utensil holders with manually replaced water instead of constant flow, found a consistent savings of 90% compared to traditional dipper wells. According to the Savings Model, a direct install incentive program of \$1,000 per dipper well could generate significant, affordable savings at only \$224/AF. This program has not yet been created due to budget and staffing constraints but is being explored for the future.

Conclusion

Valley Water's water conservation programs are periodically evaluated for cost-effectiveness by using the Savings Model that provides a cost effectiveness defined as \$/AF value. While there are many creative water saving devices on the market, not all systems translate well into a cost-effective program and the Savings Model has allowed Staff to prioritize those that are most effective.

The cost effectiveness of offering a conservation program for hot water recirculation systems ranges from \$2,540/AF to \$6,623/AF. This cost per acre foot of water savings is much higher than any other conservation program currently offered. Staff prioritizes the available budget on programs that can achieve a higher amount of water savings per dollar spent.

ATTACHMENTS:

- Attachment 1: PowerPoint Presentation
- Attachment 2: Hot Water Re-Circulation Pilot Study
- Attachment 3: Water Conservation Program Flyer

UNCLASSIFIED MANAGER:

Kirsten Struve, 408-630-3138

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Valley Water's Water Conservation Savings Model

Water Conservation & Demand Management Committee, July 25, 2022



Watersavings.org

Drought/Saving Water

[HOME](#) › WATER CONSERVATION PROGRAMS

Water Conservation Programs

COVID-19 Program Notice



Landscape Rebate Program

Our Landscape Rebate Program can help you save water and money, offering up to **\$3,000*** for residential sites and **\$50,000*** for commercial and multi-family sites.

[Get started with your application](#)

[Overview of the Landscape Rebate Program](#)

All Water Conservation Programs



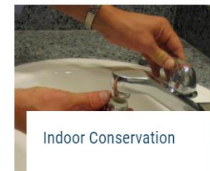
Rebates & Surveys



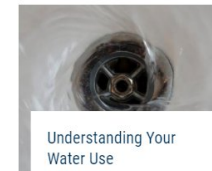
Outdoor Conservation



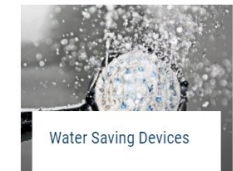
Landscape Guides & Resources



Indoor Conservation



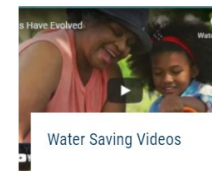
Understanding Your Water Use



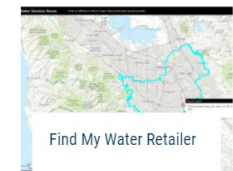
Water Saving Devices



Report Water Waste



Water Saving Videos



Find My Water Retailer



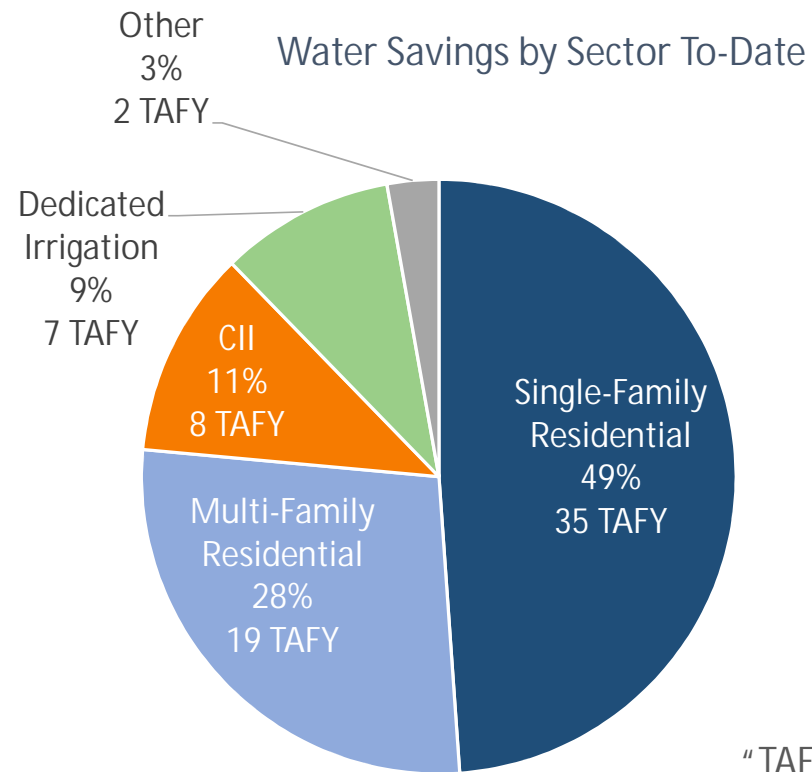
Water Conservation Targets

Valley Water's Long-Term Conservation Savings targets:

- 99 TAFY by 2030
- 109 TAFY by 2040

74 TAFY Savings Achieved through 2020

Savings Model Tracks our Progress



"TAFY" = thousand acre-feet per year

Water Conservation Strategic Plan

- Tracks progress towards targets
- Evaluates individual program
 - Savings
 - Cost effectiveness
- Strategic Plan Resource
 - Updated 2021
 - Blueprint for success
 - Support tool for program marketing and design

Water Conservation Savings Model

- September 2019 update
- Built from a national, Excel-based model
- Strategic tool to evaluate program cost effectiveness
- Critical to conservation strategy



Water Conservation Tracking Model

VERSION 1

User Guide

A TOOL FOR PLANNING AND TRACKING VALLEY WATER'S
WATER CONSERVATION PROGRAMS



Model Inputs

- 1992 baseline
- Inflation and real discount rate
- Population, employment, and building types
- Behavior
- % of efficient fixtures in county
- Costs
- Objective savings data



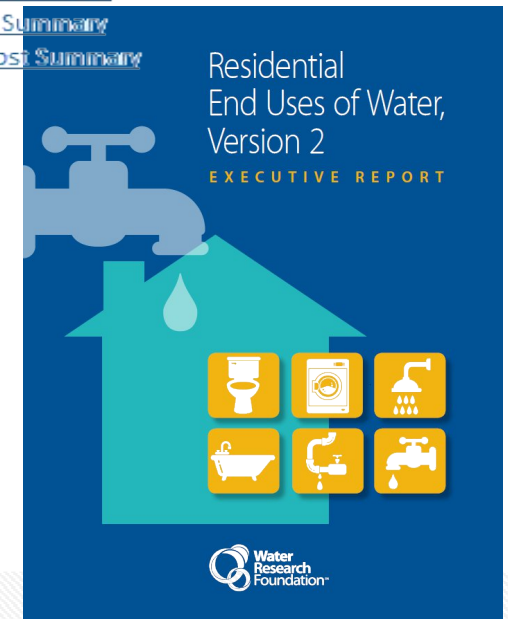
Water Conservation Tracking Model

Input Worksheets

[Population & Housing](#)
[Conservation Programs](#)

Summary Worksheets

[Water Savings Summary](#)
[Plumbing Fixture Saturation](#)
[Valley Water Cost Summary](#)
[Program Partner Cost Summary](#)



Model Outputs

- Changes in % of efficient fixtures
- Water savings
 - Programmatic
 - Specific customer classes
 - Overall
- Cost per acre-foot

Table Manager



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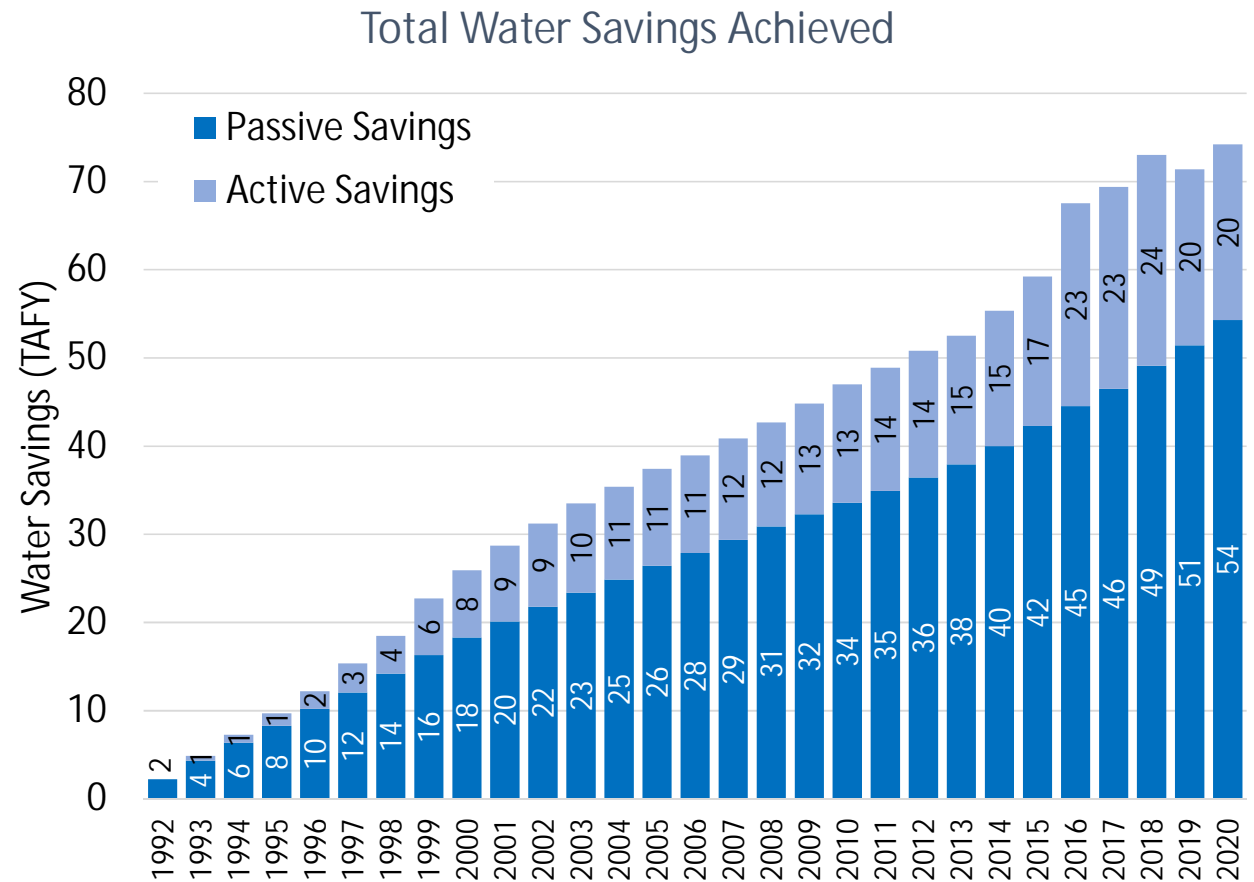
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|---|-------------------------------------|
| <input type="checkbox"/> Program Activity | <input type="checkbox"/> Select All |
| <input checked="" type="checkbox"/> Program Specifications | |
| <input type="checkbox"/> Gross Savings | |
| <input type="checkbox"/> Passive Savings | |
| <input type="checkbox"/> Active Savings | |
| <input type="checkbox"/> Valley Water Annual Cost | |
| <input type="checkbox"/> Valley Water Program Partner Annual Cost | |

Close

Progress Towards Conservation Targets

Model tracks

- Passive Savings vs.
- Active Savings



Hot Water Recirculation Systems

- Saves water by sending cold water back to the water heater instead of down the drain
- Valley Water Pilot Study
 - Water savings insignificant
 - Reevaluated in 2019 – no changes to technology
- Resources added to website
- Component of MWENDO

Evaluating Hot Water Recirculation Systems

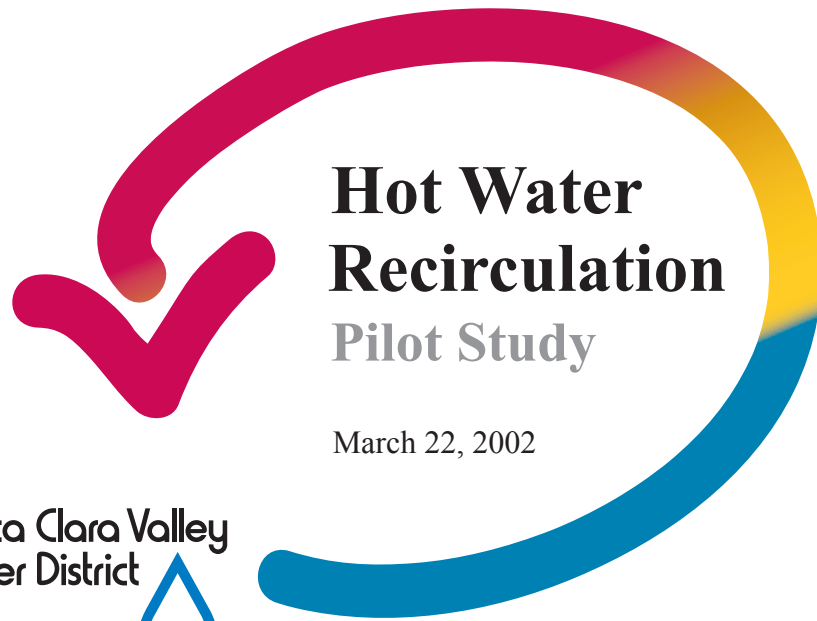
Conservation Program	Gallons Saved per Year	Cost Effectiveness
Turf Conversion - Landscape Rebate Program	36g/ft ²	\$1,063/AF
Graywater Rebate Program	4,585	\$1,618/AF
Dipper Well	94,900	\$224/AF
Hot Water Recirculation System	Low end = 900 High end = 3,100	Low end = \$6,623/AF High end = \$2,540/AF

Program Monitoring and Evaluation

- Continue to evaluate the cost effectiveness of current and potential conservation program offerings
- Use funds to offer conservation programs that achieve the highest amount of water savings per dollar spent

QUESTIONS





Hot Water Recirculation Pilot Study

March 22, 2002

Santa Clara Valley
Water District



5750 Almaden Expressway
San Jose, CA 95118-3686
408.265.2600

Hot Water Re-circulation Pilot Study

March 2002



Jerry De La Piedra
Water Use Efficiency Unit

Under Direction of:
Hossein Ashktorab
Water Use Efficiency Unit Manager
Santa Clara Valley Water District

**Santa Clara Valley Water District
Hot Water Re-circulation Pilot Study**

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Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

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Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

SUMMARY

The Santa Clara Valley Water District, continuously looking for ways to conserve its limited water supply, was awarded \$26,000 in grant funding from the Bureau of Reclamation to supplement a Hot Water Re-circulation Pilot Study. The study, which was implemented in February of 2000, had been designed to address both the amount of water savings attributed to these systems as well as what the public's overall perception may be.

Two complementary methods were used. The first method, or Phase I, involved analysis of pre and post installation of water use data for 65 residential participants while the second method, or Phase II, included the use of flow trace analysis (i.e. data loggers and software) for 9 residential participants – a total of 74 homes were included in the study.

A two tailed T test was used to determine the amount of savings in each phase. For Phase I, average household water use decreased by a little more than 2% (approximately 8.6 gallons per day) in the treatment year (July, '00 – June, '01) relative to the control year (July, '99 – June, '00). In Phase II, discretionary water use decreased by 0.6 gallons per person per day following installation of the systems. ***However, neither of these differences (Phase I or Phase II) is considered statistically significant.***

The existence of a non-significant trend toward reduced water consumption may be attributed to several factors, including; small sample size (Phase II), short study time (Phase II) or times per day each participant activated their system. On average, each system was only activated 3 times a day (with only a slight increase when winter months included), far below what the manufacturers promote. This may be due to a lack of education on the participant's part.

Although the majority of participants were satisfied with their system, average rating of 4.3 (on a scale of 1 to 5, with 5 being the high), the lack of statistical significance ***may*** be a reflection of the weakness of these devices as a tool to reduce consumption. Other studies which are currently underway, including the City of Palo Alto's, may provide a more comprehensive (or complimentary) look at the effectiveness of the hot water re-circulation system.

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

I. BACKGROUND

As population growth continues its upward trend throughout California, the demand placed on its water supply is also amplified. Each year, California homeowners allow an estimated 120 billion gallons of water to run directly into their sewer lines while waiting for hot water to arrive at showers and sinks. Every gallon of water that enters their home requires energy and processing, and each gallon that goes through their water heater requires additional energy. As a leader in water conservation, the Santa Clara Valley Water District (SCVWD) is continuously looking for ways to conserve its limited water supply. Besides being a signatory to the California Urban Water Conservation Council's Memorandum of Understanding, SCVWD is continuously researching new technologies and/or techniques, one being the Hot Water Re-circulation System.

To date, there are several reports available describing hot water re-circulation systems and the ***potential*** water and energy savings available. One such report, Reference Document: Program Design Tool and Savings Estimates¹, showed water savings of approximately 28.1 gallons per unit per day. This potential water savings was calculated by multiplying the average “cold start” hot water run times with the average savings per run. It should be noted that this study included a “plumbing factor” which offsets the fact that not all of the homes will experience 100% potential savings. Other reports, developed by the manufacturers, have shown similar results using similar methodology. Although such reports provide an important initial look at hot water re-circulation systems, SCVWD decided to go a step further and calculate what the ***actual*** (or field tested) savings may be.

In February 2000, SCVWD began implementation of a Hot Water Re-circulation Pilot Study. The District applied for and was awarded \$26,000 in grant funding from the Bureau of Reclamation to help offset the costs of the study. Agreements were also made with the manufacturer of the system as well as a third party to develop the monitoring equipment to be used. Initially, two issues were to be addressed; how much savings can be attributed to hot water re-circulation systems (both in terms of water as well as energy) and what was the public's overall perception of these systems.

¹ Prepared by A & N Technical Services, Inc. 1996

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

II. STUDY DESIGN

After looking over several options, SCVWD decided on a re-circulation system manufactured by ACT, Inc. Metlund Systems. This system, which works on demand, is designed to be installed under the sink furthest from the hot water heater. When activated (by a push of a button), cool water that normally would go down the drain is circulated back to the water heater through the cool water line. At the same time, the system fills the hot water line with hot water from the water heater. When hot water reaches the system, the zone valve closes and the pump shuts off automatically.



Figure 1: Example of a hot water re-circulation device installed under a sink (photo supplied by ACT, Inc. Metlund Systems)

SCVWD proposed that two complementary methods be used to evaluate the impact of this technology. The first method, or Phase I, involved analysis of pre and post installation of water use data (for 90 residential participants) while the second method, or Phase II, included a more intensive monitoring system (for 10 residential participants). Phase II was also going to look at any possible energy savings that may exist. Analysis of both phases used a two tailed T test to determine the amount of savings attributable to these systems.

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

Phase I

Initially, the study was designed for SCVWD to offer a rebate (\$200) to entice potential participants. However, it was decided at a later date that in order to efficiently obtain the preferred participants, SCVWD would need to purchase the system and distribute it for free (participants would still be responsible for the installation). Over 1,300 direct mailings, which included a cover letter and an informational flyer, were randomly mailed to potential participants. Interested residents were instructed to call SCVWD and were asked the following questions:

- Number of years at current residence?
- Number of residents?
- Age of house?
- Square footage of house?
- Own or Rent?
- Do you have an existing system?
- Current wait time for hot water?
- Any renovations completed within the last year?
- Any renovations planned in the next year?
- Approximate distance from hot water heater to furthest fixture

Since the goal was to compare a year of pre-installation data to a year of post-installation data of an average home in Santa Clara County, certain participants/homes had to be excluded. For instance, if they had recently installed a new landscape (or were planning to within the next year) they were excluded. Similarly, if the participant had either not resided at their current address for at least a year or if they were a renter (thus more likely to leave before the year of post-installation was over), they were also excluded.

Table 1: Sample Customers Excluded From Study

CUSTOMER ID#	REASON EXCLUDED
5820	New landscape
5630	Less than 1 yr residency
5813	Short wait time for hot water
2490	Adding a new lawn
2544	Renter
5240	Existing re-circulation system

Close to 300 people responded with an initial phone call to SCVWD, with approximately 135 of them completing a phone survey. Once the initial screening was completed, participants still remaining were contacted and a site visit was scheduled. At that point, a SCVWD representative visited the participant's home, took some initial measurements (including the actual wait time for hot water) and dropped off their free system. The participants were also given a waiver, which explained they had one month to have the

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

system installed or return it (or \$250) to SCVWD. The following data was collected at the site visit:

- Number of low-flow fixtures (toilets, showerheads, aerators and washing machines)
- Size of landscaped area
- Size of turf area
- Automatic sprinklers
- Hot water heater temperature setting
- Measured wait for hot water (at the furthest fixture)
- Type of piping (copper, galvanized or PVC)

Phase II

SCVWD initially wanted to address both the water savings associated with these systems as well as any energy savings that may exist. SCVWD had discussions with a third party for them to develop the monitoring equipment needed. This equipment consisted of two parts, a Meter Panel (which was mounted on a plywood board) as well as a Tee and thermocouple. The Meter Panel (which included three flow meters and two check valves) was to be installed at the cold water main line “split” to the water heater while the Tee and thermocouple were to be installed on the hot water line from the water heater. The check valves on the Meter Panel allow water to flow in only one direction, thus enabling the flow meters to register total re-circulated water, the hot water consumption and the cold water consumption. The flow meters were also modified (by combining them with two thermocouples) so that energy use could also be measured.

Since this phase was a much more comprehensive look at the impact of this system, it was designed for only 10 participants. Potential participants were selected in a similar fashion as in Phase I (close to 50 direct mailings were sent out) and were given both a free system as well as the installation of said system. By signing up for this phase, the participants also agreed that SCVWD staff would come to their home once a month (for one year) to read the flow meters on the Meter Panel. The data collected would then be sent to the third party for analysis.

Once the 10 customers were selected, a private contractor was hired to install both the re-circulation system and the monitoring equipment. However, several problems arose with the first installation and because of this, SCVWD decided to look at an alternative approach. Instead of using the monitoring equipment for these ten customers, SCVWD decided to use flow trace analysis (i.e. data loggers and software).

Although energy use (and any savings) was not being measured now, data loggers do represent a comprehensive look at water use. Data loggers record magnetic pulses from the water meter every 10 seconds. These pulses are then converted into a flow rate based on the brand, model and size of the meter. Using the software, a consistent flow pattern can now be isolated, quantified and categorized. Uses such as flushing a toilet or turning

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

on a bathroom faucet can be identified and measured. Because of this, all water used by a single family residence can be accounted for, thus enabling the SCVWD to quantify the effects of these hot water re-circulating systems.



Figure 2: Example of a data logger installed on a residential meter (photo supplied by Aquacraft, Inc.)

The 9 participants (one dropped out half way through the study) went through a thorough water audit prior to participation. Again similar to Phase I, the following components were documented:

- Number of residents
- Any renovations within the past month?
- Any renovations planned within the next month?
- Number of low-flow components (toilets, showerheads, aerators and washing machines)
- Size of landscaped area
- Size of turf area
- Automatic sprinklers?
- Hot water heater temperature setting
- Measured wait for hot water (at the furthest fixture)
- Leak? (including measurement)

Data loggers were then installed (March 2001) for a two week period prior to installation of the system. The participants then had a week to install their system. Once all 9

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

systems were installed, the data loggers were again placed on the water meters for another two week period. After the five week period, the data loggers were sent to Aquacraft for desegregation. An Access database was then provided to the SCVWD quantifying all uses of water for the 9 participants.

III. DATA ANALYSIS

Phase I

The water consumption of 65 households (25 of the original 90 dropped out for various reasons) was measured for the year preceding and the year following the installation of hot water re-circulation systems. The data consisted of bimonthly meter readings. The populations of meter readings were not normally distributed, but were worse when converted to logarithms. Because of this, analysis was done on the unconverted data. Average household water use decreased by a little more than 2% (approximately 4 ccf/yr) in the treatment year (July, '00 – June, '01) relative to the control year (July, '99 – June, '00), but this difference was not statistically significant (see Figure 1).

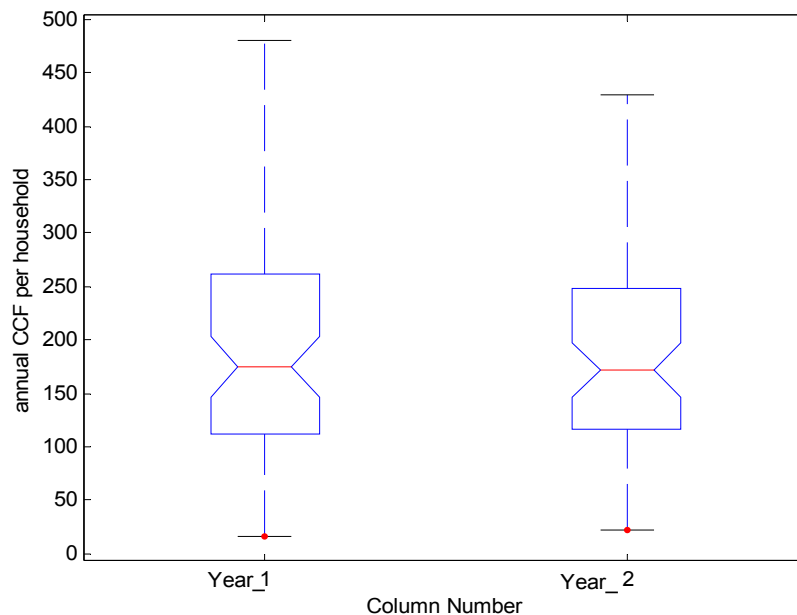


Figure 3: Boxplots for annual household water consumption (ccf)

The boxplots above are a method of representing and summarizing distributions of data. The lower and upper edges of the “boxes” are drawn at the 25th and 75th percentiles of the data. The horizontal lines more or less in the middle of the boxes, in this case in the “notch”, represent the sample means of each distribution. The vertical lines extending from the top and bottom edges of the boxes indicate the spread of the remainder of the data, i.e. all those data points lower and higher, respectively, than the 25th and 75th percentiles. The notches are an estimate of the uncertainty about the mean.

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

It can readily be seen that the upper extreme and the 75th percentile border are lower in the treatment year (Year 2). The mean is lowered almost imperceptibly (4 ccf/year) but the uncertainties surrounding the locations of the true means are nearly identical. The 25th percentile border and the bottom of the distribution are approximately the same amount higher in Year 2 as the mean is lower, reflecting the fact that water consumption actually increased in some (42%) households.

Several other variables were also analyzed to determine if they were significant, including reference evapotranspiration (ET_o), and the annual heat accumulation [as measured by the sum of the bimonthly average maximum temperatures ($^{\circ}F_{max}$)]. ET_o was found to be slightly higher in the treatment year (47.54") than in the control year (46.08") while the annual heat accumulation was slightly lower (419 vs. 423 $^{\circ}F$). Regression analysis indicated that $^{\circ}F_{max}$ was most closely associated with water use. Bimonthly average household water consumptions were then normalized to consumption per $^{\circ}F_{max}$ and the years compared (Figure 2), but the difference between the years remained insignificant.

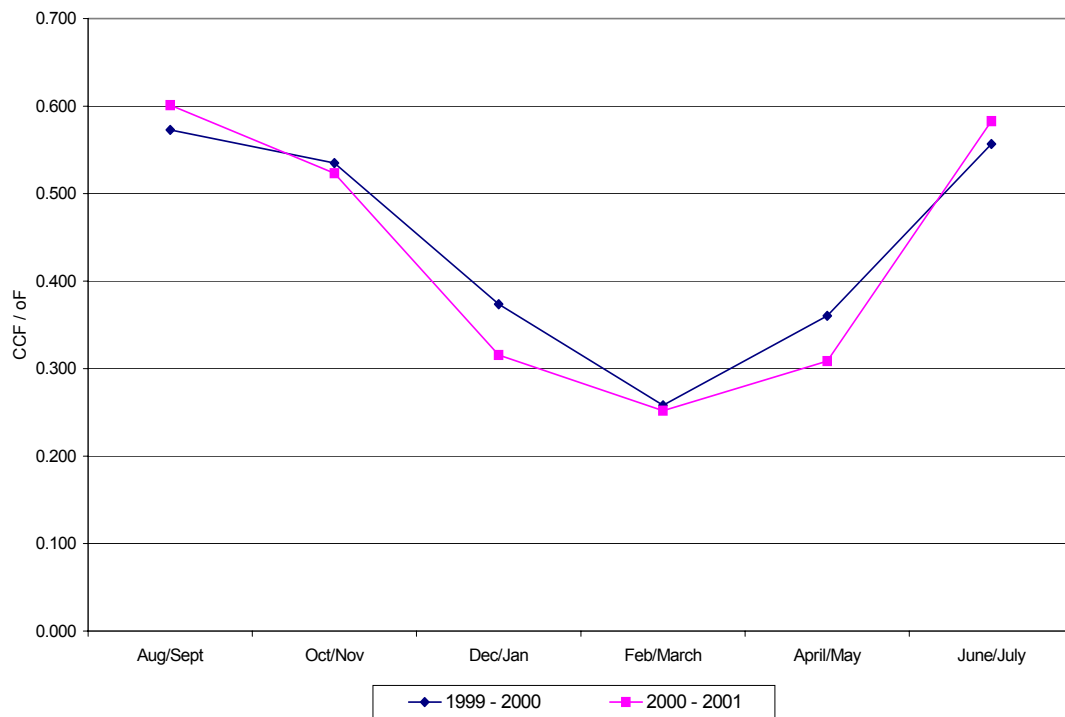


Figure 4: Bimonthly average household water consumption per average maximum daily temperature ($^{\circ}F_{max}$)

Finally, an estimate of household irrigation was made by multiplying each household's yard area, converted to acres, by $0.8 \times \text{evapotranspiration } (ET_o)$. This amount was converted to hundreds of cubic feet (ccf) and subtracted from the bimonthly consumption

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

data to reduce what was perceived to be a landscape irrigation effect. Again, the comparison revealed no significant difference.

Phase II

Data loggers were installed in nine houses and water use with re-circulation systems was monitored and partitioned for twelve days and compared with a twelve day control period ending a week prior. All “non discretionary” water use such as that due to dishwashers and toilets was removed and the remaining water consumption compared. Discretionary water use decreased 0.6 gallons per person per day following installation of the re-circulation systems, but this difference was not statistically significant.

The discretionary uses under consideration were then limited to showering. Average shower duration increased and volume decreased (0.7 gal/cap/day) following the installation of the re-circulation systems. These seemingly contradictory results may be due to the fact that users no longer had to run showers wide open to flush cold water out of the pipes. These were not considered to be statistically significant.

The average daily maximum temperature was lower during the treatment period than during the control period. The shower data were transformed to duration or volume per average maximum degrees Fahrenheit for their respective time periods, but they remained statistically insignificant.

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

IV. CUSTOMER SURVEY DATA

SCVWD, in an attempt to understand what the participant's perception of their system was, sent out two customer survey letters (a complete summary of the data can be found in Appendices A and B).

- The first survey was sent out approximately 6 months after installation (October 2000).
- 55 of them were returned - 73.3% return rate.
- The second survey was sent out approximately 1 year after installation (March 2001).
- 53 of them were returned - a 70.7% return rate.

Customers were asked various questions, including rating their system on a scale of 1 to 5 (with 5 being high) as well as how many times a day they use their system. The following figures and table summarize the data collected for these two questions:

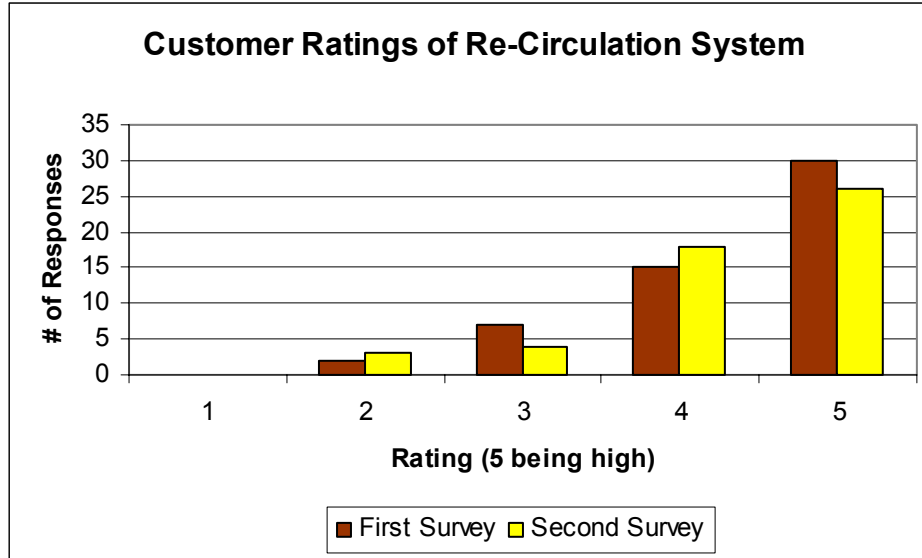


Figure 5: How each participant rated their Hot Water Re-circulation System on a scale of 1 to 5 (with 5 being high)

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

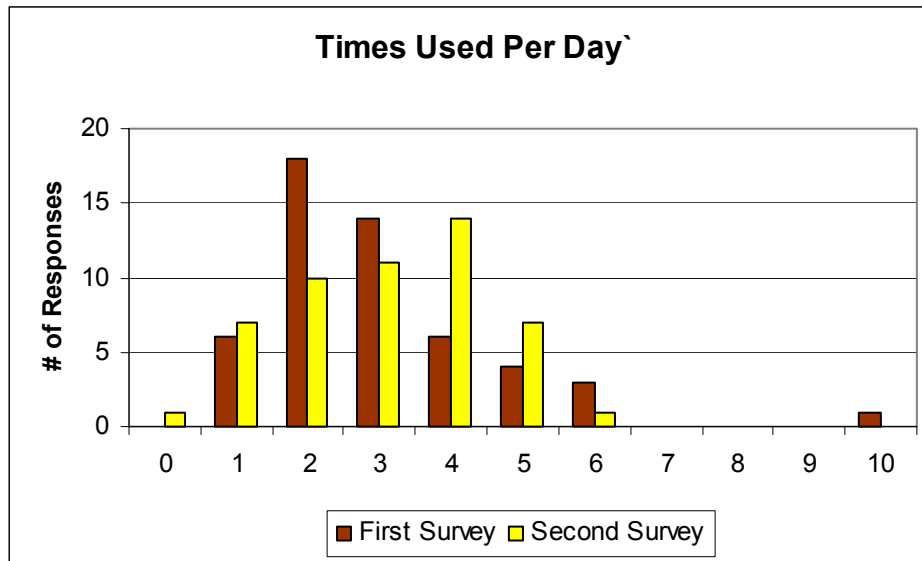


Figure 6: How many times a day each participant uses their Hot Water Re-circulation System

Table 2: Average rating and average usage of Hot Water Re-circulation Systems

1st Customer Survey		2nd Customer Survey	
Ave. Rating	Ave. Times/day Used	Ave. Rating	Ave. Times/day Used
4.35	3.00	4.31	3.24

Customers were also asked, in both surveys, what their wait time was for hot water post installation. This was then compared to what was measured in the preliminary screening process. It must be noted that although customers were instructed on how to do this measurement, these *may* be the customer's perceptions of what the wait time is post installation and not actual measurements. The following figures and table summarize the data collected:

Santa Clara Valley Water District

Hot Water Re-circulation Pilot Study

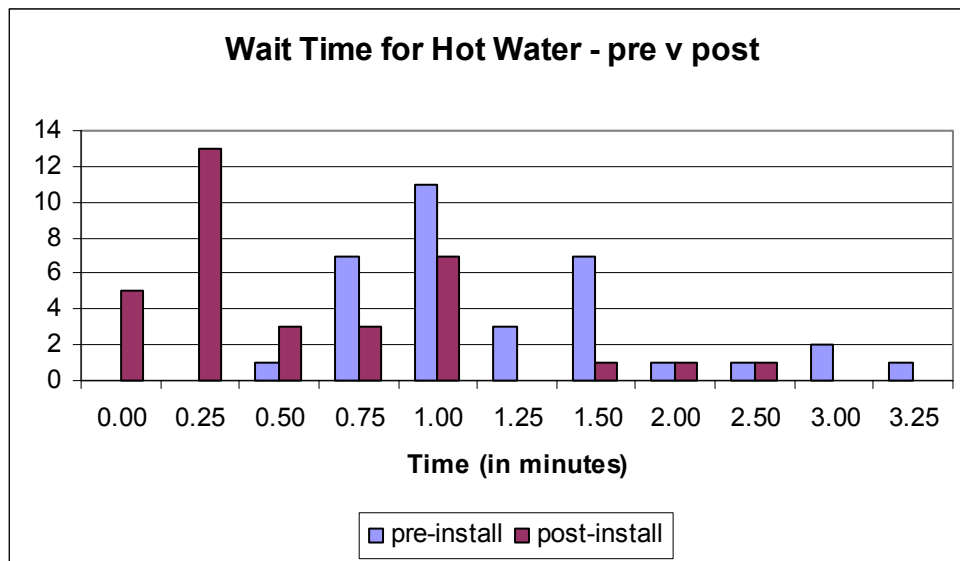


Figure 7: Comparison of wait time for hot water pre installation versus post installation (1st survey data)

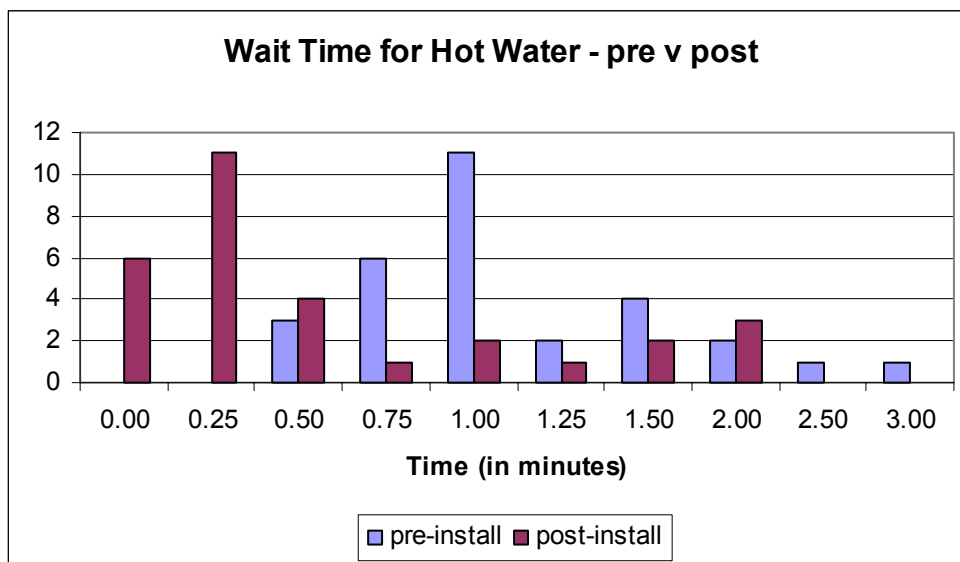


Figure 8: Comparison of wait time for hot water pre installation versus post installation (2nd survey data)

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

Table 3: Average wait for hot water – pre-installation and post-installation

1st Customer Survey		2nd Customer Survey	
Wait pre-install	Wait post-install ²	Wait pre-install	Wait post-install ²
1.2 min.	.59 min.	1.2 min.	.61 min.

On the first survey, customers were also asked who installed their system (to gauge how difficult the systems are to install):

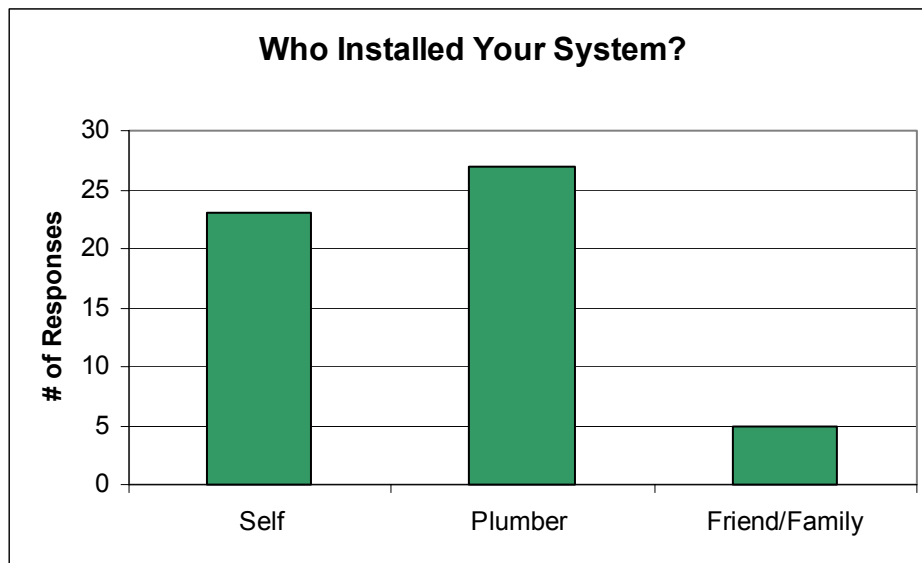


Figure 9: Who installed your Hot Water Re-circulation System?

All participants were initially asked several marketing questions as well, including; who in your household would most likely purchase a new system (both age and gender) and how much would they be willing to pay for a new system. The following figures summarize their answers.

² Although the same participants that answered the first survey were not necessarily the same ones that answered the second survey (only 38 of the participants answered both surveys and of those only 23 answered this question on both surveys), the numbers are only slightly different. For those 23 participants, the wait for hot water post installation increases from .63 minutes in the first survey to .69 minutes in the second.

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

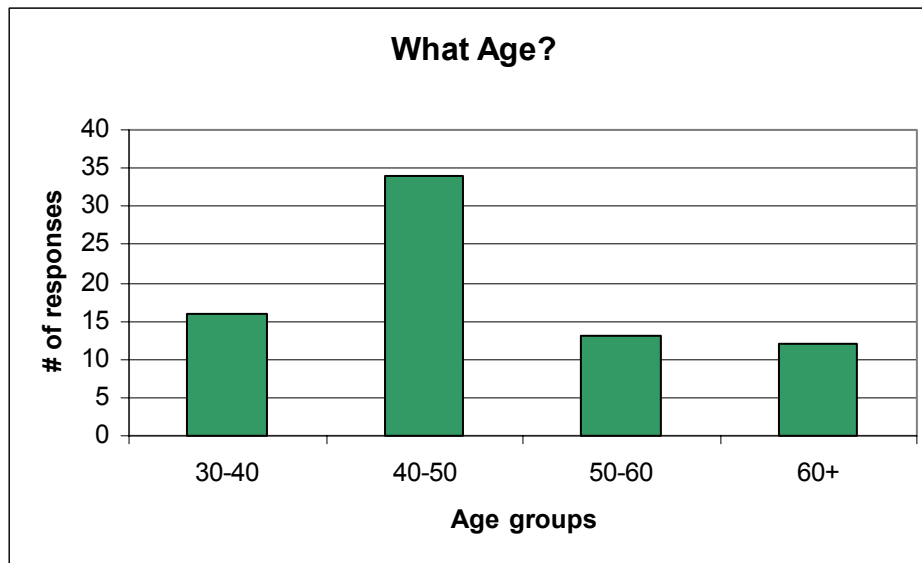


Figure 10: How old is the person in your household that would most likely purchase a new system?

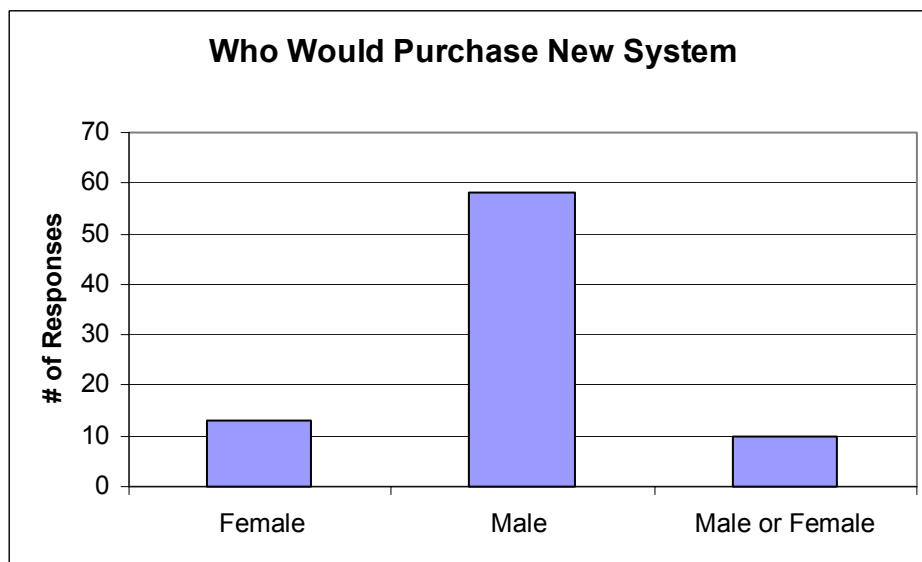


Figure 11: Who (male or female) in your household would most likely purchase a new system?

Santa Clara Valley Water District Hot Water Re-circulation Pilot Study

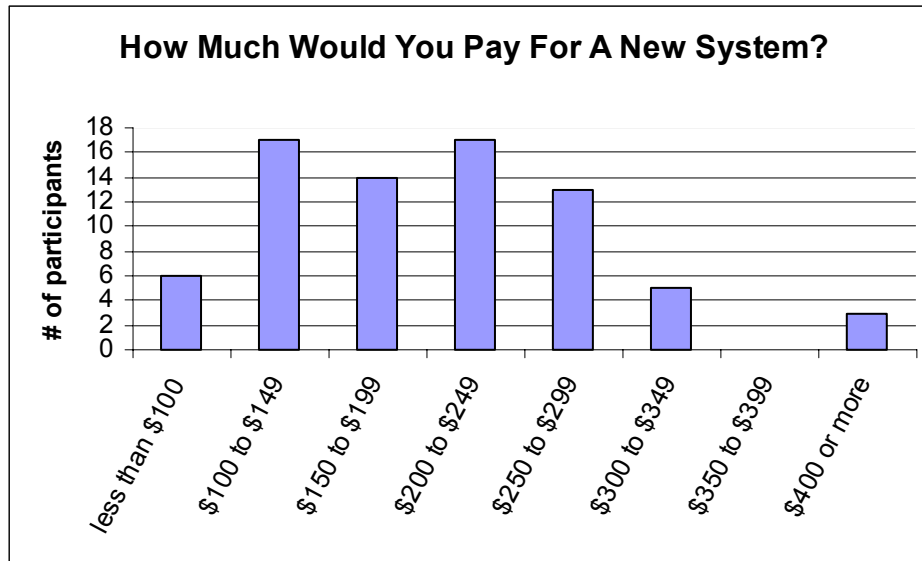


Figure 12: How much would you be willing to spend on a new system?

Finally, each participant was asked how important was it to them that the hot water re-circulation system save money on their energy bill, save money on their water bill, help the environment by conserving resources and make it more convenient to get hot water.

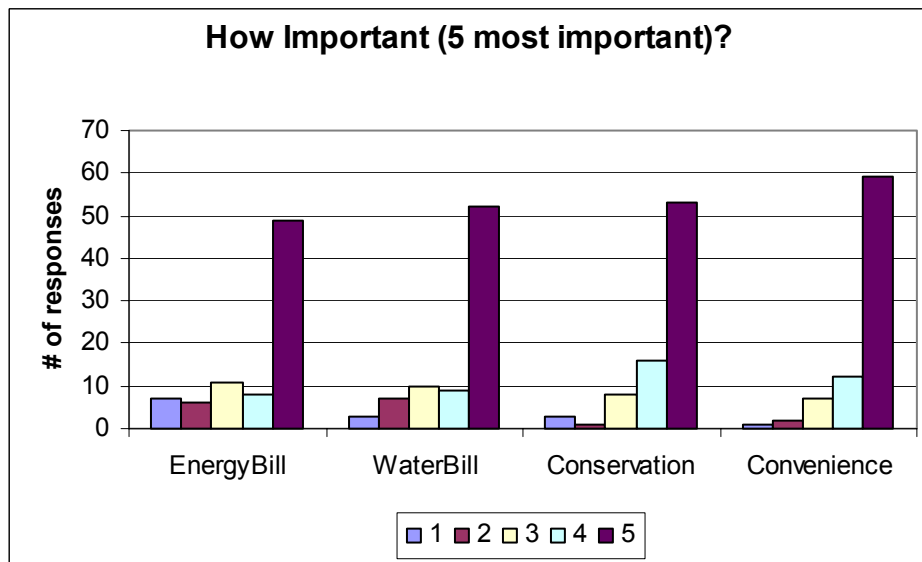


Figure 13: In terms of what motivated you to participate in this study, how would you rate the importance of saving money on your energy bill, save money on your water bill, help the environment by conserving resources and the convenience of getting hot water quicker?

APPENDIX A

Hot Water Recirculation Study Questionnaire 1

Thank you for participating in our Hot Water Recirculation Study. At this time we would like to ask you a few questions. Please fill out the following survey and return it in the envelope provided.

1. On a scale of 1 to 5 (with 5 being the greatest), how happy are you with the system, and why?

1 = 0% 2 = 4% 3 = 13% 4 = 27% 5 = 56%

2. Who installed your hot water re-circulation system (yourself, friend, plumber, etc.)?

Self = 42% Plumber = 49% Friend/Family = 9%

3. To the best of your knowledge, has the hot water heater setting been changed? If yes, what is the new setting?

Yes = 9% No = 91%

4. How many times a day does the system get used?

**0=0% 1=11% 2=35% 3=27% 4=12%
5=8% 6=6% 7=0% 8=0% 9=0% 10=2%**

5. When does the system get used most? What time of day and for what purpose (showers, baths, sinks, etc.)? Be specific.

Afternoon=5% Mornings=57% Evenings=26% Morn. & Eve.=12%

Showers=48% BathSinks=22% KitchenSink=20% Baths=8% ClothesWasher=2%

6. How long is the wait (in minutes) for hot water once the system is activated?

**0=15% .25=38% .5=9% .75=9% 1.0=20%
1.25=0% 1.5=3% 2.0=3% 2.5=3% 3.0=0%**

7. Other comments, problems, suggestions, etc?

Name and address (please print) _____

APPENDIX B

Hot Water Recirculation Study Questionnaire 2

Thank you for participating in our Hot Water Recirculation Study. At this time we would like to ask you a few questions. Please fill out the following survey and return it in the envelope provided.

1. On a scale of 1 to 5 (with 5 being the greatest), how happy are you with the system?

1 = 0% 2 = 6% 3 = 8% 4 = 35% 5 = 51%

Has your opinion changed since the last questionnaire? Why?

Yes = 5% (both increased) No = 95%

2. To the best of your knowledge, has the hot water heater setting been changed since the study began?

Yes = 20% No = 80%

3. How many times a day does the system currently get used?

0=2% 1=14% 2=20% 3=21% 4=27% 5=14% 6=2%

4. When does the system currently get used most? What time of day and for what purpose (showers, baths, sinks, etc.)?

**Afternoon=7% Mornings=50% Evenings=11% Morn. & Eve.=32%
Showers=57% BathSinks=16% KitchenSink=16% Baths=7% ClothesWasher=4%**

5. How long is the current wait (in minutes) for hot water once the system is activated?

**0=20% .25=36% .5=13% .75=3% 1.0=7% 1.25=3%
1.5=7% 2.0=10% 2.5=0% 3.0=0%**

6. Have you made any major changes to your landscape within the last year (a new lawn or pool)? If yes, please describe what you did and when you did it?

Yes = 4% (New lawn and fixed leak) No = 96%

7. Have you replaced any of your interior water fixtures within the last year (toilets, showerheads, and/or faucet aerators)? If yes, please describe.

Yes = 12% (3 toilets, 2 faucet aerators, 1 showerhead) No = 88%

8. Has the number of people in your household increased/decreased within the last year? If yes, please describe?

Yes = 18% No = 82%

9. Other comments, problems, suggestions, etc?

Name and address (please print) _____

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Water Conservation Rebates and Programs



Water Conservation: Are You Drought Ready?

These rebates are designed to make water conservation easier, helping you to make your Santa Clara County home or business drought ready.

Online Shopping Cart

Chances are, you are using more water in your home or business than needed. Valley Water offers free water conservation devices that can help you save water. Visit cloud.valleywater.org/shopping-cart to order your **FREE** gear and literature today!



We're here to help!

To learn more about our rebate programs, including specific program details and contact information, please reach out to us. Since there are eligibility requirements for these rebate programs, **before purchasing equipment or starting any project, please check with us** via email, by phone or online.



(408) 630-2554



www.watersavings.org



conservation@valleywater.org

NOTE: All programs are subject to funding availability and certain restrictions apply. The rebate rate and maximum amounts **may be higher** in some areas.

Landscape Rebate Program

To start, submit an online application for approval and to be scheduled for a pre-inspection before beginning any work on your project. For more information or to schedule a pre-inspection, visit valleywater.dropletportal.com.

Landscape Conversion Rebates

Any property with qualifying high-water-using landscapes (i.e., irrigated turf or functional swimming pools) can receive a rebate of at least \$2/square foot for converting a high-water-using landscape to a low-water-using landscape.

Irrigation Equipment Upgrade Rebate

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

- Installation of a dedicated landscape meter, flow sensor or hydrometer for a rebate up to \$1,000.
- Replacement of old sprinkler nozzles and bodies with high-efficiency sprinkler nozzles (up to \$5 each).
- Replacement of old rotor sprinklers or spray bodies with either pressure regulation or check valves (up to \$20 each).
- Conversion of existing pop-up sprinklers to an inline drip irrigation system for a rebate of \$0.25/sq. ft.
- Installation of a rain sensor to avoid watering while it's raining for a rebate up to \$50.
- Conversion of an existing irrigation timer to a qualifying smart controller for a rebate up to:
 - » \$300 for 1-12 station controller
 - » \$1,000 for a 13-24 station controller
 - » \$2,000 for a 25+ station controller

Rainwater Capture Rebates

Rebates are available for rainwater capture installation or diversion efforts such as:

- Installation of a qualifying rain barrel to collect rain water from existing downspouts for a rebate of at least \$35/barrel.
- Diverting existing downspouts to qualifying cisterns to receive a rebate of at least \$0.50/gallon.
- Installation of a rain garden to collect roof water runoff for a rebate of at least \$1/square foot of roof area diverted, up to \$300.

Rebate Caps

All Landscape Rebate Program applicants will be held to a total rebate cap (for the Landscape Conversion Rebate, Rainwater Capture Rebate, and the Irrigation Equipment Upgrade Rebate combined).

- \$3,000 for single family and multi-family (4 or fewer units)
- \$50,000 for all commercial sites and multi-family (5 or more units).

Rebate caps may be higher in some areas.

Graywater Laundry to Landscape Rebate Program

Receive at least \$200 per residential site for enabling your clothes washer to irrigate your yard with graywater. Apply online and find how-to-videos at watersavings.org. No pre-inspection required, but wait for approval before beginning any work on your project.

Water Wise Survey Program

This two-part program will help you save water indoors and out. Sign up for one or both!

- Request a free **Do-It-Yourself Water Wise Indoor Survey Kit** to evaluate your home's water use efficiency. The kit includes a step-by-step instruction guide, a flow-rate testing bag and toilet leak testing tablets. After completing the survey, you can request free items such as low-flow faucet aerators, showerheads, and toilet flappers. See the Online Shopping Cart section for more details!
- Request a free **Water Wise Outdoor Survey** consultation from a trained irrigation professional. The visit will result in a customized report for your property, including any apparent leaks or inefficiencies, suggestions for irrigation scheduling, and recommendations for money-saving landscape rebates. We can survey up to ½ acre of landscape at single family or small multi-family sites, with a working irrigation system. To get started, have a recent copy of your water bill on-hand and call **(408) 630-2000** or email waterwise@valleywater.org. If you are a customer of San Jose Water Company, please contact them directly.

Fixture Replacement Program

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

Submeter Rebate Program

Mobile home parks, apartments and condominium complexes can receive at least \$150 per installed water submeter by upgrading from a single meter.

Large Landscape Program

Commercial, industrial, institutional and multi-family complexes with over ½ acre of landscape area may be eligible for a free landscape field survey. Professional irrigation auditors perform free site evaluations to provide recommendations for improving system efficiency. Free landscape water budgets are available for some sites, which compares your actual irrigation use to a site-specific budget. Visit waterfluence.com to see if your site already receives this free benefit. Sign up for 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 reduction. This custom rebate based on the measured amount of water saved is available to qualifying facilities including commercial, industrial and institutional facilities like schools and hospitals. The rebate is at least \$4 per 100 cubic feet of water saved per year, or 100% of the project cost (excluding labor and taxes), whichever is less.

Report Water Waste

Help local residents and businesses save money and preserve our shared water supply by confidentially reporting water waste and leaks. We appreciate your detailed observations, and photos are a big help. 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

For more information, contact the **Water Conservation Hotline** at **(408) 630-2554** or by email at conservation@valleywater.org. Or use our **Access Valley Water** customer request and information system at valleywater.org to find out the latest information on Valley Water projects or to submit questions, complaints or compliments directly to a Valley Water staff person.



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Santa Clara Valley Water District

File No.: 22-0866

Agenda Date: 7/25/2022

Item No.: 4.4.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management Committee

SUBJECT:

Standing Items Report.

RECOMMENDATION:

- A. This agenda item allows the Committee to receive verbal or written updates and discuss the below subjects. These items are generally informational; however, the Committee may request additional information from staff:
- B. This is informational only and no action is required.
Staff may provide a verbal update at the 7/25/2022, meeting if there is reportable/updated information.
 - 1. Sustainable Groundwater Management Act (SGMA)
 - 2. Flood MAR
 - 3. Agricultural Water Use Baseline Study

SUMMARY:

Standing Items will allow regular reports from staff on subjects that may be of interest to the committee members.

ATTACHMENTS:

None.

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193

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Santa Clara Valley Water District

File No.: 22-0867

Agenda Date: 7/25/2022

Item No.: 4.5.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management Committee

SUBJECT:

Review Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda.

RECOMMENDATION:

Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.

SUMMARY:

The attached Work Plan outlines the approved topics for discussion to be able to prepare policy alternatives and implications for Board deliberation. The work plan is agendaized at each meeting as accomplishments are updated and to review additional work plan assignments by the Board.

BACKGROUND:

Governance Process Policy-8:

The District Act provides for the creation of advisory boards, committees, or commissions by resolution to serve at the pleasure of the Board.

Accordingly, the Board has established Advisory Committees, which bring respective expertise and community interest, to advise the Board, when requested, in a capacity as defined: prepare Board policy alternatives and provide comment on activities in the implementation of the District's mission for Board consideration. In keeping with the Board's broader focus, Advisory Committees will not direct the implementation of District programs and projects, other than to receive information and provide comment.

Further, in accordance with Governance Process Policy-3, when requested by the Board, the Advisory Committees may help the Board produce the link between the District and the public through information sharing to the communities they represent.

ATTACHMENTS:

Attachment 1: WCaDMC Work Plan

UNCLASSIFIED MANAGER:

Candice Kwok-Smith, 408-630-3193

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Water Conservation and Demand Management Committee Work Plan 2022

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Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
				<p>days maximum limit that includes ornamental landscaping and lawns. <i>The Board approved this recommendation at the April 12, 2022, meeting.</i></p> <p>Accomplished April 25, 2022: The Committee received the following presentations:</p> <ul style="list-style-type: none"> •The monthly update on progress towards Valley Water Resolution 21-68's water use reduction target and drought-related water conservation efforts •The Water Conservation Program Savings update for Fiscal Year 2021 (FY21), •The One-Year Check-In for the Online Shopping Cart (eCart) Program for Free Water-Saving Devices, •The Youth Commission Drought Awareness and Conservation Toolkit, the Committee took no action. <p>Accomplished May 19, 2022: The Committee received the following presentations:</p> <ul style="list-style-type: none"> •Monthly update on progress towards achieving Valley Water Resolution 21-68's water use reduction target and enforcement for Valley Water Resolution 22-20 and took the following action:

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
				<p>The Committee unanimously approved recommending that the Board consider adopting the Ordinance ADOPTING DROUGHT OUTDOOR WATER CONSERVATION AND ENFORCEMENT MEASURES.”</p> <p><i>The Board approved this recommendation at the May 24, 2022, meeting.</i></p> <p>•Water Conservation Program</p> <p>Accomplished June 27, 2022:</p> <p>The Committee received the following presentations:</p> <ul style="list-style-type: none"> •Monthly update on progress towards achieving Valley Water’s water use reduction target and water conservation efforts related to the drought emergency. •Water Fixture Replacement Program One Year Update, •Commercial, Industrial, Institutional, and Multi-Family Residential (CII/MF) Water Conservation Programs, <p>The Committee took no action.</p>
2	<p>Recommend policies towards water conservation goal:</p> <ul style="list-style-type: none"> • Water Conservation Strategic Plan • Making Water Conservation a Way of Life • Review the current 15% call for water use reduction compared to 2019 water use • New programs 	TBD	Discussion/Action Items	

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
	<ul style="list-style-type: none"> SCW funding 			
Water Supply Master Plan Strategy 2: Increase Water Conservation and Stormwater Capture Goal: Increase water conservation to 109,000 AF/year and increase stormwater capture to 1,000 AF/year by 2040.				
3	Monitor progress in achieving the long-term water conservation and stormwater capture goal: <ul style="list-style-type: none"> Investments in no-regrets package/stormwater resource plan implementation Ag Water Use Baseline study Collaboration with UC Water on Flood Managed Aquifer Recharge (Flood MAR) 	January 2022 March 2022 January 2022 March 2022	Discussion/Action Items	<p><u>Accomplished January 24, 2022:</u> The Committee received presentations on the Agricultural Water Use Baseline Study and on the Flood MAR and took no action.</p> <p><u>Accomplished March 21, 2022:</u> The Committee received presentations on the Agricultural Water Use Baseline Study and on the Flood MAR and took no action.</p> <p><u>Accomplished April 25, 2022:</u> The Committee received no reports on the Agricultural Water Use Baseline Study or the Flood MAR.</p> <p><u>Accomplished May 19, 2022:</u> The Committee received no reports on the Agricultural Water Use Baseline Study or the Flood MAR.</p>

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
				Accomplished June 27, 2022: The Committee received no reports on the Agricultural Water Use Baseline Study or the Flood MAR.
4	Recommend policies towards achieving long-term water conservation goal <ul style="list-style-type: none"> • Collaboration on ordinances 	2022	Discussion/Action Items	
Water Supply Master Plan Strategy 3: Optimize the Use of existing supplies and infrastructure				
5	South County Recharge	TBD	Discussion/Action Items	
6	Sustainable Groundwater Management Plan (SGMA) <ul style="list-style-type: none"> • Updates on our 2021 Groundwater Management Plan • New Groundwater Sustainability Plan (GSP) for North San Benito Subbasin 	Monthly	Discussion/Action Items	Accomplished January 24, 2022: The Committee received a verbal update on the Groundwater Sustainability Plans and took no action. Accomplished March 21, 2022: The Committee received a verbal update on the Groundwater Sustainability Plans and took no action.

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
				<p>Accomplished April 25, 2022: The Committee received a presentation on:</p> <ul style="list-style-type: none"> •The Proposed Zones of Controlled Drinking Water Well Construction for the Purified Water Project, and •A verbal update on the Groundwater Sustainability Plans, and the Committee took no action. <p>Accomplished May 19, 2022: The Committee received no report.</p>
Future Demand Projections				
7	Monitor progress and recommend policies <ul style="list-style-type: none"> • Urban Water Management Plan • CCAP water supply portion • Water Shortage Contingency Plan update (Drought Response Plan update) 	February 2022 March 2022	Discussion/Action Items	<p>Accomplished February 23, 2022: The Committee received a presentation on the Drought Response Plan and took no action.</p> <p>Accomplished March 21, 2022: The Committee received a presentation on the Drought Response Plan – Benchmark Study and took no action.</p>
Work Plan Updates				

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
8	Review Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda.	Monthly	Discussion/Action Items	<p><u>Accomplished January 24, 2022:</u> The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took no action.</p> <p><u>Accomplished February 23, 2022:</u> The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took no action.</p> <p><u>Accomplished March 21, 2022:</u> The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took no action.</p> <p><u>Accomplished April 25, 2022:</u> The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took no action.</p> <p><u>Accomplished May 19, 2022:</u> The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took no action.</p>

Water Conservation and Demand Management Committee Work Plan 2022

Item No.	Work Plan Item	Meeting Date	Discussion/Action Item	Accomplishment Date and Outcome
				<p>Accomplished June 27, 2022:</p> <p>The Committee reviewed and discussed the Water Conservation and Demand Management Committee Work Plan and took the following action:</p> <p>The Committee unanimously approved requesting that the Board consider approving a Board Workshop on the Water Supply Master Plan (WSMP) MAP process to engage all that would benefit (Board, Committee and Community) when staff is ready.</p>
Additional Items:				
9	Outreach messaging for water-wise concerns.			
10	<p>Find opportunities to ensure new development have improved water wise features</p> <ul style="list-style-type: none"> Proactively engage to ensure new development have improved water wise features and review major developments within the county Work on contacting the building trades about water conservation practices. Work on contacting Planning Commissions on adopting the model ordinances 	March 2022		<p>Accomplished March 21, 2022:</p> <p>The Committee received a presentation on improving water wise features for new developments and took no action.</p>