

June 7, 2019

MEETING NOTICE**WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE**

Members of the Water Conservation and Demand Management Committee:

Director Nai Hsueh
Director Linda J. LeZotte, Vice Chair
Director Richard P. Santos, Chair

Staff Support of the Water Conservation and Demand Management Committee:

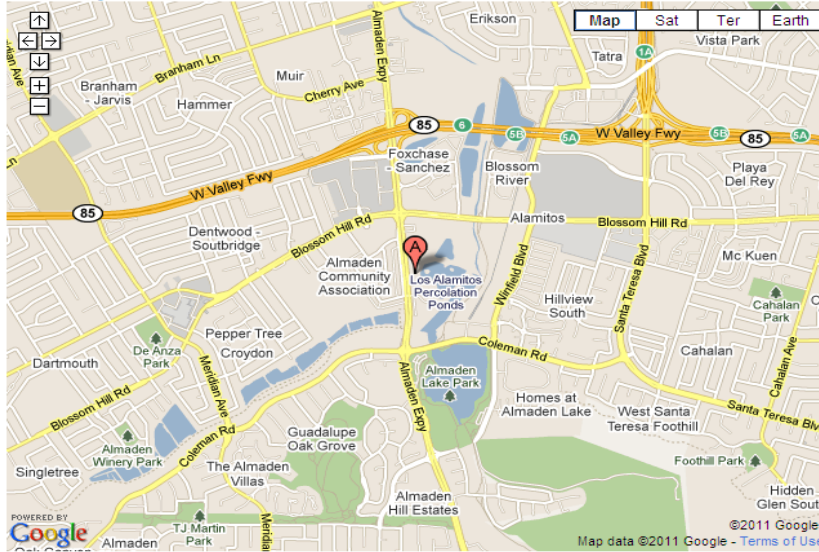
Norma J. Camacho, Chief Executive Officer
Nina Hawk, Chief Operating Officer, Water Utility
Rick Callender, Chief of External Affairs
Stanly Yamamoto, District Counsel
Kurt Arends, Deputy Operating Officer, Raw Water Operations & Maintenance
Division
Garth Hall, Deputy Operating Officer, Water Supply Division
Bhavani Yerrapotu, Deputy Operating Officer, Treated Water Operations &
Maintenance Division
Rachael Gibson, Deputy Administrative Officer, Office of Government Relations
Bart Broome, Assistant Officer, Office of Government Relations
Antonio Alfaro, Government Relations Advocate, Office of Government Relations
Jerry De La Piedra, 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,
Water Supply Division,
Karen Koppett, Senior Water Conservation Specialist

The regular meeting of the Water Conservation and Demand Management Committee is scheduled to be held on **Tuesday, June 18, 2019, at 10:00 a.m.** in the Headquarters Building Boardroom, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

Enclosed are the meeting agenda and corresponding materials. Please bring this packet with you to the meeting.

Enclosures

**Santa Clara Valley Water District - Headquarters Building,
5700 Almaden Expressway, San Jose, CA 95118**



From Oakland:

- Take 880 South to 85 South
- Take 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Morgan Hill/Gilroy:

- Take 101 North to 85 North
- Take 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- Cross Blossom Hill Road
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Sunnyvale:

- Take Highway 87 South to 85 North
- Take Highway 85 North to Almaden Expressway exit
- Turn left on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From San Francisco:

- Take 280 South to Highway 85 South
- Take Highway 85 South to Almaden Expressway exit
- Turn left on Almaden Plaza Way
- Turn right (south) on Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Downtown San Jose:

- Take Highway 87 - Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (first traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance

From Walnut Creek, Concord and East Bay areas:

- Take 680 South to 280 North
- Exit Highway 87-Guadalupe Expressway South
- Exit on Santa Teresa Blvd.
- Turn right on Blossom Hill Road
- Turn left at Almaden Expressway
- At Via Monte (third traffic light), make a U-turn
- Proceed north on Almaden Expressway approximately 1,000 feet
- Turn right (east) into the campus entrance



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

**Headquarters Building Boardroom
5700 Almaden Expressway
San Jose CA 95118**

REGULAR MEETING AGENDA

**Tuesday, June 18, 2019
10:00 AM**

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

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.

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

Tuesday, June 18, 2019

10:00 AM

Headquarters Building Boardroom
5700 Almaden Expressway San Jose CA

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: This item is reserved for persons desiring to address the Committee on any matter not on this agenda. Members of the public who wish to address the Committee on any item not listed on the agenda should complete a Speaker Form and present it to the Committee Clerk. The Committee Chair will call individuals in turn. 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.

[19-0534](#)

Recommendation: Approve the April 26, 2019, Meeting Minutes

Manager: Michele King, 408-630-2711

Attachments: [Attachment 1: 042619 WCaDM Comm DRAFT Mins](#)

Est. Staff Time: 5 Minutes

4. ACTION ITEMS:

4.1. Evaluation on the Extent of Shallow Groundwater Dewatering by Obtaining and Analyzing Information from Land Use and Regulatory Agencies.

[19-0535](#)

Recommendation: This is an information only item and no action is required.

Manager: Garth Hall, 408-630-2750

Est. Staff Time: 20 Minutes

- 4.2. Updates to Ongoing and Future Water Conservation Programs and Resources. [19-0536](#)
Recommendation: This is a discussion item and the Committee may provide comments. However, no action is required.
Manager: Jerry De La Piedra, 408-630-2257
Attachments: [Attachment 1: Conservation Rebates](#)
[Attachment 2: Model Water Efficient New Development Ordinance](#)
Est. Staff Time: 15 Minutes
- 4.3. Discuss Agriculture Baseline Study. [19-0537](#)
Recommendation: This is a discussion item and the Committee may provide comments, however, no action is required.
Manager: Jerry De La Piedra, 408-630-2257
Est. Staff Time: 20 Minutes
- 4.4. Review Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests; and the Committee's Next Meeting Agenda.. [19-0538](#)
Recommendation: Review the Committee work plan to guide the committee's discussions regarding policy alternatives and implications for Board deliberation.
Manager: Michele King, 408-630-2711
Attachments: [Attachment 1: WCaDMC 2019 Work Plan](#)
[Attachment 2: WCaDMC August 2019 Draft Agenda](#)
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.

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Santa Clara Valley Water District

File No.: 19-0534

Agenda Date: 6/18/2019
Item No.: 3.1.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management

SUBJECT:

Approval of Minutes.

RECOMMENDATION:

Approve the April 26, 2019, 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 meetings.

ATTACHMENTS:

Attachment 1: 042619 WCaDM Comm Draft Mins.

UNCLASSIFIED MANAGER:

Michele King, 408-630-2711

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WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE MEETING

DRAFT MINUTES

**MONDAY, APRIL 26, 2019
9:30 AM**

A regularly scheduled meeting of the Water Conservation and Demand Management Committee was held on April 26, 2019, in the Headquarters Building Boardroom at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

Committee Chair, Director Richard P. Santos called the meeting to order at 9:33 a.m.

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

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

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

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 Linda J. LeZotte and unanimously carried, to approve the minutes of the March 25, 2019, Water Conservation and Demand Management Committee meeting as presented.

4. ACTION ITEMS

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

Ms. Rachael Gibson reviewed the materials as outlined in the agenda item.

The Committee discussed the following item: the Committee would like to review the final version of the Ordinance before it is rolled out.

Mr. Jerry De La Piedra and Mr. Garth Hall advised the Committee that the draft Ordinance was brought to them in 2018 and they will ensure that the final version comes back to the Committee.

The Committee took no action.

4.2 WATER SUPPLY MASTER PLAN CONSERVATION AND STORMWATER CAPTURE PROJECT UPDATE

Ms. Metra Richert reviewed the materials as outlined in the agenda item.

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

Mr. Jerry De La Piedra, Ms. Karen Koppett and Mr. Anthony Eulo were available to answer questions.

The Committee took no action.

4.3 WATER SUPPLY MASTER PLAN – ADVANCED METERING INFRASTRUCTURE

Ms. Metra Richert reviewed the materials as outlined in the agenda item.

The Committee discussed the following items: AMI Pilot program highlights, in-depth guidelines, metering, benefits of monthly billing and leak detection.

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

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

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

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

The Committee took no action.

4.4 REVIEW OF 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 reviewed the materials as outlined in the agenda items.

Staff clarified work plan item #13 (Ag Water-Reality vs talk) this references the baseline study of Agriculture in Santa Clara county. Would like to have the Farm Bureau give their input and have this item on the next meeting's agenda. Consider possible tours in the field and include the Agricultural Water Advisory Committee.

Add revising E-2 2.1 policy, align it with the Water Supply Master Plan, look at the policy, change level of service and stakeholder outreach. July/August timeframe will work for staff. The Board will work with staff through the Committee to refine language to convey resilient, safe and affordable water supply.

The Committee scheduled the next meeting for Tuesday, June 18, 2019, at 10:00 a.m.

5. CLERK REVIEW AND CLARIFICATION OF COMMITTEE'S REQUESTS

Ms. Glenna Brambill stated there were no action items for Board consideration.

6. ADJOURNMENT

Chair Santos adjourned at 10:37 a.m. to the next scheduled meeting on Tuesday, June 18, 2019, at 10:00 a.m. in the Headquarters Building Boardroom at 5700 Almaden Expressway, San Jose, California.

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

Approved:

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Santa Clara Valley Water District

File No.: 19-0535

Agenda Date: 6/18/2019

Item No.: 4.1.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management

SUBJECT:

Evaluation on the Extent of Shallow Groundwater Dewatering by Obtaining and Analyzing Information from Land Use and Regulatory Agencies.

RECOMMENDATION:

This is an information only item and no action is required.

SUMMARY:

Shallow groundwater occurs naturally throughout Santa Clara County, with depth to water less than 10 feet in many locations. This condition exists due to local geology and because there is little demand for water from these zones. Where excavations or infrastructure intersect shallow groundwater, temporary or ongoing dewatering may be required. Despite temporary and ongoing dewatering, groundwater conditions are sustainable in the Santa Clara and Llagas subbasins.

At the October 31, 2018 Committee meeting, staff presented information on potential Santa Clara Valley Water District (Valley Water) actions related to dewatering including well permitting, metering, imposing groundwater charges and exploring expanded reuse. At that meeting, the Committee supported the following staff recommendations, requesting periodic updates as the work progresses:

- A. Evaluate the extent of dewatering by obtaining and analyzing available information from land use and regulatory agencies.
- B. If ongoing dewatering sites with significant and consistent yield are identified, determine what resources would be needed to explore potential reuse options and related environmental impacts.
- C. Further explore shallow groundwater interactions with surface water and with principal aquifers in coordination with stakeholders as part of Sustainable Groundwater Management Act (SGMA) compliance.
- D. Encourage land use agencies to minimize dewatering discharges and require reasonable reuse in permitting activities requiring dewatering.

This agenda item provides an update on recommendation A above. After reaching out to land use agencies and the San Francisco Bay Regional Water Quality Control Board (Regional Board), staff has received records of over 200 potential dewatering sites in Santa Clara County. Data was provided by the Regional Board, City of Palo Alto, City of San Jose (which also includes sites in Santa Clara, Milpitas, and Cupertino), City of Sunnyvale, and Santa Clara County Roads and Airports Division.

Staff from the cities of Campbell, Morgan Hill, and Gilroy, along with the West Valley Sanitation District reported that dewatering within their jurisdictions was either very rare or had not occurred within the last five years.

The data provided varies significantly in terms of the specific information and date range. Due to the complexity of and variations in the data, staff has completed only a preliminary analysis, which is summarized below.

1. Most available records from cities relate to permitting functions, and some do not appear to be dewatering discharges.

For most cities, available data relates to permits issued for short-term sanitary sewer or storm drain discharges, with a typical, maximum permitted duration of one year. Dewatering projects that need to discharge for more than one year generally apply for an NPDES permit from the Regional Board for discharge to storm drains and/or creeks. A review of the site location data provided by some cities suggests that some are contaminant release sites. At these sites, the purpose of pumping is to treat contaminated groundwater rather than to prevent flooding from shallow groundwater. Therefore, these sites should not be considered as dewatering sites. Additional effort is needed to screen out these and other non-dewatering sites from further evaluation.

2. Records on dewatered volumes and specific discharge dates are not readily available.

The Regional Board maintains records of permitted (maximum) discharge volumes but does not require metering of actual discharges. To ensure adequate permit coverage for worst case conditions, dischargers presumably overestimate the dewatering rates. While information on discharge start and end dates are provided for each location, there is no information on the frequency or duration of discharges during those periods. Only the cities of Palo Alto and Sunnyvale were able to provide data on discharge volumes, but only the City of Palo Alto provided discharge volumes and dates.

3. Most data obtained relate to temporary (one-time) dewatering discharges as opposed to ongoing dewatering.

Per Recommendation B, there is an interest in identifying ongoing dewatering sites, where expanded reuse may be more feasible. This contrasts with temporary dewatering sites, where reuse beyond localized irrigation or fill stations is hindered by the lack of infrastructure to capture, store, and move water.

Many of the records obtained appear to relate to temporary discharges, but some are ongoing discharges. However, as noted previously, discharges from known contaminant release sites do not represent dewatering and will need to be excluded from further analysis. Valley Water staff

also continue to seek relevant information from Caltrans, who is known to operate several ongoing dewatering systems to prevent shallow groundwater from surfacing on highways.

Based on the data provided and conversations with agency staff, the need for dewatering can vary significantly from year to year depending on the economy, approved projects, and the timing of construction activities.

Staff will continue to evaluate the data received to identify true dewatering discharges so that the extent of dewatering can be better described. Staff continues to seek relevant information from Caltrans. Per recommendation B, if dewatering sites with consistent yield can be identified, staff will evaluate the resources needed to explore related reuse while considering the potential environmental effects of lower dewatering discharges to creeks.

Work to further evaluate shallow groundwater interactions with surface water and with deeper aquifers as part of SGMA compliance (recommendation C) has not begun. In part, staff is awaiting the California Department of Water Resources assessment of the 2016 Groundwater Management Plan, which Valley Water submitted as an Alternative to a Groundwater Sustainability Plan for SGMA compliance. The DWR assessment is expected by June 2019 and may identify specific work needed related to groundwater/surface water interaction.

Staff will continue to keep the Committee updated as the evaluation of shallow groundwater dewatering progresses.

ATTACHMENTS:

None

UNCLASSIFIED MANAGER:

Garth Hall, 408-630-2750

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Santa Clara Valley Water District

File No.: 19-0536

Agenda Date: 6/18/2019

Item No.: 4.2.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management

SUBJECT:

Updates to Ongoing and Future Water Conservation Programs and Resources.

RECOMMENDATION:

This is a discussion item and the Committee may provide comments. However, no action is required.

SUMMARY:

Santa Clara Valley Water District (Valley Water) has a long-term water conservation goal of saving nearly 100,000 acre-feet per year by 2030 (base year of 1992). Through the current update to Valley Water's Water Supply Master Plan, the Board has approved additional water conservation and stormwater capture projects, increasing the long-term goal to nearly 110,000 acre-feet per year of water savings by 2040. To achieve this goal, Valley Water and its retailers partner to implement nearly 20 different ongoing water conservation programs that use a mix of incentives and rebates, free device installation, one-on-one home visits, site surveys, and educational outreach to reduce water consumption in homes, businesses and agriculture. Programs include replacing high-water using landscaping with low-water using landscape, installing efficient irrigation equipment, and offering incentives for graywater laundry-to-landscape systems. Valley Water also implements an annual water conservation campaign that typically includes an online component, social media, and traditional media ads.

In addition to the programs and efforts outlined in the attached Water Conservation Rebates and Programs Flyer (Attachment 1), Valley Water offers a variety of specialized programs including home water use reports (with participating water retailers), free showerhead and aerator distribution, a graywater laundry to landscape direct installation program, the Lawn Busters Program (described below), a water waste inspector program, a large landscape water management program, a landscape maintenance assistance program, an agricultural irrigation management program, workshops and classes, and a wide variety educational tools.

A few updates to on-going and future programs:

- Model Water Efficient New Development Ordinance (Model Ordinance) - The Office of Government Relations provided a rollout plan for local adoption at the April Committee meeting. Staff level conversations have occurred in Mountain View, Cupertino, and San Jose, and staff is scheduling meetings to begin discussing the ordinance adoption process for each city, town, and Santa Clara County, including each jurisdiction's timeline, policy development,

public comment, Council processes, and implementation of the Model Ordinance. A copy of the Model Ordinance is provided in Attachment 2. Staff will work with Board Members so they may participate in the process for ordinance adoption, track progress, and inform strategic action.

- Lawn Busters Program - Valley Water partners with Our City Forest (OCF) to offer the Lawn Busters Program, which replaces high water using landscape with low-water using landscape for low-income residents, seniors, disabled persons, and veterans. OCF staff has requested a time extension as the current agreement is set to expire in June 2019. As of April 30, 2019, 189 projects have been completed, for a total of 182,845 square feet of turf replaced. Extending the term will allow OCF reach their goal of 225,000 square feet of turf replacement.
- AMI and Water Use Reports Program - Staff presented a draft set of guidelines to this Committee in April 2019 and has since brought the draft guidelines to the Water Conservation Subcommittee (of the Retailers Committee). Staff is working to finalize the guidelines by the end of the Fiscal Year.
- Leak Assistance Program - This program is currently in early development as staff is seeking input from water retailers on design and implementation options. Staff will present a draft framework of the program to the Committee at a future meeting.
- Water Conservation Strategic Plan - A [Water Use Efficiency Strategic Plan](https://www.valleywater.org/sites/default/files/Water%20Use%20Efficiency%20Strategic%20Plan.pdf) <<https://www.valleywater.org/sites/default/files/Water%20Use%20Efficiency%20Strategic%20Plan.pdf>> was created in 2008, which analyzed options for meeting Valley Water's long-term savings goal as well as strategies for addressing a water shortage. Staff is planning on updating this Strategic Plan in FY 20.
- Baseline Study for Agriculture - To better understand current practices as well as identify areas for potential water savings, staff is proposing Valley Water develop a baseline study for agriculture. Staff will reach out to the Farm Bureau and the County on potential partnerships, with a goal of completing the study in FY 20.

ATTACHMENTS:

Attachment 1: Water Conservation Rebates and Programs Flyer

Attachment 2: Model Water Efficient New Development Ordinance (MWENDO)

UNCLASSIFIED MANAGER:

Jerry De La Piedra, 408-630-2257

Water Conservation Rebates and Programs



Water conservation: A California way of life!

The Santa Clara Valley Water District (Valley Water) truly appreciates the community's response to our call for reduced water use. Thank you! It's important that going forward we continue to practice daily water conservation. Valley Water is pleased to offer the following programs:

Landscape Rebate Program

Those wishing to participate in the Landscape Rebate Program must complete a pre-inspection and submit an application for approval **before** beginning any work on their project.

Landscape Conversion Rebate

Santa Clara County single family homes, multi-family and business/institutional properties with qualifying high water using landscape (i.e., irrigated turf or functional swimming pool) can receive a rebate of \$1/sq. ft. for converting high-water-using landscape to low-water-using landscape. This amount may be higher in some areas.

Rainwater Capture Rebates

- Install a qualifying rain barrel to collect rain water from existing downspouts for rebate up to \$35/barrel.
- Receive a rebate of \$0.50/gallon for diverting existing downspouts to qualifying cisterns.
- Install a rain garden to collect roof water runoff for a rebate of \$1/sq. ft. of roof area diverted, up to \$300.

Irrigation Equipment Upgrade Rebate

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

- Install a dedicated landscape meter, flow sensor or hydrometer for a rebate up to \$1,000.
- Replace old sprinkler nozzles and bodies with high efficiency sprinkler nozzles (up to \$5 each) and rotor sprinklers or spray bodies with pressure regulation and/or check valves (up to \$20 each).

- Convert existing pop-up sprinklers to an in-line drip irrigation system for a rebate of \$0.25/sq. ft.
- Convert an existing irrigation timer to a qualifying weather-based irrigation controller (rain sensor required) for a rebate of up to \$300 (for a 1-12 station controller), \$1,000 (for a 13-24 station controller) or \$2,000 (for a 25+ station controller). Rain sensors are rebated up to \$50.


For more information or to schedule a pre-inspection, please start the online application process by visiting scvwd.dropletportal.com or call the Water Conservation Hotline at (408) 630-2554.

Please Note:

All applications will be held to a total rebate cap (for the Landscape Conversion Rebate, Rainwater Capture Rebate, and the Irrigation Equipment Upgrade Rebate combined) of \$2,000 for single family and multi-family (4 or fewer units) and \$20,000 for all commercial sites and multi-family (5 or more units). Rebate cap may be higher in some areas.

Graywater Laundry to Landscape Rebate Program

Receive \$200 per residential site for properly connecting a clothes washer to a graywater system. This amount **may be higher** in some cost-sharing areas. Download the application and find how-to-videos at watersavings.org. For more information, please call (408) 630-2554. No pre-inspection required! Wait for approval **before** beginning any work on your project.



VOW to use every gallon wisely.

VOW
VALUE OUR WATER

Get more tips at watersavings.org

Water Wise Survey Program

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

- For the **Do-It-Yourself Water Wise Indoor Survey**, customers are able to request a kit to evaluate indoor water use that includes a flow rate bag for testing shower and sink flow rates and dye tablets for testing toilets for leaks. Included in the kit will be a step-by-step guide to evaluate your own water use. Customers who complete the survey can request free conservation items for their homes, such as low flow faucet aerators and showerheads and toilet flappers. To request a DIY Kit, please call (408) 630-2554. The DIY Kit is also available at watersavings.org.
- During the **Water Wise Outdoor Survey** offered to *single family and small multi-family sites (under ½ acre)* in Santa Clara County, a trained irrigation professional will complete a comprehensive evaluation of the irrigation system, flagging issues onsite, adjusting the irrigation controller and creating a custom report detailing the survey findings. To schedule an inspection call (408) 630-2000 or email waterwise@valleywater.org.

Landscape Survey Program

Commercial, industrial, institutional, and multi-family complexes with over ½ acre of landscape area within Santa Clara County may be eligible for a free landscape field survey. Professional irrigation auditors perform free site evaluations to provide recommendations for improving system efficiency.

To find out if your site can benefit from a landscape field survey, please call (408) 630-2554.

Commercial Rebate Program

Commercial rebates are available for qualifying facilities in Santa Clara County that replace or update equipment which results in a measurable water reduction. The rebate is currently \$4 per 100 cubic feet of water saved per year, or 50 percent of the project cost, whichever is less. This amount may be higher in some areas. For more information, please call (408) 630-2554.

Submeter Rebate Program

Mobile home parks and apartment and condominium complexes in Santa Clara County can receive \$150 per installed water submeter for changing from a master water meter to individual water submeters. For more information, please call (408) 630-2554.

Report Water Waste

Valley Water's water waste inspectors respond to reports of water waste and violations of local water use restrictions. To report water waste, you may select any of these convenient options: call (408) 630-2000; email waterwise@valleywater.org; download our Access Valley Water app; or go to Access Valley Water from the QR code below or at valleywater.org.

Before purchasing equipment or beginning any project, customers should check eligibility requirements at www.watersavings.org or call the Valley Water's Water Conservation Hotline at (408) 630-2554.

All programs are subject to funding availability and certain restrictions apply.

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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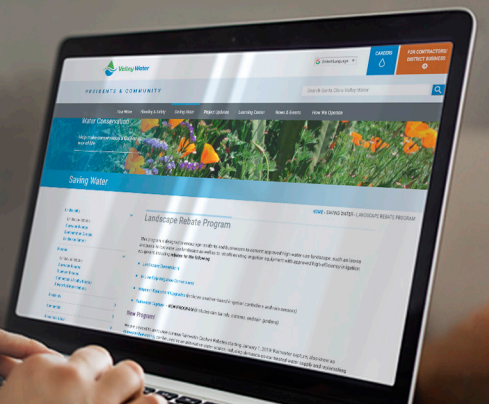


valleywater



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ORDINANCE NO. XXXX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF [] ADDING A NEW CHAPTER [] (WATER EFFICIENT NEW DEVELOPMENT) TO TITLE [] OF THE CITY OF [] MUNICIPAL CODE RELATED TO REQUIREMENTS FOR NEW DEVELOPMENT THAT PROMOTE WATER USE EFFICIENCY AND THE DEVELOPMENT OF ALTERNATE SOURCES OF WATER SUPPLY

WHEREAS, all California water users are responsible for making effective use of the available water resources; and

WHEREAS, water is a public resource that the California Constitution protects against waste and unreasonable use; and

WHEREAS, growing population, climate change, and the need to protect and grow the City's economy make it essential that the City manage its water resources as efficiently as possible; and

WHEREAS, reduced water use through conservation provides significant energy reduction and associated environmental benefits, and can help protect water quality, preserve and improve stream flows, and reduce greenhouse gas emissions; and

WHEREAS, improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses; and

WHEREAS, the City has determined that the energy standards in this ordinance are cost-effective and require buildings to be designed to consume no more energy than permitted by Part 6 of Title 24 of the California Code of Regulations; and

WHEREAS, the development of Alternate Water Source Systems will assist in meeting future water requirements of the City and lessen the impacts of new development on the City's sanitary sewer system; and

WHEREAS, the application of risk-based water quality standards to Onsite Treated Nonpotable Water systems can protect public health, safety, and welfare; and

WHEREAS, adoption of this ordinance and adoption of rules and regulations by the City will help achieve the City's goals for water supply use and preservation by:

- (1) Promoting the values and benefits of Nonpotable Water use while recognizing the need to invest water and other resources as efficiently as possible;
- (2) Encouraging the use of Nonpotable Water for nonpotable applications; and
- (3) Replacing potable water use for toilet and urinal flushing and irrigation to the maximum extent possible with Alternate Water Sources; and

WHEREAS, it is the intent of the City Council of the City of [] to require New Development constructed in the City of [] to meet and exceed the water efficiency and alternate water supply requirements of the State of California.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF [] DOES ORDAIN AS FOLLOWS:

SECTION 1. CEQA REVIEW.

The City Council finds, pursuant to [Title 14 of the California Code of Regulations, Section 15061(b)(3),] that this Ordinance is [exempt] from the California Environmental Quality Act (CEQA) in that it [is not a “project” which has the potential for causing a significant effect on the environment].

SECTION 2. DEFINITIONS.

The terms used in this Chapter have the meaning set forth below:

Alternate Water Source: A source of Nonpotable Water that includes Recycled Water, Graywater, Stormwater, condensate, onsite treated Nonpotable Water, Rainwater, Blackwater, and any other source approved by the Director.

Alternate Water Source System: The system of facilities necessary for providing Nonpotable Water for use in a development project, including but not limited to all collection, treatment, storage, and distribution facilities. Nonpotable Water System shall have the same meaning.

Blackwater: Wastewater containing bodily or other biological wastes. This is discharge from toilets, dishwashers, kitchen sinks, and utility sinks.

Compact Hot Water Distribution System: A hot water distribution system in which the water heater to fixture proximity is more compact than threshold criteria that is defined based on the dwelling unit conditioned floor area and number of stories, as described in Part 6 of Title 24 of the California Code of Regulations.

Director: The Director of [] or any individual designated by the Director to act on his or her behalf.

District: A group of two or more parcels that share Alternate Water Sources.

District System: An Alternate Water Source System serving a District development project.

Drain Water Heat Recovery (DWHR): A double wall heat exchanger that recovers heat from the effluent waste piping and uses it to preheat water in a domestic or service water-heating system in order to reduce water heating energy usage.

Equal Flow Configuration: Installation of a drain water heat recovery device with preheated water being routed to both the water heater and the shower, as opposed to an unequal flow configuration with preheated water being routed to either the water heater or the shower.

First Certificate of Occupancy: Either a temporary certificate of occupancy or a Certificate of Final Completion and Occupancy.

Foundation Drainage: Nuisance groundwater that is extracted to maintain a building's or facility's structural integrity and would otherwise be discharged to the City's sewer system. Foundation Drainage does not include Nonpotable groundwater extracted for a beneficial use that is subject to City groundwater well regulations.

Graywater: Untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. Graywater includes, but is not limited to, wastewater from bathtubs, showers, bathroom sinks, lavatories, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Graywater does not include Blackwater.

Graywater Ready: A design criteria for a structure's plumbing system that provides a noninvasive pathway to install a graywater treatment and reuse system at a later date. In a Graywater Ready home, for example, it will be possible to install an NSF 350 System without altering the in-wall or in-ground plumbing and electrical infrastructure.

Hot Water Recirculation System: A Hot Water System that uses the hot water return line and/or supply line connected to a water heater to enable continuous delivery of hot water to fixtures.

Hot Water System: A system that distributes hot water, consisting of a water heater, piping, and related equipment and devices.

Multi-family Residential: A residential building that contains three or more dwelling units.

New Development: Buildings and structures that have not received initial design approval from the **Planning Department** or a building permit from the **Building Department** prior to **May 1, 2019**.

Nonpotable Water: Water collected from Alternate Water Sources, treated, and intended to be used onsite for direct beneficial use.

Nonpotable Water Engineering Report: Report submitted by project applicant to the Director describing the Alternate Water Source System in accordance with the rules and regulations adopted by the City.

Nonpotable Water System: The same meaning as Alternate Water Source System.

Nonresidential: A building that contains occupancies other than dwelling units. For the purposes of this ordinance, hotels, motels, institutional housing (such as hostels and dormitories), hospitals, and night shelters are considered nonresidential.

NSF 350 System: Any treatment system certified to meet NSF/ANSI Standard 350 for Onsite Residential and Commercial Reuse Treatment Systems, as amended from time to time.

Open Cooling Tower: An open, or direct contact, cooling tower which exposes water directly to the cooling atmosphere, thereby transferring the source heat load from the water directly to the air by a combination of heat and mass transfer.

Onsite Treated Nonpotable Water: Nonpotable Water that has been collected, treated, and intended to be used onsite and is suitable for direct beneficial use.

Onsite Treated Nonpotable Water Program: Program established by the Director for Onsite Treated Nonpotable Water systems including rules and regulations regarding the operation of Alternate Water Source Systems necessary to effectuate the purposes of this ordinance and to protect public health and safety.

Permittee: Owner or operator of an Onsite Treated Nonpotable Water system.

Rainwater: Precipitation collected from roof surfaces or other manmade, aboveground collection surfaces.

Recycled Water: Water that has been reclaimed from wastewater for beneficial use as defined by Title 22 of the California Code of Regulations.

Residential: A building that contains residential dwelling units including single-family or multi-family housing units and mobile homes.

Single-family Residential: A residential building that contains one or two dwelling units.

Stormwater: Precipitation collected from at-grade or below grade surfaces.

Water Budget: The calculation of the potential volume of onsite Alternate Water Sources and demands of a development project and any other building subject to this ordinance.

Water Budget Calculator: The water use calculation application approved by the Director that provides for the assessment of a proposed onsite water system, Alternate Water Sources, and the end uses of the Alternate Water Sources.

Water Budget Documentation: An in-depth assessment of the project applicant's Nonpotable Water use, including survey information, water meter readings, water service billing information, Alternate Water Source schematic drawings, or any other information deemed necessary by the Director.

SECTION 3. The City Council hereby adds a new Chapter [] (Water Efficient New Development) to Title [] of the City of [] Municipal Code to read as follows:

{CODE SECTION} 1. APPLICABILITY.

A. This chapter shall apply to all New Development in the City of [].

B. **Exception.** The Director may exempt a covered New Development project from some or all provisions of this chapter upon determination that sufficient practical challenges exist making compliance with the provisions infeasible. The project applicant is responsible for demonstrating infeasibility of compliance with the provisions when applying for exemption.

{CODE SECTION} 2. REQUIREMENTS.

{CODE SECTION} 2.1. REQUIREMENTS FOR SINGLE-FAMILY RESIDENTIAL BUILDINGS.

A. **Single-Family Residential Water Waste Reduction when Heating Water.** Section 110.3(c) of Part 6 of Title 24 of the California Code of Regulations is hereby amended to add the following Section 110.3(c)8:

8. Single-family Residential New Development must meet either A or B:

- A. Meet the criteria of the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations related to the Compact Hot Water Distribution System Expanded Credit with HERS verification as defined in Section RA4.4.16 of the Reference Appendices.
- B. The hot water system shall not allow more than 0.125 gallons of water to be delivered to any fixture before hot water arrives. Where a hot water recirculation system or electric trace heating system is installed, the branch from the recirculating loop or electric trace heating element to the fixture shall contain a maximum of 0.125 gallons. For reference, this volume limitation equates to branch runs no longer than approximately 22' of 3/8" nominal pipe size, 12' of 1/2" nominal pipe size, or 5.5' of 3/4" nominal pipe size.

Hot water recirculation system configurations must be in compliance with Title 24 of the California Code of Regulations, shall not be controlled by timers only, and must be:

- i. Demand systems with manual control, in compliance with the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations, with HERS verification as defined by Section RA4.4.17 of the Reference Appendices; or
- ii. Demand systems with sensor control, in compliance with the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations performance path as specified by Section 150.1(b) and with HERS verification as defined by Section RA4.4.18 of the Reference Appendices; or
- iii. Other systems acceptable to the Director.

Hot water systems pursuing compliance under Section 110.3(c)8B shall also meet the criteria of the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations related to the Drain Water Heat Recovery System Credit with HERS verification as defined by Section RA4.4.21 of the Reference Appendices.

EXCEPTION to Section 110.3(c)8: Stand-alone tubs.

B. **Single-Family Residential Graywater Ready Collection and Distribution System.** All new Single-family Residential units shall be built Graywater Ready in compliance with Chapter 15 of the California Plumbing Code. The components of a Graywater system shall be labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.

1. **Applicability.** This **Section 2.1.B** shall apply to the installation of Graywater Collection and Distribution Systems at new Single-family Residential units.
2. **Development Project Requirements.** Graywater Ready Single-family Residential units must include the following:
 - (a) Dedicated Graywater collection plumbing, which must:
 - i. Capture water from sufficient number of fixtures to meet landscape water demand of the Single-family Residential unit, specifically, water from showers, baths, lavatory sinks and laundry washing machines. The landscape water demand shall be calculated in accordance with Model Water Efficient Landscape Ordinance as adopted in **[municipal code section]**;
 - ii. Convene each source in the location on the property designated to accommodate future non-invasive installation of a treatment system; and
 - iii. Reconverge with the home's Blackwater collection system prior to flowing to the municipal sewer system.
 - (b) Dedicated locations on the property to accommodate future non-invasive installation of:
 - i. A complete Graywater treatment system;
 - ii. A storage tank for treated Graywater with a capacity of at least 175 gallons; and
 - iii. A surge tank with overflow protection to hold Graywater for no longer than 24 hours while Graywater is draining by gravity or by pump into the landscape.
 - (c) Dedicated distribution plumbing for treated Graywater, so that potable water can be disconnected in the future when appropriately treated Graywater is available, which must include:
 - i. Dedicated supply feeds capable of providing treated Graywater to each landscape irrigation system on the property (for example, front yard and back yard).
 - (d) Other requirements for the Single-family Residential unit to be Graywater Ready, including:
 - i. A hose bib with potable water within 15 feet of each point where the Graywater system exits the envelope of the home; and
 - ii. A dedicated 20-amp, 120-volt electrical circuit with GFCI breaker within 5 feet of each point where the Graywater system exits the envelope of the home.
3. **Exceptions.**
 - (a) Additions and alterations of existing buildings that use the existing building drain(s) are exempted from this **Section 2.1.B**.

- (b) Sites with irrigated landscape area not exceeding 500 square feet are exempted from this **Section 2.1.B.**

C. Single-Family Residential Onsite Treated Nonpotable Water Systems.

1. **Applicability.** This **Section 2.1.C** shall apply to the voluntary installation and operation of Alternate Water Source Systems at Single-family Residential units. This section shall not apply to Graywater systems where Graywater is collected solely for subsurface irrigation and does not require treatment and that are regulated by Chapter 15 (commencing with Section 1501.0) of the California Plumbing Code (Part 5 of Title 24 of the California Code of Regulations), as determined by the Director, or Rainwater systems where Rainwater is collected solely for subsurface irrigation, drip irrigation, or non-sprinkled surface applications and does not require treatment and that are regulated by Chapter 16 (commencing with Section 1601.0) of the California Plumbing Code (Part 5 of Title 24 of the California Code of Regulations), as determined by the Director.

2. **Regulation of Alternate Water Sources.**

- (a) Any person or entity who installs and operates an Alternate Water Source System shall comply with this ordinance, the rules and regulations adopted by the California Department of Public Health, and all applicable local, state, and federal laws. Alternate Water Source Systems shall be designed and built in compliance with Title 17 and Title 22 of the California Code of Regulations, Chapter 15 of the California Plumbing Code and labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.

- (b) **Onsite Treated Nonpotable Water Program.** Within **ninety (90) days** after passage of this ordinance, the Director shall establish a program for Onsite Treated Nonpotable Water systems including rules and regulations regarding the operation of Alternate Water Source Systems necessary to effectuate the purposes of this ordinance and to protect public health and safety. This Onsite Treated Nonpotable Water Program shall include the risk-based water quality standards established by the California State Water Resources Control Board and shall address, at a minimum:

- i. Water quality criteria, including risk-based log reduction targets for the removal of pathogens such as enteric viruses, parasitic protozoa, and enteric bacteria for Nonpotable Water sources, Graywater, Rainwater, Stormwater, and Blackwater, and nonpotable end uses, toilet and urinal flushing, clothes washing, irrigation, and dust suppression;
- ii. Water quality monitoring requirements, including content and frequencies;
- iii. Reporting requirements for the water quality monitoring results, including content and frequencies;
- iv. Notification and public information requirements;
- v. Cross-connection controls; and
- vi. Operation and maintenance requirements.

- (c) The Director shall review applications for Alternate Water Source Systems and may issue or deny such applications, in accordance with applicable laws and regulations.
- (d) The **relevant City departments** shall review plans and issue or deny permits for the construction, installation, or modification of Alternate Water Source Systems, in accordance with applicable laws and regulations.

3. **Project Applicant and/or Permittee Design and Construction Requirements.**

- (a) Prior to initiating installation of any Alternate Water Source project, project applicants shall submit to the Director an application for permits to operate Alternate Water Source Systems. Such applications shall comply with the requirements of this ordinance and any regulations the Director has issued. Project applicants shall pay a non-refundable permit application fee to cover the costs of investigation and processing the application and issuing the permit. Each project application submitted to the Director shall include a Nonpotable Water Engineering Report that provides project information determined by the Director to be necessary for complete review of the proposed project. City departments may not approve or issue permits for any site installing an Alternate Water Source System unless and until the Director has approved the Nonpotable Water Engineering Report.
- (b) **System Design.** All buildings using Nonpotable Water from Alternate Water Source Systems shall include:
 - i. A flow meter on the nonpotable distribution system to account for Nonpotable Water use;
 - ii. A reduced pressure backflow assembly (RP) within twenty-five (25) feet of the downstream side of the point of connection or meter to protect the City's public water and/or Recycled Water system;
 - iii. Signage that state law and the Department of Public Health's rules and regulations require;
 - iv. Cross connection control in accordance with Titles 17 and 22 of the California Code of Regulations;
 - v. Any other requirements the Director determines are necessary to protect public health.
- (c) **Plumbing Permit.** A project applicant shall obtain from the **Department of Building Inspection** an appropriate plumbing permit and any other building or installation permit required to construct, install, and/or alter an Alternate Water Source System.
- (d) **Encroachment Permit.** A project applicant shall obtain from the **Department of Public Works** appropriate authorization for placement of any pipelines or other portions of an Alternate Water Source System within the public right-of-way.
- (e) **Construction Certification Letter.** Project applicants shall certify to the Director that Alternate Water Source System construction is complete and consistent with the approved Nonpotable Water Engineering Report in accordance with the provisions of

this ordinance and any implementing rules and regulations. City departments may not approve or issue a First Certificate of Occupancy or approval for any Alternate Water Source System until the Director has reviewed and verified the Construction Certificate Letter.

4. Fees.

(a) The non-refundable application fees for Alternate Water Source System permits are:

i. Rainwater: \$

ii. NSF 350 systems: \$

iii. Foundation Drainage: \$

iv. Graywater: \$

v. Blackwater: \$

vi. Transfer of any permit: \$

(b) The fees set forth in this Section 2.1.C.4 may be adjusted each year, without further action by the City Council.

Not later than April 1, the Director shall report to the Controller the revenues generated by the fees for the prior fiscal year and the prior fiscal year's costs of operation, as well as any other information that the Controller determines appropriate to the performance of the duties set forth in the Section.

Not later than May 15, the Controller shall determine whether the current fees produce, or are projected to produce, revenues sufficient to support the costs of providing the services for which the fees are assessed and that the fees will not produce revenue that significantly exceed more than the costs of providing the services for which the fees are assessed.

The Controller shall if necessary, adjust the fees upward or downward for the upcoming fiscal year as appropriate to ensure that the program recovers the costs of operation without producing revenue which is significantly more than such costs. The adjusted rates shall become operative on July 1.

5. **Operating Requirements.** When the Director determines the applicant has satisfied all the requirements of this Section 2.1.C, the Director may issue an operations permit for an Alternate Water Source System. Permittees shall timely submit all water quality monitoring information required by the provisions of this ordinance and the rules and regulations of the California Department of Public Health and California State Water Resources Control Board. Permittees shall conduct ongoing backflow prevention and cross connection testing in accordance with this ordinance, the rules and regulations of the California Department of Public Health and California State Water Resources Control Board, and all applicable local, state, and federal laws.

6. **Nonpotable Water Use Audits.** When required by the Director, the Permittee or property owner shall conduct a Nonpotable Water use audit describing the extent of Nonpotable Water use in accordance with the requirements provided by the Director.
 7. **Sale or Transfer.** Permittees shall notify the Director of any intent to sell or transfer the building or facility containing an Alternate Water Source System within thirty (30) days following the sale or transfer of property, in accordance with regulations adopted by the Director.
 8. **Inspection and Notices of Violation.** The Director may inspect any Alternate Water Source System subject to the requirements of this **Section 2.1.C** to determine compliance with the provisions of this ordinance and applicable regulations.
 9. **Violation and Penalties.** Any Permittee or person otherwise subject to the requirements of this **Section 2.1.C** who violates any provision of this **Section 2.1.C** or any applicable rule or regulation shall be subject to enforcement of relevant administrative penalties. The Director may impose administrative penalties and may pursue any other legal remedies for such violations.
 10. **Revocation and Suspension of Permit.** The Director may order a Permittee to cease operation of an Alternate Water Source System or may revoke or suspend the permit to operate if the Director determines that:
 - (a) The manager, operator, or any employee has violated any provision of this **Section 2.1.C** or any regulation issued pursuant to this **Section 2.1.C**;
 - (b) The Alternate Water Source System is being operated or maintained in a manner threatening the public health or health of patrons and/or residents;
 - (c) The owner or operator has refused to allow any duly authorized City official to inspect the premises or the operations of the Alternate Water Source System; or
 - (d) The California State Water Resources Control Board has directed such action.
- D. Use of Recycled Water for Single-Family Residential Common Landscaping.** All new Single-family Residential units with landscaping provided by a water meter serving three or more homes that is managed by a homeowners' association or other association or entity shall be irrigated with Recycled Water if Recycled Water is available within 200 feet of the property line. If Recycled Water is planned to be made available to the development within ten years from the date of building permit issuance or is within the adopted Recycled Water project area, a system shall be constructed that will enable Recycled Water to be easily connected to the irrigation system once the Recycled Water supply is available within 200 feet of the property line, locating irrigation system plumbing such that the system can be supplied near the anticipated point of connection to the future Recycled Water system, ensuring there are no cross-connections between Recycled Water and potable water supplies, and using irrigation system components suitable for use with Recycled Water.

Alternate Water Source Systems shall be labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.

{CODE SECTION} 2.2. REQUIREMENTS FOR MULTI-FAMILY RESIDENTIAL BUILDINGS AND NONRESIDENTIAL BUILDINGS.

- A. **Multi-family and Nonresidential Exterior Faucet Locks.** Locks shall be installed on all publicly accessible exterior faucets and hose bibs.
- B. **Water Meters to Measure Indoor Water Use.** For new buildings or additions with a **total gross floor area of 50,000 square feet or more**, separate water meters or submeters shall be installed to measure indoor water use as follows:
1. For each individual leased, rented, or other tenant space within the building projected to consume more than 100 gallons per day (380 L/day).
 2. For each building that uses more than 100 gallons per day (380 L/day) on a parcel containing multiple buildings.
 3. Where potable water is used for industrial/process uses, for water supplied to the following subsystems:
 - (a) Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s);
 - (b) Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s); and
 - (c) Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW).
- C. **Cooling Towers.** All newly constructed cooling towers shall include devices to capture and reuse the blowdown water discharged from the cooling tower, operated in accordance with **Section 2.2.D** of this ordinance. Plumbing to facilitate the use of Alternate Water Sources shall be labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.
- D. **Use of Alternate Water Sources for Multi-family and Nonresidential Buildings.** All new Multi-family Residential and Nonresidential structures shall include dual plumbing systems that facilitate and maximize the use of Alternate Water Sources for use in irrigation, toilet flushing, cooling towers, and other uses suitable for Nonpotable Water as allowed by the appropriate agencies in compliance with the following:
1. If Recycled Water is available within 200 feet of the property line or if the Director has determined that it is reasonably available, 100 percent of water for toilets, urinals, floor drains, and process cooling and heating in that building shall come from Recycled Water. Plumbing to facilitate the use of Alternate Water Sources shall be labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.
 2. If Recycled Water is planned to be made available to the development within ten years from the date of building permit issuance or the development is within the adopted Recycled Water project area, the development may meet the requirements of this **Section 2.2.D** solely by building out the dual plumbing distribution system to the anticipated point of connection to the future Recycled Water system. Plumbing to facilitate the use of Alternate Water Sources shall be labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.

3. **Onsite Treated Nonpotable Water Systems.** If Recycled Water is not available to the development and is not anticipated to be made available to the development within ten years, the development shall install onsite water collection and treatment systems to capture, collect, treat, and distribute Graywater, Rainwater, and Stormwater runoff. The use of treated Blackwater may be allowed by the Director.

(a) **Applicability.** This **Section 2.2.D.3** shall apply to the installation and operation of Alternate Water Source Systems at new development projects with a total gross floor area of **[] square feet or more** and to the voluntary installation and operation of Alternate Water Source Systems at sites containing Multi-family Residential and Nonresidential buildings. This **Section 2.2.D.3** shall not apply to systems at Single-family Residential occupancies, Graywater systems where Graywater is collected solely for subsurface irrigation and does not require treatment and that are regulated by Chapter 15 (commencing with Section 1501.0) of the California Plumbing Code (Part 5 of Title 24 of the California Code of Regulations), as determined by the Director, or Rainwater systems where Rainwater is collected solely for subsurface irrigation, drip irrigation, or non-sprinkled surface applications and does not require treatment and that are regulated by Chapter 16 (commencing with Section 1601.0) of the California Plumbing Code (Part 5 of Title 24 of the California Code of Regulations), as determined by the Director.

(b) **Development Project Requirements.**

- i. All toilet and urinal flushing and irrigation demands shall be met through the collection and reuse of available onsite Rainwater, Graywater, and Foundation Drainage, to the extent required by application of the Water Budget Documentation developed for each project.
- ii. Project applicants shall use the Water Budget Calculator, as provided by the Onsite Treated Nonpotable Water Program established by the Director, to prepare a Water Budget assessing the amount of Rainwater, Graywater, and Foundation Drainage produced onsite, and the planned toilet and urinal flushing and irrigation demands.
- iii. If, based on the Water Budget Documentation, the available supply from onsite sources exceeds the demands for toilet and urinal flushing and irrigation, 100% of those demands shall be met by using the available onsite sources. If, based on the Water Budget Documentation, the available supply from onsite sources is less than the demands for toilet and urinal flushing and irrigation, 100% of the available onsite supply shall be used to meet the demands for toilet and urinal flushing and irrigation. Available Blackwater or Stormwater supplies may be used instead of, or in addition to Rainwater, Graywater, and Foundation Drainage to meet the available onsite supply requirements calculated in accordance with the Water Budget Documentation requirements.
- iv. **Additional Requirements for District Systems.** All District Systems shall conform to the following requirements, subject to the Director's determination, is his or her sole discretion, that an exception to any of such requirements will fulfill the purposes and objectives of this ordinance. Where a District System complies with the requirements in **Section 2.2.D.3(b)iv.1** through **2.2.D.3(b)iv.4**,

including any exceptions approved by the Director, individual development projects within the District shall not be required to demonstrate compliance as long as the individual development projects are provided service by the approved District System.

1. In addition to preparation of the Water Budget, project applicants for District Systems shall submit implementation plans for review and approval, in accordance with the rules and regulations of the Onsite Treated Nonpotable Water Program established by the Director.
 2. District Systems shall be operated by a single Permittee having sole control of operations of all of its facilities, including but not limited to treatment and distribution facilities. District Systems shall be constructed in accordance with all applicable standards and specifications set by the water service provider, sewer service provider, and/or any authority having jurisdiction.
 3. District Systems and development projects shall not provide Nonpotable Water to water users or for purposes located outside the boundaries of the District or approved development project, except when the water users or other purposes are located on property contiguous to, or across a public right of way from, the boundaries of the District or approved development project, and the total amount of Nonpotable Water produced by the Alternate Water Source System will not exceed 125% of the District System's or approved development project's Nonpotable Water demands for toilet and urinal flushing and irrigation, as determined by the approved Water Budget Documentation.
 4. For District Systems, the ongoing operation and maintenance responsibilities of the responsible party shall be held by the owner of the common areas within the District development project and may be transferred to a homeowners' association or similar entity that maintains the common areas within the District development project.
- v. The Director may approve alternate District Systems that will achieve compliance with the purposes and objectives of this ordinance, in accordance with the rules and regulations of the Onsite Treated Nonpotable Water Program established by the Director. Alternative District Systems may include, but are not limited to, water purchase agreements.
- vi. City departments shall not issue an encroachment permit, a site permit, or a plumbing permit for a project, or approve a Nonpotable Water Engineering Report, prior to the Director's determination that the Water Budget Documentation has been prepared in accordance with the rules for Water Budget calculations in the Onsite Treated Nonpotable Water Program established by the Director.
- vii. **Subdivision Approvals.**

1. **Parcel Map or Tentative Subdivision Map Conditions.** The **Director of Public Works** shall not approve a parcel map or tentative subdivision map for any property unless a condition is imposed requiring compliance with this ordinance to serve the potential uses of the property covered by the parcel map or tentative subdivision map, as specified in the provisions of this ordinance.
2. **Subdivision Regulations.** The **Director of Public Works** shall adopt regulations consistent with, and in furtherance of this ordinance.
3. **Final Maps.** **The Director of Public Works** shall not endorse and file a final map for property within the boundaries of the City without first determining that the subdivider has complied with the conditions imposed on the parcel map or tentative subdivision map pursuant to this ordinance and for any such conditions not fully satisfied prior to the recordation of the final map, the subdivider has signed a certificate of agreement and/or improvement agreement, to ensure compliance with such conditions.
4. This **Section 2.2.D.3(b)vii** shall not apply to parcel maps or tentative subdivision maps submitted solely for the purposes of condominium conversion.

viii. In the event that a privately owned Alternate Water Supply System approved by the Director is subsequently determined by the California Public Utilities Commission to be subject to that agency's jurisdiction and regulation, the City may, with the consent of the affected owner, acquire and operate the facilities.

(c) Regulation of Alternate Water Sources.

- i. Any person or entity who installs and operates an Alternate Water Source System shall comply with this ordinance, the rules and regulations adopted by the California Department of Public Health, and all applicable local, state, and federal laws. Alternate Water Source Systems shall be designed and built in compliance with Title 17 and Title 22 of California Code of Regulations, Chapter 15 of the California Plumbing Code and labeled in compliance with Chapter 6, Section 601.3, of the California Plumbing Code.
- ii. **Onsite Treated Nonpotable Water Program.** Within **ninety (90) days** after passage of this ordinance, the Director shall establish a program for Onsite Treated Nonpotable Water systems including rules and regulations regarding the operation of Alternate Water Source Systems necessary to effectuate the purposes of this ordinance and to protect public health and safety. This Onsite Treated Nonpotable Water Program shall include the risk-based water quality standards established by the California State Water Resources Control Board and shall address, at a minimum:
 1. Water quality criteria, including risk-based log reduction targets for the removal of pathogens such as enteric viruses, parasitic protozoa, and enteric bacteria for Nonpotable Water sources, Graywater, Rainwater,

- Stormwater, and Blackwater, and nonpotable end uses, toilet and urinal flushing, clothes washing, irrigation, and dust suppression;
2. Water quality monitoring requirements, including content and frequencies;
 3. Reporting requirements for the water quality monitoring results, including content and frequencies;
 4. Notification and public information requirements;
 5. Cross-connection controls; and
 6. Operation and maintenance requirements.
- iii. The Director shall review applications for Alternate Water Source Systems and may issue or deny such applications, in accordance with applicable laws and regulations.
- iv. The **relevant City departments** shall review plans and issue or deny permits for the construction, installation, or modification of Alternate Water Source Systems, in accordance with applicable laws and regulations.

(d) Project Applicant and/or Permittee Design and Construction Requirements.

- i. Prior to initiating installation of any Alternate Water Source project, project applicants shall submit to the Director an application for permits to operate Alternate Water Source Systems. Such applications shall comply with the requirements of this ordinance and any rules and regulations of the Onsite Treated Nonpotable Water Program established by the Director. Project applicants shall pay a non-refundable permit application fee to cover the costs of investigation and processing the application and issuing the permit. Each project application submitted to the Director shall include a Nonpotable Water Engineering Report that provides project information determined by the Director to be necessary for complete review of the proposed project. City departments may not approve or issue permits for any site installing an Alternate Water Source System unless and until the Director has approved the Nonpotable Water Engineering Report.

The Nonpotable Water Engineering Report for District Systems must include information on the permanent legal agreements between property owners and provide documentation that each party is a willing and responsible participant in the District Nonpotable Water use.

- ii. **System Design.** All buildings using Nonpotable Water from Alternate Water Source Systems shall include:
 1. A flow meter on the nonpotable distribution system to account for Nonpotable Water use;

2. A reduced pressure backflow assembly (RP) within twenty-five (25) feet of the downstream side of the point of connection or meter to protect the City's public water and/or Recycled Water system;
 3. Signage that state law and the California Department of Public Health's rules and regulations require;
 4. Cross connection control in accordance with Titles 17 and 22 of the California Code of Regulations;
 5. Any other requirements the Director determines are necessary to protect public health.
- iii. **Plumbing Permit.** A project applicant shall obtain from the **Department of Building Inspection** an appropriate plumbing permit and any other building or installation permit required to construct, install, and/or alter an Alternate Water Source System. Each parcel within a District shall obtain appropriate plumbing and any other building or installation permits required.
- iv. **Encroachment Permit.** A project applicant shall obtain from the **Department of Public Works** appropriate authorization for placement of any pipelines or other portions of an Alternate Water Source System within the public right-of-way.
- v. **Construction Certification Letter.** Project applicants shall certify to the Director that Alternate Water Source System construction is complete and consistent with the approved Nonpotable Water Engineering Report in accordance with the provisions of this ordinance and any implementing rules and regulations. City departments may not approve or issue a First Certificate of Occupancy or approval for any Alternate Water Source System until the Director has reviewed and verified the Construction Certificate Letter.

(e) **Fees.**

- i. The non-refundable application fees for Alternate Water Source System permits are:
 1. Rainwater: \$
 2. NSF 350 systems: \$
 3. Foundation Drainage: \$
 4. Graywater: \$
 5. Blackwater: \$
 6. Transfer of any permit: \$
 7. District Scale, the applicable amount above, plus: \$ per hour for plan review and/or onsite inspection

- ii. The fees set forth in this Section 4.2.D.3(e) may be adjusted each year, without further action by the City Council.

Not later than April 1, the Director shall report to the Controller the revenues generated by the fees for the prior fiscal year and the prior fiscal year's costs of operation, as well as any other information that the Controller determines appropriate to the performance of the duties set forth in this Section 2.2.D.

Not later than May 15, the Controller shall determine whether the current fees produce, or are projected to produce, revenues sufficient to support the costs of providing the services for which the fees are assessed and that the fees will not produce revenue that significantly exceed more than the costs of providing the services for which the fees are assessed.

The Controller shall if necessary, adjust the fees upward or downward for the upcoming fiscal year as appropriate to ensure that the program recovers the costs of operation without producing revenue which is significantly more than such costs. The adjusted rates shall become operative on July 1.

4. **Operating Requirements.** When the Director determines the applicant has satisfied all the requirements of this Section 2.2.D, the Director may issue an operations permit for an Alternate Water Source System. Permittees shall timely submit all water quality monitoring information required by the provisions of this ordinance and the rules and regulations of California Department of Public Health and the California State Water Resources Control Board. Permittees shall conduct ongoing backflow prevention and cross connection testing in accordance with this ordinance, the rules and regulations of the California Department of Public Health and California State Water Resources Control Board, and all applicable local, state, and federal laws.
5. **Nonpotable Water Use Audits.** When required by the Director, the Permittee or property owner shall conduct a Nonpotable Water use audit describing the extent of Nonpotable Water use in accordance with the requirements provided by the Director.
6. **Sale or Transfer.** Permittees shall notify the Director of any intent to sell or transfer the building or facility containing an Alternate Water Source System within thirty (30) days following the sale or transfer of property, in accordance with regulations adopted by the Director.
7. **Inspection and Notices of Violation.** The Director may inspect any Alternate Water Source System subject to the requirements of this Section 2.2.D to determine compliance with the provisions of this ordinance and applicable regulations.
8. **Violation and Penalties.** Any Permittee or person otherwise subject to the requirements of this Section 2.2.D who violates any provision of this Section 2.2.D or any applicable rule or regulation shall be subject to enforcement of relevant administrative penalties. The Director may impose administrative penalties and may pursue any other legal remedies for such violations.
9. **Revocation and Suspension of Permit.** The Director may order a Permittee to cease operation of an Alternate Water Source System, may revoke or suspend the permit to

operate, and/or may terminate the operation of, and modify to render inoperable an Alternate Water Source System, if the Director determines that:

- (a) The manager, operator, or any employee has violated any provision of this **Section 2.2.D** or any regulation issued pursuant to this **Section 2.2.D**;
- (b) The Alternate Water Source System is being operated or maintained in a manner threatening the public health or health of patrons and/or residents;
- (c) The owner or operator has refused to allow any duly authorized City official to inspect the premises or the operations of the Alternate Water Source System; or
- (d) The California State Water Resources Control Board has directed such action.

10. **Exceptions.**

- (a) Additions that use any part of the existing plumbing piping system are exempted from this **Section 2.2.D**.
- (b) Alterations that do not include replacing all of the potable water piping are exempted from this **Section 2.2.D**.
- (c) Mental hospitals or other facilities operated by a public agency for the treatment of persons with mental disorders are exempted from this **Section 2.2.D**.
- (d) Where Recycled Water quality has been deemed unsuitable by the Director for a particular fixture or equipment, the fixture and/or equipment shall be dual-plumbed for future connection.

{CODE SECTION} 2.3. REQUIREMENTS FOR COMMERCIAL FACILITIES.

A. Use of Manually Operated Toilets in Commercial Facilities. Toilets and urinals in commercial facilities shall not have sensor or automatic flush valves and instead shall have manually operated flush mechanisms.

B. Use of Manually Operated Faucets in Commercial Facilities. Faucets in commercial facilities shall not have automatic sensors installed and instead shall have manually operated handles, which may include metering faucets.

1. **Exceptions.** Hospitals and airports are exempted from this **Section 2.3.B**.

C. Water Efficiency in Commercial Kitchens. All new and replacement commercial dishwashers, food steamers, combination ovens, and food waste pulping systems must comply with water efficiency standards as defined in the 2016 California Green Building Standards Code, Part 11, Section A5.303.3 – Appliances and fixtures for commercial application. These standards are mandatory for the purposes of this provision.

{CODE SECTION 2.4. REQUIREMENTS RELATED TO SALE AND INSTALLATION OF COMPLIANT FIXTURES AND FITTINGS.

- A. **Retail Establishments Selling Compliant Fixtures and Fittings.** All stores, outlets and other retail establishments shall only offer for sale plumbing fixtures and fittings that are in compliance with California appliance water efficiency standards. Model numbers of plumbing fixtures and fittings offered for sale must be listed in the California Energy Commission Appliance Efficiency Database.
- B. **Plumbers, Contractors, and Service Providers Installing Compliant Fixtures and Fittings.** All plumbers, contractors, and other service providers shall not install any plumbing fixtures or other devices that are not in compliance with California appliance water efficiency standards. Model numbers of plumbing fixtures and fittings installed by plumbers, contractors, and service providers must be listed in the California Energy Commission Appliance Efficiency Database.

{CODE SECTION} 2.5. REQUIREMENTS RELATED TO LANDSCAPE IRRIGATION AND POOL AND SPA COVERS FOR RESIDENTIAL AND NONRESIDENTIAL PROPERTIES.

Requirements in this provision may be addressed in [Water Efficient Landscape Ordinance adopted by jurisdiction]. In any instances of conflicting requirements, the more stringent requirement shall prevail. (Jurisdictions may wish to edit this provision prior to adoption to more closely align with the specific Water Efficient Landscape Ordinance adopted by jurisdiction.)

- A. **Water Meters for Landscape Irrigation.** A landscape water meter shall be installed for landscape irrigation for the following:
1. When required by the California Department of Water Resources Model Water Efficient Landscape Ordinance or local water efficient landscape ordinance;
 2. Additions and alterations, with a valuation of \$200,000 or more, where the entire potable water system is replaced, including all underground piping to the existing meter; and
 3. Landscaped areas shall have flow sensors or hydrometers, regardless of being metered separately.
- B. **Irrigation Controllers.** In new construction or building additions or alterations with over 500 square feet of cumulative landscaped area, install irrigation controllers and sensors which include the following criteria:
1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
 2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor that connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.
 3. **Exception.** For new residential construction, manual irrigation is also permitted.
- C. **Irrigation System.** In landscaped areas, irrigation nozzles shall have a maximum precipitation rate of one inch per hour.

- D. **Irrigation Audits.** For newly constructed landscaped areas, **the local agency** shall administer an irrigation audit to verify that the irrigation system complies with regulations, as well as to identify potential deficiencies and assure that corrections have been made. If corrections are needed, these must be addressed prior to approval of the new construction.
- E. **Swimming Pool and Spa Covers.** Swimming pools and spas must be in compliance with the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations Section 110.4. For Single-family Residential dwellings, any permanently installed outdoor in-ground swimming pool or spa not covered by the scope of the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations Section 110.4, including any swimming pool or spa that is non-heated or has electric resistance heating deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy, shall be equipped with a cover having a manual or power-operated reel system.

1. **Exceptions.**

- (a). For irregular-shaped swimming pools and spas not covered by the scope of the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations Section 110.4, including any swimming pool or spa that is non-heated or has electric resistance heating deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy, for which it is infeasible to cover 100 percent of the swimming pool or spa with a reel system due to its irregular shape, other types of covers may be allowed as determined by the Director.
- (b). Additions or alterations to existing swimming pools and spas not covered by the scope of the 2019 Building Energy Efficiency Standards for Part 6 of Title 24 of the California Code of Regulations Section 110.4, including any swimming pool or spa that is non-heated or has electric resistance heating deriving at least 60 percent of the annual heating energy from site solar energy or recovered energy, with a valuation not exceeding \$25,000 are exempted from this **Section 2.5.E.**

SECTION 4. SEVERABILITY. If any portion of this Ordinance is held to be invalid or inapplicable to any situation by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance or the applicability of this Ordinance to other situations.

SECTION 5. EFFECTIVE DATE. This Ordinance and the rules, regulations, provisions, requirements, orders, and matters established and adopted hereby shall take effect and be in full force and effect **from and after the expiration of ninety (90) days after the date of its adoption.**

SECTION 6. POSTING AND PUBLICATION. The City Clerk is hereby directed to publish this ordinance pursuant to §36933 of the Government Code.

THE FOREGOING ORDINANCE WAS INTRODUCED AT A MEETING OF THE CITY COUNCIL HELD ON THE [] DAY OF [MONTH YEAR] AND WAS FINALLY ADOPTED AT A MEETING OF THE CITY COUNCIL HELD ON THE [] DAY OF [MONTH YEAR], AND SAID ORDINANCE WAS DULY PASSED AND ADOPTED IN ACCORDANCE WITH LAW BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

APPROVED:

DATE:

NAME, Title

DATE

ATTEST:

DATE:

NAME, Title

DATE

EXHIBIT A

EXPRESS FINDINGS FOR LOCAL AMENDMENTS OF BUILDING STANDARDS

Section 1.1.8 of Part 2 of Title 24 of the California Code of Regulations (California Building Standards Code) and Sections 17958 and 18941.5 of the California Health and Safety Code provide that any city, county, or city and county may make more restrictive amendments to the provisions of Title 24 of the California Code of Regulations. Sections 17958.5 and 17958.7 of the California Health and Safety Code require that for each proposed local amendment to the provisions of Title 24 of the California Code of Regulations, the local governing body must make an express finding supporting its determination that each such local amendment is reasonably necessary because of local climatic, geological, or topographical conditions. Section 101.7.1 of Part 11 of Title 24 of the California Code of Regulations, known as the California Green Building Standards Code, provides that local climatic, geological, or topographical conditions include environmental conditions established by the city, county, or city and county.

Pursuant to Sections 17958.5 and 17958.7 of the California Health and Safety Code, the following tables summarize the provisions of the 2016 California Building Standards Code in Title 24 of the California Code of Regulations being amended by the Ordinance and the findings providing justification for each amendment.

Section of Ordinance Making Amendment	Section of CA Code Being Amended	Title	Add, Delete, or Amend?	Justification (see below for key)
{CODE SECTION} 2.1A	110.3(c) of Part 6 of Title 24	Mandatory Requirements for Service Water-Heating Systems and Equipment	Add	C

Key to Justification for Amendments to Title 24 of the California Code of Regulations

C	This amendment is justified on the basis of a local climatic condition. Risks such as climate change and drought could negatively affect water supply reliability in Santa Clara County. Santa Clara County is characterized by a dry climate and experiences the effects of drought and the benefits of saving water more intensely than some other communities in California. Santa Clara County’s vulnerabilities to climate change include increases in seasonal irrigation demands, a decrease in imported water supplies as a result of reduced snow pack and a shift in the timing of runoff, more frequent and severe droughts, changes in surface water quality associated with changes in flows and temperature, and changes in imported water quality due to salinity intrusion in the delta. Temperature projections for the Bay Area show an expected increase in the
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	<p>frequency and intensity of heat waves that could result in a decrease in water supply and/or changes in water demands. Precipitation for the beginning of 2018 was 60% of average levels at the San Jose Index Station and significantly lower than that of the Santa Cruz Mountains, the Diablo Range and South County, with snow water equivalent for the Northern Sierra falling well below normal. It is necessary to maximize water efficiency and reduce the waste and unnecessary use of potable water in order to help ensure that water supply is capable of reliably satisfying demand while withstanding the potential and expected future drought conditions in Santa Clara County.</p>
G	<p>This amendment is justified on the basis of a local <u>geological</u> condition.</p>
T	<p>This amendment is justified on the basis of a local <u>topographical</u> condition.</p>

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Santa Clara Valley Water District

File No.: 19-0537

Agenda Date: 6/18/2019

Item No.: 4.3.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management

SUBJECT:

Discuss Agriculture Baseline Study.

RECOMMENDATION:

This is a discussion item and the Committee may provide comments, however, no action is required.

SUMMARY:

At the April 26, 2019 Water Conservation and Demand Management Board Advisory Committee (Committee) meeting, the Committee discussed the need to better understand the conservation potential in the agriculture sector, including potentially developing a baseline study of agricultural water use. This memo summarizes the proposed components of a Santa Clara Valley Water District (Valley Water) Agriculture Baseline Study (Study), as well as possible next steps.

Background

The goal of the Study is to better understand current agricultural water use practices and identify opportunities for additional water conservation. Staff's proposal is to hire a contractor or consulting firm to develop and complete the Study. Staff will also coordinate with the local Farm Bureau and Santa Clara County staff.

Staff reviewed baseline studies completed for other sectors and developed a preliminary list of topics the Study may address:

- 1) Types of crops and associated acres of crops in Santa Clara County
- 2) Types of irrigation systems used, by crop type
- 3) When available, water use by crop type and by irrigation method, including potentially comparing to crops' water budgets
- 4) Geographical distribution of agricultural practices in Santa Clara County
- 5) Agricultural producers' water use knowledge and mindsets
 - a. Concerns related to water supply
 - b. Knowledge/mindset related to water use and water conservation
 - c. Knowledge and opinions of Valley Water's conservation programs
- 6) Recommendation of potential projects or programs to increase agricultural water use efficiency

Next Steps

Staff plans to present the preliminary list of topics for the Study to the Agricultural Water Advisory Committee (AWAC) for feedback. After presenting to the AWAC, staff will finalize the list of topics the

Study will cover and develop a Scope of Work to incorporate into a Request for Proposals. Staff will coordinate with the local Farm Bureau and Santa Clara County staff throughout the process. Staff will update the WCDM Committee as the Study progresses.

ATTACHMENTS:

None.

UNCLASSIFIED MANAGER:

Jerry De La Piedra, 408-630-2257



Santa Clara Valley Water District

File No.: 19-0538

Agenda Date: 6/18/2019

Item No.: 4.4.

COMMITTEE AGENDA MEMORANDUM

Water Conservation and Demand Management

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 Board-approved topics for discussion to be able to prepare policy alternatives and implications for Board deliberation. The work plan is agendized 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: Water Conserv and Demand Mgmt Committee 2019 Work Plan

Attachment 2: Water Conserv and Demand Mgmt Committee Next Meeting's Draft Agenda

File No.: 19-0538

Agenda Date: 6/18/2019
Item No.: 4.4.

UNCLASSIFIED MANAGER:
Michele King, 408-630-2711

2019 Work Plan: Water Conservation and Demand Management Committee

Update: May 2019

The annual work plan establishes a framework for committee discussion and action during the annual meeting schedule. The committee work plan is a dynamic document, subject to change as external and internal issues impacting the District occur and are recommended for committee discussion. Subsequently, an annual committee accomplishments report is developed based on the work plan and presented to the District Board of Directors.

ITEM	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHMENT DATE AND OUTCOME
1	Election of Chair and Vice Chair for 2019	2-15-19	Discussion/Action Item	Accomplished February 15, 2019: The Committee voted to retain Director Richard P. Santos as Chair and Director Linda J. LeZotte as Vice Chair for 2019; <i>{note the election of chair and vice chair does not apply to this committee}</i> .
2	Water Conservation and Demand Management Committee 2018 Accomplishments Report	2-15-19	Discussion/Action Item	Accomplished February 15, 2019: The Committee reviewed the 2018 work plan accomplishments and were pleased with their 2018 accomplishments.
3	Water Supply Master Plan Conservation and Stormwater Capture Project Update	2-15-19	Discussion/Action Item	Accomplished February 15, 2019: The Committee received a presentation Water Supply Master Plan Conservation and Stormwater Capture Project Update and took no action.
4	Sustainable Groundwater Management Act Basin Prioritization Update	2-15-19	Discussion/Action Item	Accomplished February 15, 2019: The Committee received a presentation Sustainable Groundwater Management Act Basin Prioritization Update and took no action.

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1
Page 1 of 3

2019 Work Plan: Water Conservation and Demand Management Committee

Update: May 2019

ITEM	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHMENT DATE AND OUTCOME
5	Review of Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda	2-15-19 3-25-19 4-26-19 6-18-19	Discussion/Action Item	Accomplished February 15, 2019: The Committee received an overview of the 2019 work plan and took no action. Accomplished March 25, 2019: The Committee received an overview of the 2019 work plan and took no action.
6	Fixed/variable charges	3-25-19	Discussion/Action Item	Accomplished March 25, 2019: The Committee received a presentation on Fixed/Variable Charges and took no action.
7	Stormwater Resources Plan (SWRP) Green Stormwater Infrastructure – Upper Penitencia Concept	3-25-19	Discussion/Action Item	Accomplished March 25, 2019: The Committee received a presentation on SWRP Green Stormwater infrastructure-Upper Penitencia Concept and took no action.
8	Update on Model Water Efficient New Development Ordinance (MWENDO)	4-26-19	Discussion/Action Item	Accomplished April 26, 2019: The Committee received an update on Model Water Efficient New Development Ordinance (MWENDO) and took no action.
9	Water Supply Master Plan Conservation and Stormwater Capture Project Update	4-26-19	Discussion/Action Item	Accomplished April 26, 2019: The Committee received an update on the Water Supply Master Plan Conservation and Stormwater Capture Project and took no action.

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1
Page 2 of 3

2019 Work Plan: Water Conservation and Demand Management Committee

Update: May 2019

ITEM	WORK PLAN ITEM	MEETING	ACTION/DISCUSSION OR INFORMATION ONLY	ACCOMPLISHMENT DATE AND OUTCOME
10	Water Supply Master Plan - Advanced Metering Infrastructure "AMI"	4-26-19	Discussion/Action Item	Accomplished April 26, 2019: The Committee received an update on the Water Supply Master Plan - Advanced Metering Infrastructure "AMI" and took no action.
11	Evaluation on the Extent of Shallow Groundwater Dewatering by Obtaining and Analyzing Information from Land Use and Regulatory Agencies	6-18-19	Discussion/Action Item	
12	Updates to Ongoing and Future Water Conservation Programs and Resources	6-18-19	Discussion/Action Item	
13	Discuss Agriculture Baseline Study	6-18-19	Discussion/Action Item	
14	Update on Climate Change Action Plan	TBD	Discussion/Action Item	
15	E-2 2.1 Policy Review	TBD	Discussion/Action Item	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Attachment 1
Page 3 of 3

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DRAFT AGENDA

WATER CONSERVATION AND DEMAND MANAGEMENT COMMITTEE

(TBD)

10:00 a.m. - 12:00 p.m.

**Santa Clara Valley Water District
Headquarters Building Boardroom
5700 Almaden Expressway
San Jose, CA 95118**

Time Certain

10:00 a.m.

1. **Call to Order/Roll Call**
2. **Time Open for Public Comment on Any Item Not on the Agenda**
Comments should be limited to two minutes. If the Committee wishes to discuss a subject raised by the speaker, it can request placement on a future agenda.
3. **Approval of Minutes**
3.1 Approval of Minutes – June 18, 2019, meeting
4. **Discussion/Action Items**
 - 4.1 Update on Climate Change Action Plan
Recommendation: This is a discussion item and the Committee may provide comments. However, no action is required.
 - 4.2 E-2 2.1 Policy Review (Nina Hawk)
Recommendation: This is a discussion item and the Committee may provide comments. However, no action is required.
 - 4.3 Review of Water Conservation and Demand Management Committee Work Plan, the Outcomes of Board Action of Committee Requests and the Committee's Next Meeting Agenda (Committee Chair)
Recommendation: Review of Water Conservation and Demand Management Committee Work Plan, any Outcomes of Board Action or Committee Requests and the Committee's Next Meeting Agenda.
5. **Clerk Review and Clarification of Committee's 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 discussion of Item 4.

6. Adjourn: Adjourn

REASONABLE EFFORTS TO ACCOMMODATE PERSONS WITH DISABILITIES WISHING TO ATTEND COMMITTEE MEETINGS WILL BE MADE. PLEASE ADVISE THE CLERK OF THE BOARD OFFICE OF ANY SPECIAL NEEDS BY CALLING (408) 630-2277.

Meetings of this committee will be conducted in compliance with all Brown Act requirements. All public records relating to an open session 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 same time that the public records are distributed or made available to the legislative body, at the following location:

Santa Clara Valley Water District, Office of the Clerk of the Board
5700 Almaden Expressway, San Jose, CA 95118

Water Conservation and Demand Management Committee:

Purpose: To support the Board of Directors in achieving its policy to provide a reliable water supply to meet current and future water usage by making policy recommendations related to demand management.

Handouts

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HANDOUT: AGENDA ITEM 4.1

From: Falecie Wang [mailto:faleciew@gmail.com]
Sent: Monday, June 17, 2019 10:58 PM
To: Glenna Brambill <GBrambill@valleywater.org>
Cc: Melody Song <shanghaimelody@yahoo.com>; alex629@126.com; Keith Bennett <pagroundwater@luxsci.net>; E Nigenda <enigenda1@gmail.com>; Gregory Zicarelli <gregory.zicarelli@gmail.com>
Subject: Save Palo Alto's Groundwater

Dear Water Conservation and Demand Management Committee,

We are writing regarding June 18th's meeting, Action Item 4.1. Evaluation on the Extent of Shallow Groundwater Dewatering by Obtaining and Analyzing Information from Land Use and Regulatory Agencies.

We are Falecie Wang and Melody Cao, two rising juniors at Palo Alto High School. As two residents of Santa Clara County, we are immensely interested in the issue of dewatering and its effects on our groundwater. Speaking on behalf of our community, we believe that preserving groundwater, one of our state's most valuable natural resources, is a matter that needs to be addressed immediately. Many Californians do not realize how much water is being wasted during the construction of basements: nearly 126 million gallons of water—in Palo Alto alone—was pumped from the area's shallow aquifer in 2015. While this number has decreased over the past four years, still not enough is being done to resolve our concern. Therefore, we hope the contents of our letter is taken into consideration, because it is the duty of each individual and society as a whole to take action to save groundwater now.

Foremost, we would like the Committee to enforce better construction practices. There are countless effective methods that will mitigate flow, but one that is particularly advantageous: the cut-off wall. To give some background, the cut-off wall method is ordinarily executed by stationing a barrier in the shape of a box around the affected area to prevent groundwater from seeping in. Cut-off walls are remarkably practical; in 2017, the City's Public Works Department released a chart showing that the use of cut-off walls led to pumping less than two percent of the amount of groundwater pumped without using the cut-off wall technique. In addition, there was little disturbance to the neighboring properties and none of the extracted groundwater was wasted. Aside from this, the use of the cut-off wall also enables convenience. One popular approach that architects commonly use for constructing basements in Palo Alto is the open basement excavation technique, a process that requires digging out and refilling soil before and after building interior walls. By utilizing the cut-off procedure, the process is sped up considerably through reducing the time of the refilling process. With a number of varying practices for the construction of cut-off walls at hand (including concrete, cement grouting, etc.), it would seem imprudent not to exploit this practice and install cut-off walls during dewatering.

Respectfully yours,

Falecie Wang and Melody Cao