

January 13, 2017

MEETING NOTICE & REQUEST FOR RSVP

TO: SANTA CLARA VALLEY WATER COMMISSION

Municipality	Representative	<u>Alternate</u>
City of Campbell	Hon. Jeffrey Cristina	Hon. Susan M. Landry
City of Cupertino	Hon. Darcy Paul	Hon. Savita Vaidhyanathan
City of Gilroy	Hon. Peter Leroe-Muñoz	Hon. Roland Velasco
City of Los Altos	Hon. Lynette Lee Eng	Hon. Mary Prochnow
Town of Los Altos Hills	Vacant	Vacant
Town of Los Gatos	Hon. Barbara Spector	Hon. Steve Leonardis
City of Milpitas	Hon. Garry Barbadillo	
City of Monte Sereno	Hon. Evert Wolsheimer	Hon. Burton Craig
City of Morgan Hill	Hon. Rich Constantine	Hon. Larry Carr
City of Mountain View		Hon. Ken Rosenberg
City of Palo Alto	Hon. Greg Schmid	Hon. Marc Berman
City of San Jose	Hon. Lan Diep	Kerrie Romanow
City of Santa Clara	Hon. Debi Davis	Hon. Patrick Kolstad
City of Saratoga	Hon. Rishi Kumar	Hon. Howard Miller
City of Sunnyvale	Vacant	John Stufflebean
Santa Clara County Board of	Hon. Mike Wasserman	Hon. Cindy Chavez
Supervisors		•
Santa Clara County Open Space	Hon. Mike Flaugher	Hon. Kalvin Gill
Authority	G	
Midpeninsula Regional Open Space	Hon. Yoriko Kishimoto	Hon. Jed Cyr
District		- -

The regular meeting of the Santa Clara Valley Water Commission is scheduled to be held on Wednesday, January 25, 2017, at 12:00 p.m., in the Headquarters Building Boardroom, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California. Lunch will be provided.

Enclosed are the meeting agenda and corresponding materials. Please bring this packet with you to the meeting. Additional copies of this meeting packet are available on-line at http://www.valleywater.org/About/WaterCommission.aspx

A majority of the appointed membership is required to constitute a quorum, which is fifty percent plus one. A quorum for this meeting must be confirmed at least 48 hours prior to the scheduled meeting date or it will be canceled.



Further, a quorum must be present on the day of the scheduled meeting to call the meeting to order and take action on agenda items.

Members with two or more consecutive unexcused absences will be subject to rescinded membership.

Please confirm your attendance by contacting Michelle Critchlow at 1-408-630-2883, or mcritchlow@valleywater.org.

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 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 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 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 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 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





Board Representative

Barbara Keegan, Board Representative Gary Kremen, Alternate John L. Varela, Board Representative

AGENDA

SANTA CLARA VALLEY WATER COMMISSION

WEDNESDAY, JANUARY 25, 2017

12:00 p.m. - 2:00 p.m.

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

Time Certain:

12:00 p.m.

1. Call to Order/Roll Call

2. <u>Time Open for Public Comment on Any Item Not on Agenda</u>

Comments should be limited to two minutes. If the Commission 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 October 26, 2016, meeting
- 4. Election of Chair and Vice Chair
- 5. Action Items
 - 5.1 Review and Approve 2016 Annual Accomplishments Report for Presentation to the Board (Commission Chair)

Recommendation: Review and approve the 2016 Accomplishments Report for presentation to the Board. Provide comments to the Committee Chair to share with the Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Committee.

- 5.2 Water Supply Update and Drought Response (Tracy Hemmeter) Recommendation: This is a discussion item; however, no action is required.
- 5.3 Review and Comment to the Board on the Fiscal Year 2018 Preliminary Groundwater Production Charges (Darin Taylor)

Recommendation: Discuss and consider the attached preliminary groundwater production charge analysis and provide comment to the Board on policy implementation, as necessary.

5.4 Review Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda (Commission Chair)

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

6. <u>Clerk Review and Clarification of Commission Requests to the Board</u>

This is a review of the Commission's Requests, to the Board (from Item 4). The Commission may also request that the Board approve future agenda items for Commission discussion.

7. Reports

Directors, Managers, and Commission members may make brief reports and/or announcements on their activities. Unless a subject is specifically listed on the agenda, the Report is for information only and not discussion or decision. Questions for clarification are permitted.

- 7.1 Director's Report
- 7.2 Manager's Report
- 7.3 Commission Member Reports
- **8.** Adjourn: Adjourn to next regularly scheduled meeting at 12:00 p.m., **April 12, 2017,** in the Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118

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 Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarter 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.

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend commission meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Santa Clara Valley Water Commission's Purpose and Duties

The Santa Clara Valley Water Commission of the Santa Clara Valley Water District is established to assist the Board of Directors (Board) with policies pertaining to water supply, flood protection and environmental stewardship in the areas of interest to Santa Clara County and the Towns and Cities therein.

The specific duties are:

- Prepare policy alternatives
- Provide comment on activities in the implementation of the District's mission
- Produce and present to the Board an Annual Accomplishments Report that provides a synopsis of the annual discussions and actions.

In carrying out these duties, Commission members bring to the District their respective expertise and the interests of the communities they represent. In addition, Commissioners may help the Board produce the link between the District and the public through information sharing to the communities they represent.



SANTA CLARA VALLEY WATER COMMISSION MEETING

MINUTES

WEDNESDAY, OCTOBER 26, 2016 12:00 PM

(Paragraph numbers coincide with agenda item numbers)

A rescheduled meeting of the Santa Clara Valley Water Commission was held on October 26, 2016, in the Headquarters Building Boardroom, located at the Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose, California.

1. CALL TO ORDER/ROLL CALL

Chairperson Tara Martin-Milius called the meeting to order at 12:01 p.m.

There was no quorum present. Chairperson Martin-Milius noted the lack of a confirmed quorum and announced that informational items would be heard until such time that a quorum is confirmed and meeting was adjourned.

Members in attendance were:

City of Cupertino	Representative Hon. Darcy Paul	<u>Alternate</u>
City of Gilroy City of Los Altos Town of Los Altos Hills Town of Los Gatos	Hon. Mary Prochnow* Hon. John Harpootlian Hon. Marcia Jensen	Hon. Roland Velasco*
City of Milpitas Town of Monte Sereno City of Mountain View City of Palo Alto City of Santa Clara City of Saratoga City of Sunnyvale County of Santa Clara Santa Clara Open Space Authority Midpeninsula Regional Open Space District	Hon. Garry Barbadillo Hon. Evert Wolsheimer Hon. John Inks Hon. Greg Schmid Hon. Debi Davis Hon. Rishi Kumar* Hon. Tara Martin-Milius Hon. Mike Wasserman* Hon. Mike Flaugher*	

Members not in attendance were:

	<u>Representative</u>	<u>Alternate</u>
City of Campbell	Hon. Jeffrey Cristina	Hon. Liz Gibbons
City of Cupertino		Hon. Savita Vaidhyanathan
City of Gilroy	Hon. Peter Leroe-Munoz	
City of Los Altos		Hon. Jean Mordo
Town of Los Altos Hills		Richard Chiu
Town of Los Gatos		Hon. Barbara Spector
City of Milpitas		Vacant
Town of Monte Sereno		Hon. Burton Craig
City of Morgan Hill	Hon. Rich Constantine	Hon. Larry Carr
City of Mountain View		Hon. Ken Rosenberg
City of Palo Alto		Hon. Marc Berman
City of San José	Hon. Manh Nguyen	Kerrie Romanow
City of Santa Clara		Hon. Patrick Kolstad
City of Saratoga		Hon. Howard Miller
City of Sunnyvale		John Stufflebean
County of Santa Clara		Hon. Cindy Chavez
Santa Clara Open Space		Hon. Kalvin Gill
Authority		
Midpeninsula Regional		Hon. Jed Cyr
Open Space District		

^{*}Commission Members arrived as noted.

Board member in attendance were: Director Barbara Keegan, Board Representative.

Staff members in attendance were: Jennifer Abadilla, Glenna Brambill, Norma Camacho, Michelle Critchlow, Jerry De La Piedra, Jordan Eldridge, Jim Fiedler, Garth Hall, Tracy Hemmeter, and Darin Taylor.

*Hon. Rishi Kumar, Hon. Mike Wasserman and Hon. Roland Velasco arrived at 12:06 p.m.

Chairperson Martin-Milius requested roll call at 12:06 p.m. A quorum was confirmed. Chairperson Martin-Milius called the meeting to order and went to agenda item 3.

Agenda Item 2 was heard prior to a confirmed quorum

3. APPROVAL OF MINUTES

It was moved by Hon. Greg Schmid, seconded by Hon. John Inks, and by majority vote carried, to approve the September 8, 2016, meeting minutes, as presented. Hon. Garry Barbadillo and Hon. Rishi Kumar abstained.

4. ACTION ITEMS

4.1 WATER SUPPLY UPDATE

Ms. Tracy Hemmeter reviewed the material as outlined in the agenda item. The October 2016 Monthly Status Report and information on Bay Area Confluence was handed out.

Director Barbara Keegan spoke on this agenda item.

Mr. Jim Fiedler was available to answer questions.

No action was taken.

*Hon. Mary Prochnow and Hon. Mike Flaugher arrived at 12:11 p.m.

4.2 OVERVIEW OF FORECAST MODELING

Mr. Darin Taylor reviewed the material as outlined in the agenda item.

Director Barbara Keegan and Interim CEO Ms. Norma Camacho spoke on this agenda item.

No action was taken.

4.4 DISCUSS OPPORTUNITIES OF REDUCING DEMAND WITH NEW AND INFILL DEVELOPMENT

Chair Martin-Milius, tabled item 4.4 until a future meeting.

4.3 SAN FRANCISCO ESTUARY INSTITUTE PRESENTATION

Mr. Jim Fiedler introduced this agenda item and had Mr. Robin Grossinger reviewed the material as outlined in the agenda item. There two handouts given to the Commission; Landscape Resilience Framework and Vision for a resilient Silicon Valley Landscape.

No action was taken.

Hon. Martin-Milius left at 1:32 p.m. and did not return.

Hon. Marcia Jensen left the meeting at 1:44 p.m. and did not return.

4.5 REVIEW SANTA CLARA VALLEY WATER COMMISSION WORK PLAN, THE OUTCOMES OF BOARD ACTION OF COMMISSION REQUESTS AND THE COMMISSION'S NEXT MEETING AGENDA

Ms. Glenna Brambill reviewed the material as outlined in the agenda item. Agenda items; Update on CA WaterFix (Bay Delta Conservation Plan and Imported Water with Respect to Board Ends Policy 2.1: Reliable Water) and Riparian Ordinance Report were removed from the October 2016 meeting because the information was not available and will be placed on the January 2017 agenda or later. The opportunities of reducing demand with new and infill development discussion will be placed on the agenda for 2017 as well.

5. CLERK REVIEW AND CLARIFICATION OF COMMISSION REQUESTS TO THE BOARD

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

6. REPORTS

6.1 Director's Report

Board Chair Director Barbara Keegan reported the following:

- Board Action
- Water District News
- Water Supply
- Flood Protection
- Community Outreach

6.2 Manager's Report

Ms. Norma Camacho reported the following:

 Informed Commissioners of push back from various community members against fluoridation of water

6.3 Commission Member Reports

- Hon. Mike Wasserman inquired about "at capacity" for Dams and the confusion
 of what is contained in the Mercury News regarding reservoirs' capacities, asked
 that the Board clarify what the "actual" capacities are
- Hon Rishi Kumar gave an update of the City of Saratoga's October 2016 Council Meeting on their water issues

7. ADJOURNMENT

Vice Chairperson Hon. Yoriko Kishimoto adjourned at 2:08 p.m. to the next regular meeting on Wednesday, January 25, 2017, at 12:00 p.m., in the Santa Clara Valley Water District Headquarters Boardroom.

Michelle Critchlow Office of the Clerk of the Board

Approved:



Committee: Water Commission

Meeting Date: 01/25/17

Agenda Item No.: 5.1

Unclassified Manger: Michele King

Email: mking@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Review and Approve 2016 Annual Accomplishments Report for Presentation to the Board

RECOMMENDED ACTION:

- 1. Approve the 2016 Accomplishments Report for presentation to the Board.
- 2. Provide comments to the Commission Chair to share with the Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Commission

SUMMARY:

This is an ACTION item:

The Accomplishments Report summarizes the Commission's discussions and actions to prepare Board policy alternatives and implications for Board deliberation throughout 2016. The Commission Chair, or designee, presents the Accomplishments Report to the Board at a future Board meeting.

The Commission may provide feedback to the Commission Chair, at this time, to share with Board as part of the Accomplishments Report presentation pertaining to the purpose, structure, and function of the Commission.

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.

ATTACHMENT(S):

Attachment 1: Santa Clara Valley Water Commission 2016 Accomplishments Report

2016 Annual Accomplishments Report: Santa Clara Valley Water Commission

GP8. 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.

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 BOARD POLICY	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
1	Annual Accomplishments Report (Governance Process-8:Policy Implementation)	view and approve 2015 complishments Report for sentation to the Board. <i>(Action)</i> comit requests to the Board, as ropriate.	Accomplished January 27, 2016: The Commission reviewed and approved 2015 Accomplishments Report for presentation to the Board. The Board received this information at their May 10, 2016, meeting.
2	Election of Chair and Vice Chair for 2016	nmittee Elects Chair and Vice air for 2016. (Action)	Accomplished January 27, 2016: The Commission elected the 2015 Commission Chair and Vice Chair, Hon. Tara Martin-Milius and Hon. Yoriko Kishimoto respectively.
3	Review and Comment to the Board on the Fiscal Year 2017 Preliminary Groundwater Production Charges	ceive and comment to the Board the Fiscal Year 2017 Preliminary undwater Production Charges. tion) mit requests to the Board, as ropriate.	Accomplished January 27, 2016: The Commission received information on the Fiscal Year 2017 Preliminary Groundwater Production Charges. No action was taken.

ITEM	WORK PLAN ITEM BOARD POLICY	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
4	Update on 2016 Water Supply and Drought Response	 Receive update on water supply and drought response. (Action) Provide comments to the Board, as necessary. 	Accomplished January 27, 2016: The Commission received an update on 2016 Water Supply and Drought Response. No action was taken.
5	Review of Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda	 Receive and review the 2016 Board-approved Committee work plan. (Action) Submit requests to the Board, as appropriate. 	Accomplished January 27, 2016: The Commission reviewed the 2016 Committee Work Plan and the action to approve the Commission having informal groups failed by majority no votes 4-9. Accomplished April 13, 2016: The Commission reviewed the 2016 Committee Work Plan and took the following action: Unanimously approved Chairperson Tara Martin-Milius writing a letter to the Board requesting a response on the Plan Bay Area. Board Chair Keegan responded to Chairperson Martin-Milius on May 10, 2016 and the Commission received the information via email May 11, 2016. Accomplished September 8, 2016: The Commission reviewed the 2016 Committee Work Plan and took no action.

ITEM	WORK PLAN ITEM BOARD POLICY		INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
6	Review and Comment to the Board on the Fiscal Year 2017 Proposed Groundwater Production Charges.	•	Review and comment to the Board on the Fiscal Year 2017 Proposed Groundwater Production Charges. <i>(Action)</i> Provide comments to the Board, as necessary.	Accomplished April 13, 2016: The Commission received information on the Fiscal Year 2017 Proposed Groundwater Production Charges. The Commission took the following action: The Commission unanimously voted to support the Fiscal Year 2016-2017 Proposed Groundwater Production Charges. The Board received the Commission's comment at their April 26, 2016, meeting.
7	Update on CA WaterFix (Bay Delta Conservation Plan and Imported Water with Respect to Boar Ends Policy 2.1: Reliable Water)		Receive an update on the Bay Delta Conservation Plan and Imported Water with Respect to Board Ends Policy 2.1:Reliable Water (Information)	Accomplished April 13, 2016: The Commission received an update on the CA WaterFix (Bay Delta Conservation Plan) and Imported Water with Respect to Board Ends Policy 2.1:Reliable Water. No action was taken. October 26, 2016: This agenda item was removed for this meeting because there was no new significant information for the Commission at this time. (removal approved by Water Commission Chair Martin- Milius)

ITEM	WORK PLAN ITEM BOARD POLICY	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
8	Comprehensive Review of Safe, Clean Water Program Grants and Partnership Projects	 Discuss the Comprehensive Review of Safe, Clean Water Program Grants and Partnership Projects (Action) Provide comments to the Board, as necessary. 	Accomplished September 8, 2016: The Commission received an update on the Comprehensive Review of Safe, Clean Water Program Grants and Partnership Projects. No action was taken.
9	Conceptual Development of a Pilot Mini- Grant Program for Wildlife Habitat Restoration Grants and Partnerships (Project D3) of the Safe, Clean Water Program	 Discuss the Conceptual Development of a Pilot Mini-Grant Program for Wildlife Habitat Restoration Grants and Partnerships (Project D3) of the Safe, Clean Water Program (Action) Provide comments to the Board, as necessary. 	Accomplished September 8, 2016: The Commission received an update on the Conceptual Development of a Pilot Mini-Grant Program for Wildlife Habitat Restoration Grants and Partnerships (Project D3) of the Safe, Clean Water Program. No action was taken.
10	Status Report on the One Water Plan (Water Resources Master Plan)	Receive an update on the One Water Plan (Water Resources Mas Plan). (Information)	Accomplished September 8, 2016: The Commission received a status report on the One Water Plan (Water Resources Master Plan). No action was taken.
11	Riparian Ordinance Report	Review the Riparian Ordinance Report and provide comments to the Board, as necessary. (Information)	October 26, 2016: This item is postponed until staff gets the Board's direction as to what type of feedback they expect from the Commission regarding the Riparian Ordinance Report (Chair Martin-Milius was apprised of this change).

ITEM	WORK PLAN ITEM BOARD POLICY	INTENDED OUTCOME(S)	ACCOMPLISHMENT DATE AND OUTCOME
12	Overview Forecast Modeling	Discuss forecast modeling and provide comments to the Board, as necessary. (Information)	Accomplished October 26, 2016: The Commission received an overview of forecast modeling. No action was taken.
13	Water Supply Master Plan	 Receive information of the Water Supply Master Plan. (Action) Provide comments to the Board, as necessary. 	Accomplished October 26, 2016: The Commission received a presentation of the Water Supply Master Plan. No action was taken.
14	San Francisco Estuary Institute	Receive a presentation of the Resilience Landscapes Study Project. (Information)	Accomplished October 26, 2016: The Commission received a presentation from the San Francisco Estuary Institute on Resilience Landscapes. No action was taken.



Committee: Water Commission

Meeting Date: 01/25/17

Agenda Item No.: 5.2

Unclassified Manager: Garth Hall

Email: ghall@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Water Supply Update and Drought Response

RECOMMENDED ACTION:

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

SUMMARY:

This information-only item summarizes water supply conditions and District drought response, including working with other entities on a Task Force to draft water efficiency guidelines for new developments.

BACKGROUND:

Current water supply conditions and District drought response activities are summarized in the following monthly reports: Drought 2016 Monthly Status Report (Attachment 1), Water Tracker (Attachment 2), and Groundwater Condition Report (Attachment 3).

On June 14, 2016, the District Board of Directors adopted a resolution calling for a 20 percent reduction in water use compared to 2013, and a limitation on outdoor watering of ornamental landscapes or lawns with potable water to three days per week through January 31, 2017. Due to improved water supply conditions, this call was a reduction from the 30 percent reduction and two day per week outdoor watering call issued in 2015. The call for 20 percent was based on current water supply conditions, projections of water use and supply in 2016, and is consistent with the District's Water Shortage Contingency Plan.

In response to the ongoing drought, the District held two Summits in 2015, one with elected officials and one with staff from local water suppliers, to discuss potential drought response efforts and improve collaboration. Several recommendations emerged, including more consistent policy throughout Santa Clara County. In response, District staff has participated with representatives from local cities, the county, Sustainable Silicon Valley, and Joint Venture Silicon Valley on a Task Force to draft water efficiency guidelines for new developments. The idea was to set the bar even higher in terms of water use efficiency. Language for alternate supplies such as graywater, rainwater harvesting, and on-site reuse was incorporated. The Task Force has completed an administrative draft (Attachment 4) and is currently seeking comments from interested stakeholders. Outreach efforts will include sharing the draft ordinance with the following entities:

- District Board of Directors' Water Conservation & Demand Management Committee (December 2016)
- Santa Clara County building officials (December 2016/January 2017)
- District Water Retailers Committee (December 2016)
- Santa Clara County City Managers Association (January 2017)
- Cities Association of Santa Clara County (January 2017)
- District Board of Directors' Water Commission (January 2017)
- District Board of Directors' Agricultural Water Advisory Committee (January 2017)
- District Board of Directors' Environmental Water Resources Committee (January 2017)

ATTACHMENT(S):

Attachment 1: Drought 2016 Monthly Status Report Attachment 2: Water Tracker

Attachment 3: Groundwater Condition Report
Attachment 4: Draft Model Water Efficient New Development Ordinance



Drought 2016 Monthly Status Report

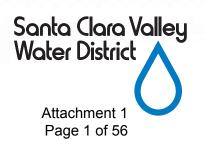


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Executive Summary

Water Tracker U.S. Drought Monitor

1. Water Use Reductions

- A. District Water Use Efficiency Strategies
- B. San Francisco Public Utilities Commission In-county Water Supplies
- C. Countywide Water Use and Savings
- D. Recycled Water Production

2. Retailers Water Use and Savings

- A. Water Savings by Retailer (Table)
- B. California Water Service Company
- C. Gilroy, City of
- D. Great Oaks Water Company
- E. Milpitas, City of
- F. Morgan Hill, City of
- G. Mountain View, City of
- H. Palo Alto, City of
- I. Purissima Hills Water Company
- J. San Jose Municipal Water System
- K. San Jose Water Company
- L. Santa Clara, City of
- M. Stanford University
- N. Sunnyvale, City of

3. Water Conservation Measures

- A. Santa Clara Valley Water District
- B. Water Retailers (Table)
- C. Other Entities (non retailer cities, the County of Santa Clara, untreated surface water users, independent wells)

4. District Drought Response Strategies

- A. Water supply and operations
- B. Water use reduction
- C. Drought response opportunities
- D. Administrative and financial management

5. Data Collection Methodology

- A. Water Use Data Disclaimer
- B. Treated Water Data
- C. Groundwater Data
- D. SFPUC Water Data
- E. Surface Water Data
- F. Recycled Water Use

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Water Tracker



A monthly assessment of trends in water supply and use for Santa Clara County, California

Outlook as of December 1, 2016

Santa Clara County residents and businesses reduced water use by 31% in October 2016 compared to October 2013. This brings the cumulative 2016 water savings through October to 27% compared to the same period of 2013. Realizing parts of the state were better off than others in terms of water supply, the State Water Resources Control Board adopted an updated Emergency Regulation in May that allowed water retailers throughout the state to determine their individual conservation standards based on local conditions.

At its June 14 meeting, the District's Board of Directors (Board) lowered its water use reduction target to 20% for the period extending through January 2017, but emphasized that residents should continue their efforts to conserve in this ongoing drought. The Board also called for local water providers to continue to institute mandatory measures, as needed, to reach the 20% target, and called for restrictions on watering schedules to a maximum of three times a week, up from the two day a week schedule most areas of the county have had in place since the spring of 2015.

Groundwater recharge operations are expected to meet or exceed the 2016 recharge plan, which entails more recharge than in normal years.

Weather



Rainfall in San Jose

- Month of November = 1.18 inches
- Rainfall year total = 2.64 inches or 94% of average to date (Rainfall year is July 1 to June 30)
- December 2 Northern Sierra snowpack was 82% of normal for this date

Local Reservoirs



- Total December 1 storage = 67,872 acre-feet
 - » 93% of 20-year average for that date
 - » 40% of total capacity
 - » 55% of restricted capacity (169,009 acre-feet total storage capacity limited by seismic restrictions to 122,924 acre-feet)
- Approximately 2,770 acre-feet of imported water delivered into local reservoirs during November 2016
- Total estimated releases to streams (local and imported water) during November was 6,990 acre-feet

Groundwater



 Groundwater (GW) Storage: End of 2016 storage is predicted to fall near the boundary of Stage 2 (Alert) and Stage 1 (Normal) of the Water Shortage Contingency Plan

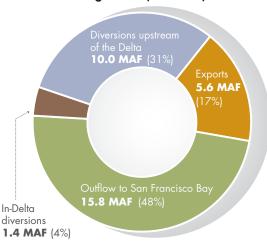
	Santa Clara	Subbasin	Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
November managed recharge estimate (AF)	7,700	900	2,200
January to November managed recharge estimate (AF)	97,800	10,400	25,400
January to November managed recharge, % of 5-year avg.	250%	108%	135%
October pumping estimate (AF)	3,500	1,000	4,100
January to October pumping estimate (AF)	48,200	9,300	34,600
January to October pumping, % of 5-year average	66%	100%	93%
GW index well level compared to last November	Increase	Increase	Increase

Imported Water



- 2016 State Water Project (SWP) and Central Valley Project (CVP) allocations:
 - » 2016 SWP allocation: 60% = 60,000 acre-feet
 - » 2016 CVP allocations South-of-Delta: Municipal and Industrial water service contractors: 55% of historic use = 71,500 acre-feet, Agriculture water service contractors: 5% = 1,655 acre-feet
- Initial 2017 SWP allocation: 20% = 20,000 acre-feet announced on November 28, 2016
- Reservoir storage information, as of November 30, 2016:
 - » Shasta Reservoir at 64% of capacity (107% of average for this date)
 - » Oroville Reservoir at 42% of capacity (70% of average for this date)
 - » San Luis Reservoir at 42% of capacity (70% of average for this date)
- District's Semitropic groundwater bank reserves: An estimated 190,339 acrefeet as of November 30, 2016.
- Estimated SFPUC deliveries to Santa Clara County:
 - » Month of November = 4,017 acre-feet
 - » Year-to-date = 40,722 acre-feet
 - » Five-year average is 48,700 acre-feet

Delta Watershed Diversions and Outflow Typical Annual Balance Average Years (32.8 MAF)



Treated Water



- Below average demands of 7,102 acre-feet delivered in November
- This total is 91% of the five-year average for the month of November
- Year-to-date = 91,663 acre-feet or 85% of the five-year average

Conserved Water

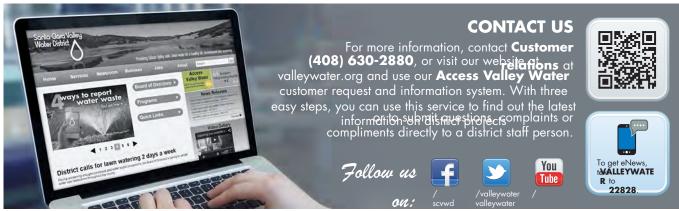


- Saved 69,000 acre-feet in FY16 from long-term program (baseline year is 1992)
- Long-term program goal is to save nearly 72,000 acre-feet in FY17
- The Board has called for a 20% reduction and a limit of three days per week for irrigation of ornamental landscape with potable water
- Achieved a 27% reduction in water use through the first ten months of 2016, compared to 2013

Recycled Water



- Estimated November 2016 production = 1,000 acre-feet
- Estimated year-to-date through November = 18,124 acre-feet or 101% of the fiveyear average
- Silicon Valley Advanced Water Purification Center produced an estimated 4.3 billion gallons (13,100 acre-feet) of purified recycled water since March 25, 2014. The purified water is blended with existing tertiary recycled water for South Bay Water Recycling Program's customers



U.S. Drought Monitor **California**

December 13, 2016

(Released Thursday, Dec. 15, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4 D1-D4 D2-D4 D3-D4	D1-D4	D2-D4	D3-D4	D4
Current	12.16	87.84	73.04	60.27	42.80	21.04
Last Week 12/6/2016	12.03	87.97	73.04	60.27	42.80	21.04
3 Months Ago 9/13/2016	00.00	100.00	83.59	62.27	42.80	21.04
Start of Calendar Year 12/29/2015	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 9/27/2016	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago 12/15/2015	0.14	99.86	97.33	90.63	69.09	44.84

Intensity:



D3 Extreme Drought

D4 Exceptional Drought

D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

NOAA/NWS/NCEP/CPC Anthony Artusa











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Executive Summary

EXECUTIVE SUMMARY

The purpose of this report is to provide a monthly water supply and water use reduction outlook in response to the ongoing drought. The data and analysis provided includes local and imported water conditions, in addition to detailed monthly water use and reductions as reported by the county's major water retailers.

Background

As a result of the multi-year drought and reduced water supply outlook, including projected groundwater storage, the Santa Clara Valley Water District's (district) Board of Directors (board) set a preliminary 2014 water use reduction target equal to 10 percent of 2013 countywide water use, and on February 25, 2014, increased the target to 20 percent. The resolution setting the reduction target also recommended retail water agencies, local municipalities and the County of Santa Clara (County) implement mandatory measures as needed to achieve the water use reduction target. As conditions have changed since early 2014, the board has updated its call for water use reductions and recommendations to achieve savings, as follows:

- November 25, 2014, extended the February 25, 2014, call for 20 percent reductions through June 30, 2015.
- March 24, 2015, the board called for 30 percent water use reductions, and recommended that
 retail water agencies, municipalities and the County implement mandatory measures as needed
 to accomplish that target, including a two day a week outdoor irrigation schedule.
- November 24, 2015, the board extended the call for 30 percent savings through June 30, 2016.
- June 14, 2016, the board approved a resolution to revise the call for water use reductions to 20 percent, and to increase the allowable days for outdoor irrigation from two to three days a week. The resolution is in effect to January 31, 2017, to coincide with the recently updated state emergency regulations.

The district's Drought Response Strategy (See Section 4) developed in February 2014 continues to support the board's call for water use reductions and has been an effective approach to respond to the drought. These actions are still the basis of our drought response. Certain strategies may change, increase or sunset, as conditions change. The drought strategies are implemented by a cross-functional team from across the organization (convened when the Drought Response Strategy was formulated).

Summary of Response to Call for Water Use Reductions

From the beginning of the drought response initiated in 2014, the district has worked with water retailers, municipalities and the County to increase water conservation efforts and public outreach, and to implement other actions to reduce water use.

- Water retailers and the district increased their outreach and education efforts.
- Investor owned retailers implemented water allocation programs.

Executive Summary

- 2015 water use data indicated that cumulative countywide retailer savings of 27 percent were realized compared to 2013.
- Preliminary 2016 data through November indicates that cumulative savings of 28 percent has been achieved, and 32 percent was achieved for the month of November when compared to November 2013.

In response to outcomes from two summits held by the district, one with the retailers and one with local elected officials, the district and retailers continue to effectuate the common theme that: messaging and policy development needs to be consistent and coordinated. The summits were held in 2015 to facilitate increased water use saving efforts and increased coordination to meet the 30 percent reduction target at that time. Even though the call for water use reductions has been lowered, coordination continues to be a focus for the water district and retailers in 2016 to help transition the response by the community to the change in water use reductions and restrictions called for by the board on June 14, 2016.

Current Drought and Water Supply Status

Severe to extreme drought conditions continue locally and throughout California (~60 percent), with slight improvement from the November 8, 2016 report.

- The U.S. Drought Monitor for California December 13, 2016, reports that Santa Clara County drought severity ranges from 'D0 –Abnormally Dry' to 'D3-Extreme Drought', depending on the location within the county.
- The National Oceanic and Atmospheric Administration three-month outlook on drought conditions indicate that drought is likely to persist or remain through the winter in many regions currently experiencing drought, including lower half of California and the Southwest.
 Geographic areas of Santa Clara County and in northern California shows improvement or 'Drought removal likely', where drought exists.
- The district's current 2016 State Water Project (SWP) allocation is 60 percent of contract quantity. Central Valley Project allocations for agricultural water service contractors South-of-Delta are 5 percent of their contract quantity; and allocations for M&I water service contractors South-of-Delta are 55 percent.
- The district's preliminary 2017 SWP allocation is 45 percent of contract, as of December 21,
 2016. The CVP preliminary 2017 allocations are not expected until February to March 2017.
- As of December 1, 2016, local reservoir storage is at 93 percent of the 20-year average for this time of year and 55 percent of restricted storage capacity, and storage in key northern California reservoirs is 70 percent to 107 percent of average for this time of year.
- Local and imported supplies are less constrained as compared to the last few years, and the district is taking advantage of the improved water supply conditions by increasing recharge operations compared to last year, in collaboration with regulatory agencies.
- Year to date managed groundwater recharge in the Santa Clara Plain is two and a half times the five-year average, and there has been much improvement in groundwater storage compared to

Executive Summary

last year. Staff continues to closely track groundwater conditions through monthly water level measurements at 225 wells and regular subsidence monitoring.

Report Format

This report begins with our current drought and water supply status as shown in the monthly Water Tracker report and Drought Monitor report. The remainder of the report focuses on water use and reduction data in Santa Clara County. Detailed 2016 water use and savings reports for the county and individual retailers are presented, as is a summary of 2013 data, which is provided for comparison as it is the base year set for water savings calculations. Data for 2014 and 2015 are also provided.

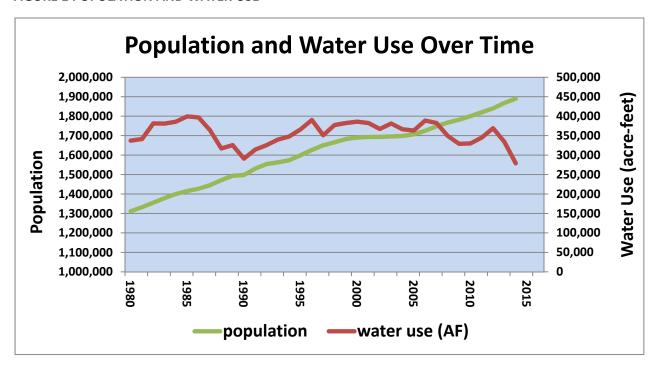
Disclaimer

The data presented within this report is preliminary and subject to change. The data is presented prior to complete QA/QC and validation in an effort to quickly identify trends in water supply conditions and water use within the county. Due to the critical nature of the ongoing drought, it is important that the district and the community have an understanding of conditions and effectiveness of water use reduction efforts. Please see the Data Collection Methodology section at the end of this report for further description and disclaimers regarding the water use data reported herein. The water use data presented in the monthly reports are based on water retailer water use, which comprises just above 80 percent of countywide water use. The remaining water use consists of small or independent groundwater well users, district untreated surface water customers and recycled water.

Section 1. Water Use Reductions

The district and its water retailers have a long history of implementing water conservation and water use efficiency in Santa Clara County. Because of the investments the district and its water retailers have made in water conservation since 1992, water use in the county has remained relatively flat despite a 25 percent increase in population over the same time period.

FIGURE 1 POPULATION AND WATER USE



A. District Water Use Efficiency Strategies

This section provides the context of the district's existing long-term conservation programs to the efforts in response to the current drought.

Long-term Water Conservation

The district's 2012 Water Supply and Infrastructure Master Plan (Water Master Plan) acknowledges that further investments are needed to ensure adequate water supply reserves in drought years. The "Ensure Sustainability" strategy adopted by the board calls for significantly increasing the current levels of conservation from 69,000 acre-feet per year (AFY) to 98,800 AFY over the next 14 years, as well as other investments that will reduce the county's reliance on the Sacramento-San Joaquin Delta. Future growth in county water demands will be met through water conservation and recycled water. While the long-term Water Master Plan is being implemented, short-term gaps between annual supply and demand can occur as seen in the current severe drought. These gaps are addressed through the board-adopted Water Shortage Contingency Plan¹.

¹ Santa Clara Valley Water District 2015 Urban Water Management Plan, http://www.valleywater.org/Services/WaterSupplyPlanning.aspx]

The district and its major water retailers have a cooperative relationship in the implementation of a variety of water conservation programs in an effort to permanently reduce water use in Santa Clara County; they are an important element in meeting long-term water reliability. Water conservation programs implemented since 1992 have had a large influence in continued demand reduction. This can be seen in Figure 1 with the relative stability of demands since the mid to late 1980s, even though population has increased significantly during the same period. Using the year 1992 as a baseline, the district saved approximately 69,000 AFY in year Fiscal Year 2016, which is over two-thirds of the district's long-term goal of 98,800 AFY by 2030.

Short-term Water Use Reductions

In addition to the district's long-term conservation programs, there are times, such as the current drought, when we need additional reductions. Short-term reduction generally refers to these behavioral changes that reduce water use over and above long-term conservation programs. When the district's board calls for short-term water use reductions, the cities and water retailers consider the implementation of their water shortage contingency plan actions identified in their Urban Water Management Plans in order to achieve the necessary shortage response. The board's calls for short term reductions during this drought included:

- 20 percent call in February 2014 and extended in November 2014
- 30 percent call in March 2015 and extended in November 2015
- 20 percent call in June 2016

The 2015 call for 30 percent reduction triggered certain actions by retailers or municipalities. Those actions are being adjusted as necessary in response to the recent board call for a 20 percent reduction. Actions to achieve the desired shortage response may be different for each city/water retailer depending on service area composition (commercial, industrial, residential) and source of water supplies. However, some actions are common to several of the cities/water retailers, providing for more consistent implementation and messaging. An example of a consistent approach was the coordinated two day/week watering schedule. As a result of the board approved resolution June 14, 2016, the watering schedule has been revised, and the district and those retailers continuing with a watering restriction have coordinated communication of this change to the community. The revised restriction on outdoor watering of ornamental landscapes or lawns with potable water is now for a maximum of three days a week (odd numbered and no addresses may water on Mondays, Thursdays and Saturdays; even numbered addresses may water on Tuesdays, Fridays and Sundays). The benefit of consistent approaches such as these include: reduced confusion among residents, increased ease of implementation, and easier compliance and enforcement if needed.

In response to the unprecedented water shortage situation in the last few years, the district increased and expanded its short-term measures and strengthened efforts to foster its partnerships with its water retailers to promote water conservation. To that end, the district works closely with the water retailers on program development, as well as water conservation outreach and education. Please see our website

Water Use Reductions

for more information on our long standing programs and new efforts and rebates available in response to the current drought (www.watersavings.org).

<u>State Water Resources Control Board (State Board) Emergency Regulations</u>

The State Board's initial emergency regulation to increase water use reduction practices for all Californians became effective July 28, 2014. The regulations target outdoor urban water use and establish the minimum level of activity that residents, businesses and certain water suppliers must meet as the drought deepens.

- March 17, 2015, the State Board extended and expanded the regulations. Among the new rules
 were many restrictions on water use by commercial, industrial and institutional water users and
 other restrictions on water waste.
- April 1, 2015, the governor directed the State Board to implement mandatory water reductions in cities and towns across California to reduce water usage by 25 percent (extended through October 2016).
- May 5, 2015, the State Board updated the emergency regulations again (effective May 18, 2015, and extended in February 2016), to address the governor's April 1, 2015, Executive Order (Order). Some major accomplishments included:
 - o the investor owned retailers implemented water allocation programs
 - o the Order also required the California Energy Commission to establish standards that improve the efficiency of water appliances available for sale and installation in new and existing buildings. As a result, showerhead flow rate requirements have been reduced to 2.0 gallons per minute and will be reduced again in July 2018, to 1.8 gallons, and flow rates for faucets have been reduced to 1.2 gallons per minute (as of July 2016).
- May 9, 2016, Executive Order, the State Board extended and amended the Emergency Regulations on May 18, 2016, to include locally developed water use reduction standards, and requires water retailers to self-certify the availability of water supplies assuming three additional dry years. The amendment also calls for the wholesale suppliers such as the district to provide retailers with the supplies they anticipate being able to deliver in each of the three years. The district has worked closely with local water retailers to meet the requirements of the amended regulations, posted at http://www.valleywater.org/SWRCBposting/.
- The May 9, 2016, Executive Order also directed state agencies to establish a long-term framework for water conservation and drought planning. The proposed framework "Making Water Conservation a California Way of Life" was released by the state on November 30, 2016, with comments due by December 19, 2016. District staff participated in several of these workshops, as did several agencies the district is a member of. The proposed framework addresses drought resiliency by recommending some prohibitions be permanent (e.g. hosing of sidewalks, driveways, and other hardscapes; watering lawns in a manner that causes runoff; irrigating ornamental turf on public street medians, etc.) and that Water Shortage Contingency Plans be strengthened.

To support the regulations and the district board's resolutions, the district has been responding through other efforts as part of its aggressive drought response program that includes 15 strategies (see Section 4). These extra efforts included increasing efforts in communicating with and supporting our local water retailers, cities, and the County; expanding outreach and marketing; establishing a centralized system to report water waste; and hiring additional water waste inspectors to follow-up on reports of water waste. The following is a summary of the current 2016 call level to our drought hotline (408-630-2000), incoming emails to drought@valleywater.org, and the total number of water waste reports entered into Access Valley Water (through the web, the smart phone app, or entered by staff).

Monthly	Incoming calls to	Incoming emails to	New "Access Valley Water"
Activity 2016	Hotline	drought@valleywater.org	Water Waste Cases
January	31	39	274
February	33	26	326
March	34	32	266
April	29	14	171
May	59	33	157
June	63	55	181
July	46	71	180
August	37	46	142
September	51	47	117
October	40	44	108
November	21	15	58
2016 Totals	444	422	1,980

Recycled Water/Water Re-use

In addition to the district's water conservation programs, the district has partnered with cities and water retailers in the county to develop recycled water supplies to reduce demand on potable supplies. Recycled water helps in times of drought as it is an all-weather reliable source of water. Approximately 10 percent of the county's estimated total water use consisted of recycled water in 2015, limited

primarily to landscaping irrigation, agriculture irrigation, cooling towers, and industrial processes. This usage is critical now and into the future to meet water supply reliability needs. For instance, just over 21,000 AF of recycled water was estimated to have been used in 2015 countywide, thereby preserving an equal volume of drinking water supplies. In November 2016, an estimated 990 AF was produced. The district long term plans are to increase recycled and

Water Use Reductions

purified water used in this county to at least 10 percent of total use (approximately 40,000 AF) by year 2025, and its longer-term goal is 50,000 AF by year 2035.

In the near term, the continued and extreme drought conditions have prompted a review of the timing for developing recycled water and purified water projects. Staff continue to regularly inform and engage the board on the Expedited Purified Water Expansion Program. The program also includes evaluating an extension of the Sunnyvale Wolfe Road Project (delivering recycled water to the new Apple campus) to deliver purified water for groundwater recharge. Expedited implementation of the five purified water projects could provide a capability for up to 45,000 acre-feet per year.

Recycled water use has continued to increase in recent years, even with a small decrease during the drought. Many cities cite their use of recycled water as a significant help in reducing demand for potable water in all years, not just during drought. Recycled water use data at the retailer level is not available on a monthly basis for all retailers; however, the most current production data at the four waste water treatment plants is being tracked and reported in this report.

B. San Francisco Public Utilities Commission (SFPUC) Supplies

Eight retail agencies in Santa Clara County contract with the SFPUC to receive water imported from the Tuolumne River watershed as well as from watersheds around the Bay Area. This imported water is conveyed through the Regional Water System owned and operated by the SFPUC. The district does not control or administer SFPUC supplies delivered to the county; however, this supply reduces the demands on district-supplied water. The 2015 SFPUC water use in Santa Clara County was approximately 42,000 acre-feet, or almost 19 percent of all water retailer use.

On January 31, 2014, the SFPUC officially asked all customers of the Regional Water System to voluntarily curtail water consumption. The goal is to reduce system-wide usage by 10 percent. The SFPUC announced it will be enforcing the July 28, 2014, State Board's emergency regulations through education, notices, and warning to customers. Repeated water waste after receiving notice and warnings from the SFPUC could result in a fine. On August 12, 2014, the SFPUC passed new emergency outdoor irrigation restrictions for all of its retail customers to reduce potable water use by 10 percent for outdoor irrigation of ornamental landscape and turf. Many of the Santa Clara County water retailers that rely on SFPUC for some, or all, of their supplies, have increased their call in response to either the district's call, the governor's Executive Order and/or the State Board's Emergency Regulations.

On April 15, 2015, the SFPUC informed its customers that it would not be necessary to request further action from its customers system-wide in response to the governor's April 1, 2015, Executive Order directing the State Board to develop mandatory conservation across the state to achieve a 25 percent reduction below 2013 levels in water use. On June 28, 2016, the SFPUC Commission continued their call for voluntary 10 percent water use reductions and continued many of the previously called for water use restrictions.

C. Countywide Water Use Savings

The following pages in Section 1 contain detailed countywide water use and savings information for combined major retail water providers. Section 2 contains details of individual retail water provider water use and savings data and analysis reports. Please see Section 5, Data Collection Methodologies for explanation and disclaimers.

Water Savings Target and Calculations

The district bases its call for water use reductions and recommended actions on the district's Water Shortage Contingency Plan (Contingency Plan). For example, in the second year of the drought, the estimated 2015 water supply conditions showed that groundwater reserves could reach the Stage 4 ("Critical") level by the end of the calendar year if water use reduction measures were not implemented. The Contingency Plan calls for a 20 percent to 40 percent reduction at Stage 4. Staff recommended 30 percent based on modeled water supply outlook and projected conditions.

- On February 25, 2014, the board approved a resolution (extended on November 25, 2014, to be
 in place through June 30, 2015) setting a countywide water use reduction target equal to 20
 percent of 2013 water use.
- On March 24, 2015, the board adopted a new resolution calling for 30 percent water use reductions, and recommending that retail water agencies, municipalities and the County implement mandatory measures as needed to accomplish that target, including a two day a week outdoor irrigation schedule.
- On November 24, 2015, the call for 30 percent was extended to June 30, 2016.
- On June 14, 2016, the board approved a resolution to revise the call for water use reductions to 20 percent of the 2013 use, and to increase the allowable days for outdoor irrigation from two to three days a week. This action was based on estimated 2016 water supply conditions that showed groundwater reserves would fall in Stage 2 ("Alert") level by the end of the calendar year. The resolution is in effect to January 31, 2017, to coincide with the recently updated state emergency regulations.

Water Use and Reductions Results

This monthly water use and savings report only contains data and progress towards the savings target for large water retailers, and does not provide a complete accounting of countywide water use.

Recycled water use is not subject to the water savings target because it is used in lieu of other potable water supplies. Recycled water is used primarily for irrigation, industry and agriculture. Using recycled water helps conserve drinking water supplies, provides a dependable, drought-proof, locally-controlled water supply, reduces reliance on imported water and helps preserve our saltwater and tidal habitat by reducing freshwater discharge to the bay. A small, but important and growing source of water is recycled water.

Water retailers' water use savings total from February to December 2014 was just above 13 percent for the year. After statewide and local efforts were increased, water savings in 2015 (January through

Water Use Reductions

December 2015, compared to the same period in 2013) totaled an estimated 27 percent. Preliminary cumulative savings for 2016 are 28 percent. November 2016 water use savings compared to November 2013 are 32 percent. The significant and sustained increases in water savings in 2015, and the 2016 savings, indicate that the messaging and tools implemented from the governor's office to the district to the retailers had an effect on water use behavior. Even with the June 14, 2016, call for 20 percent reductions, down from 30 percent, water use reductions are on track to be well above the 20 percent year-end target, while month to month savings are variable.

TABLE 1: CURRENT YEAR'S (2013 and 2016) RETAIL WATER USE AF AND SAVINGS

2013 (Base Year) and 2016 (Reporting Year) in Acre-feet

2013	North County Ground water	South County Ground water	Treated Water	SFPUC	SJWC Surface	2013 Monthly Use	2013 Cumulative Use
Jan	3,063	1,192	5,879	3,477	1,807	15,418	15,418
Feb	3,207	1,209	6,759	3,619	1,385	16,179	31,598
Mar	5,728	1,586	8,352	3,416	595	19,676	51,274
Apr	6,556	1,906	10,876	4,591	422	24,352	75,626
May	8,415	2,314	13,650	5,894	299	30,573	106,198
Jun	8,937	2,312	13,769	5,263	516	30,797	136,995
Jul	10,579	2,614	13,646	5,803	616	33,258	170,254
Aug	9,949	2,400	13,640	6,144	584	32,716	202,970
Sep	7,957	2,305	12,845	4,970	531	28,608	231,578
Oct	8,074	2,154	11,612	4,685	502	27,027	258,604
Nov*	6,826	1,692	8,749	3,671	326	21,265	279,869
Dec	6,852	1,398	7,182	3,108	203	18,744	298,613
Jan to Current Totals*	79,292	21,683	119,779	51,534	7,582	279,869	
Jan to Dec Totals	86,144	23,080	126,961	54,642	7,785	298,613	

2016	North County Ground water	South County Ground water	<u>Treated</u> <u>Water</u>	SFPUC	SJWC Surface	2016 Monthly Use	2016 Cumulative Use	Cumulative District Source Savings	Cumulative NonDistrict Source Savings	All Sources Cumulative %Savings from 2013 <+> savings	Statewide Cumulative Savings (since Jan 2016)
Jan	3,894	1,085	4,789	2,458	489	12,715	12,715	4%	44%	18%	17%
Feb	3,238	1,041	5,037	2,581	951	12,848	25,563	10%	37%	19%	15%
Mar	3,562	1,149	4,950	3,053	1,282	13,996	39,559	22%	24%	23%	19%
Apr	4,367	1,315	5,050	3,355	1,857	15,944	55,503	30%	17%	27%	21%
May	3,864	1,622	7,855	4,396	1,919	19,654	75,157	35%	12%	29%	22%
Jun	5,291	1,849	10,264	4,472	1,005	22,882	98,039	34%	11%	28%	22%
Jul	7,474	2,060	10,296	4,647	0.3	24,477	122,516	32%	14%	28%	21%
Aug	5,447	2,178	11,834	4,648	0.3	24,107	146,623	31%	16%	28%	21%
Sep	3,696	2,062	12,328	4,591	0.3	22,678	169,301	30%	16%	27%	20%
Oct	2,905	1,788	10,561	3,277	0.3	18,532	187,833	30%	18%	27%	20%
Nov*	3,265	1,393	7,099	2,547	1.8	14,305	202,138	30%	20%	28%	not available
Dec	-	ı	-	i	-	-					
*Jan to Current	47,003	17,541	90,062	40,025	7,507	202,138					

1%

28%

of Supply Current monthly water use data is preliminary and subject to change.

25%

19%

%Savings by Source

These water use data sets do not include recycled water or surface water sales by the District.

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013).

 $^{^{}st}$ Current month data does not include Stanford data - Not available at time of printing.

TABLE 2: LAST YEAR'S RETAIL WATER USE AF AND SAVINGS (2015 Compared to 2013)

2013 (Base Year) and 2015 (Reporting Year) in Acre-feet

2013	North County Ground water	South County Ground water	Treated Water	SFPUC	SJWC Surface	2013 Monthly Total	2013 Cumulative Use
Jan	3,063	1,192	5,879	3,477	1,807	15,418	15,418
Feb	3,207	1,209	6,759	3,619	1,385	16,179	31,598
Mar	5,728	1,586	8,352	3,592	595	19,852	51,450
Apr	6,556	1,906	10,876	4,591	422	24,352	75,802
May	8,415	2,314	13,650	5,894	299	30,573	106,374
Jun	8,937	2,312	13,769	5,263	516	30,797	137,171
Jul	10,579	2,614	13,646	5,803	616	33,258	170,430
Aug	9,949	2,400	13,640	6,144	584	32,716	203,146
Sep	7,957	2,305	12,845	4,970	531	28,608	231,754
Oct	8,074	2,154	11,612	4,685	502	27,027	258,780
Nov	6,826	1,692	8,749	3,671	326	21,265	280,045
Dec	6,852	1,398	7,182	3,108	203	18,744	298,789
Jan to Current Totals*	86,144	23,080	126,961	54,818	7,785	298,789	
Jan to Dec Totals	86,144	23,080	126,961	54,818	7,785	298,789	

2015	North County Ground water	South County Ground water	Treated Water	SFPUC	SJWC Surface	2015 Monthly Use	2015 Cumulative Use	Cumulative District Source Savings	Cumulative NonDistrict Source Savings	All Sources Cumulative %Savings from 2013 <+> savings	Statewide Cumulative Savings (since Jan 2015)
Jan	5,656	1,144	5,616	2,908	339	15,663	15,663	-23%	39%	-2%	7%
Feb	5,172	1,126	4,307	3,085	1,020	14,711	30,374	-8%	29%	4%	5%
Mar	5,661	1,367	6,468	3,558	1,473	18,527	48,901	1%	14%	5%	4%
Apr	5,831	1,402	6,937	3,570	749	18,489	67,390	10%	14%	11%	7%
May	4,195	1,627	9,503	3,682	485	19,491	86,881	18%	19%	18%	13%
Jun	3,881	1,628	10,290	4,005	484	20,288	107,169	23%	19%	22%	16%
Jul	3,966	1,705	11,278	4,196	253	21,398	128,567	25%	21%	25%	19%
Aug	4,385	1,707	11,109	3,945	0.3	21,146	149,713	27%	24%	26%	20%
Sep	5,718	1,641	9,295	3,960	0.3	20,615	170,328	27%	25%	27%	22%
Oct	5,803	1,535	8,693	3,665	0.3	19,696	190,025	27%	25%	27%	22%
Nov	4,182	1,101	6,406	2,476	0.3	14,165	204,190	27%	26%	27%	22%
Dec	4,812	1,021	4,875	2,974	0	13,683	217,873	28%	25%	27%	21%
Jan to Dec Totals	59,261	17,005	94,778	42,025	4,804	217,873					
%Savings											

27%

of Supply Current monthly water use data is preliminary and subject to change.

23%

38%

These water use data sets do not include recycled water or surface water sales by the District. Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013).

2013 data revised March 2016 due to Purissima correction (meter read adjustment).

25%

Values may not add up due to rounding.

31%

by Source

26%

TABLE 3: PAST YEAR'S RETAIL WATER USE AF AND SAVINGS (2014 Compared to 2013)

For the 2014 Water Use Savings Analysis, January was not incorporated. 2014 savings compared to 2013.

2013	North County Ground- water	South County Ground- water	<u>Treated</u> <u>Water</u>	<u>SFPUC</u>	SJWC Surface	2013 Monthly Total	2013 Cumulative Use Feb to Dec
January w	ater use valu	es are NOT u	sed in water s	avings calcul	ations or cun	nulative use v	alues.
Jan	3,062.9	1,191.7	5,879.1	3,477.5	1,807.1	15,418.3	15,418
Feb	3,207.4	1,208.5	6,759.1	3,619.5	1,384.8	16,179.3	16,179
Mar	5,727.9	1,585.7	8,351.9	3,591.6	594.9	19,851.9	36,031
Apr	6,556.1	1,906.2	10,876.4	4,591.3	422.2	24,352.2	60,383
May	8,415.4	2,314.3	13,650.4	5,893.9	298.6	30,572.7	90,956
Jun	8,937.2	2,311.7	13,769.1	5,262.6	516.2	30,796.8	121,753
Jul	10,579.1	2,613.8	13,645.9	5,803.2	616.3	33,258.3	155,011
Aug	9,948.6	2,399.5	13,640.2	6,143.7	584.1	32,716.1	187,727
Sep	7,957.1	2,305.2	12,844.7	4,970.5	530.6	28,608.1	216,335
Oct	8,074.3	2,153.7	11,612.2	4,684.9	501.5	27,026.6	243,362
Nov	6,826.2	1,692.3	8,749.4	3,671.2	326.0	21,265.1	264,627
Dec	6,852.4	1,397.7	7,182.5	3,108.5	202.8	18,743.8	283,371
Feb to Dec 2013 Totals	83,082	21,889	121,082	51,341	5,978	283,371	

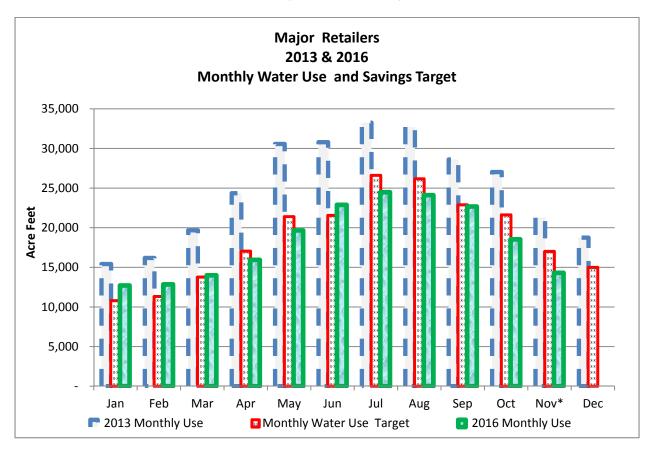
2014	North County Ground- water	South County Ground- water	<u>Treated</u> <u>Water</u>	<u>SFPUC</u>	SJWC Surface	2014 Monthly Use	2014 Cumulative Use Feb to Dec	Cumulative % Savings from 2013 <+> savings
January v	water use val	ues are NOT	used in water	savings calcu	lations or cur	nulative use v	alues.	Not
Jan	6,485.1	1,508.7	8,137.3	3,631.3	0.3	19,762.7	19,762.7	Applicable
Feb	5,769.3	1,164.3	5,173.0	2,616.7	0.3	14,723.6	14,723.6	9%
Mar	7,341.8	1,305.2	5,754.1	3,011.0	113.4	17,525.5	32,249.2	10%
Apr	8,290.4	1,521.2	6,501.1	4,047.5	110.0	20,470.3	52,719.5	13%
May	11,378.7	2,166.5	8,750.7	5,250.0	54.9	27,600.8	80,320.2	12%
Jun	11,808.4	2,301.6	9,648.4	4,539.0	4.6	28,302.0	108,622.2	11%
Jul	12,541.7	2,233.6	9,908.9	5,069.4	9.8	29,763.4	138,385.7	11%
Aug	10,760.6	2,154.8	10,182.3	4,754.4	404.9	28,257.0	166,642.7	11%
Sep	9,322.9	1,974.2	9,324.1	4,066.8	9.8	24,697.8	191,340.4	12%
Oct	8,970.0	1,775.6	8,216.0	4,172.4	0.3	23,134.3	214,474.7	12%
Nov	7,102.7	1,217.5	5,950.5	2,725.3	0.3	16,996.2	231,470.9	13%
Dec	5,618.2	1,052.3	4,046.9	2,814.3	583.6	14,115.3	245,586.2	13%
Feb to Dec 2014 Totals	98,905	18,867	83,456	43,067	1,292	245,586		
%Savings by Source of Supply	-19%	14%	31%	16%	78%	13%		

These water use data sets do not include recycled water or surface water sales by the District. Percent savings are shown in positive values where savings have been made and negative percent values

Cumulative total from February to current month.

Savings Target for February was 10%. March through December was 20% of 2013 monthly use.

FIGURE 3: TOTAL RETAILER WATER USE (2013 and 2016)



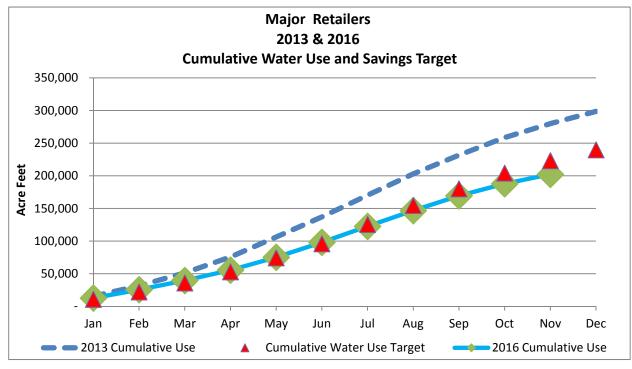
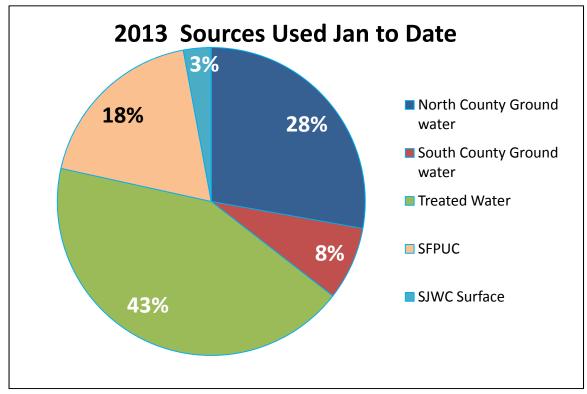
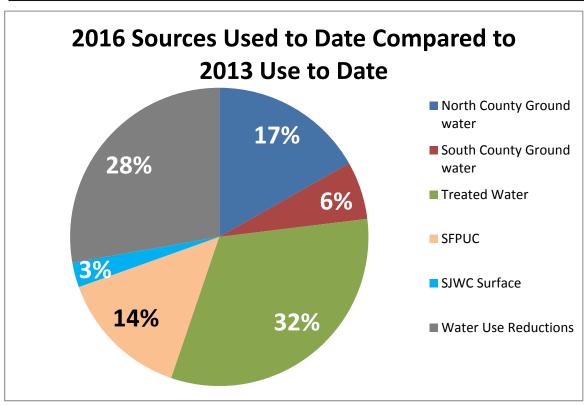


FIGURE 4: TOTAL RETAILERS WATER USE BY SOURCE (2013 and 2016)





^{*}current month data does not include Stanford current monthly water use- not available

TABLE 4: COUNTY WIDE RECYCLED WATER USE 2013 and 2016

2013	North County Recycled SBWRP WTP	South County Recycled SCRWA WTP	Palo Alto WTP	Sunnyvale WTP
Jan	552.70	95.4	184.5	58.2
Feb	688.70	113.2	177.7	52.0
Mar	819.1	140.7	177.9	61.4
Apr	1,203.0	195.4	194.9	60.6
May	1,574.3	205.7	189.5	51.6
Jun	1,718.3	245.3	180.7	53.6
Jul	1,985.0	284.5	222.1	62.8
Aug	1,824.8	230.5	263.5	57.6
Sep	1,629.6	157.1	247.5	56.0
Oct	1,412.0	115.8	245.4	53.7
Nov	993.1	113.7	218.7	53.7
Dec	894.9	142.2	220.5	37.2
Jan to Dec 2013 Totals	15,295.5	2,039.5	2,522.9	658.4
Jan to Current Month Totals	14,400.6	1,897.3	2,302.4	621.2

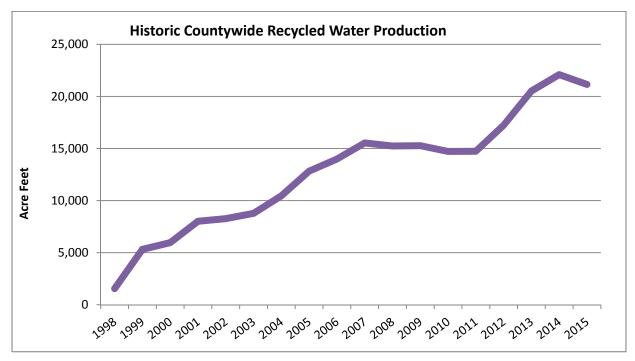
Waters use values are in acre feet

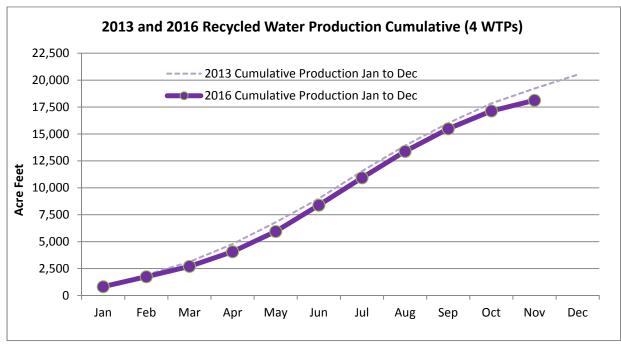
Red values are preliminary data, subject to change and validation

<u>2016</u>	North County Recycled SBWR WTP	South County Recycled SCRWA WTP	Palo Alto WTP	Sunnyvale WTP
Jan	431	118	254	15
Feb	542	117	242	24
Mar	507	136	292	25
Apr	773	183	354	52
May	1,187	204	377	114
Jun	1,673	233	405	128
Jul	1,898	236	409	0
Aug	1,725	261	399	70
Sep	1,491	166	329	113
Oct	1,159	141	337	18
Nov	582	116	266	26
Dec				
Jan to Current Totals	11,968	1,911	3,664	584
% of 2013 to DATE	83%	101%	159%	94%

Tables contain recycled water volumes produced and sold for re-use in the county. Data does not account for system losses prior to end use. (Therefore, 'use' and 'production' are interchangeable terms in these tables.)

FIGURE 5: COUNTY WIDE RECYCLED WATER USE 2013 and 2016





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Section 2. Retailers' Water Use and Savings

This section contains detailed water use data from 2013 and 2016, summarizes cumulative water use saving percent, and illustrates cumulative and monthly trends in water use and savings at the water retailer level. [Please see Section 5, Data Collection Methodology for more information]

TABLE 5: 2016 RETAILER CONSERVATION ACTIONS AND SAVINGS SUMMARY

Water Retailer	Call for Savings	Cumulative Water Use (AF)	Monthly Savings November 2016	Cumulative Savings Jan to November 2016
San Jose Water Co.	20%	97,124	34%	29%
Santa Clara (City)	20%	15,915	23%	21%
Sunnyvale	15%	15,423	30%	24%
San Jose Municipal	20%	14,792	32%	27%
California Water Service	20%	9,751	41%	32%
Palo Alto	10%	9,219	30%	27%
Mountain View	10%	8,159	32%	29%
Great Oaks	20%	8,349	33%	30%
Milpitas	20%	8,044	21%	20%
Gilroy	20%	6,553	27%	25%
Morgan Hill	20%	5,942	43%	29%
Purissima Hills Water	10%	1,488	53%	30%
Stanford	10%	1376 (Oct ¹)	36% (Oct ¹)	34% (Oct ¹)
Total		202,138	32%	28%

Values may not add up due to rounding

¹ Current month data not available as of 12/20/2016

TABLE 6: 2016 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water	Jan to	Jan to	Jan to	Jan to	Jan to May	Jan to June	<u>Jan to</u> July	Jan to Aug	Jan to Sept	Jan to Oct	Jan to Nov	Jan to Dec
Retailer Savings	<u>Jan</u>	<u>Feb</u>	Mar	<u>April</u>	-							<u>DCC</u>
San Jose Water Company	16%	17%	22%	27%	29%	29%	29%	29%	28%	29%	29%	
Santa Clara, city	19%	16%	18%	20%	23%	23%	22%	22%	20%	21%	21%	
Sunnyvale	14%	18%	21%	23%	27%	26%	26%	25%	23%	23%	24%	
San Jose Municipal Water	11%	16%	22%	26%	29%	28%	28%	28%	27%	27%	27%	
California Water Service	35%	33%	37%	39%	38%	35%	33%	31%	30%	31%	32%	
Palo Alto	24%	29%	27%	30%	31%	29%	27%	28%	26%	27%	27%	
Mountain View	30%	31%	28%	31%	34%	33%	32%	31%	29%	29%	29%	
Great Oaks	19%	20%	25%	29%	32%	30%	31%	30%	29%	29%	30%	
Milpitas	17%	18%	16%	18%	22%	21%	21%	21%	19%	20%	20%	
Gilroy	8%	11%	20%	25%	26%	27%	26%	26%	25%	25%	25%	
Morgan Hill	5%	13%	24%	31%	34%	31%	30%	28%	27%	28%	29%	
Purissima Hills Water	59%	45%	49%	40%	39%	32%	29%	29%	26%	29%	30%	
Stanford	34%	39%	36%	39%	38%	37%	35%	35%	34%	34%	1	
Combined Cumulative	18%	19%	23%	27%	29%	29%	28%	28%	27%	27%	28%	
Savings	16/6	15/0	23/0	21/0	25/0	25/6	26/0	20/0	21/0	27/0	20/0	
Month to Month	Jan to	Feb to	Mar	April	May	June	July to	Aug to	Sept	Oct to	Nov to	Dec
Water Retailer Savings	<u>Jan</u>	<u>Feb</u>	<u>to</u>	<u>to</u>	<u>to</u>	<u>to</u>	<u>July</u>	Aug	<u>to</u>	<u>Oct</u>	<u>Nov</u>	<u>to</u>
Can Jaca Water Company	16%	100/	Mar 210/	April 36%	May	June 2007	200/	200/	Sept 2000	220/	34%	<u>Dec</u>
San Jose Water Company		18%	31%		36%	28%	28%	28%	26%	33%	1	
Santa Clara (City of)	19%	12%	22%	26%	29%	23%	17%	25%	5%	27%	23%	
Sunnyvale	14%	22%	25%	28%	36%	22%	26%	20%	12%	25%	30%	
San Jose Municipal Water	11%	22%	31%	33%	38%	25%	29%	25%	19%	30%	32%	
California Water Service	35%	31%	44%	42%	37%	26%	24%	23%	24%	37%	41%	
Palo Alto	24%	34%	23%	37%	35%	19%	14%	34%	11%	35%	30%	
Mountain View	30%	32%	23%	35%	42%	27%	28%	27%	10%	34%	32%	
Great Oaks	19%	21%	33%	38%	37%	26%	31%	26%	26%	29%	33%	
Milpitas	17%	20%	12%	24%	31%	18%	22%	21%	5%	23%	21%	
Gilroy	8%	13%	34%	33%	31%	28%	23%	23%	21%	27%	27%	
Morgan Hill	5%	19%	38%	43%	41%	21%	27%	19%	22%	34%	43%	
Purissima Hills Water		3.00/	54%	22%	36%	11%	22%	25%	15%	45%	53%	
Tarissinia Tinis Water	59%	26%	34/0	22/0	3070	11/0					<u> </u>	
Stanford	34%	43%	31%	44%	38%	30%	25%	35%	29%	36%	1	

^{1.} Stanford data not available due to late month meter read by SFPUC

TABLE 7: 2015 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to	Jan to
Retailer Savings	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>April</u>	May	<u>June</u>	<u>July</u>	<u>Aug</u>	<u>Sept</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>
San Jose Water Company	-3%	1%	3%	10%	18%	22%	25%	27%	27%	27%	28%	28%
Santa Clara, city	2%	5%	4%	6%	11%	15%	16%	19%	18%	18%	19%	18%
Sunnyvale	-6%	7%	6%	12%	20%	23%	26%	27%	27%	26%	27%	26%
San Jose Municipal Water	-8%	2%	4%	11%	19%	22%	25%	26%	26%	26%	26%	26%
California Water Service	8%	11%	10%	15%	23%	27%	29%	31%	31%	32%	32%	33%
Palo Alto	10%	15%	12%	16%	25%	26%	27%	29%	29%	29%	29%	29%
Mountain View	0%	13%	10%	15%	22%	24%	25%	28%	28%	28%	28%	28%
Great Oaks	0%	5%	7%	13%	20%	24%	26%	28%	28%	29%	29%	29%
Milpitas	1%	6%	4%	8%	14%	16%	18%	20%	19%	19%	19%	18%
Gilroy	-5%	0%	5%	12%	18%	22%	25%	26%	26%	26%	27%	26%
Morgan Hill	-8%	-2%	6%	19%	24%	26%	30%	31%	31%	32%	33%	33%
Purissima Hills Water	-4%	14%	7%	21%	25%	29%	31%	31%	29%	27%	28%	29%
Stanford	-3%	6%	7%	13%	22%	24%	24%	26%	25%	26%	28%	28%
Combined Cumulative	-2%	4%	5%	11%	18%	22%	25%	26%	27%	27%	27 %	27%
Savings	-2/0	4/0	3/0	11/0	10/0	22/0	25/0	20/0	21/0	21/0	27 /0	21/0
					D 4	I	Ludiu Am	A	Carat	0-44-	None	_
Month to Month	Jan to	Feb to	Mar	<u>April</u>	May	<u>June</u>	July to	Aug to	<u>Sept</u>	Oct to	Nov to	<u>Dec</u>
Month to Month Water Retailer Savings	<u>Jan to</u> <u>Jan</u>	Feb to Feb	<u>to</u>	to	to	<u>to</u>	July to July	Aug to Aug	<u>to</u>	Oct to Oct	Nov to Nov	<u>to</u>
Water Retailer Savings	Jan	<u>Feb</u>	to Mar	to April	to May	to June	July	Aug	to Sept	<u>Oct</u>	Nov	<u>to</u> <u>Dec</u>
Water Retailer Savings San Jose Water Company	<u>Jan</u> -3%	<u>Feb</u> 5%	to Mar 7%	to April 25%	to May 36%	to June 35%	<u>July</u> 38%	Aug 36%	to Sept 31%	Oct 28%	Nov 33%	to Dec 30%
Water Retailer Savings San Jose Water Company Santa Clara (City of)	-3% 2%	5% 7%	<u>to</u> <u>Mar</u> 7% 3%	to April 25% 11%	10 May 36% 26%	to June 35% 29%	38% 20%	36% 33%	to Sept 31% 11%	28% 17%	33% 30%	16%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale	-3% 2% -6%	5% 7% 18%	7% 3% 4%	to April 25% 11% 27%	10 May 36% 26% 38%	35% 29% 36%	38% 20% 37%	36% 33% 36%	to Sept 31% 11% 25%	28% 17% 21%	33% 30% 29%	16% 20%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water	-3% 2% -6% -8%	5% 7% 18% 11%	7% 3% 4% 7%	to April 25% 11% 27% 24%	10 May 36% 26% 38% 39%	35% 29% 36% 33%	38% 20% 37% 35%	36% 33% 36% 34%	11% 25% 25%	28% 17% 21% 24%	33% 30% 29% 30%	16% 20% 21%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service	-3% -2% -6% -8% -8%	5% 7% 18% 11% 15%	7% 3% 4% 7% 8%	to April 25% 11% 27% 24% 26%	to May 36% 26% 38% 39% 40%	10 June 35% 29% 36% 33% 40%	38% 20% 37% 35% 39%	36% 33% 36% 34% 37%	to Sept 31% 11% 25% 25% 34%	28% 17% 21% 24% 36%	33% 30% 29% 30% 42%	16% 20% 21% 44%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto	-3% -2% -6% -8% 8% 10%	5% 7% 18% 11% 15% 19%	7% 3% 4% 7% 8% 6%	to April 25% 11% 27% 24% 26% 25%	to May 36% 26% 38% 39% 40% 46%	35% 29% 36% 33% 40% 31%	38% 20% 37% 35% 39% 31%	36% 33% 36% 34% 37% 38%	11% 25% 25% 34% 28%	28% 17% 21% 24% 36% 32%	33% 30% 29% 30% 42% 36%	16% 20% 21% 44% 26%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View	-3% -6% -8% 8% 10% -0%	5% 7% 18% 11% 15% 19% 24%	7% 3% 4% 7% 8% 6% 3%	to April 25% 11% 27% 24% 26% 25% 27%	to May 36% 26% 38% 39% 40% 46% 38%	10 June 35% 29% 36% 33% 40% 31% 33%	38% 20% 37% 35% 39% 31% 31%	36% 33% 36% 34% 37% 38% 41%	to Sept 31% 11% 25% 25% 34% 28% 25%	Oct 28% 17% 21% 24% 36% 32% 27%	33% 30% 29% 30% 42% 36% 37%	16% 20% 21% 44% 26%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks	-3% -6% -8% 8% 10% -0%	5% 7% 18% 11% 15% 19% 24% 10%	10% Mar 7% 3% 4% 7% 8% 6% 3% 10%	to April 25% 11% 27% 24% 26% 25% 27% 25%	to May 36% 26% 38% 39% 40% 46% 38% 38%	35% 29% 36% 33% 40% 31% 33% 37%	38% 20% 37% 35% 39% 31% 31% 36%	36% 33% 36% 34% 37% 38% 41% 35%	11% 25% 25% 34% 28% 25% 33%	28% 17% 21% 24% 36% 32% 27% 30%	33% 30% 29% 30% 42% 36% 37% 34%	16% 20% 21% 44% 26% 19% 27%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks Milpitas	-3% -2% -6% -8% 8% 10% 0% 1%	5% 7% 18% 11% 15% 19% 24% 10% 11%	7% 3% 4% 7% 8% 6% 3% 10% -1%	11% 25% 11% 27% 24% 26% 25% 27% 25% 17%	10 May 36% 26% 38% 39% 40% 46% 38% 38% 31%	35% 29% 36% 33% 40% 31% 33% 37% 24%	38% 20% 37% 35% 39% 31% 31% 36% 25%	36% 33% 36% 34% 37% 38% 41% 35% 32%	11% 25% 25% 34% 28% 25% 33% 13%	28% 17% 21% 24% 36% 32% 27% 30% 16%	33% 30% 29% 30% 42% 36% 37% 34% 23%	16% 20% 21% 44% 26% 19% 27%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks Milpitas Gilroy	-3% -2% -6% -8% 8% 10% 0% -0% 1% -5%	5% 7% 18% 11% 15% 19% 24% 10% 11% 5%	7% 3% 4% 7% 8% 6% 3% 10% -1% 13%	25% 11% 27% 24% 26% 25% 27% 25% 17% 24%	10 May 36% 26% 38% 39% 40% 46% 38% 38% 31% 34%	35% 29% 36% 33% 40% 31% 33% 37% 24% 33%	38% 20% 37% 35% 39% 31% 31% 36% 25% 35%	36% 33% 36% 34% 37% 38% 41% 35% 32% 32%	11% 25% 25% 34% 28% 25% 33% 13% 28%	28% 17% 21% 24% 36% 32% 27% 30% 16% 27%	33% 30% 29% 30% 42% 36% 37% 34% 23% 30%	16% 20% 21% 44% 26% 19% 27% 10%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks Milpitas Gilroy Morgan Hill	-3% -2% -6% -8% 8% 10% 0% 1% -5% -8%	5% 7% 18% 11% 15% 19% 24% 10% 11% 5% 3%	10% 10% 10% 10% 10% 11%	11% 25% 11% 27% 24% 26% 25% 27% 25% 17% 24% 39%	10 May 36% 26% 38% 39% 40% 46% 38% 31% 34% 35%	35% 29% 36% 33% 40% 31% 33% 37% 24% 33% 35%	38% 20% 37% 35% 39% 31% 31% 36% 25% 35% 42%	36% 33% 36% 34% 37% 38% 41% 35% 32% 32% 34%	11% 25% 25% 34% 28% 33% 13% 28% 36%	28% 17% 21% 24% 36% 32% 27% 30% 16% 27% 35%	33% 30% 29% 30% 42% 36% 37% 34% 23% 30% 46%	16% 20% 21% 44% 26% 19% 27% 10% 24% 38%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks Milpitas Gilroy Morgan Hill Purissima Hills Water	-3% -2% -6% -8% 8% 10% -0% -5% -8% -4%	5% 7% 18% 11% 15% 19% 24% 10% 11% 5% 3% 25%	10% 13% 10% 13% 17% 13% 17% -3%	11% 25% 11% 27% 24% 26% 25% 27% 25% 17% 24% 39% 40%	to May 36% 26% 38% 39% 40% 46% 38% 31% 34% 35% 37%	35% 29% 36% 33% 40% 31% 33% 37% 24% 33% 35% 40%	38% 20% 37% 35% 39% 31% 36% 25% 35% 42% 41%	36% 33% 36% 34% 37% 38% 41% 35% 32% 32% 34% 27%	11% 25% 25% 34% 28% 25% 33% 13% 28% 36% 19%	28% 17% 21% 24% 36% 32% 27% 30% 16% 27% 35% 8%	33% 30% 29% 30% 42% 36% 37% 34% 23% 30% 46% 37%	16% 20% 21% 44% 26% 19% 27% 10% 24% 38% 47%
Water Retailer Savings San Jose Water Company Santa Clara (City of) Sunnyvale San Jose Municipal Water California Water Service Palo Alto Mountain View Great Oaks Milpitas Gilroy Morgan Hill	-3% -2% -6% -8% 8% 10% 0% 1% -5% -8%	5% 7% 18% 11% 15% 19% 24% 10% 11% 5% 3%	10% 10% 10% 10% 10% 11%	11% 25% 11% 27% 24% 26% 25% 27% 25% 17% 24% 39%	10 May 36% 26% 38% 39% 40% 46% 38% 31% 34% 35%	35% 29% 36% 33% 40% 31% 33% 37% 24% 33% 35%	38% 20% 37% 35% 39% 31% 31% 36% 25% 35% 42%	36% 33% 36% 34% 37% 38% 41% 35% 32% 32% 34%	11% 25% 25% 34% 28% 33% 13% 28% 36%	28% 17% 21% 24% 36% 32% 27% 30% 16% 27% 35%	33% 30% 29% 30% 42% 36% 37% 34% 23% 30% 46%	16% 20% 21% 44% 26% 19% 27% 10% 24% 38%

TABLE 8: 2014 RETAILER CUMULATIVE SAVINGS SUMMARY

(Savings calculated from February 2014 to December 2014)

Cumulative Water Retailer Savings	Feb to Feb	Feb to Mar	Feb to April	Feb to May	Feb to June	Feb to July	Feb to Aug	Feb to Sept	Feb to Oct	Feb to Nov	Feb to Dec	Total Savings	Savings District Source	Saving S SFPUC Supply
San Jose Water Company	3%	%9	10%	10%	%6	10%	10%	11%	11%	12%	13%	13%	13%	N/A
Santa Clara (City of)	7%	%8	%6	%2	%8	%8	%8	%8	%8	%6	10%	10%	%6	16%
Sunnyvale	16%	15%	17%	15%	14%	14%	14%	13%	13%	13%	14%	14%	%L	22%
San Jose Municipal Water	15%	16%	18%	14%	12%	12%	12%	12%	12%	12%	13%	13%	%9	4%
California Water Service	15%	18%	19%	15%	13%	13%	13%	13%	14%	14%	16%	16%	16%	N/A
Palo Alto	32%	25%	16%	17%	16%	13%	15%	15%	15%	16%	16%	16%	N/A	16%
Mountain View	24%	18%	18%	17%	14%	14%	14%	14%	14%	15%	16%	16%	%9-	19%
Great Oaks	7%	11%	16%	15%	13%	14%	14%	15%	15%	16%	16%	16%	16%	N/A
Milpitas	11%	11%	11%	11%	10%	10%	11%	11%	11%	11%	11%	11%	-1%	16%
Gilroy	2%	11%	17%	14%	13%	12%	12%	13%	13%	14%	14%	14%	14%	N/A
Morgan Hill	-7%	%6	15%	16%	16%	16%	15%	15%	16%	18%	19%	19%	19%	N/A
Purissima Hills Water	45%	34%	78%	14%	14%	12%	14%	14%	14%	16%	16%	16%	N/A	16%
Stanford	24%	21%	15%	10%	10%	7%	8%	8%	%9	8%	7%	7%	N/A	7%
Total Cumulative Savings	%6	11%	13%	12%	11%	11%	11%	12%	12%	13%	13%	13%	11%	16%

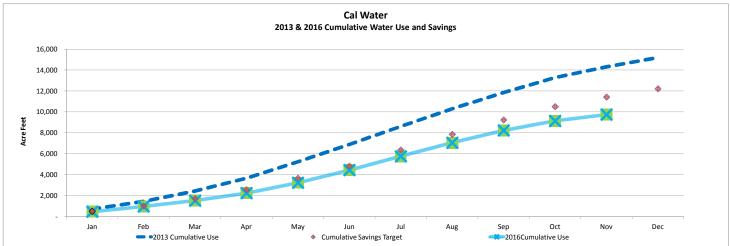
California Water Service Company

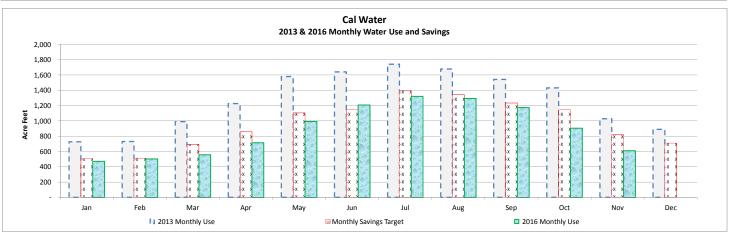
2013 and 2016 Water Use Compared to Target

					2013 and 2
<u>2013</u>	Groundwater	<u>Treated</u> <u>Water</u>	SFPUC	<u>Surface</u>	2013 Monthly Use
Jan	215.0	510.0	-	-	725.0
Feb	254.0	477.0	-	-	731.0
Mar	446.0	544.0	-	-	990.0
Apr	439.0	786.0	-	-	1,225.0
May	672.0	906.0	-	-	1,578.0
Jun	709.0	930.0	-	-	1,639.0
Jul	690.0	1,049.0	-	-	1,739.0
Aug	437.0	1,241.0	-	-	1,678.0
Sep	321.0	1,221.0	-	-	1,542.0
Oct	363.0	1,068.0	-	-	1,431.0
Nov	183.0	844.0	-	-	1,027.0
Dec	262.0	626.0	-	-	888.0
Jan to Current Month	4,546.0	9,576.0	-	-	14,305.0
January to December Total	4,991.0	10,202.0	-	-	15,193.0

2016	Groundwater	Treated Water	SFPUC	<u>Surface</u>	2016 Monthly Use
					•
Jan	264.0	208.0	-	-	472.0
Feb	288.0	216.0	-	-	504.0
Mar	260.0	298.0	-	-	558.0
Apr	200.0	514.0	-	-	714.0
May	124.0	868.0	-	-	992.0
Jun	107.0	1,101.0		-	1,208.0
Jul	126.0	1,195.0		-	1,321.0
Aug	123.0	1,171.0	-	-	1,294.0
Sep	74.0	1,100.0	-	-	1,174.0
Oct	244.0	661.0	-	-	905.0
Nov	339.0	270.0	-	-	609.0
Dec	-	-	-	-	-
Jan to Current Month	2,149.0	7,602.0	-	-	9,751.0
%Savings by Source of Supply	53%	21%			32%

Cumulative % Savings Jan to December
(+) = savings
35%
33%
37%
39%
38%
35%
33%
31%
30%
31%
32%
-





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Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013) Cumulative % Savings shows the target savings for all months combined at that period in time.

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target. N/A = Not Applicable

'-' Not Available



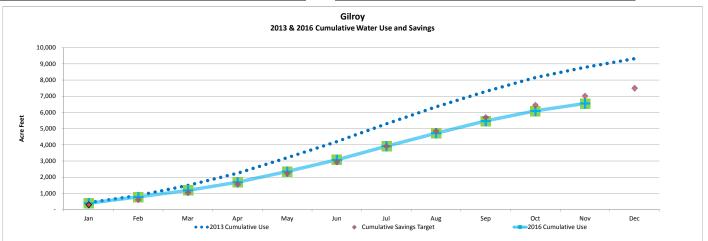
Gilroy

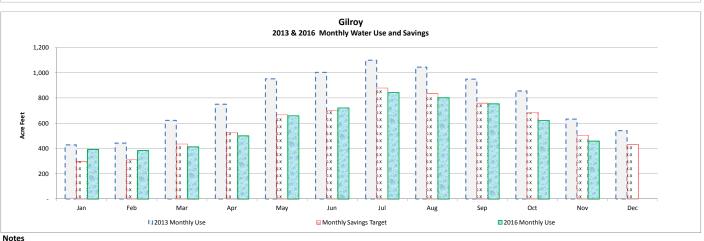
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use
Jan	428.0	_	-	-	428.0
Feb	443.0	-	-	-	443.0
Mar	623.0	-	-	-	623.0
Apr	751.0	-	-	-	751.0
May	952.0	-	-	-	952.0
Jun	1,002.6	-	-	-	1,002.6
Jul	1,099.5	-	-	-	1,099.5
Aug	1,045.0	-	-	-	1,045.0
Sep	950.0	-	-	-	950.0
Oct	856.0	-	-	-	856.0
Nov	632.0	-	1	1	632.0
Dec	541.0	-	-	-	541.0
Jan to Current Month Totals	8,782.1	-	-	-	8,782.1
January to December Total	9,323.1	-	-	-	9,323.1

2016	<u>Groundwater</u>	Treated Water	<u>SFPUC</u>	Surface Water	2016 Monthly Use
Jan	392.7	_	-	-	392.7
Feb	383.8	-	_	-	383.8
Mar	413.1	-	-	-	413.1
Apr	500.7	-	-	-	500.7
May	659.9	-	-	-	659.9
Jun	721.6	-	-	-	721.6
Jul	843.7	-	-	-	843.7
Aug	802.2	-	-	-	802.2
Sep	754.0	-	1	1	754.0
Oct	622.1	-	-	-	622.1
Nov	458.8	-	-	-	458.8
Dec	-	-	-	-	-
Jan to Current Month Totals	6,552.7		-	-	6,552.7
%Savings by Source of Supply	25%				25%

Cumulative % Savings Jan to December
(+) = savings
8%
11%
20%
25%
26%
27%
26%
26%
25%
25%
25%
-





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Cumulative % Savings shows the target savings for all months combined at that period in time.

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- Not Available



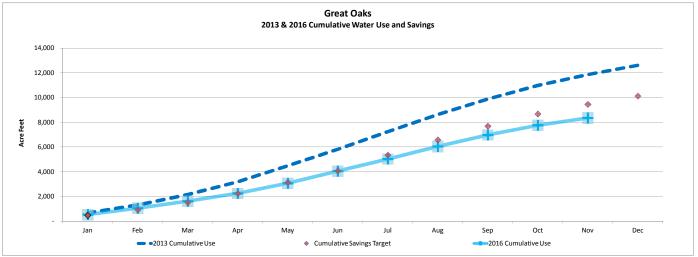
Great Oaks Water Company

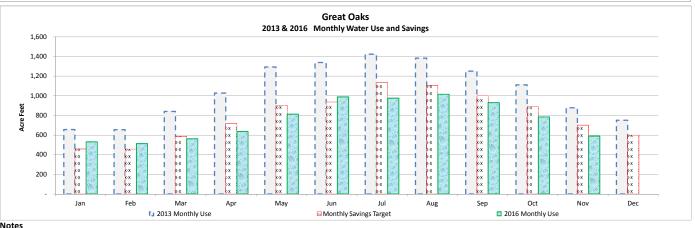
2013 and 2016 Water Use Compared to Target

<u>2013</u>	Ground water - Zone 2	Ground water - Zone 5	Treated Water	SFPUC	2013 Monthly Use
		,			1
Jan	240.8	415.2	-	1	656.0
Feb	277.6	376.7	-	-	654.3
Mar	430.5	409.7	-	-	840.2
Apr	652.3	376.3	-	-	1,028.6
May	901.6	391.4	-	-	1,293.0
Jun	970.8	368.9	-	-	1,339.7
Jul	1,056.8	366.9	-	1	1,423.7
Aug	1,040.8	342.0	-	1	1,382.8
Sep	882.6	368.9	-	-	1,251.5
Oct	751.0	359.7	-	-	1,110.7
Nov	534.4	343.3	-	-	877.7
Dec	444.5	306.2	-	1	750.7
Jan to Current Month Totals	7,739.2	4,119.0	-	-	11,858.2
January to December Total	8,183.7	4,425.2	-	-	12,608.9

<u>2016</u>	Ground water - Zone 2	Ground water - Zone 5	Treated Water	SFPUC	2016 Monthly Use
Jan	170.6	360.7	-	-	531.3
Feb	176.6	337.6	-	-	514.2
Mar	176.8	386.1	-	-	562.9
Apr	268.5	369.1	-	-	637.6
May	421.8	391.7	-	-	813.5
Jun	600.9	388.5	-	-	989.4
Jul	588.9	387.6	-	-	976.5
Aug	472.2	544.2	-	-	1,016.4
Sep	390.1	541.4	-	-	931.5
Oct	224.0	561.2	-	-	785.2
Nov	48.6	541.5	-	-	590.1
Dec	-	-	-	-	-
Jan to Current Month Totals	3,539.0	4,809.7	-	-	8,348.7
%Savings by Source of Supply	54%	-17%	-	-	30%

Cumulative % Savings Jan to December
(+) = savings
19%
20%
25%
29%
32%
30%
31%
30%
29%
29%
30%





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The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016 $\,$

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

 $\label{lem:cumulative gradients} \textbf{Cumulative \% Savings shows the target savings for all months combined at that period in time.}$

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.

N/A = Not Applicable

- Not Available



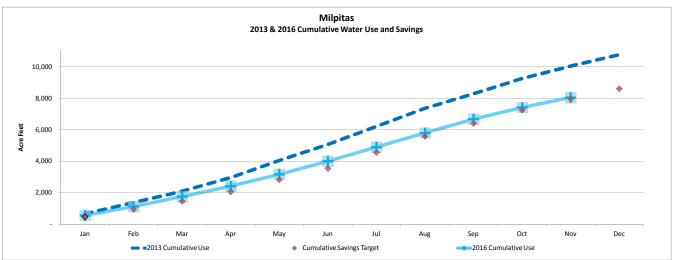
Milpitas, City

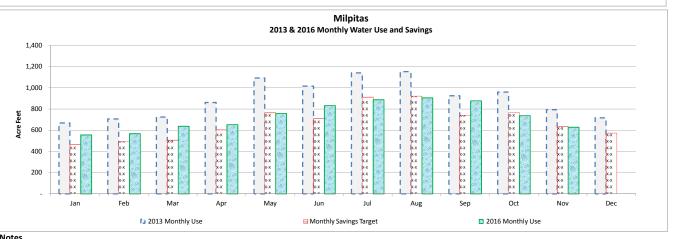
2013 and 2016 Water Use Compared to Target

<u>2013</u>	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use
Jan	1	235.0	433.0		668.0
Feb		228.0	478.0	-	706.0
Mar	_	263.0	461.0	_	724.0
Apr	-	288.0	574.0	-	862.0
May	-	323.0	770.0	-	1,093.0
Jun	-	310.0	705.0	-	1,015.0
Jul	-	377.0	764.0	-	1,141.0
Aug	-	298.0	855.0	-	1,153.0
Sep	-	182.0	743.0	-	925.0
Oct	-	228.0	731.0	-	959.0
Nov	-	253.0	541.0	-	794.0
Dec	-	265.0	452.0	-	717.0
Jan to Current Month Totals		2,985.0	7,055.0		10,040.0
January to December Total	-	3,250.0	7,507.0	-	10,757.0

<u>2016</u>	Groundwater	Treated Water	SFPUC	Surface Water	2016 Monthly Use
Jan	_	233.5	322.6	_	556.2
Feb	-	238.0	330.2	-	568.2
Mar	-	271.4	365.5	-	636.9
Apr	-	267.6	385.4	-	652.9
May	-	293.5	465.5	-	759.0
Jun	1	309.0	524.0	1	833.0
Jul	-	322.0	565.9	-	888.0
Aug	-	330.2	576.0	-	906.2
Sep	-	320.8	557.1	-	877.9
Oct	-	311.5	426.4	-	737.9
Nov	-	267.5	360.6	-	628.2
Dec	-	-	-	-	-
Jan to Current Month Totals	-	3,165.1	4,879.2	-	8,044.3
%Savings by Source of Supply	-	-6%	31%	-	20%

Cumulative % Savings Jan to December (+) = savings
17%
18%
16%
18%
22%
21%
21%
21%
19%
20%
20%
-





Notes

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Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.

January to March 2015 savings targets at 20% reductions compared to the same period in 2013, and the remaining months are at the March 24, 2015 call for 30% savings. N/A = Not Applicable

- Not Available

SFPUC - San Francisco Public Utilities Commission Water Sales. SFPUC Drought response is a call for voluntary 10% savings



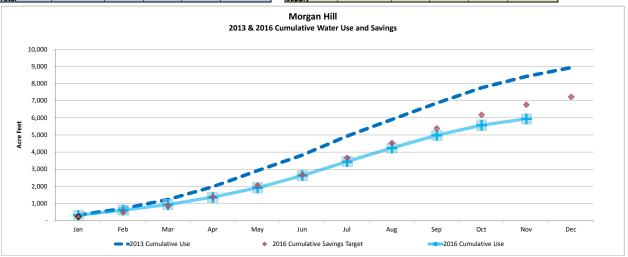
Morgan Hill, City

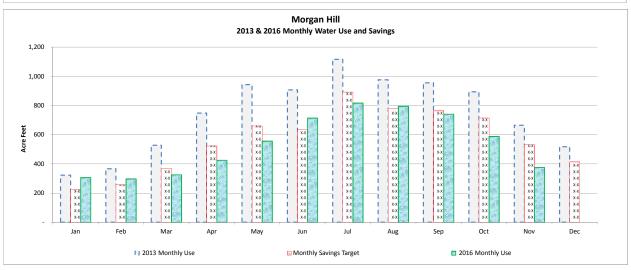
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	SFPUC	Other	2013 Monthly Use
Jan	323.0	-	-	-	323.0
Feb	367.0	-	-	-	367.0
Mar	528.0	-	-	-	528.0
Apr	748.0	-	-	-	748.0
May	943.0	-	-	-	943.0
Jun	907.0	-	-	-	907.0
Jul	1,116.0	-	-	-	1,116.0
Aug	976.0	-	-	-	976.0
Sep	955.0	-	-	-	955.0
Oct	894.0	-	-	-	894.0
Nov	665.0	-	-	-	665.0
Dec	518.0	-	-	-	518.0
Jan to Current Month Totals	8,422.0	-	-		8,422.0
January to December Total	8,940.0	-	-	-	8,940.0

_					
<u>2016</u>	Groundwater	Treated Water	<u>SFPUC</u>	<u>Other</u>	2016 Monthly Use
Jan	306.0	-	-	-	306.0
Feb	297.5	-	-	-	297.5
Mar	325.4	-	-	-	325.4
Apr	425.3	-	-	-	425.3
May	556.0	-	-	-	556.0
Jun	714.3	-	-	-	714.3
Jul	817.0	-	-	-	817.0
Aug	795.4	-	-	-	795.4
Sep	741.0	-	-	-	741.0
Oct	588.3	-	-	-	588.3
Nov	376.2	-	-	-	376.2
Dec	-	1	ı	1	-
Jan to Current Month Totals	5,942.3	-	-	-	5,942.3
%Savings by Source of Supply	29%	-	-	-	29%

Cumulative % Savings Jan to December
(+) = savings
5%
13%
24%
31%
34%
31%
30%
28%
27%
28%
29%
-





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- Not Available



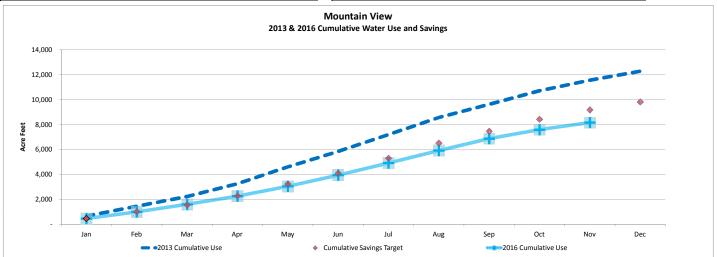
Mt. View

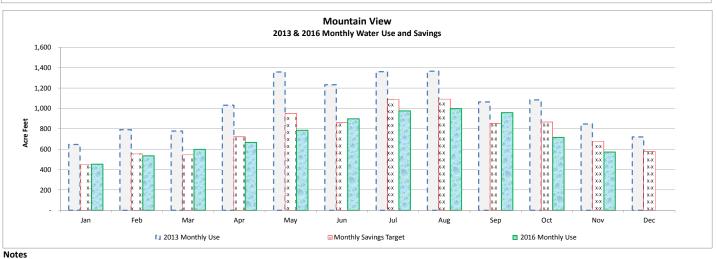
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	<u>SFPUC</u>	Surface Water	2013 Monthly Use
Jan	28.0	54.0	564.0	_	646.0
Feb	28.0	63.0	700.0	-	791.0
Mar	38.0	85.0	655.0	-	778.0
Apr	35.0	110.0	886.0	1	1,031.0
May	40.0	142.0	1,176.0	1	1,358.0
Jun	41.0	142.0	1,049.0	-	1,232.0
Jul	29.0	155.0	1,177.0	-	1,361.0
Aug	30.0	152.0	1,183.0	-	1,365.0
Sep	24.0	134.0	906.0	-	1,064.0
Oct	35.0	121.0	928.0	-	1,084.0
Nov	31.0	92.0	724.0	-	847.0
Dec	30.0	79.0	611.0	-	720.0
Jan to Current Month Totals	359.0	1,250.0	9,948.0	•	11,557.0
January to December Total	389.0	1,329.0	10,559.0	-	12,277.0

<u>2016</u>	Groundwater	Treated Water	<u>SFPUC</u>	Surface Water	2016 Monthly Use
Jan	5.6	32.7	415.7	_	454.0
Feb	5.6	47.4	482.3	-	535.4
Mar	7.0	50.7	540.4	-	598.1
Apr	8.5	64.1	593.6	-	666.1
May	12.5	89.0	684.3	-	785.8
Jun	12.1	104.0	782.5	-	898.6
Jul	12.7	112.8	850.3	-	975.8
Aug	12.9	108.8	876.2	-	997.9
Sep	12.6	100.1	846.6	-	959.3
Oct	9.3	78.6	628.7	=	716.6
Nov	12.6	56.6	502.6	-	571.8
Dec	-	-	-	-	-
Jan to Current Month Totals	111.4	844.7	7,203.3	-	8,159.4
%Savings by Source of Supply	69%	32%	28%		29%

Cumulative % Savings Jan to December
(+) = savings
30%
31%
28%
31%
34%
33%
32%
31%
29%
29%
29%
-





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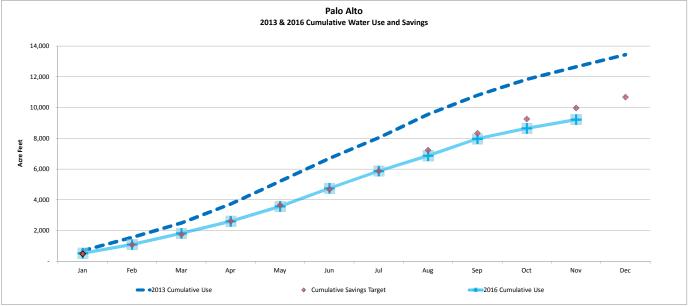
Palo Alto

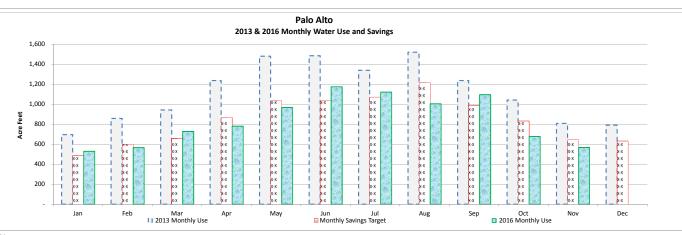
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	<u>SFPUC</u>	Other	2013 Monthly Use
Jan	-	-	696.0	-	696.0
Feb	-	-	857.5	-	857.5
Mar	-	-	943.0	-	943.0
Apr	-	-	1,237.3	-	1,237.3
May	-	-	1,479.7	-	1,479.7
Jun	-	-	1,484.3	-	1,484.3
Jul	-	-	1,340.2	-	1,340.2
Aug	-	-	1,520.7	-	1,520.7
Sep	-	-	1,237.3	-	1,237.3
Oct	-	-	1,041.1	-	1,041.1
Nov	-	-	807.9	-	807.9
Dec	-	-	791.2	-	791.2
Jan to Current Month Totals	-	-	12,644.7		12,644.7
January to December Total	-	-	13,435.9	-	13,435.9

<u>2016</u>	Groundwater	Treated Water	<u>SFPUC</u>	<u>Other</u>	2016 Monthly Use
Jan	-	-	529.6	-	529.6
Feb	-	-	566.3	-	566.3
Mar	-		728.2	-	728.2
Apr	-		781.4	-	781.4
May	-	-	968.3	-	968.3
Jun	-	-	1,175.6	-	1,175.6
Jul	-	-	1,121.9	-	1,121.9
Aug	-	-	1,004.7	-	1,004.7
Sep	-	-	1,096.0	-	1,096.0
Oct	-	-	678.3	-	678.3
Nov	-	-	568.4	-	568.4
Dec	-	-	-	-	-
Jan to Current Month Totals	,	-	9,218.7	-	9,218.7
%Savings by Source of Supply			27%		27%

Cumulative % Savings Jan to December
(+) = savings 24%
29%
27%
30%
31%
29%
27%
28%
26%
27%
27%
-





Notes

Current monthly water use data is preliminary and subject to change.

The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

 $\label{lem:cumulative % Savings shows the target savings for all months combined at that period in time.$

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target. N/A = Not Applicable

Not Applie
 Not Available

 $SFPUC-San\ Francisco\ Public\ Utilities\ Commission\ Water\ Sales.\ SFPUC\ Drought\ response\ is\ a\ call\ for\ voluntary\ 10\%\ savings$



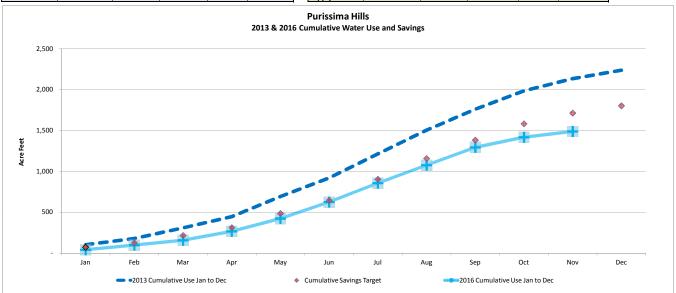
Purissima Hills

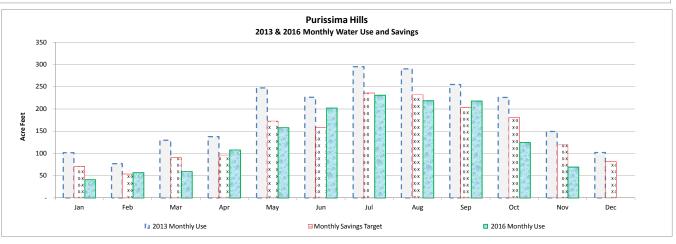
2013 and 2016 Water Use Compared to Target

					2013 a
2013	Groundwater	Treated Water	SFPUC	Other	2013 Monthly Use
Jan	-	-	101.5	-	101.5
Feb	-	-	77.0	-	77.0
Mar	-	-	129.6	-	129.6
Apr	-	-	138.0	-	138.0
May	-	-	247.3	-	247.3
Jun	-	-	226.4	-	226.4
Jul	-	-	295.0	-	295.0
Aug	-	-	290.0	-	290.0
Sep	-	-	255.2	-	255.2
Oct	-	-	225.9	-	225.9
Nov	-	-	149.3	-	149.3
Dec	-	-	102.2	-	102.2
Jan to Current Month Totals	-	-	2,135.3		2,135.3
January to December Total	-	-	2,237.5	1	2,237.5

<u>2016</u>	Groundwater	Treated Water	<u>SFPUC</u>	<u>Other</u>	2016 Monthly Use
Jan	-	-	41.2	-	41.2
Feb	-	1	57.1	-	57.1
Mar	-	1	59.6	-	59.6
Apr	-	-	108.0	-	108.0
May	-	1	158.2	-	158.2
Jun	-	1	202.3	-	202.3
Jul	-	1	231.0	-	231.0
Aug	-	1	218.7	-	218.7
Sep	-	ı	218.1	-	218.1
Oct	-	1	124.8	-	124.8
Nov	-	-	69.6	-	69.6
Dec	-	1	i	-	-
Jan to Current Month Totals	-	-	1,488.4	-	1,488.4
%Savings by Source of Supply			30%		30%

Cumulative % Savings Jan to December
(+) = savings
59%
45%
49%
40%
39%
32%
29%
29%
26%
29%
30%
-





Notes

Current monthly water use data is preliminary and subject to change.

 $The intitial \ water \ use \ reduction \ target \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ June \ 14, \ 2016, \ to \ 20\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ 30\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ 30\% \ for \ 2016 \ was \ 30\% \ for \ 2016 \ was \ 30\%, \ but \ was \ changed \ on \ 30\% \ for \ 2016 \ was \ 30\% \ for \ 30\%$

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

 $\label{lem:cumulative } \textbf{Cumulative \% Savings shows the target savings for all months combined at that period in time.} \\$

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target. N/A = Not Applicable

SFPUC - San Francisco Public Utilities Commission Water Sales. SFPUC Drought response is a call for voluntary 10% savings 2013 Data was changed after change in meter reading schedule (updated March 2016)



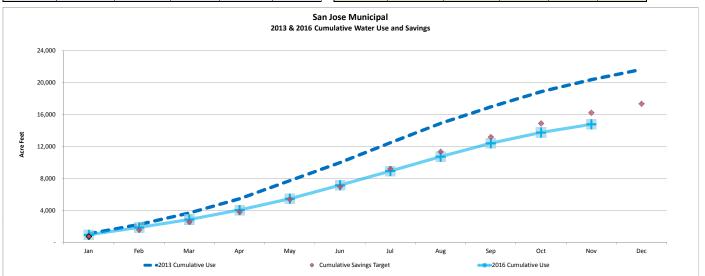
San Jose Municipal

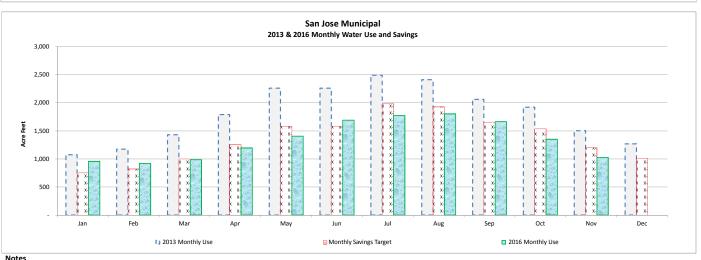
2013 and 2016 Water Use Compared to Target

2013	Ground Water Zone 2	Ground Water Zone 5	Treated Water	SFPUC	2013 Monthly Use
Jan	35.1	25.5	728.0	286.0	1,074.6
Feb	37.2	21.8	762.0	354.0	1,175.0
Mar	46.7	25.0	1,020.0	339.0	1,430.7
Apr	67.8	30.9	1,278.0	414.0	1,790.7
May	39.9	27.9	1,653.0	540.0	2,260.8
Jun	45.2	33.2	1,691.0	493.0	2,262.4
Jul	47.3	31.4	1,854.0	560.0	2,492.7
Aug	50.8	36.5	1,750.0	574.0	2,411.3
Sep	33.6	31.3	1,530.0	466.0	2,060.9
Oct	36.3	44.0	1,380.0	461.0	1,921.3
Nov	33.4	52.0	1,039.0	379.0	1,503.4
Dec	26.4	32.5	885.0	326.0	1,269.9
Jan to Current Month Totals	473.3	359.5	14,685.0	4,866.0	20,383.8
January to December Total	499.7	392.0	15,570.0	5,192.0	21,653.7

<u>2016</u>	Ground Water Zone 2	Ground Water Zone 5	Treated Water	SFPUC	2016 Monthly Use
Jan	35.6	25.0	598.0	299.8	958.4
Feb	17.0	22.4	574.6	307.9	921.9
Mar	18.2	24.2	605.0	340.5	987.9
Apr	37.1	19.7	736.6	404.2	1,197.6
May	17.6	14.0	412.2	964.4	1,408.2
Jun	75.3	25.0	1,149.6	442.6	1,692.5
Jul	45.8	11.2	1,236.2	481.0	1,774.2
Aug	52.6	36.3	1,211.1	504.9	1,804.8
Sep	49.6	25.9	1,094.5	496.6	1,666.6
Oct	39.2	16.3	915.2	381.1	1,351.7
Nov	11.2	16.4	676.0	324.1	1,027.7
Dec	-	-	-	-	-
Jan to Current Month Totals	399.2	236.4	9,208.9	4,947.1	14,791.5
%Savings by Source of Supply	16%	34%	37%	-2%	27%

Cumulative % Savings Jan to December
(+) = savings
11%
16%
22%
26%
29%
28%
28%
28%
27%
27%
27%
-





Notes

Current monthly water use data is preliminary and subject to change.

The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013) Cumulative % Savings shows the target savings for all months combined at that period in time.

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target. N/A = Not Applicable

Not Available

SFPUC - San Francisco Public Utilities Commission Water Sales. SFPUC 2014 Drought response is a call for voluntary 10% savings



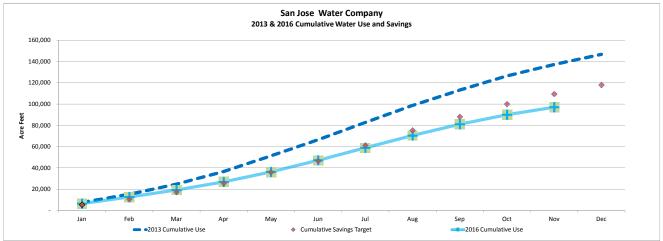
San Jose Water Company

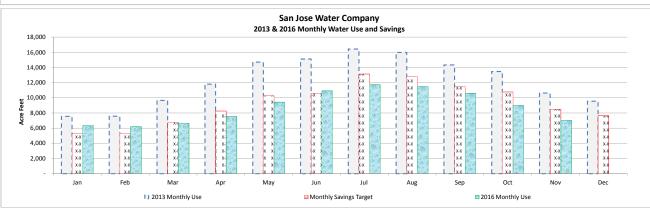
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use
Jan	1,731.0	4,016.1	-	1,807.1	7,554.2
Feb	1,865.6	4,328.1	-	1,384.8	7,578.6
Mar	3,807.7	5,241.9	-	594.9	9,644.4
Apr	4,293.0	7,082.4	-	422.2	11,797.6
May	5,375.9	9,033.4	-	298.6	14,708.0
Jun	5,643.2	8,959.1		516.2	15,118.5
Jul	7,198.0	8,610.9	-	616.3	16,425.2
Aug	6,693.0	8,694.2		584.1	15,971.2
Sep	5,451.9	8,352.7	-	530.6	14,335.2
Oct	5,575.0	7,394.2		501.5	13,470.6
Nov	4,971.4	5,323.4	-	326.0	10,620.8
Dec	5,145.5	4,205.5	-	202.8	9,553.7
Jan to Current Month Totals	52,605.6	77,036.5	•	7,582.2	137,224.3
January to December Total	57,751.1	81,242.0	-	7,785.0	146,778.1

2016	Groundwater	Treated Water	SFPUC	Surface Water	2016 Monthly Use
Jan	2,785.4	3,099.5	-	489.1	6,373.9
Feb	2,081.5	3,193.1	-	951.1	6,225.7
Mar	2,348.6	3,035.0	-	1,282.3	6,665.9
Apr	3,220.7	2,491.9	-	1,857.4	7,570.0
May	2,498.7	5,019.8	-	1,918.8	9,437.2
Jun	3,560.3	6,351.5	-	1,005.1	10,916.9
Jul	4,414.0	7,330.9	-	0.3	11,745.2
Aug	3,684.0	7,793.2	-	0.3	11,477.5
Sep	2,042.8	8,568.4	-	0.3	10,611.5
Oct	1,545.7	7,491.7	-	0.3	9,037.8
Nov	2,162.2	4,898.2	-	1.8	7,062.2
Dec	-	-	-	-	-
Jan to Current Month Totals	30,343.9	59,273.1	-	7,506.8	97,123.7
%Savings by Source of Supply	42%	23%	-	1%	29%

Cumulative % Savings Jan to December
(+) = savings
16%
17%
22%
27%
29%
29%
29%
29%
28%
29%
29%
-





Notes

Current monthly water use data is preliminary and subject to change.

The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016
Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

Cumulative % Savings shows the target savings for all months combined at that period in time.

N/A = Not Applicable
- Not Available



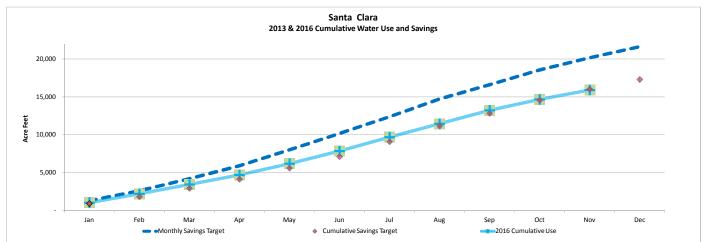
Santa Clara (City)

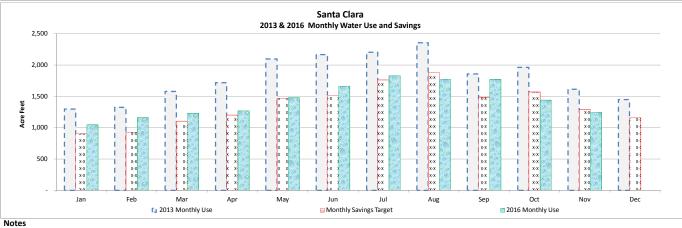
2013 and 2016 Water Use Compared to Target

2013	Groundwater	<u>Treated</u> <u>Water</u>	<u>SFPUC</u>	Other	2013 Monthly Use
	002.0	207.0	207.0		1 206 0
Jan	802.0	287.0	207.0	-	1,296.0
Feb	735.0	370.0	219.0	-	1,324.0
Mar	951.0	428.0	199.0	-	1,578.0
Apr	1,059.0	434.0	224.0	-	1,717.0
May	1,378.0	492.0	226.0	-	2,096.0
Jun	1,520.0	467.0	180.0	-	2,167.0
Jul	1,545.0	454.0	204.0	-	2,203.0
Aug	1,688.0	450.0	217.0	-	2,355.0
Sep	1,233.0	442.0	183.0	-	1,858.0
Oct	1,301.0	428.0	234.0	-	1,963.0
Nov	1,062.0	356.0	194.0	-	1,612.0
Dec	933.0	342.0	173.0	-	1,448.0
January to Current Month Totals	13,274.0	4,608.0	2,287.0	-	20,169.0
January to December Total	14,207.0	4,950.0	2,460.0	-	21,617.0

<u>2016</u>	Groundwater	<u>Treated</u> <u>Water</u>	SFPUC	<u>Other</u>	2016 Monthly Use
Jan	623.2	232.2	192.1	-	1,047.5
Feb	660.9	295.5	205.7	-	1,162.1
Mar	737.1	270.8	223.8	-	1,231.7
Apr	619.6	424.9	223.6	-	1,268.1
May	775.3	487.1	216.3	-	1,478.7
Jun	919.8	517.5	227.5	-	1,664.8
Jul	1,204.1	402.0	225.2	-	1,831.3
Aug	1,085.1	460.7	224.8	-	1,770.6
Sep	1,113.4	450.7	208.5	-	1,772.6
Oct	828.6	469.7	143.3	-	1,441.6
Nov	680.4	402.0	163.5	-	1,245.9
Dec	-	-	-	-	-
January to Current Month Totals	9,247.5	4,413.1	2,254.3	-	15,914.9
%Savings by Source of Supply	30%	4%	1%	-	21%

Cumulative % Savings Jan to December
(+) = savings
19%
16%
18%
20%
23%
23%
22%
22%
20%
21%
21%
-





- Inotes

Current monthly water use data is preliminary and subject to change.

The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

Cumulative % Savings shows the target savings for all months combined at that period in time.

Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.

January to March 2015 savings targets at 20% reductions compared to the same period in 2013, and the remaining months are at the March 24, 2015 call for 30% savings. N/A = Not Applicable

Not Available

SFPUC - San Francisco Public Utilities Commission Water Sales. SFPUC Drought response is a call for voluntary 10% savings



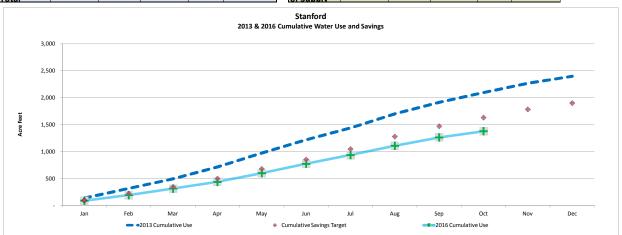
Stanford University

2013 and 2016 Water Use Compared to Target

<u>2013</u>	Groundwa ter	Treated Water	<u>SFPUC</u>	Other	2013 Monthly Use
Jan	-	-	138.0		138.0
Feb	-	-	180.0		180.0
Mar	-	1	176.0		176.0
Apr	-	-	220.0		220.0
May	-	-	260.0		260.0
Jun	-	-	246.0		246.0
Jul	-	-	218.0		218.0
Aug	-	-	262.0		262.0
Sep	-	-	215.0		215.0
Oct	-	-	180.0		180.0
Nov	-	-	172.0		172.0
Dec	-	-	130.0		130.0
Jan to Current Month	-	-	2,095.0	-	2,095.0
January to December	-	-	2,397.0	-	2,397.0

<u>2016</u>	Groundwa ter	Treated Water	SFPUC	<u>Other</u>	2016 Monthly Use
Jan	-	-	91.0	-	91.0
Feb	-	-	102.4	-	102.4
Mar	-	-	121.3	-	121.3
Apr	-	-	124.1	-	124.1
May	-	-	162.2	-	162.2
Jun	-	-	172.9	-	172.9
Jul	-	-	163.6	-	163.6
Aug	-	-	171.5	-	171.5
Sep	-	-	153.6	-	153.6
Oct	-	-	115.8	-	115.8
Nov*	-	-	-	-	-
Dec	-	-	-	-	-
Jan to Current Month	-	-	1,378.5	-	1,378.5
%Savings by Source of Supply			34%		34%

Cumulative %
Savings Jan to
<u>December</u>
(+) = savings
34%
39%
36%
39%
38%
37%
35%
35%
34%
34%
-
-





Current monthly water use data is preliminary and subject to change.

The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016 was 30%.

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

Cumulative % Savings shows the target savings for all months combined at that period in time. Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.

Potable Use only reported. SFPUC data does not match SFPUC billing records due to wheeling water to Stanford Hospital, which is in the Palo Alto service area

Variations in month to month savings: Stanford's billing cycles vary on a monthly and yearly basis, and are not consistent with the amount of calendar days in each month.

When normalized for number of days in billing cycles, decreased, Stanford reports Domestic Water Savings of above the percent saved in this report

* water use values are not available as of time of report printing

N/A = Not Applicable

- Not Available



As of 12/13/2016

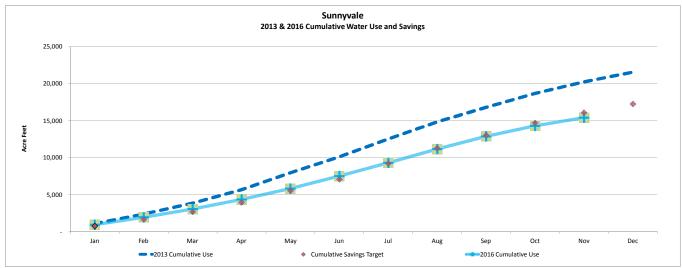
Sunnyvale, City

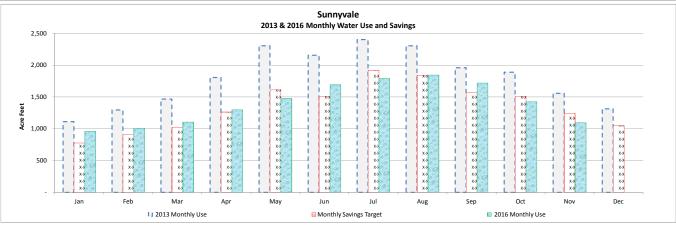
2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use
	,				
Jan	11.0	49.0	1,052.0	1	1,112.0
Feb	10.0	531.0	754.0	-	1,295.0
Mar	8.0	770.0	689.0	-	1,467.0
Apr	10.0	898.0	898.0	-	1,806.0
May	8.0	1,101.0	1,195.0	-	2,304.0
Jun	8.0	1,270.0	879.0	-	2,157.0
Jul	13.0	1,146.0	1,245.0	-	2,404.0
Aug	9.0	1,055.0	1,242.0	-	2,306.0
Sep	11.0	983.0	965.0	-	1,959.0
Oct	13.0	993.0	884.0	-	1,890.0
Nov	11.0	842.0	704.0	-	1,557.0
Dec	11.0	780.0	523.0	-	1,314.0
Jan to Current Month Totals	112.0	9,638.0	10,507.0	•	20,257.0
January to December Total	123.0	10,418.0	11,030.0	-	21,571.0

<u>2016</u>	Groundwater	<u>Treated</u> <u>Water</u>	SFPUC	Surface Water	2016 Monthly Use
Jan	9.3	385.2	566.3	-	960.9
Feb	8.6	472.3	529.0	-	1,009.9
Mar	14.1	419.4	673.5	-	1,106.9
Apr	12.3	550.5	735.0	-	1,297.8
May	14.0	685.0	776.5	-	1,475.5
Jun	16.2	731.6	944.5	-	1,692.2
Jul	13.1	766.2	1,008.6	-	1,787.9
Aug	17.0	759.0	1,071.0	-	1,847.0
Sep	13.7	693.3	1,014.6	-	1,721.6
Oct	14.6	633.0	779.0	-	1,426.5
Nov	10.9	528.5	557.9	-	1,097.3
Dec	-	-	-	-	
Jan to Current Month Totals	143.7	6,623.9	8,655.9	-	15,423.5
%Savings by Source of Supply	-28%	31%	18%		24%

Cumulative %
Savings Jan to
Dec based on
2013
(+) = savings
14%
18%
21%
23%
27%
26%
26%
25%
23%
23%
24%
-





Notes

Current monthly water use data is preliminary and subject to change.The intitial water use reduction target for 2016 was 30%, but was changed on June 14, 2016, to 20% for 2016

Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)

Cumulative % Savings shows the target savings for all months combined at that period in time. Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.

N/A = Not Applicable

SFPUC - San Francisco Public Utilities Commission Water Sales. SFPUC Drought response is a call for voluntary 10% savings



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Section 3. Water Conservation Measures

This section provides an overview of the water conservation measures taken by the district, municipalities and water retailers.

A. Santa Clara Valley Water District Measures

Since the district's call for water use reductions, the district has increased its water conservation outreach and education, and increased rebates for many of its programs, including:

- Landscape conversion rebate program: rebates were temporarily increased to \$2 per square foot (back to \$1 per square foot as of July 1, 2016).
- Irrigation hardware upgrades rebate program: several irrigation hardware rebates were increased.
- Graywater laundry to landscape rebate program: up to \$200 per residential site for properly connecting a clothes washer to a graywater irrigation system.
- Commercial rebate programs: several rebates were temporarily increased for commercial facilities, including the rebate for connectionless food steamers, commercial high-efficiency clothes washers and the custom/measured rebate (As of July 1, 2016, some rebates are back to the original amounts).

In addition, the district recently initiated a Safe, Clean Water and Natural Flood Protection Program to provide research grants to study and pilot-test new and innovative water conservation programs and efficient technologies. The program will provide \$1 million over a 10 year period.

To date, costs of \$18.7 million have been incurred for drought response activities. In addition, the board and the CEO have authorized an additional \$27.3 million in budget adjustments. The breakdown is as follows:

- Conservation Programs \$16.4 million
- Outreach \$2.4 million
- Imported Water \$8.5 million for purchased water and reverse flow consultant.

B. Water Retailer Measures

Local water retailers responded to the district's called for savings in various ways. Several retailers called for 20 percent reductions and activated or adopted water use restrictions. Most water retailers took additional action since August 2014 to respond to the State Board's Emergency Regulations that were adopted in July 2014. Nearly every water retailer increased their outreach and education efforts. In addition, water retailers implemented additional actions in response to the governor's April 1, 2015, Executive Order and the State Board's expanded drought-related emergency regulations adopted March 17, 2015. Two summits, one with the retailers, one with elected officials, have been held to facilitate increased water conservation and water use saving efforts and increase coordination to meet the 30 percent reduction target. A common theme between the two summits was that messaging and policy

Section 3. Water Conservation Measures

development needs to be consistent and coordinated. See Table 9 on next page for a summary of actions taken to date.

TABLE 9: WATER RETAILER WATER USE REDUCTION MEASURES THROUGH JULY 2016

Water Retailer	Retailer Call for Water Use Reduction	Retailer Water Use Restrictions
California Water Service	20 percent	Enacted Schedule 14.1 restrictions and allocations
Gilroy	20 percent	Permanent restrictions plus Stage 1
Great Oaks	20 percent	Enacted Schedule 14.1 restrictions and allocations
Milpitas	20 percent	Permanent restrictions plus additional measure, including allocations. Urgency Drought Ordinance adopted and in force.
Morgan Hill	20 percent	Permanent restrictions plus Level 1 Water Supply Shortage Condition.
Mountain View	10 percent	Permanent restrictions plus Stage 1.
Palo Alto	10 percent	Palo Alto has implemented all measures included in Stage I of its Water Shortage Contingency Plan
Purissima Hills Water	10 percent	Permanent restrictions
San Jose Municipal Water	20 percent	20 percent water conservation target plus 3-days a week landscape irrigation schedule
San Jose Water Company	20 percent	Enacted Schedule 14.1 restrictions and allocations. 3 days per week landscape irrigation schedule
Santa Clara	20 percent	Permanent restrictions
Stanford	10 percent	N/A
Sunnyvale	15 percent	Permanent restrictions plus Stage 1

C. Other Municipality Measures (non retailer cities and the County)

Some of the cities or towns in Santa Clara County do not have a municipal water system. They are served by investor owned water retail agencies. However, many of them are moving forward with their own actions to influence water use reductions in their communities.

TABLE 10: MUNICIPALITY NON-RETAILER ACTIONS

City (non municipal water retailer)	Action	<u>Outreach</u>
Campbell, City of	Drought Ordinance updated to include enforcement provisions and drought stages. Calling for 20 percent.	Water saving tips on website and in city newsletter.
Saratoga, City of	Drought Resolution calls for 20 percent. Updated Water Efficient Landscape Ordinance.	Water saving tips on website, with links to SJWC and SCVWD water conservation and rebate programs.
Los Altos, City of	Drought Resolution calls for 32 percent.	Resolution includes voluntary measures consistent with model ordinance
Los Altos Hills, Town of	Water efficient landscaping regulations in place. Environmental Initiatives Committee reviewing potential additional water saving measures.	Support SCVWD and retailer efforts. Water conservation information on Town website.
Los Gatos, Town of	Drought Ordinance adopted and in force, calls for 20 percent.	Water saving tips and information on SCVWD water conservation rebate programs on website.
Cupertino	Drought Ordinance adopted and in force. Resolution calls for 30 percent.	Drought Resources page on city website, banners with watering schedule and drought messages in City parks, drought signs on City lawns. Matching turf removal rebate.
Monte Sereno, City of	Water conservation and landscaping regulations in place.	City Council received information detailing SJW's Schedule 14.1 restrictions.

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Section 4. Drought Response Strategies

The district's comprehensive drought response is being implemented through fifteen strategies grouped into four general categories: (A) water supply and operations; (B) water use reduction; (C) drought response opportunities; and (D) administrative and financial management.

A. Water Supply and Operations

1. Secure imported water supplies.

This strategy includes working with state and federal project operators: California Department of Water Resources (DWR) and U.S. Bureau of Reclamation (Reclamation), and contractors of the State Water Project (SWP) and Central Valley Project (CVP), to secure the district's 2015 contract carryover supplies and 2016 contract allocations. It also includes supporting initiatives to control Delta salinity; providing for return of water from the Semitropic Water Bank; determining the availability of supplemental water transfers and imported water carryover for 2016; and coordinating with San Francisco Public Utilities Commission (SFPUC) on drought impacts to the Hetch-Hetchy Project.

2. Manage surface water and groundwater supplies.

To maximize water supply reliability and protect groundwater, this strategy optimizes distribution of limited local and imported supplies, including deliveries to the three water treatment plants, operation of district reservoirs and the groundwater recharge system, and deliveries to untreated surface water users. Given current water supply conditions, ongoing communication is required with regulatory agencies and other stakeholders regarding changing conditions in reservoirs, creeks and recharge ponds, as well as working with untreated surface water customers to establish alternate sources of supply.

3. Optimize treated water quality and availability.

This strategy focuses on optimizing treatment plant operations and source water supplies to meet drinking water quality and reliability objectives, in coordination with the district's retail treated water contractors. It includes continuing to meet treated water quality objectives despite drought-induced water quality conditions in the Delta this year. This strategy also includes working with SFPUC to use the Hetch-Hetchy Intertie when necessary to meet treated water schedules.

B. Water Use Reduction

4. Reduce 2016 water use by 20 percent compared to 2013 water use

This strategy includes promoting short-term and long-term actions to meet the 20 percent water use reduction target called for by the Board on June 14, 2016, as well as tracking progress towards meeting that target. Activities include promoting the district's water conservation programs; coordinating with retail water agencies,

Drought Response Strategies

municipalities and the County of Santa Clara on drought response ordinances and programs; and implementing a public outreach and education campaign.

5. Ensure that district facilities set a model for water conservation.

Many water conservation measures have been implemented at district facilities in past years, including low flow toilets, dual flush valves in high use areas, low flow aerators on faucets in restrooms and break areas, low flow devices in showers, drought tolerant landscaping and/or native vegetation, and Calsense intelligent irrigation controllers for landscaping. In 2013, the district reduced water use by 11 percent (10.8 million gallons) compared to 2012 (12.1 million gallons). In 2015, district facilities used 43 percent less water than in 2013.

6. Support customers and key stakeholders to minimize adverse drought impacts.

This strategy includes providing assistance to retail water agencies for their outreach, operations, and conservation programs. The district meets regularly with the Water Retailers and subcommittees (Water Supply, Treated Water, Water Quality, Groundwater, Conservation, Communication and Ad Hoc Drought Response Subcommittees). Assistance is also being provided to surface water customers, agricultural water users, municipalities, and others as they implement drought response. The Landscape Committee is convened to discuss drought response as it affects landscape businesses. This strategy includes tracking and reporting customer and stakeholder requests.

C. Drought Response Opportunities

7. Leverage community awareness to advance long-term conservation measures.

This strategy includes measures to increase participation in the district's long-term water conservation programs. It also identifies, evaluates and supports new innovative conservation measures, including Safe Clean Water (SCW) Water Conservation Research Grant efforts, which are expected to be implemented in calendar year 2016. Staff is also investigating opportunities for advancing sustainable, long-term savings through land use initiatives, where feasible.

8. Accelerate recycled water program development and implementation.

The current drought has raised interest in expediting implementation of both non-potable and potable reuse components of the district's long-term water supply plans by existing and potential recycled water partners, legislators, water users and others. Staff is identifying and preparing plans for high-priority recycled/purified water projects (up to 45,000 acre-feet per year) to help alleviate water supply shortages if the current drought continues; pursuing regulatory proposals to provide for safe implementation of indirect and direct potable reuse projects; and completing master planning of all recycled water efforts. Other aspects of this strategy include support and pursuit of legislative proposals to streamline the implementation of recycled water projects and provide potential funding.

Drought Response Strategies

9. Leverage opportunity to maintain uniquely accessible district facilities.

During the more severe times within the drought, many District facilities were more accessible than normal for inspections and maintenance, given the limited surface water in District reservoirs and limited raw water operations. For example, some groundwater recharge ponds that have been in continuous service for decades were drained, providing opportunity for cleaning and refurbishment. This strategy took advantage of unique conditions in 2014 and 2015 to expedite work and advance district asset management.

10. Leverage opportunity to further development of the district's workforce.

Effective drought response requires reassignment of staff resources to meet current needs, and this reassignment also creates opportunity for staff to gain new knowledge, skills and abilities. This strategy includes establishing processes for fair and expedited reassignment of staff resources to assist with implementation of drought response so that the district is better able to serve the public this year and in future years through workforce development.

11. Advance community knowledge, awareness, and understanding of the water supply system and services provided by the district.

This strategy includes efforts to expand outreach communication and engagement with the general public and working even more closely with media to convey drought and water conservation messages. This also provides an opportunity to expand outreach to key stakeholders (e.g., city councils) and regional groups.

D. Administrative and Financial Management

12. Secure Federal and State legislative support to offset drought impacts and accelerate conservation and recycling programs.

Staff is tracking a number of State and federal legislative initiatives aimed at providing drought relief and funding to offset costs of drought response and accelerate water supply and water use efficiency projects. This strategy focuses on providing input to legislators and implementing agencies on drought impacts and needs, as well as grant application requirements to maximize funding opportunities for district and customer projects and programs. The strategy also includes pursuing funding and reimbursements for district projects and programs and for collaborative opportunities that assist customers with offsetting financial impacts of the drought.

13. Leverage Emergency Operations Center (EOC) to assist in supporting drought efforts.

Soon after the Governor's January 17, 2014, Declaration of Drought Emergency, the district activated its EOC at Level 1 to facilitate response to drought-status inquiries from the State Operations Center (SOC), Coastal Regional Operations Center (REOC) and the local Santa Clara County Operational Area (OA). Emergency resource requests may be requested through the EOC, as determined by the district's EOC Director, and the EOC also helps track

Drought Response Strategies

drought-related costs for potential reimbursement. The EOC communication structure provides opportunity for additional outreach to policy and staff representatives of local municipalities, the county and emergency response providers about the need to achieve the 30 percent water use reduction target and to promote water conservation.

14. Adjust district resource allocations necessary to respond to drought.

This strategy includes identifying, tracking and processing budget adjustments and other adjustments of resources as needed to support overall implementation of drought response. In addition to staff resource adjustments discussed in Strategy #10, drought response is expected to include increased/adjusted budgets for an effective water use reduction campaign, additional pumping and water treatment costs, extraordinary maintenance projects, and supplemental imported water. The strategy includes clearly identifying the schedule impacts and other impacts of these resource adjustments as non-drought-related work is delayed or removed from project work plans.

15. Support the Board of Directors.

This strategy includes ensuring that the Board is provided timely and accurate information on current water supply conditions and drought response to support their efforts and linkages to the community. This strategy includes support for the Board's Ad Hoc Water Conservation Committee and Ad Hoc Recycled Water Committee to discuss drought-related opportunities to advance these important programs. It also includes ensuring that Board advisory committees are informed of current water supply, drought response measures, and implementation of the 2016 water use reduction campaign. Board updates are provided monthly on current water supply and drought response, including progress toward achieving the 20 percent water use reduction target.

Section 5. Data Collection Methodology

This section describes how water use data is collected by the district for the monthly drought response status report.

A. Water Use Data Disclaimer

Due to the need to communicate retailer water use data and savings progress in a timely manner, water use data in this report is currently being self reported by the retailer and is subject to further QA/QC and verification, may not match district billing records and is therefore subject to change. The intent of this report is to illustrate a general month by month and cumulative trend in water use and savings efforts toward the goal of a 20 percent reduction in water use compared to the same period in 2013. Below is how the district typically would collect and store water use data.

B. Treated Water Data

The district measures the volume of treated water delivered to its treated water customers (major water retailers). Monthly treated water deliveries are measured by meters (scheduled, contract, non-contract, and total delivered) for each and all water retailers (contractors). Meters are recalibrated/maintained regularly and may error up to 2 percent. Otherwise, the water use values represent actual billed amounts. For this report, treated water data is being reported by retailers.

C. Groundwater Data

The groundwater data collection and reporting process includes sending a water production statement to the customer for them to complete and report their water use. Once the completed production statement data is reviewed and accepted by the district, the district considers the data to be validated. This process which was developed in consideration of the requirements of the District Act, results in at least a 6 week delay in groundwater production reporting. For this report, groundwater data is being reported by retailers.

D. SFPUC Water Data

The San Francisco Public Utilities Commission (SFPUC) has eight common retail water customers with the district. SFPUC reports monthly water use directly to the district (historically that data was provided to BAWSCA, who in turn provided it to the district). Five of the common customers have their metered deliveries measures by SFPUC at the beginning of the month. Two of the customers (Stanford and Palo Alto) have their meters read on the 18th or 19th, and therefore their monthly data is split between two months. For the purposes of this report, water use for the month, will be that water used as measured by the following month (i.e. March water use is water use measured in April). It should be noted that the SFPUC provides monthly billing reports labeled as Monthly Water Sales. That data contains water sold and used in the previous month (i.e. March Water Sales report contains February use data for the

Data Collection Methodology

many of the customers, including the five common customers whose meters are read on the first of March, for instance).

For this report, groundwater data is being reported by retailers.

E. Surface Water Data

For the purpose of this report, water use data represents use by large water retailers and does not include surface water deliveries by the district to its non-potable surface water customers. The only surface water use included in this report is from San Jose Water Company, which has surface water rights. San Jose Water Company has its own water treatment plant for their surface water.

F. Recycled Water Use

Historically, recycled water use has been tracked in-county by sales at the treatment plants. However, for the purposes of this report, an effort is being made to collect this data at the water retailer level. This requires even more coordination and participation with the recycled water retailers. Many of the water retailers do not read their meters monthly and therefore their recycled water use is not reported in this monthly report. It is important to know how county water savings may be accommodated by increases in water use. If the data can be collected monthly it will be reported as such, otherwise it will be reported in the semiannual and annual reports, as available.



Santa Clara Valley Water District

Santa Clara Valley Water District 5750 Almaden Expressway, San Jose, CA 95118-3686 Phone: (408) 265-2600 Fax: (408) 266-0271 www.valleywater.org

Water Tracker



A monthly assessment of trends in water supply and use for Santa Clara County, California

Outlook as of January 1, 2017

Santa Clara County residents and businesses reduced water use by 32% in November 2016 compared to November 2013. This brings the cumulative 2016 water savings through November to 28% compared to the same period of 2013. Realizing parts of the state were better off than others in terms of water supply, the State Water Resources Control Board adopted an updated Emergency Regulation in May that allowed water retailers throughout the state to determine their individual conservation standards based on local conditions.

At its June 14 meeting, the District's Board of Directors (Board) lowered its water use reduction target to 20% for the period extending through January 2017, but emphasized that residents should continue their efforts to conserve in this ongoing drought. The Board also called for local water providers to continue to institute mandatory measures, as needed, to reach the 20% target, and called for restrictions on watering schedules to a maximum of three times a week, up from the two day a week schedule most areas of the county have had in place since the spring of 2015.

Groundwater recharge in 2016 was greater than in normal years and preliminary water supply analysis shows that 2017 recharge should meet or exceed normal year recharge.

Weather



Rainfall in San Jose

- Month of December = 1.49 inches
- Rainfall year total = 4.13 inches or 80% of average to date (Rainfall year is July 1 to June 30)
- January 3 Northern Sierra snowpack was 68% of normal for this date

Local Reservoirs



- Total January 1 storage = 74,498 acre-feet
 - » 95% of 20-year average for that date
 - » 44% of total capacity
 - » 61% of restricted capacity (169,009 acre-feet total storage capacity limited by seismic restrictions to 122,924 acre-feet)
- Approximately 254 acre-feet of imported water delivered into local reservoirs during December 2016
- Total estimated releases to streams (local and imported water) during December was 7,320 acre-feet

Groundwater



 Groundwater (GW) Storage: Estimated end of 2016 storage was within the lower range of Stage 1 (Normal) of the Water Shortage Contingency Plan

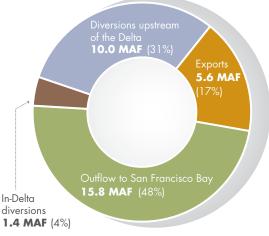
	Santa Clara Subbasin		Llagas Subbasin
	Santa Clara Plain	Coyote Valley	
December managed recharge estimate (AF)	6,700	900	1,400
January to December managed recharge estimate (AF)	103,300	11,300	26,300
January to December managed recharge, % of 5-year avg.	242%	108%	128%
November pumping estimate (AF)	3,700	900	3,700
January to November pumping estimate (AF)	51,300	10,200	38,200
January to November pumping, % of 5-year average	65%	101%	95%
GW index well level compared to last December	Increase	Increase	Increase

Imported Water



- 2017 State Water Project (SWP) and Central Valley Project (CVP) allocations:
 - » 2017 SWP allocation: 45% = 45,000 acre-feet announced on December 21, 2016
 - » 2017 CVP allocations: A 2017 CVP allocation has not yet been identified
- Reservoir storage information, as of January 3, 2017:
 - » Shasta Reservoir at 73% of capacity (118% of average for this date)
 - » Oroville Reservoir at 56% of capacity (91% of average for this date)
 - » San Luis Reservoir at 62% of capacity (90% of average for this date)
- District's Semitropic groundwater bank reserves: An estimated 190,339 acre-feet as of January 3, 2017
- Estimated SFPUC deliveries to Santa Clara County:
 - » Month of December = 2,787 acre-feet
 - » 2016 Total to Date = 43,509 acre-feet
 - » Five-year average is 48,700 acre-feet





Treated Water



- Below average demands of 5,990 acre-feet (estimated) delivered in December
- This total is 93% of the five-year average for the month of December
- Year-to-date = 97,654 acre-feet or 85% of the five-year average

Conserved Water



- Saved 69,000 acre-feet in FY16 from long-term program (baseline year is 1992)
- Long-term program goal is to save nearly 72,000 acre-feet in FY17
- The Board has called for a 20% reduction and a limit of three days per week for irrigation of ornamental landscape with potable water
- Achieved a 28% reduction in water use through the first eleven months of 2016, compared to 2013

Recycled Water



- Estimated December 2016 production = 700 acre-feet
- Estimated 2016 through December = 18,870 acre-feet or 99% of the five-year average
- Silicon Valley Advanced Water Purification Center produced an estimated 4.3 billion gallons (13,200 acre-feet) of purified recycled water since March 25, 2014. The purified water is blended with existing tertiary recycled water for South Bay Water Recycling Program's customers



Groundwater Condition REPORT | SANTA CLARA COUNTY

January 2017

 Groundwater Storage: Total estimated storage at the end of 2016 was within the lower range of Stage 1 (Normal) of the District's Water Shortage Contingency Plan.

Santa Clara Plain:

- The December managed recharge estimate is 6,700 acre-feet. The year-to-date managed recharge estimate is 103,300 acre-feet, or 242% of the five-year average.
- The November groundwater pumping estimate is 3,700 acre-feet.
 Estimated groundwater pumping between January and November is 51,300 acre-feet, or 65% of the five-year average.
- The groundwater level in the Santa Clara Plain (San Jose) index well is about 19 feet higher than last December and 19 feet higher than the fiveyear average.

Coyote Valley:

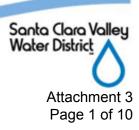
- The December managed recharge estimate is 900 acre-feet. The year-todate managed recharge estimate is 11,300 acre-feet, or 108% of the fiveyear average.
- The November groundwater pumping estimate is 900 acre-feet. Estimated groundwater pumping between January and November is 10,200 acrefeet, or 101% of the five-year average.
- The groundwater level in the Coyote Valley index well is about 14 feet higher than last December and 11 feet higher than the five-year average.

Llagas Subbasin:

- The December managed recharge estimate is 1,400 acre-feet. The year-to-date managed recharge estimate is 26,300 acre-feet, or 128% of the five-year average.
- The November groundwater pumping estimate is 3,700 acre-feet.
 Estimated groundwater pumping between January and November is 38,200 acre-feet, or 95% of the five-year average.
- The groundwater level in the Llagas Subbasin (San Martin) index well is about 36 feet higher than last December and 17 feet higher than the fiveyear average.

Contact Us For questions, contact

Bassam Kassab at (408) 630–2091



Groundwater Recharge

The estimated managed recharge for December 2016 is higher than the average of the last five years (2011-2015) for the Santa Clara Plain and Coyote Valley and lower for Llagas Subbasin. Managed recharge is dependent on a number of factors, including water availability, regulatory requirements, and facility maintenance schedules. Figures 1, 2, and 3 compare monthly managed recharge through December 2016 to the five-year average.

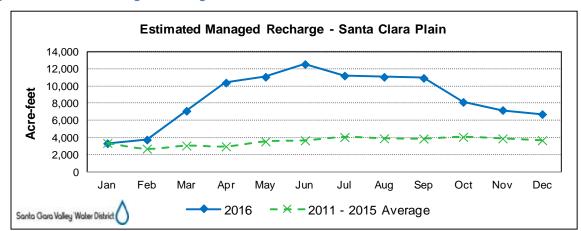


Figure 1 - Estimated Managed Recharge in the Santa Clara Plain



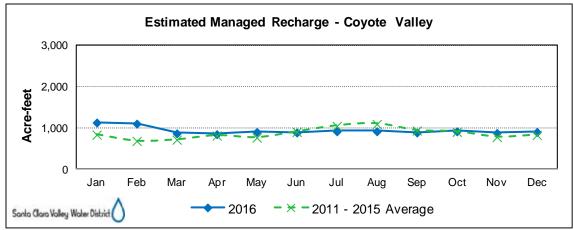
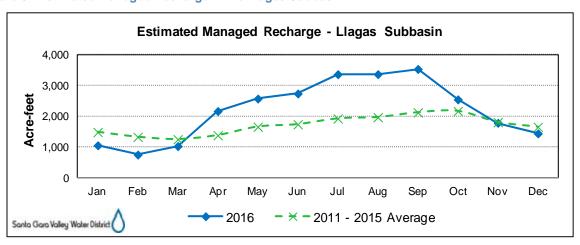


Figure 3 - Estimated Managed Recharge in the Llagas Subbasin



Groundwater Pumping

The estimated pumping for November 2016 (the most recent month with pumping data available from retailers) is lower than the average of the last five years (2011-2015) for the Santa Clara Plain and higher for Coyote Valley and Llagas Subbasin. Figures 4, 5, and 6 compare monthly estimated groundwater pumping through November 2016 to the five-year average.

Figure 4 – Estimated Santa Clara Plain Pumping

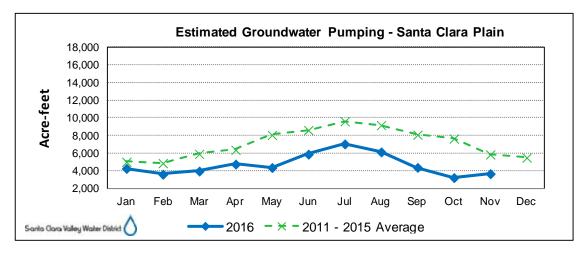


Figure 5 – Estimated Coyote Valley Pumping

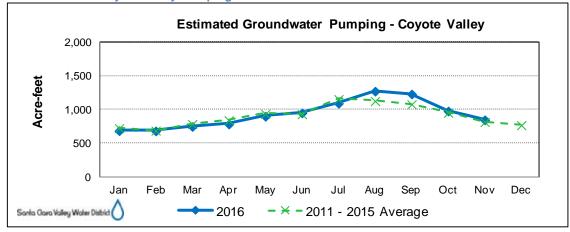
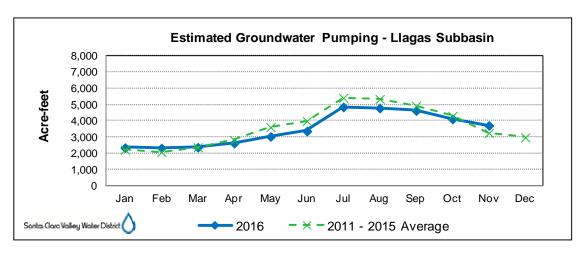


Figure 6 - Estimated Llagas Subbasin Pumping



Groundwater Levels

Groundwater levels at selected monitoring wells (Figure 7) are compared to the groundwater levels of December 1987 (a dry year), December 2004 (a normal year), and the five-year average of December measurements for 2011-2015. This information is presented in individual well groundwater hydrographs in Figures 8 through 18.

December 2016 groundwater levels were higher than November levels in five index wells, lower in three wells, and about the same in three wells. From December 2015 to December 2016, all 11 wells showed water level increases ranging from 7 to 44 feet. The December 2016 levels were higher than December 2004 levels by 1 to 18 feet in 10 wells and one well lacks 2004 data. December 2016 levels were higher than the five-year average of December measurements in all 11 wells by 5 to 39 feet. December 2016 groundwater levels were higher than December 1987 levels in 10 index wells and lower in one well.

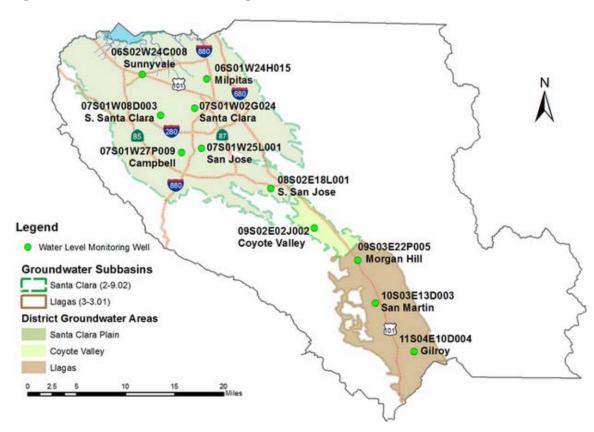


Figure 7 - Location of Selected Monitoring Wells

Figure 8 - Milpitas Well Hydrograph

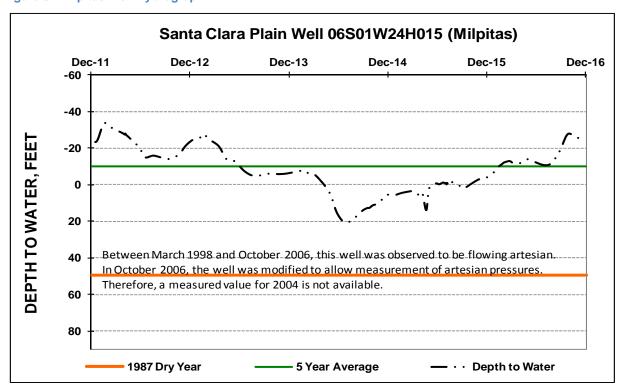


Figure 9 – Sunnyvale Well Hydrograph

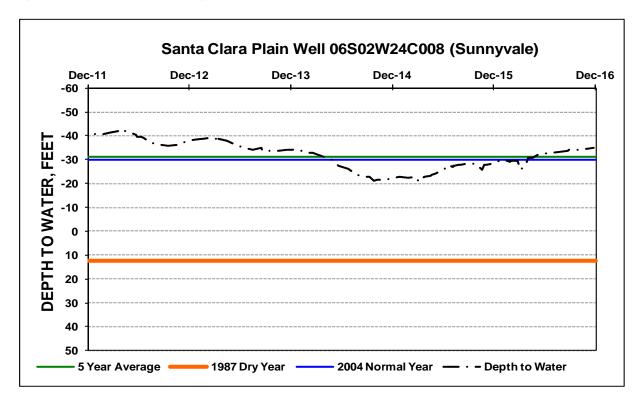


Figure 10 - San Jose Well Hydrograph

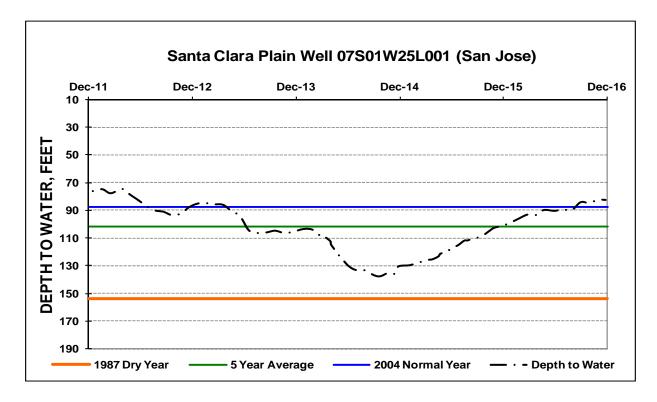


Figure 11 - Santa Clara Well Hydrograph

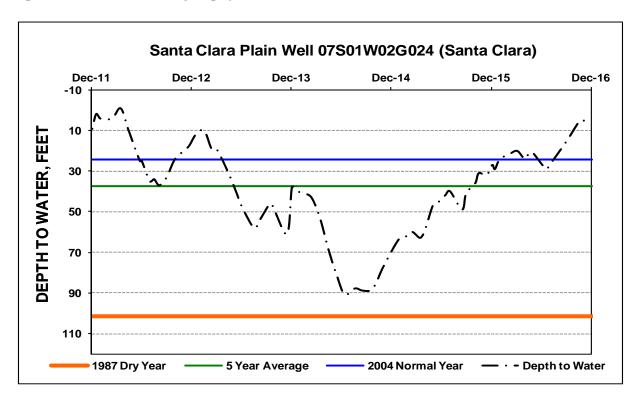


Figure 12 - South Santa Clara Well Hydrograph

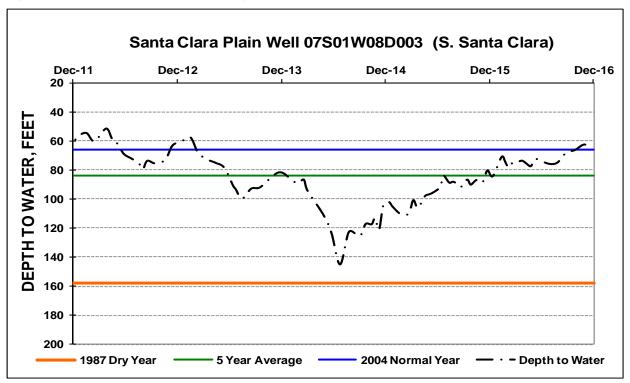


Figure 13 - Campbell Well Hydrograph

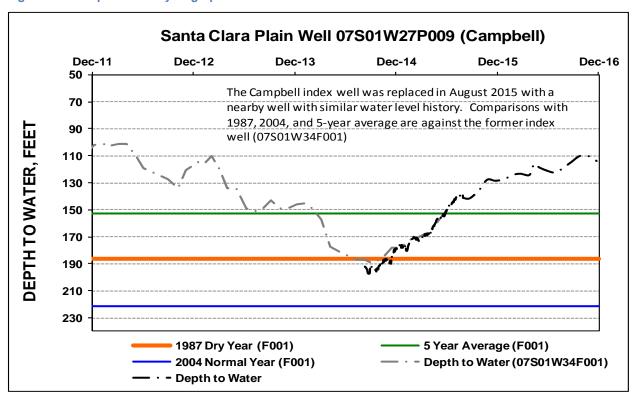


Figure 14 - South San Jose Well Hydrograph

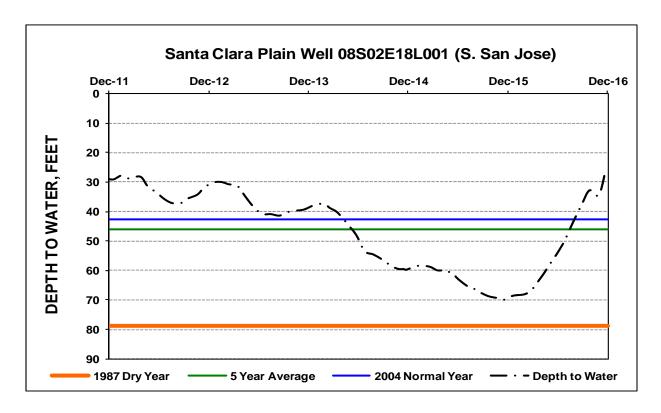


Figure 15 - Coyote Valley Well Hydrograph

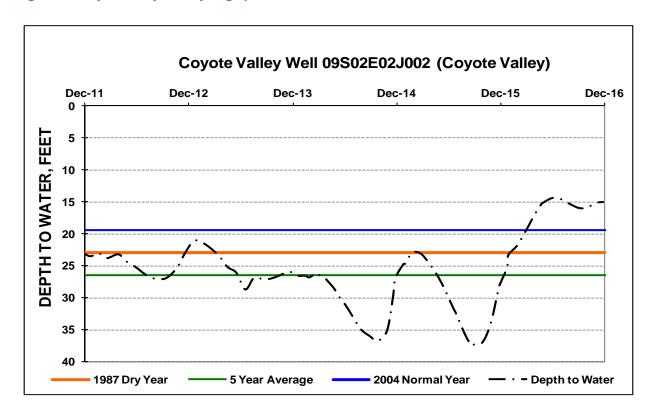


Figure 16 - Morgan Hill Well Hydrograph

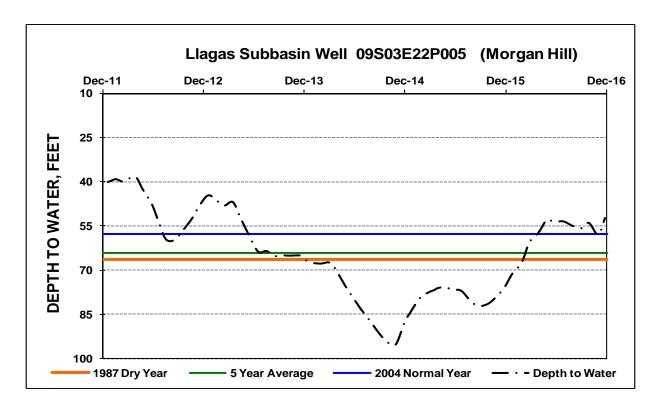


Figure 17 - San Martin Well Hydrograph

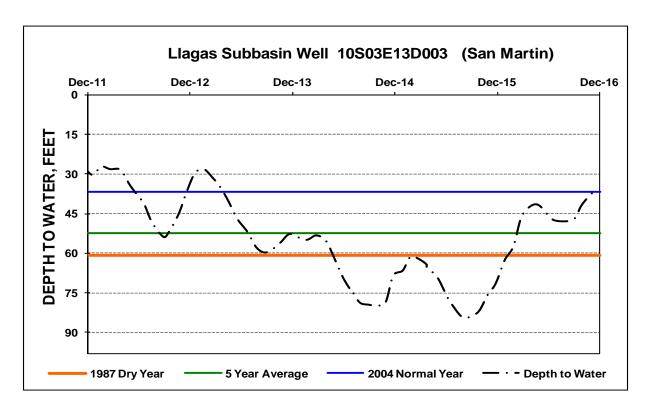
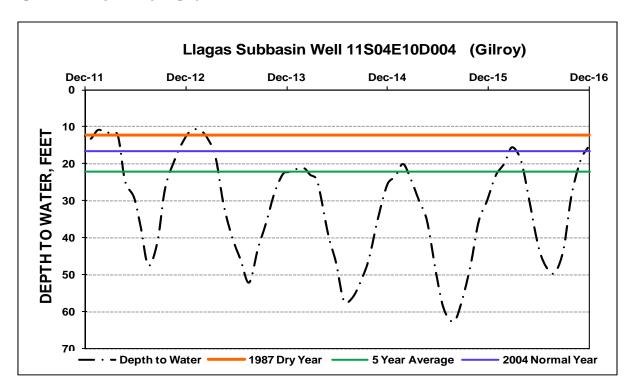


Figure 18 - Gilroy Well Hydrograph



Model Water Efficient New Development Ordinance Developed by the Santa Clara County Water Efficient New Development Task Force (November 29, 2016)

ORDINANCE NO. XXXX

AN ORDINANCE OF THE	E CITY COUNCIL OF THE CITY OF
ADDING A NEW CHAPTER	R (WATER EFFICIENT NEW DEVELOPMENT) TO
TITLE OF THE	MUNICIPAL CODE RELATED TO REQUIREMENTS
FOR NEW DEVELOPMENT	THAT PROMOTES 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.

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

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.

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

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.

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.

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.
WHEREAS, it is the intent of the City Council of the City of
NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF DOES ORDAIN AS FOLLOWS:
SECTION 1. CEQA REVIEW.
The City Council has evaluated this ordinance and has determined that it is from the California Environmental Quality Act per
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, on-site treated nonpotable water, Rainwater, Blackwater, and any other source approved by the Director.
Blackwater: Wastewater containing bodily or other biological wastes. This is discharge from toilets, dishwashers, kitchen sinks, and utility sinks.
Director: the Director ofor any individual designated by the Director to act on his or her behalf.
First Certificate of Occupancy: either a temporary certificate of occupancy or a Certificate of Final Completion and Occupancy
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 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.

Multifamily 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 January 1, 2017.

Nonpotable Water: Water collected from alternate water sources, treated, and intended to be used on the Project site 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.

Nonresidential: A building that contains occupancies other than dwelling units. For the purposes of this section, 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.

On-site Treated Non-Potable Water: Nonpotable water that has been collected, treated, and intended to be used on-site and is suitable for direct beneficial use. Permittee: owner or operator of an On-site 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 multifamily, housing units and mobile homes.

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

Smart Hot Water Recirculation System: A hot water recirculation system that is capable of monitoring and recording hot water usage patterns for optimal pump activation.

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

SECTION 3. APPLICABILITY.

This chapter shall apply to all New Development in the City/County.

SECTION 4. REQUIREMENTS.

- A. **Hot Water Waste Reduction**. The hot water system shall not allow more than 0.5 gallons of water to be delivered to any fixture before hot water arrives. Where a hot water recirculation or electric resistance heat trace wire system is installed, the branch from the recirculating loop or electric resistance heat trace wire to the fixture shall contain a maximum of 0.5 gallons. Hot water recirculation systems may include, but are not limited to, the following:
 - (1) Timer-initiated systems.
 - (2) Temperature sensor-initiated systems.
 - (3) Occupancy sensor-initiated systems.
 - (4) Smart hot water recirculation systems.
 - (5) User-activated systems.
 - (6) Other systems acceptable to the Director.
- B. **Single-Family Graywater Collection, Filtration and Distribution System**. All new single-family residential units shall be built Graywater Ready and must include the following:
 - 1. Dedicated graywater collection plumbing, which must:
 - a. Capture water from all fixtures producing graywater, specifically including all showers, baths, lavatory sinks and laundry washing machines;
 - b. Exit the envelope of the structure and converge in a single location; and
 - c. Reconverge with the home's blackwater collection system prior to flowing to the municipal sewer system.
 - 2. The graywater collection system must include:
 - a. An in-ground surge tank with at least 60 gallons capacity;
 - b. A physical bypass function to allow graywater to be diverted away from the surge tank, to the municipal sewer system during construction;
 - c. A treated water tank with at least 175 gallons capacity.
 - d. A hose bib with potable water within 15 feet of the point where the graywater collection system exits the envelope of the home; and
 - e. A 20 amp, 120 volt dedicated electrical circuit with GFCI breaker within 15 feet of the point where the graywater collection system exits the envelope of the home.
 - 3. 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:
 - a. A single, dedicated supply feed for providing water to irrigation valves; and
 - b. A single, dedicated supply feed for providing water to all toilets in the home

Additions and alterations of existing buildings that use the existing building drain(s) are exempted from this provision.

- C. Multifamily and Nonresidential Development's Use of Alternate Water Sources. All new multifamily residential and all 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.
 - 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 water closets, urinals, floor drains, and process cooling and heating in that building shall come from recycled water.
 - 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 solely by building out the dual plumbing system to the anticipated point of connection to the future recycled water system.
 - 3. 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 water collection and treatment systems that comply with the applicable sections of the California Plumbing Code to capture, collect, treat, and distribute graywater, rainwater, and stormwater runoff.
 - 4. A commercial building(s) or campus may be permitted by the appropriate agency for treatment and use of blackwater for nonpotable purposes so long as systems complies with current standards (now Title 22) for installation, reporting and monitoring.

EXCEPTIONS:

- a) Additions that use any part of the existing plumbing piping system.
- b) Alterations that do not include replacing all of the potable water piping.
- c) 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.
- D. Recycled Water use in Single-Family 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 homeowner's 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.

- E. **Cooling Towers**. All newly constructed cooling towers shall connect to and use alternate water sources. All newly constructed cooling towers shall include the following:
 - 1. Connectivity controllers
 - 2. Automated chemical feed systems
 - 3. Plumbing to facilitate the use of nonpotable water supplies
 - 4. Recirculation systems that recirculate the water as much as possible prior to discharge
 - 5. Devices to capture and reuse the blow down water discharged from the cooling tower.
- F. **Retail Establishments.** All stores, outlets and other retails establishments shall only sell plumbing fixtures and other devices which are in compliance with California State and Federal water efficiency standards, e.g., EPA WaterSense certified.
- G. **Automatic Sensor Operated Fixtures.** Faucets in commercial facilities, shall not have automatic sensors installed, and instead have manually operated handles. Toilets and urinals in commercial facilities shall not have sensor or automatic flush valves and instead have manually operated flush mechanisms.
- H. **Plumbers, Contractors, and Service Providers**. All plumbers, contractors and other service providers shall not install any plumbing fixtures or other devices which are not in compliance with California State and Federal water efficiency standards, e.g., EPA WaterSense certified.
- I. Commercial Kitchens. All new and replacement food related and utensil-related equipment shall be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program and are in compliance with any California State and Federal water efficiency standards, where applicable, and may develop an Water Efficiency Management Plan to help establish an effective facility water management program using appropriate guidelines such as the EPA WaterSense at Work-Best Management Practice for Commercial and Institutional Facilities document.
- **J.** Landscape Meters. 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.
 - 3. Landscaped areas shall have flow sensors or hydrometers, regardless of being metered separately.

- **K.** Additional Meters Required. New Buildings or Additions in Excess of 50,000 Square Feet. Separate submeters or meters shall be installed 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. 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).
 - c. Steam and hot-water boilers with energy input more than 500,000 Btu/h (147 kW).
 - 3. For each building that uses more than 100 gallons per day on a parcel containing multiple buildings.
- L. Irrigation Controllers. In new construction or building addition or alteration over 500 square feet of cumulative landscaped area, install irrigation controllers and sensors which include the following criteria, and meet manufacturer's recommendations:
 - 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 which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.
 - EXCEPTION: For new residential construction, manual irrigation is also permitted.
- **M. Irrigation System:** In landscaped areas, irrigation nozzles shall have a maximum precipitation rate of one inch per hour.
- **N. 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.
- **O.** Exterior Faucets. Locks shall be installed on all publicly accessible exterior faucets and hose bibs except those installed on single family dwellings.
- **P. Swimming Pool Covers**. For one- and two-family dwellings, any permanently installed outdoor in-ground swimming pool or spa shall be equipped with a cover having a manual or

power-operated reel system. For irregular-shaped pools where it is infeasible to cover 100 percent of the pool due to its irregular shape, a minimum of 80 percent of the pool shall be covered.

EXCEPTION: Additions or alterations to existing swimming pools and spas with a building valuation not exceeding \$25,000.SECTION 5. SEVERABILITY

If any provision of this Title, or its application to any person, or circumstances, is held to be invalid, the remainder of this Ordinance, or the application of the provision to other persons or circumstances, shall not be affected.

SECTION 6. EFFECTIVE DATE. This Ordinance shall take effect thirty (30) days after the date of its adoption.

SECTION 7. POSTING AND PUBLICATION. The City Clerk is hereby directed to publish this ordinance pursuant to §36933 of the Government Code.

THE FOREGOING ORDINANCE WAS INTRO	ODUCED AT A MEETING OF THE
CITY COUNCIL HELD ON THE XX DAY OF	F, AND WAS FINALLY
ADOPTED AT A MEETING OF THE CITY CO	OUNCIL HELD ON THE XX DAY OF
, AND SAID ORDINANCE WAS	DULY PASSED AND ADOPTED IN
ACCORDANCE WITH LAW BY THE FOLLOW	ING VOTE:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSTAIN: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST: APPROVED:



Committee: Water Commission

Meeting Date: 01/25/17

Agenda Item No.: 5.3

Unclassified Manager: Darin Taylor

Email: dtaylor@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Review and Comment to the Board on the Fiscal Year 2018 Preliminary Groundwater

Production Charges

RECOMMENDED ACTION:

Discuss and consider the attached preliminary groundwater production charge analysis and provide comment to the Board on policy implementation, as necessary.

SUMMARY:

This is an Information only item:

Staff has prepared the preliminary FY 2017–18 groundwater production charge analysis and is seeking input to incorporate into the development of the groundwater production charge recommendation that will be published in the annual Protection and Augmentation of Water Supplies (PAWS) report on February 24, 2017. The analysis includes a current water use projection, a discussion of changes to the capital cost projection, and some scenarios for Board consideration. Staff has developed a Base Case preliminary FY 2017-18 groundwater production charge projection, which is lower than the prior year projection due to a reduced cost forecast for imported water, and the push out of certain capital project costs.

BACKGROUND:

Executive Limitation 7.4: A BAO shall "marshal for the Board as many staff and external points of view, issues and options as needed for fully informed Board choices."

For the FY 2017-18 groundwater production charge setting process, staff is seeking input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation.

ATTACHMENT(S):

Attachment 1: Staff Report and Preliminary FY 2017-18 Groundwater Production Charges Information



Santa Clara Valley Water District

File No.: 16-0578 Agenda Date: 1/10/2017

Item No.: 2.8.

BOARD AGENDA MEMORANDUM

SUBJECT:

Preliminary Fiscal Year (FY) 2017-18 Groundwater Production Charges Analysis.

RECOMMENDATION:

Discuss and provide direction on the preliminary FY 2017-18 Groundwater Production Charge analysis prepared by staff.

SUMMARY:

Staff has prepared the preliminary FY 2017-18 groundwater production charge analysis for Board review. The analysis includes a current water use projection, a discussion of changes to the capital cost projection, and some scenarios for Board consideration. Staff has developed a Base Case preliminary FY 2017-18 groundwater production charge projection, which is lower than the prior year projection due to a reduced cost forecast for imported water, and the push out of certain capital project costs. Staff is seeking Board input on the preliminary analysis to incorporate into the development of the groundwater production charge recommendation.

The groundwater production charge recommendation will be detailed in the *Annual Report on the Protection and Augmentation of Water Supplies* that is planned to be filed with the Clerk of the Board on February 24, 2017. The public hearing on groundwater production charges is scheduled to open on April 11, 2017. It is anticipated that the Board would set the FY 2017-18 groundwater production charges by May 9, 2017, that would become effective on July 1, 2017.

The District protects and augments water supplies for the health, welfare and safety of the community. County-wide, groundwater replenished by the District makes up, on average, two-thirds of the groundwater used by residents, retailers and businesses. The District replenishes the groundwater basins with local water and purchased water imported from the Sierra Nevada mountains. The activities undertaken by the District to acquire, monitor, recharge, and protect the water supply in support of the Silicon Valley economy are funded, in part, through groundwater production charges.

The FY 2017-18 groundwater production charge and surface water charge setting process will be conducted consistent with the District Act, Proposition 218's requirements for property-related fees for water services as detailed in Board resolutions 99-21, 12-10, and 12-11. (Attachments 2-4).

File No.: 16-0578 Agenda Date: 1/10/2017

Item No.: 2.8.

Water Use Assumptions

District managed water use for FY 2015-16 is estimated to be approximately 199,000 acre-feet (AF), which is roughly 30,000 AF lower than budgeted that year and is roughly a 30% reduction versus calendar year 2013. (District-managed water use excludes Hetch Hetchy, and San Jose Water Company owned water supplies). For the current year, FY 2016-17, staff estimates that water usage will be approximately 205,000 AF or flat to the FY 2016-17 budget and roughly a 28% reduction versus calendar year 2013. For purposes of the preliminary analysis, staff is assuming a water usage of 217,000 AF for FY 2017-18 which is a 6% increase relative to the estimated FY 2016-17 water usage, and consistent with water usage patterns during the last drought that occurred between 2007 and 2011.

Staff will carefully monitor monthly water use actuals and work closely with the water retailers during the upcoming rate setting process to modify the water usage forecast as necessary.

Groundwater Production Charge Projections

Staff has prepared a Base Case preliminary groundwater production charge projection for Board review. It assumes a 9.9% increase in the North County M&I groundwater production charge from \$1,072/AF to \$1,178/AF for FY 2017-18, and 6.4% in the South County from \$393/AF to \$418/AF. It also assumes a 6.4% increase in the Ag groundwater production charge for FY 2017-18 from \$23.59/AF to \$25.09/AF.

This projection is lower than prior year for North County primarily due to reduced imported water costs (e.g., less \$4.5M for Central Valley Project (CVP) imported water purchase costs, and less \$4.8M for Semitropic Water Bank take costs), and schedule extensions for the Anderson Dam Seismic Retrofit and the Expedited Purified Water Program. For South County, the preliminary groundwater charge projection for FY 2017-18 is equal to the prior year projection due to a higher cost projection for the Anderson Dam Seismic retrofit, which has offset the lower imported water cost forecast. The prior year projection reflected a 16.7% increase in the North County M&I groundwater production charge, 6.4% for South County M&I, and 6.4% for the agricultural groundwater production charge for FY 2017-18.

Staff anticipates no changes to the contract treated water surcharge and the non-contract treated water surcharge for FY 2017-18.

The overall impact of the preliminary analysis for FY 2017-18 to the average household would be an increase of \$3.65 per month in North County and \$0.86 per month in South County.

Other Assumptions

The Base Case preliminary analysis assumes the continued practice of relying on the State Water Project (SWP) Tax to pay for 100% of the SWP contractual obligations. Pursuant to Water Code Section 11652, the District, whenever necessary, is required to levy on all property in its jurisdiction not exempt from taxation, a tax sufficient to provide for all payments under its SWP contract with the California Department of Water Resources (DWR). The District is anticipating a \$6.1M decrease in

File No.: 16-0578 Agenda Date: 1/10/2017

Item No.: 2.8.

SWP costs for FY 2017-18 due to one-time, and drought related costs driving the prior year SWP cost projection. Accordingly, the preliminary analysis assumes a decrease in the SWP Tax for FY 2017-18 to \$26M from \$33M. The SWP Tax for the average household in Santa Clara would go from \$54.00 per year to \$42.00 per year. Note that the SWP tax projection for FY 2017-18 does not include any costs for the California Water Fix (CWF).

Although the Board has yet to make a decision on the CWF, consistent with past years, the Base Case preliminary analysis includes a cost projection for the CWF based on the "Conveyance Pumping" scenario. Staff continues to assume that the SWP portion of CWF would be paid for by SWP tax in FY 19 & beyond.

The Base Case preliminary analysis also assumes the continued practice to set the South County agricultural groundwater production charge at 6% of the M&I charge as directed by the Board at the August 23, 2016 Board meeting. A Drought Reserve was established in FY 2015-16, and \$3M of seed funding was allocated in FY 2016-17. No further funding for this reserve is included in the preliminary analysis. The purpose of this reserve would be to help minimize rate impacts and fluctuation during the next drought, and would complement the Supplemental Water Supply Reserve. The preliminary analysis does not include unfunded capital projects or additional unfunded operations cost needs identified by staff.

Other key assumptions in the Base Case preliminary analysis include:

- Design Bid Build (DBB) track assumed for the Expedited Purified Water program
- No additional funding for Recycled Water North County Partnerships in FY 2017-18 and beyond (FY 2016-17 budget totals \$3M)
- Drought Reserve: \$3M of seed funding allocated in FY 17, no further funding included in preliminary analysis
- Salary Savings of \$1.5M included for FY 2017-18

Scenarios

Staff has run a scenario based on a target increase for FY 2017-18 of less than 5% for both North County and South County M&I groundwater production charges. Under that scenario, an additional \$6M of operations costs savings in FY 2017-18 would be necessary relative to the preliminary cost projection. However, the future year cost projection is higher than the Base Case for both zones, averaging 12% annual increases for the North County M&I groundwater charge from FY 2018-19 to FY 2021-22, and averaging 6% annual increases for South County M&I groundwater.

Staff has prepared a graphic that shows the impact of potential water supply investments on the Base Case preliminary projection including the CWF, Expedited Purified Water, and a potential investment in Los Vagueros Reservoir storage.

Other Information

Staff requested retail customers to provide the percentage of their retail rates that are driven by wholesale water costs. The following responses were received:

File No.: 16-0578 **Agenda Date:** 1/10/2017

Item No.: 2.8.

	Average Monthly	
Retail Provider	Retail Bill*	Wholesale of
San Jose Water Co.	\$116.45	40%
Great Oaks Water Co.	\$58.59	52%
City of Mountain View	\$104.48	55%
City of Sunnyvale	\$76.56	65%
City of San Jose	\$77.15	63%
City of Gilroy	\$39.86	36%

^{*} Monthly bill for 5/8" meter and 1,500 cubic feet us

Per Board request, staff is currently working on a fact sheet that would help clarify how the components of the District's Water Utility costs impact retail water bills.

FINANCIAL IMPACT:

This preliminary analysis of the groundwater production charges does not have any direct financial impact, however, the adopted groundwater production charges will affect the future finances of the Water Utility Enterprise.

CEQA:

CEQA Guidelines Section 15273: CEQA does not apply to establishment or modification of water rates.

ATTACHMENTS:

Attachment 1: Power Point presentation

Attachment 2: District Resolution 99-21 (Pricing Policy)

Attachment 3: District Resolution 12-10 Attachment 4: District Resolution 12-11

UNCLASSIFIED MANAGER:

Jim Fiedler, 408-630-2736

Preliminary FY 18 Groundwater Production Charge Analysis

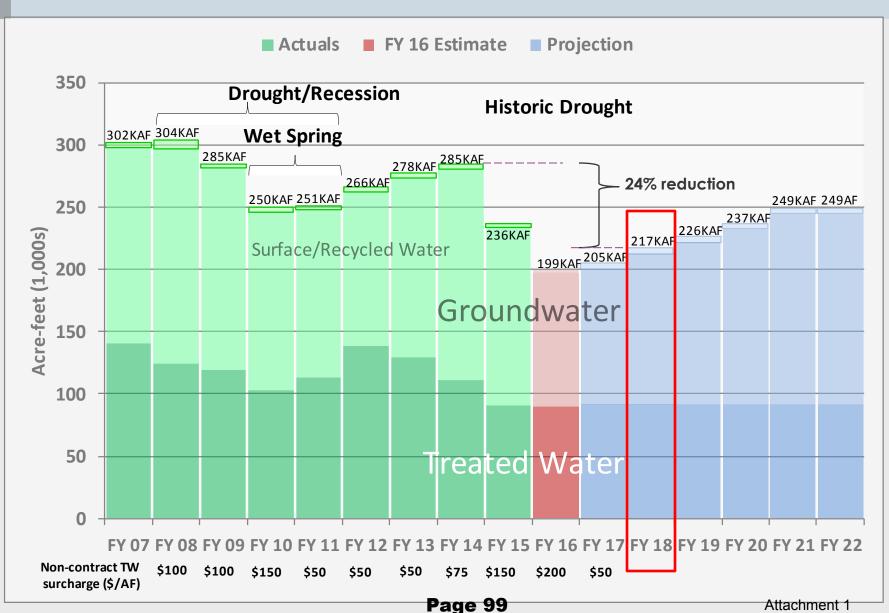
January 10, 2017



Presentation Outline

- 1. Water Use
- 2. Financial Analysis
 - ► FY 18 Analysis Key Assumptions
 - Preliminary Cost Projection
 - Preliminary Groundwater Production Charge Projection
 - Scenarios
 - ▶ Other Information
- 3. Schedule
- 4. Discussion/Wrap up

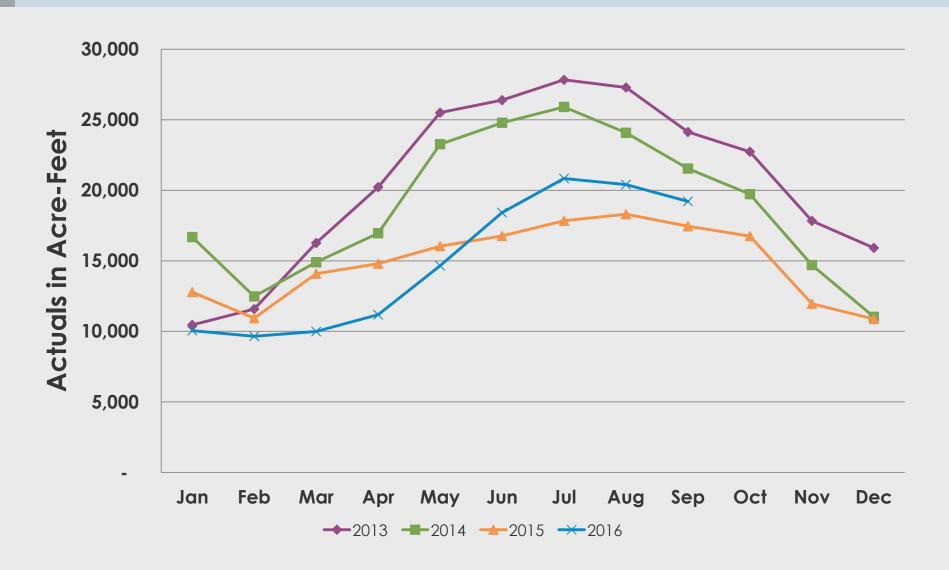
Water Usage (District Managed)



Note: FY 18 refers to fiscal year 2017-18

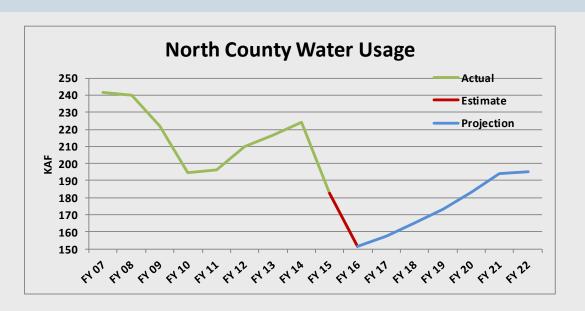
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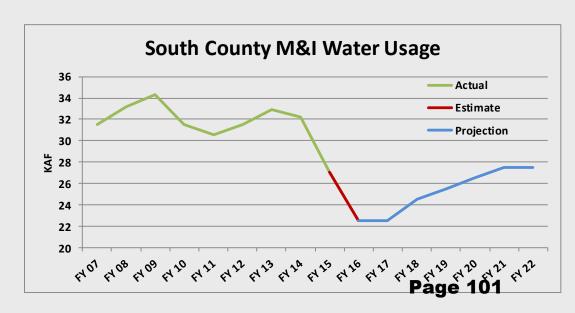
Historic Water Usage (Groundwater & Treated Water)



Water Usage Trend by Zone

Water Usage by Zone (Groundwater, Treated Water, Surface Water)





Presentation Outline

1. Water Use

2. Financial Analysis

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Financial Analysis: FY 18 Key Assumptions

California Water Fix (CWF):

- ▶ "Conveyance Pumping" Case included in Prelim Analysis
- ▶ State Water Project portion of CWF would be paid for by SWP tax in FY 19 & beyond
- ▶ Incremental SWP tax for average single family residence would be \$13/yr by FY 27

Expedited Purified Water:

▶ Costs assume a Progressive Design Build (PDB) method

Recycled Water North County Partnership:

- ► FY 17 budget totals \$3M
- ▶ No additional funding in FY 18 & beyond included in Prelim Analysis

Drought Reserve:

▶ \$3M of seed funding allocated in FY 17, no further funding included in preliminary analysis

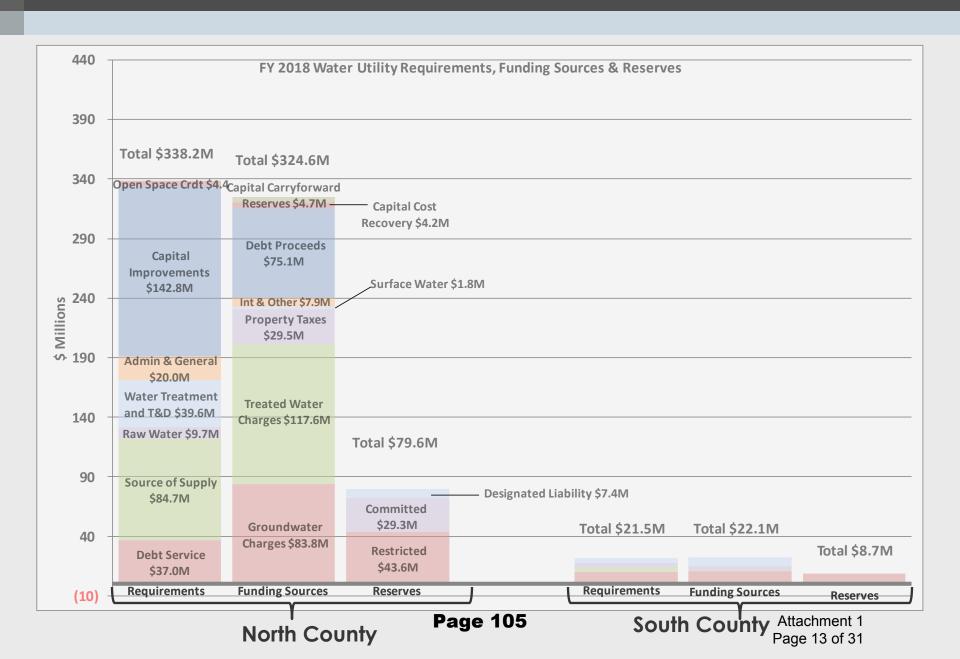
Salary Savings:

► Included in Prelim Analysis (\$1.5M)

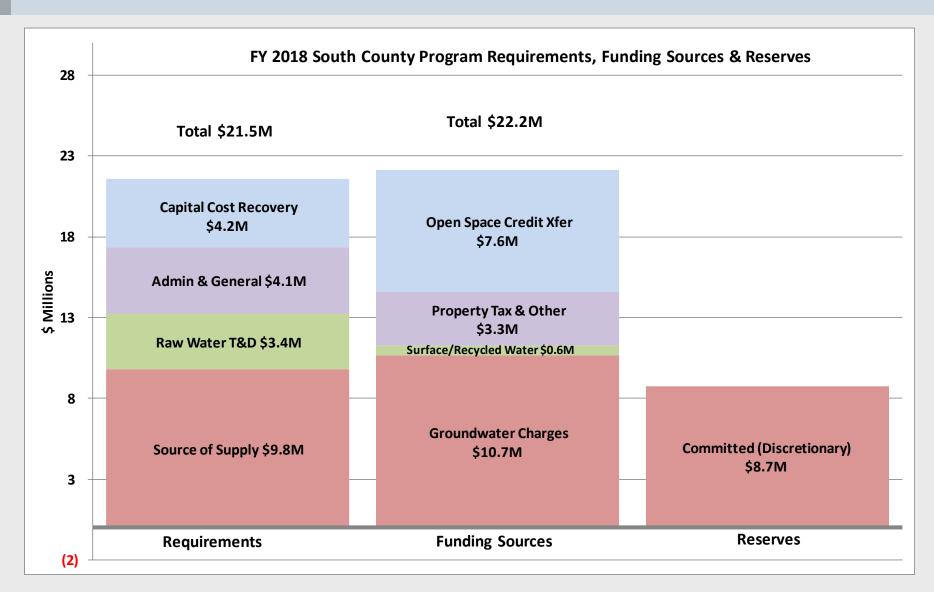
Financial Analysis: Preliminary Cost Projection



FY 2018: Requirements, Sources & Reserves

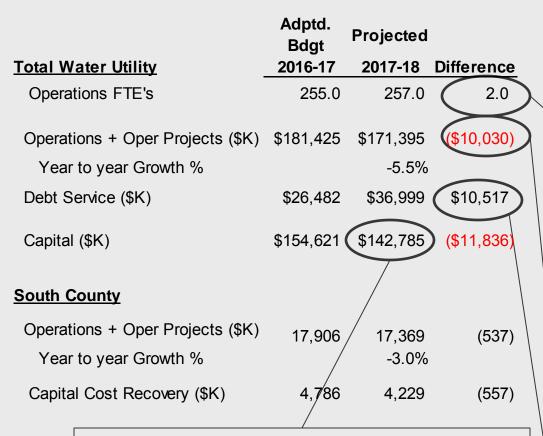


FY 2018: Requirements, Sources & Reserves - South County



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Financial Analysis: FY 18 Analysis and Assumptions



\$142.8M Capital Cost driven by:

\$60.0M Rinconada upgrade & Residuals Mgt

\$16.0M various Pipeline Rehab projects

\$15.3M Expedited Purified Water

\$9.7M CVP capital payments (not CWF)

\$9.3M Almaden/Guad/Calero/Anderson Dams

\$9.3M Main & Madrone Pipelines Respace 107

Cost Increase Drivers

2 FTE increase driven by:

1 operator for Purification Center, & 1 position for water Utility environmental stewardship support

\$10.0M decrease driven by:

- -\$4.5M CVP water purchases costs (higher drought rates in FY 17)
- -\$6.1M SWP water purchase costs (one time costs & higher drought rates in FY 17)
- -\$4.8M Semitropic banking operations (to be paid for by supplemental water supply reserve if necessary)

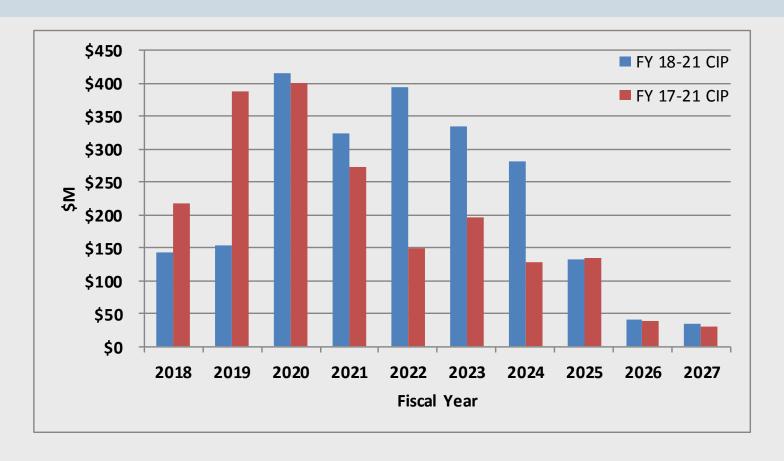
Offset by inflation

\$10.5M increase driven by:

Planned debt issuance

Attachment 1 Page 15 of 31

Financial Analysis: Preliminary FY 18 CIP



- Extended schedule for Anderson Dam Seismic Retrofit by 2 years & added \$245M
- Extended schedule for Expedited Purified Water program by 2 years

Key Capital project funding FY 18 thru FY 27

- Expedited Purified Water Program (\$918M)
- Rinconada Reliability
 Improvement (\$135M)
- Anderson Dam Seismic Retrofit (\$413M)
 - \$67M (15% of total \$445M project) to be reimbursed by Safe Clean Water Measure

- FAHCE Implementation
 Fund (\$145M
 placeholder)
- Calero & Guadalupe
 Dams Seismic Retrofit
 (\$127M)
- 10 Year Pipeline
 Rehabilitation (\$97M)
- Almaden Dam
 Improvements (\$45M)
- Vasona Pumping Plant Upgrade (\$20M)

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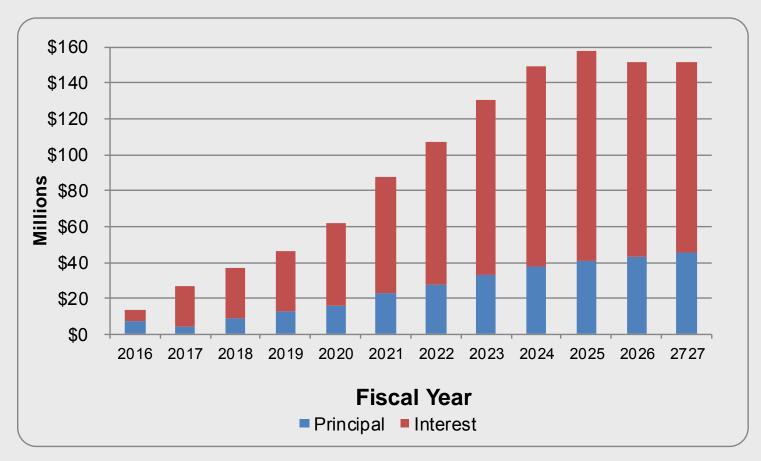
Aftachment 1 Page 17 of 31

Financial Analysis: Unfunded Capital

Project Name	Estimated Total Cost (\$M)
Dam Seismic Retrofit at Chesbro and Uvas	90
SCADA Small Capital Improvements	20
South County Recycled Water Reservoir Expansion	7
Land Rights - South County Recycled Water PL	6
Fleet and Facility Annex Improvements	5
Alamitos Diversion Dam Improvements	3
Coyote Diversion Dam Improvements	2
Total	133

Financial Analysis: Preliminary Debt Service Projection

Water Utility



Maintaining 2.0 times Debt Service Coverage helps ensure financial stability and continued high credit ratings

Presentation Outline

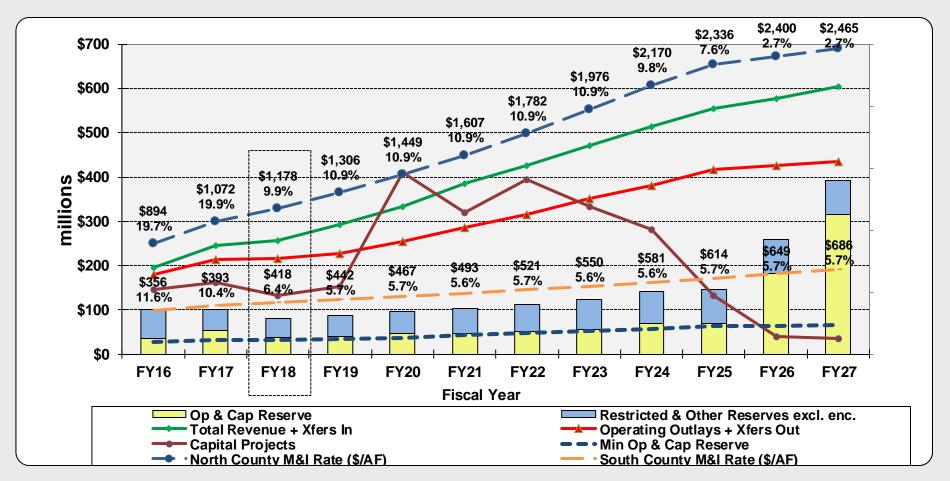
1. Water Use

2. Financial Analysis

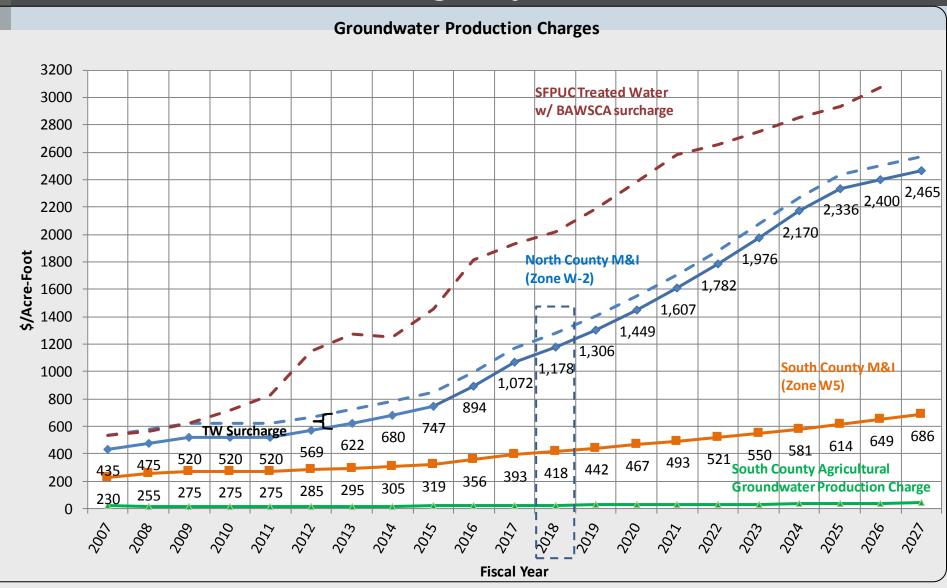
- ► FY 18 Analysis Key Assumptions
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Financial Analysis: Preliminary Groundwater Production Charge Projection

Water Utility Enterprise Funds



Financial Analysis: Preliminary Groundwater Production Charge Projection



Financial Analysis: Preliminary Groundwater Production Charge Projection

	Adj Bgt							
Base Case	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24
No. County (W-2) M&I GWP charge (\$/AF)	\$1,072	\$1,178	\$1,306	\$1,449	\$1,607	\$1,782	\$1,976	\$2,170
Y-Y Growth %	19.9%	9.9%	10.9%	10.9%	10.9%	10.9%	10.9%	9.8%
So. County (W-5) M&I GWP charge (\$/AF)	\$393	\$418	\$442	\$467	\$493	\$521	\$550	\$581
Y-Y Growth %	10.4%	6.4%	5.7%	5.7%	5.6%	5.7%	5.6%	5.6%
Ag GWP charge (\$/AF)	\$23.59	\$25.09	\$26.53	\$28.03	\$29.59	\$31.27	\$33.01	\$34.87
Y-Y Growth %	10.4%	6.4%	5.7%	5.7%	5.6%	5.7%	5.6%	5.6%
Operating & Capital Reserve	\$53,468	\$37,357	\$40,126	\$44,987	\$45,106	\$49,959	\$54,909	\$68,250
Supplemental Water Supply Reserve (\$K)	\$14,277	\$14,677	\$15,077	\$15,477	\$15,877	\$16,277	\$16,677	\$17,077
Sr./Parity Debt Svc Cov Ratio (1.25 min)	1.85	2.11	2.54	2.54	2.27	2.13	2.01	2.00
South County (Deficit)/Reserves (\$K)	\$8,039	\$8,597	\$8,407	\$9,356	\$11,038	\$12,449	\$14,660	\$12,176

Assumptions:

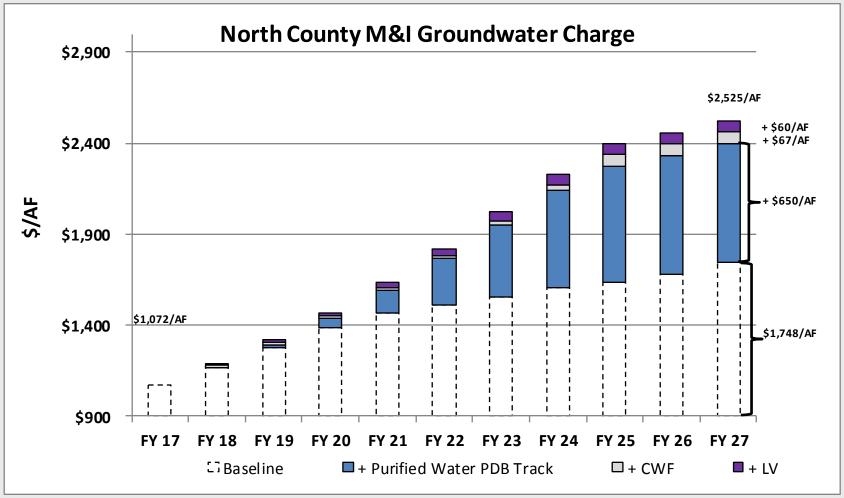
- ▶ Water Usage: FY 2017-18 at 217KAF, 5.8% increase Vs FY 17 estimate & 24% reduction Vs CY 2013
- Operations Costs: Consistent with Adopted FY 2016-17 budget
- CIP: Proposed FY 18-22 CIP is funded

Scenarios

	Adj Bgt		1			
Prior Year (May 2016)	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22
No. County (W-2) M&I GWP charge (\$/AF)	\$1,072	\$1,251	\$1,445	\$1,654	\$1,829	\$1,996
Y-Y Growth %	19.9%	16.7%	15.5%	14.5%	10.6%	9.1%
So. County (W-5) M&I GWP charge (\$/AF)	\$393	\$418	\$441	\$463	\$485	\$507
Y-Y Growth %	10.4%	6.4%	5.5%	5.0%	4.8%	4.5%
	Adj Bgt					
Base Case	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22
No. County (W-2) M&I GWP charge (\$/AF)	\$1,072	\$1,178	\$1,306	\$1,449	\$1,607	\$1,782
Y-Y Growth %	19.9%	9.9%	10.9%	10.9%	10.9%	10.9%
Y-Y Growth % So. County (W-5) M&I GWP charge (\$/AF)	19.9% \$393	9.9% \$418	10.9% \$442	10.9% \$467	10.9% \$493	10.9% \$521
	7		_	_	_	
So. County (W-5) M&I GWP charge (\$/AF)	\$393	\$418	\$442	\$467	\$493	\$521
So. County (W-5) M&I GWP charge (\$/AF)	\$393 10.4%	\$418	\$442	\$467	\$493	\$521
So. County (W-5) M&I GWP charge (\$/AF) Y-Y Growth %	\$393 10.4% Adj Bgt	\$418 6.4%	\$442 5. 7 %	\$467 5. 7 %	\$493 5.6%	\$521 5.7%
So. County (W-5) M&I GWP charge (\$/AF) Y-Y Growth % <5% Scenario	\$393 10.4% Adj Bgt 2016–17	\$418 6.4% 2017–18	\$442 5. 7 % 2018–19	\$467 5. 7 % 2019–20	\$493 5.6% 2020–21	\$521 5.7% 2021–22
So. County (W-5) M&I GWP charge (\$/AF) Y-Y Growth % <5% Scenario No. County (W-2) M&I GWP charge (\$/AF)	\$393 10.4% Adj Bgt 2016–17 \$1,072	\$418 6.4% 2017–18 \$1,125	\$442 5.7% 2018–19 \$1,260	\$467 5.7% 2019–20 \$1,412	\$493 5.6% 2020–21 \$1,581	\$521 5.7% 2021–22 \$1,770

► <5% Scenario assumes incremental \$6M operations costs savings in FY 17 Vs Baseline

Financial Analysis: Preliminary Water Supply Investment Scenarios



Notes:

- Water Supply alternative costs are based on staff estimates, and are subject to change
- CWF and Purified Water PDB track are included in the preliminary analysis Base Case

Financial Analysis: Other Information

	FY 2017	FY 2018
Other Charges	<u>Budget</u>	Projection
Contract TW Surcharge (\$/AF)	\$100.00	\$100.00
Non-contract TW Surcharge (\$/AF)	\$50.00	\$50.00
Surface Water Master Charge (\$/AF)	\$27.46	\$33.36
SWP Tax		
Revenue	\$33M	\$26M
Cost per average household	\$54/Yr	\$42/Yr
1% Ad Valorem Taxes		
Revenue	\$ 5.98 M \$6.06N	\$6.49M 1*

^{*}Latest FY 17 1% Ad valorem Tax estimate based on Assessor's office guidance Page 118

Financial Analysis: Wholesale Cost % of Retail Rates

	Average Monthly	
Retail Provider	Retail Bill*	Wholesale %
San Jose Water Co.	\$116.45	40%
Great Oaks Water Co.	\$58.59	52%
City of Mountain View	\$104.48	55%
City of Sunnyvale	\$76.56	65%
City of San Jose	\$77.15	63%
City of Gilroy	\$39.86	36%

^{*} Monthly bill for 5/8" meter and 1,500 cubic feet usage

Presentation Outline

- 1. Water Use
- 2. Financial Analysis
 - ► FY 18 Analysis Key Assumptions
 - Preliminary Cost Projection
 - Preliminary Groundwater Production Charge Projection
 - Scenarios
 - Other Information
- 3. Schedule
- 4. Discussion/Wrap up

2017 Schedule

January

- 10 Board meeting: preliminary groundwater production charge analysis, CIP workstudy session
- <u>18</u> Water Retailers meeting: preliminary groundwater production charge analysis
- <u>25</u> Water Commission meeting: preliminary groundwater production charge analysis

February

- 14 Board meeting: set date of public hearing
- <u>14</u> Board meeting: review draft CIP, Budget development update (2nd pass update)
- <u>24</u> File Report and mail well owners notice: Protection and Augmentation of Water Sup 124WS) Report

 Atta

2017 Schedule

March

- <u>15</u> Water Retailers Meeting: Groundwater charge recommendation discussion
- <u>21</u> Board meeting: Budget development update (3rd pass update)

April

- <u>03</u> Agricultural Advisory meeting: Groundwater charge recommendation discussion (tentative date)
- <u>04</u> Landscape meeting: Groundwater charge recommendation discussion (tentative date)
- 11 Board meeting: Open public hearing on groundwater charges
- <u>19</u> Water Commission meeting: Groundwater charge recommendation discussion
- <u>TBD</u> Board meeting: South County public hearing on groundwater charges
- <u>25</u> Board meeting: Conclude public hearing on groundwater charges
- <u>26-28</u> Board meeting: Budget work study session

May

• 09 Adopt budget, groundwater production charges & CIP

Summary

- Analysis assumes water usage of 217,000 AF for FY18, a 6% increase relative to budgeted FY17 usage
- Base case equates to an increase of \$3.65 per month in North
 County and \$0.86 per month in South County
- Base case assumes a \$7M decrease in State Water Project Tax in FY18; includes FY18-22 CIP, and the California Water Fix
- A rate increase of less than 5% requires an additional \$6M or more of expenditure deferrals in FY18
- Board direction to be incorporated into Report on Protection and Augmentation of Water Supplies (PAWS) scheduled for release on February 24, 2017



Committee: Water Commission

Meeting Date: 01/25/17

Agenda Item No.: 5.4

Unclassified Manger: Michele King

Email: mking@valleywater.org

COMMITTEE AGENDA MEMO

SUBJECT: Review Santa Clara Valley Water Commission Work Plan, the Outcomes of Board

Action of Commission Requests; and the Commission's Next Meeting Agenda.

RECOMMENDED ACTION:

Review the Board-approved Commission work plan to guide the commission'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.

ATTACHMENT(S):

Attachment 1: Santa Clara Valley Water Commission 2017 Work Plan

Attachment 2: Santa Clara Valley Water Commission April 2017 Draft Agenda

Update: January 2017

GP8. 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.

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	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
1	Annual Accomplishments Report	January 25	 Review and approve 2016 Accomplishments Report for presentation to the Board. (Action) Submit requests to the Board, as appropriate. 	
2	Election of Chair and Vice Chair for 2017	January 25	Committee Elects Chair and Vice Chair for 2017. (Action)	
3	Review and Comment to the Board on the Fiscal Year 2018 Preliminary Groundwater Production Charges	January 25	 Receive and comment to the Board on the Fiscal Year 2018 Preliminary Groundwater Production Charges. (Action) Submit requests to the Board, as appropriate. 	

Yellow = Update Since Last Meeting
Blue = Action taken by the Board of Directors

Attachment 1 Page 1 of 5

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
4	Water Supply Update and Drought Response/Water Supply Master Plan	January 25 October 25	 Receive update on water supply and drought response (Action) Provide comments to the Board, as necessary. 	
5	Review of Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda	January 25 April 12 July 26 October 25	Receive and review the 2016 Board-approved Committee work plan. (Action) Submit requests to the	
6	Review and Comment to the Board on the Fiscal Year 2018 Proposed Groundwater Production Charges.	April 12	Board, as appropriate. Review and comment to the Board on the Fiscal Year 2018 Proposed Groundwater Production Charges. (Action)	
	District Communication Program Update	April 12	 Provide comments to the Board, as necessary. Receive an update on the 	
7			District's Communication Program. (Information)	
8	Safe, Clean Water and Natural Flood Protection Program Update	April 12	Receive an update on the Safe, Clean and Natural Flood Protection Program. (Information)	

Yellow = Update Since Last Meeting
Blue = Action taken by the Board of Directors

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
9	Winter Preparedness Update	TBD	Receive information on the District's Winter Preparedness. (Information)	
10	Status Report on the One Water Plan	TBD	Receive an update on the One Water Plan. (Information)	
11	Discussion on the Riparian Corridor Ordinance, Encroachment Process	TBD	Discuss the Riparian Corridor Ordinance, Encroachment Process. (Action)	
			Provide comments to the Board, as necessary.	
12	Climate Change Mitigation – Carbon Neutrality by 2020 Program Update	TBD	Receive information on climate change mitigation - carbon neutrality by 2020 program update. (Action)	
12			Provide comments to the Board, as necessary.	

ITEM	WORK PLAN ITEM	MEETING	INTENDED OUTCOME(S) (Action or Information Only)	ACCOMPLISHMENT DATE AND OUTCOME
13	Climate Change and Sea Level Rise Adaptation – Water Supply, Flood Protection, Ecosystems Protection	TBD	 Receive information on climate change and sea level rise adaptation – water supply, flood protection, ecosystems protection. (Action) Provide comments to the Board, as necessary. 	
14	Demand Management Strategies and Portfolio	TBD	 Discussion on demand management strategies and portfolio. (Action) Provide comments to the Board, as necessary. 	
15	Civic Engagement	TBD	 Receive feedback from Commission per Transparency Audit). Provide comments to the Board, as necessary. 	
16	Update on CA WaterFix	TBD	Receive an update on CA Waterfix (Information)	
17	Update on Joint Use of Trails	TBD	Receive an update on the joint use of trails. (Information)	

Yellow = Update Since Last Meeting

Blue = Action taken by the Board of Directors

Update: January 2017

Board Representative

Barbara Keegan, Board Representative Gary Kremen, Alternate John L. Varela, Board Representative

DRAFT AGENDA

SANTA CLARA VALLEY WATER COMMISSION

WEDNESDAY, APRIL 12, 2017

12:00 p.m. - 2:00 p.m.

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

Time Certain:

12:00 p.m. 1. Call to Order/Roll Call

2. Time Open for Public Comment on Any Item Not on Agenda

Comments should be limited to two minutes. If the Commission 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 January 25, 2017, meeting
- 4. Action Items
 - 4.1 Review and Comment to the Board on the Fiscal Year 2018 Proposed Groundwater Production Charges (Darin Taylor

Recommendation: Discuss and consider the attached proposed groundwater production charges and provide comment to the Board on policy implementation, as necessary.

- 4.2 Update on the District's Communication Program (Marty Grimes) Recommendation: This is an information item only and no action is required.
- 4.3 Update on the Safe, Clean Water and Natural Flood Protection Program (Chris Elias) Recommendation: This is an information item only and no action is required.
- 4.4 Review Santa Clara Valley Water Commission Work Plan, the Outcomes of Board Action of Commission Requests and the Commission's Next Meeting Agenda (Commission Chair)

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

5. Clerk Review and Clarification of Commission Requests to the Board

This is a review of the Commission's Requests, to the Board (from Item 4). The Commission may also request that the Board approve future agenda items for Commission discussion.

6. Reports

Directors, Managers, and Commission members may make brief reports and/or announcements on their activities. Unless a subject is specifically listed on the agenda, the Report is for information only and not discussion or decision. Questions for clarification are permitted.

- 6.1 Director's Report
- 6.2 Manager's Report
- 6.3 Commission Member Reports
- 7. Adjourn: Adjourn to next regularly scheduled meeting at 12:00 p.m., July 26, 2017, in the Headquarters Building Boardroom, 5700 Almaden Expressway, San Jose, CA 95118

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 Office of the Clerk of the Board at the Santa Clara Valley Water District Headquarter 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.

The Santa Clara Valley Water District will make reasonable efforts to accommodate persons with disabilities wishing to attend commission meetings. Please advise the Clerk of the Board office of any special needs by calling 1-408-630-2277.

Santa Clara Valley Water Commission's Purpose and Duties

The Santa Clara Valley Water Commission of the Santa Clara Valley Water District is established to assist the Board of Directors (Board) with policies pertaining to water supply, flood protection and environmental stewardship in the areas of interest to Santa Clara County and the Towns and Cities therein.

The specific duties are:

- Prepare policy alternatives
- Provide comment on activities in the implementation of the District's mission
- Produce and present to the Board an Annual Accomplishments Report that provides a synopsis of the annual discussions and actions.

In carrying out these duties, Commission members bring to the District their respective expertise and the interests of the communities they represent. In addition, Commissioners may help the Board produce the link between the District and the public through information sharing to the communities they represent.







CITY OF SARATOGA

13777 FRUITVALE AVENUE • SARATOGA, CALIFORNIA 95070 • (408) 868-1200

COUNCIL MEMBERS: Mary-Lynne Bemald Manny Cappello Rishi Kumar Emily Lo

Howard Miller

Incorporated October 22, 1956

January 20, 2017

Board of Directors Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118

RE: 2017 Water Use Reduction Target

Dear Chair Keegan and Board Members:

The Board of Directors has shown exceptional leadership in managing the County's water supply during this prolonged multi-year drought. We are all very proud that the cumulative 2016 water savings from Santa Clara County residents and businesses was 27% through September compared to the same period of 2013. These savings put our County among the highest performing regions in the state.

The phenomenal response by our residents and business along with recent rains, has had a beneficial impact on the amount of groundwater storage. End of 2016 storage is predicted to fall near the boundary of Stage 2 (Alert) and Stage 1 (Normal) of the Water Shortage Contingency Plan. The statewide Sierra snowpack is at 161 percent of average as of January 12 lb. Total January 1 storage is at 95% of 20-year average for that date. The rainfall year total is 2.64 inches or 94% of average to date (from the December 2016 Drought 2016 Monthly Status report published by SCVWD). There is more rain to come hopefully.

Many of our constituents are aware that our region is a leader in water conservation, which is evident through media coverage of the average statewide conservation levels. They are also aware of the significant difference in retail water rates throughout the state. Some residents have conserved well over 50% of their 2013 usage yet are paying over \$500 per month for water, as a result of San Jose Water Company's (SJWC) drought surcharges. This is having a negative impact on their view towards further water conservation given the 5,600 signatures from all parts of the district that SJWC serves. http://tinyurl.com/saratogawaterpetition.

This shifting attitude greatly concerns me and I respectfully request the Board remove the adopted water use reduction target as other water districts have done. There is still need to conserve, and residents continue to be fully engaged and are behind this effort. But, we have to ensure that we are NOT a victim of the spike in water bills due to the SJWC surcharges that have been very demoralizing to residents and caused quite a bit of angst.

At its June 14 meeting, the District's Board of Directors (Board) lowered its water use reduction target to 20% for the period extending through January 2017, but emphasized that residents should continue their efforts to conserve in this ongoing drought. The Board also called for local water providers to continue to institute mandatory measures, as needed, to reach the 20% target. SJWC used the Board's water use reduction target as part of their justification to the CPUC for their drought surcharges as illustrated in the excerpt below:

"With this advice letter filing SJWC requests authority to modify the currently active Stage 3 provisions of Rule 14.1 and Schedule 14.1 to change the Limits on Watering Days to 3 days a week and to modify the drought allocations in Schedule 14.1 to reflect the 20% reduction standard set by the SCVWD."

On the same page the advice letter goes on to make additional references to the District's standards as the basis for SJWC's proposals. The resultant drought allocation that was approved by CPUC is directly tied to surcharges in our community and super high water bill for many citizens.

Based on the early January rains, nearly all of Northern California - from the Santa Cruz Mountains to the Oregon border - has now returned to normal water conditions, according to the U.S. Drought Monitor, a weekly report issued by the U.S. Department of Agriculture, the National Oceanic and Atmospheric Administration and the University of Nebraska at Lincoln. As per David Miskus, a senior meteorologist with NOAA's Climate Prediction Center in Maryland, the drought is over in Northern California. The statewide Sierra snowpack, the source of one-third of California's water supply, stood at 161 percent of average on January 12 h, up from just 64 percent on New Year's Day.

I appreciate your consideration and hope that the SCVWD board will remove the 20% drought reduction target.

Sincerely,

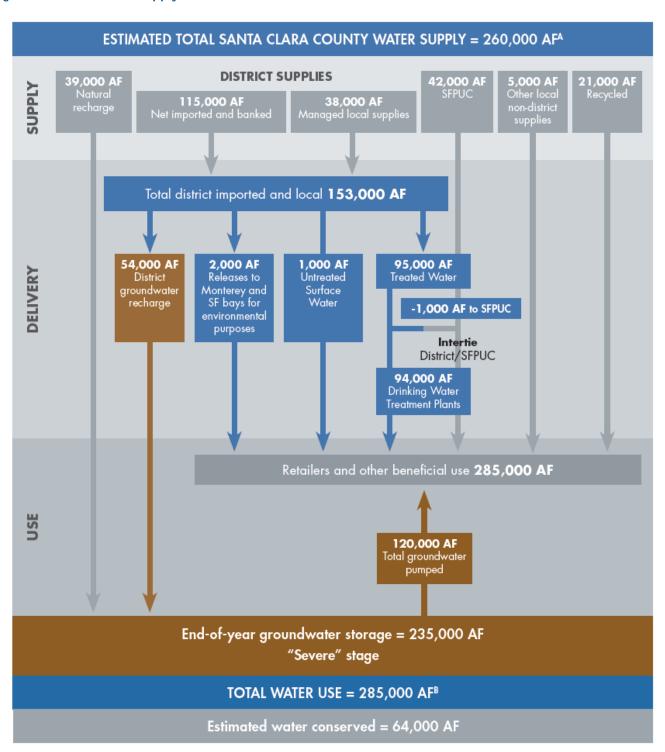
Rishi Kumar

Saratoga City Councilmember

Santa Clara Valley Water Commissioner

Chapter 3 – System Description

Figure 3-5. 2015 Water Supply and Use



A Includes net district and non-district surface water supplies and estimated rainfall recharge to groundwater basins.

B Includes municipal, industrial, agricultural and environmental uses.