



DATE: June 12, 2017

AGENDA ITEM # 2

TO: Environmental Commission

FROM: J. Logan, Staff Liaison

SUBJECT: Finalize 2017/18 Environmental Commission Goals and Work Plan

BACKGROUND

The Environmental Commission met with the City Council on May 2, 2017 to review its 2016/17 Environmental Commission Accomplishments and Draft 2017/18 Goals and discuss issues and project for the upcoming year. Based on this discussion, the Goals will be finalized and the 2017/18 Work Plan will be developed to focus the Commission's agenda items and to serve as a roadmap for the year.

DISCUSSION

Environmental Commission Goals and resulting Work Plan development targeted for 2017/18 are:

1. Climate Action Plan and Community Choice Energy
2. Water Conservation and stormwater management
3. Solid waste diversion
4. Visioning process
5. Community outreach
6. Special projects as assigned by Council

The Commission will continue discussion of the meeting results with Council, finalize the Goals and develop its 2017/18 Work Plan.

Attachments:

- A. June 12, 2017 – 2017/18 Goals and Work Plan
- B. Environmental Commission Green Building Subcommittee Report, June 2017
- C. *April Monthly Water Use Status Report*, SCVWD
- D. Stormwater management – *Capture Rain Where It Falls* video part 2 and email from Tami Mulcahy

ENVIRONMENTAL COMMISSION

2017/18 Work Plan

June 12, 2017

Goal	Projects	Assignments	Target Date	City Priority related to	Status
Climate Action Plan & CCE	Community outreach and education for the implementation of CCE and SVCEA	<ul style="list-style-type: none"> Speakers for outreach efforts (Bray – business outreach, Teksler, Hedden) 	Ongoing	Climate Action Plan Goals and CCE-SVCE implementation	Community meetings 6-21-17 and Farmers' market
	Resource to Director Bruins	<ul style="list-style-type: none"> Policy & Program guidance (Teksler, Hedden, Weiden) 	Monthly	Climate Action Plan Goals and CCE-SVCE implementation	review SVCE packet and recommendations to Director Bruins as needed
	Provide assistance as directed by Council	<ul style="list-style-type: none"> TBD (Name of Commissioner assigned) 	As assigned by Council	Climate Action Plan Goals and CCE-SVCE implementation	No activities scheduled
	Energy efficiency measure for community	<ul style="list-style-type: none"> Commission to explore and research programs offered by PG&E, Acterra, Energy Upgrade California, CA First (Hedden) 	Oct. 2017 workshop with SCCo Office of Sustainability	Climate Action Plan Goals and CCE-SVCE implementation	Home Upgrade Workshop on Oct. 18, 2017
	Research best practice for green building codes and planning requirements	<ul style="list-style-type: none"> Commission to engage with staff to research and recommend areas to be reviewed (EV, solar installs, green building measures) (Yuan, Teksler, Halkola) 	Final report to be completed, meeting with staff to submit Report	Climate Action Plan Goals and CCE-SVCE implementation	Date to meet with staff TBD
	With staff, support opportunities for CAP GHG reduction measures. Transportation	<ul style="list-style-type: none"> Commission to support staff's efforts to update CAP with inventory & review of measures. Focus on transportation (Teksler, Eyre, Hedden) 	Quarterly	Climate Action Plan Goals and CCE-SVCE implementation	CAP Report with analysis of measures and data in CIP Budget

ATTACHMENT A

Climate Action Plan & CCE (cont.)	Environmental Resources Dashboard	<ul style="list-style-type: none"> Review and enhance GHG reporting and data on Green Initiatives pages of City website (Bray, Eyre, Halkola) 	In process	Climate Action Plan Goals and CCE-SVCE implementation	Collecting data
Water Conservation & Stormwater Management	Support community and municipal drought related measures	<ul style="list-style-type: none"> Reported by (Eyre) Track water usage via ER Dashboard (Eyre, Bray) Support staff in development of green infrastructure measures (Eyre) 	Summer/Fall focus with ongoing review	Water Conservation Resolution 2015-15	Monitor water use Update drought website
	Stormwater management/shoulder paving policy	<ul style="list-style-type: none"> Assist staff and review development of storm water plans and reporting (Weiden, Bray, Halkola) 	Subcommittee meetings, staff reports	Stormwater Master Plan and Water conservation	Shoulder paving policy revisions
Solid Waste Diversion	Review of progress toward diversion goals Focus on composting	<ul style="list-style-type: none"> MTWS Annual review Explore opportunities with staff for public outreach (Weiden, Yuan) 	Compost available for community	Recycling and diversion	Schedule of compost deliveries and outreach to community
Visioning Process	Provide environmental perspective to assist visioning process	<ul style="list-style-type: none"> TBD (Name of Commissioner assigned) 	Hillview CC	Provide support to Task Force and Council on natural and built environment	Participate in discussion on environmental impacts
Community Outreach	Support project implementation by public outreach and education efforts	<ul style="list-style-type: none"> City webpages; social media; engage with community groups (Name of Commissioner assigned) Invite speakers to EC meetings on Work Plan related topics (All Commissioners) 	Ongoing		Partnership with GTLA, SVCEA, community non-profits, community organizations, County office of Sustainability
Special Projects	As assigned by Council	<ul style="list-style-type: none"> Research and report on membership for City in Mayor's National Climate Action Agenda 	July 2017	Climate Action Plan. Request from Mayor Prochnow	Discussion June 12 EC meeting

Environmental Commission Green Building Subcommittee Report

Commissioners: Halkola, Teksler, Yuan
June 2017

Purpose

To investigate potential voluntary measures the City of Los Altos could encourage in new Residential (single and multi-family) and Commercial buildings.

Background

The State of California has a comprehensive Green Building Standards Code known as CALGreen (Part II of Title 24). This code focuses on measures in five categories; Planning & Design, Energy Efficiency, Water Efficiency & Conservation, Material Conservation & Resource efficiency and Environmental Quality. There is an extensive list of mandatory items required for both residential and non-residential new buildings, effective as of 1/1/17. In addition, there are several other measures that may be adopted by local governments called voluntary Tier I and Tier II measures.

There are also several voluntary rating systems which, prior to CALGreen, cities adopted as their green building code. The Leadership in Energy and Environmental Design (LEED) system developed by the US Green Building Council outlines specific green building practices or design elements in addition to prerequisite practices that builders apply to accrue points toward different levels. While there is a LEED for homes, LEED is typically used to rate larger commercial buildings. The GreenPoint Rated (GPR) system developed by Build It Green has a similar approach to LEED but focuses on residential development, with separate single- and multi-family guidelines. LEED and GPR were adopted by many local jurisdictions to advance green building. The California Green Builder program developed by the California Building Industry Association combines prescriptive measures with performance-based verification.

Focus Measures

Our subcommittee's approach was to focus on measures that would have relatively high and long-term environmental benefits while being less complex to implement and verify. The State already has a goal of achieving Zero Net Energy for all new residential buildings by 2020 and for all commercial buildings by 2030 and has adopted rigorous energy efficiency standards to achieve this. Therefore, the subcommittee did not focus on additional energy efficiency measures, except where they would facilitate less reliance on natural gas and more on electricity, thereby promoting the greatest reduction in carbon emissions since Los Altos' electricity will be carbon-free. We also singled out a few areas that seem to be particularly important given energy and electric vehicle (EV) usage Los Altos, including pool-related measures and increasing EV charging capacity.

Deconstruction

Definition

Disassemble existing buildings for reuse or recycling of building materials instead of demolishing and landfilling building waste.

CALGreen Standards

Requirements and Tier I/II for waste diversion (no requirement for deconstruction).

Mandatory Residential: 60% waste diversion: Tier 1 = 65%, Tier II=75%

Mandatory Non-Residential: 65% diversion.

Fiscal impact: Roughly double cost from demolition; tax credit for donated materials.

Environmental Benefit: Reduced landfill waste and increased reuse of materials.

Recommendation: Require deconstruction for residential constructions and encourage deconstruction for nonresidential constructions.

Cool Roofs/Solar Reflectance Index Alternative (SRI)

Definition

Use roofing materials with a minimum aged solar reflectance and thermal emittance/minimum aged Solar Reflectance Index.

CALGreen Standards

<i>Tier I</i>	Roof Slope < 2:12	Roof Slope > 2:12
Residential	SRI 78	SRI 20
Non-Residential	SRI 64	SRI 16

Fiscal impact: \$0.75-\$1.50 per square foot for cool-roof coating and average yearly net savings of ~ \$0.50 per square foot.*

Environmental Benefit: Reduces building energy use and heat island effect.

Recommendation: Encourage adoption of Tier I.

*<https://www.epa.gov/heat-islands/using-cool-roofs-reduce-heat-islands>

Solar PV/Water Heating

Definition

Install photovoltaic or solar water heating system.

CALGreen Standards

Residential: Elective Zero Net Energy design (relies on on-site renewable energy generation to achieve zero Energy Design Rating)

Non-Residential: Tier I/II for restaurant install solar water-heating system.

Fiscal impact: Varies depending on size of system and lease vs. purchase options.

Environmental Benefit: Reduces grid electricity and/or gas demand.

Recommendation: Require residential construction to have solar-ready infrastructure – including a dedicated solar zone on the roof of no less than 500 square feet and install conduit extending from roofline and terminating at the electrical panel.

Swimming Pool Measures

Definition

Install automatic pool covers and two-speed/variable speed pool pumps.

CALGreen Standards

Not included in CALGreen

Fiscal impact: Automatic pool covers cost \$5-15 K. Variable speed pumps save an average of \$500 per year in electricity and are a few hundred dollars more expensive to install than single-speed pumps.

Environmental Benefit: Pool covers reduce water evaporation and provide passive heating during summer/warm months. Variable speed pumps reduce pool pump energy use by 50-75%.**

Recommendation: Require installation of automatic pool covers and/or variable speed pool pumps.

** <http://www.nrel.gov/docs/fy12osti/54242.pdf>

100% Electric Buildings

Definition

All energy requirements of building occupants are met with electricity (no natural gas).

CALGreen Standards

Not included in CALGreen

Fiscal impact: Potential for reduced operating cost for building.

Environmental Benefit: Eliminates energy-related carbon emissions by relying solely on carbon-free electricity from SVCE or onsite renewable energy generation.

Recommendation: Require space or water heating to be electric (heat pump). Encourage 100% electric buildings.

Hot Water Recirculation System

Definition

Install demand hot water recirculation system.

Standards

Residential: No mandatory. Voluntary=equipped with demand hot water recirculation system

Fiscal impact: Demand pump ~\$200. (Compared to the cost of continuous recirculation ~\$500 per year in increase water heating and electricity use.)

Environmental Benefit: Energy efficiency and water conservation

Recommendation: Encourage installation of demand (preferably button-hot water recirculation systems) and prohibit continuous recirculation pumps, even those on timers.

Dual Piping/Graywater Irrigation System

Definitions

- Piping installed to permit future use of graywater irrigation system served by clothes washer or other fixtures.
- Install a graywater collection system for onsite subsurface irrigation using graywater collected from bathtubs, showers, bathroom sinks & laundry water.

CALGreen Standards

Residential: Voluntary measure to install piping or use graywater

Non-Residential: Graywater/rainwater in landscape areas

Fiscal impact: Laundry to Landscape \$1,000-3,000 and ~\$150/year water/sewer savings.

Environmental Benefit: Reduce use of potable water and reduce wastewater generation.

Recommendation: Encourage installation of dual piping or graywater irrigation system.

EV Charging/Readiness

Definition

Install a dedicated 208/240 branch circuit. Facilitate EV charging capability by installing raceways for future EV supply equipment by pre-installing infrastructure to allow charging stations can be easily added later.

CALGreen Standards

Residential: Tier I/II: dedicated branch circuit.

Non-Residential: Mandatory, varies based on # spaces, Tier I=8% spaces, Tier II=12%

Fiscal impact:

Environmental Benefit: No direct impact but enables reduced vehicle emissions.

Recommendation: Require Electric vehicle supply equipment (EVSE)-ready outlet or charger or panel capacity and conduit for future installation. Encourage adoption of Tier II non-residential standard.

- *Reference:* https://www.opr.ca.gov/docs/Example_Building_Codes.docx (sample building codes)

Upgrade Electric Service Panel

Definition

Provide 200 Amp service to home.

CALGreen Standards

Not included in CALGreen

Fiscal impact: ~30% more expensive than 100 Amp service; one-time cost.

Environmental Benefit: No direct impact but accommodates increased EV ownership and demand and enables electrification of home, including additional electric vehicle charging and an increase in the number of heat pumps for space and water heating.

Recommendation: Encourage installation/upgrade to 200 Amp service

Other Measures

Some of the other measures included in CALGreen that we chose not to investigate are listed below.

- Recycled content of building materials (Res Tier 1 = 10%, II=15%)
- Topsoil reuse

- VOC/Formaldehyde content of flooring/insulation
- Rainwater Catchment (Res voluntary = use rainwater generated on 65% of roof)
- Energy Efficiency
- Water Efficiency (Non-Res Tier I=12%. II=20% savings)
- Eliminate potable water for landscaping (rainwater capture, recycled water, graywater)
- Reduce use of cement (Res Tier I = 20% reduction in foundation, II = 25% reduction)
- Permeable paving (Res Tier I = 20% or greater of hardscape; Tier II = 30%)

Incentives

Following are examples of incentives used by other cities to encourage adoption of voluntary measures:

- Expedited permit processing/Priority permitting
- Fee waivers
- Height/FAR waivers
- Rebates (eg for solar panels)
- City recognition/plaque

Next steps:

1. Present report to full Commission for discussion
2. Send report to staff for review and comments as to feasibility of measures
3. Include in Work Plan report to Council at Joint meeting

**APRIL
2017**

ATTACHMENT C



Monthly Water Use Status Report

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Water Use Reductions Background

Purpose

This report provides monthly water supply and water use reduction data. The report originated in 2014 as part of the Santa Clara Valley Water District's (district) response to drought conditions. 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 district's 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: 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: Extended the call for 30 percent savings through June 30, 2016.
- June 14, 2016: 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.
- January 31, 2017: Approved a resolution calling for 20 percent reductions and continued certain water waste prohibitions, but removed the recommendations that retailers implement mandatory measures.

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. Some of these efforts are listed below:

- Water retailers and the district increased their outreach and education efforts.
- Investor owned retailers implemented water allocation programs.
- Landscape conversion rebates were temporarily increased to \$2 per square foot (back to \$1 per square foot as of July 1, 2016).
- Several irrigation hardware rebates were increased.

- Graywater laundry to landscape rebates were increased up to \$200 per residential site for properly connecting a clothes washer to a graywater irrigation system.
- Rebate programs for commercial facilities were temporarily increased, 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 2015, the district held two summits, one with the retailers and one with local elected officials to:

- Continue to effectuate the common theme that messaging and policy development needs to be consistent and coordinated.
- Facilitate increased water use saving efforts and increased coordination to meet the 30 percent reduction target that was in place at that time.
- Focus coordination between the water district and retailers.
- Help transition the response by the community to the change in water use reductions and restrictions
- More recently, the district has hosted summits (2016 and 2017) in partnership with the Landscape Industry to understand how we can better work together to improve water supply reliability in Santa Clara County.

Countywide Water Use Reductions

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. It is a small, but important and growing source of water.

Water retailers' water use reductions total from February to December 2014 was just above 13 percent for the year. After statewide and local efforts were increased, water reductions in 2015 (January through December 2015, compared to the same period in 2013) totaled an estimated 27 percent. January through December water reduction in 2016 were 28 percent compared to 2013. Preliminary 2017 data for March indicates that 28 percent reductions were achieved in March when compared to March 2013, and through March 2017, 24 percent reductions have been achieved so far. This is above the 20 percent target set by the board on January 31, 2017. The significant and sustained increases in water savings in 2015, 2016 and 2017 indicate that the district's, retailers', municipalities', and County's efforts, along with actions at the state level, had an effect on water use behavior.

Water Supply Overview

Current Water Supply Status

Overall local and regional hydrologic conditions continue to improve as a result of winter storms.

- As previously reported, the U.S. Drought Monitor map for California indicates that Santa Clara County and northern California are no longer in drought conditions.
- The district's 2017 SWP allocation is 85 percent of contract, as of April 14, 2017. The Bureau of Reclamation announced on April 11, 2017, that Central Valley Project (CVP) allocations are 100 percent for both South of Delta M&I and Agricultural water service contractors. In accordance with our Reallocation Agreement, the district's total allocation will be 152,500 AF. Current projections for 2017 water supply operations indicate that up to 60,000 AF may be added to Semitropic Water Bank this year.
- As of April 1, 2017, local reservoir storage is at 125 percent of the 20-year average for this time of year. After the 2017 storms, many reservoirs were exceeding their capacity. Storage in key northern California reservoirs is above average for this time of year, and San Luis Reservoir is at 109 percent of average for April 1.
- Local and imported supplies are less constrained as compared to the last few years, and last year the district took advantage of the improved water supply conditions by increasing recharge operations compared to 2015, in collaboration with regulatory agencies.
- As of April 1, 2017, managed groundwater recharge in the Santa Clara Plain for 2017 to date, is 48 percent of the five-year average for that date, and there has been much improvement in groundwater storage compared to 2015. Estimated end of 2016 groundwater storage was within the lower range of Stage 1 (Normal) of the Water Shortage Contingency Plan. End of year groundwater storage for 2017 is also projected to be within the lower range of Stage 1 (Normal) of the Water Shortage Contingency Plan
- Staff continues to closely track groundwater conditions through monthly water level measurements at 225 wells and regular subsidence monitoring.

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. 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.

Water Use and Reductions Data

Water Use and Reductions Data

TABLE 1: CURRENT YEAR'S RETAIL WATER USE AF AND SAVINGS (2017 Compared to 2013)

<u>2013</u>	<u>North County Ground water</u>	<u>South County Ground water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2013 Monthly Use</u>	<u>2013 Cumulative Use</u>
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*	11,998	3,986	20,990	10,513	3,787	51,274	
Jan to Dec Totals	86,144	23,080	126,961	54,642	7,785	298,613	

<u>2017</u>	<u>North County Ground water</u>	<u>South County Ground water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2017 Monthly Use</u>	<u>2017 Cumulative Use</u>	<i>Cumulative District Source Savings</i>	<i>Cumulative NonDistrict Source Savings</i>	All Sources Cumulative %Savings from 2013 <+> savings
Jan	3,194	1,283	5,993	2,446	134	13,050	13,050	-3%	51%	15%
Feb	3,164	1,145	5,097	2,276	80	11,761	24,811	7%	52%	21%
Mar*	3,750	1,354	5,770	2,987	342	14,203	39,014	17%	42%	24%
Apr	-	-	-	-	-	-				
May	-	-	-	-	-	-				
Jun	-	-	-	-	-	-				
Jul	-	-	-	-	-	-				
Aug	-	-	-	-	-	-				
Sep	-	-	-	-	-	-				
Oct	-	-	-	-	-	-				
Nov	-	-	-	-	-	-				
Dec	-	-	-	-	-	-				
*Jan to Current Totals	10,108	3,782	16,860	7,709	555	39,014				
<i>%Savings by Source of Supply</i>	16%	5%	20%	27%	85%	24%				

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

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).

* Current month data for 2017 does not include Stanford data (not available at time of printing), and therefore also not included in 2013.

TABLE 2: LAST YEAR'S RETAIL WATER USE AND SAVINGS (2016 Compared to 2013)

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	86,144	23,080	126,961	54,642	7,785	298,613	
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	Treated Water	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	2,493	489	12,749	12,749	4%	44%	17%	17%
Feb	3,238	1,041	5,037	2,581	951	12,848	25,598	10%	37%	19%	15%
Mar	3,562	1,149	4,950	3,053	1,282	13,996	39,594	22%	24%	23%	19%
Apr	4,367	1,315	5,050	3,343	1,857	15,931	55,525	30%	17%	27%	21%
May	3,864	1,622	7,855	4,411	1,919	19,670	75,195	35%	12%	29%	22%
Jun	5,291	1,849	10,264	4,472	1,005	22,882	98,077	34%	11%	28%	22%
Jul	6,405	2,060	11,365	4,648	0.3	24,478	122,555	32%	14%	28%	21%
Aug	5,447	2,178	11,834	4,648	0.3	24,107	146,662	31%	16%	28%	21%
Sep	3,696	2,062	12,328	4,556	0.3	22,643	169,304	30%	16%	27%	20%
Oct	2,905	1,788	10,561	3,307	0.3	18,561	187,866	30%	18%	27%	20%
Nov	3,265	1,393	7,099	2,684	1.8	14,442	202,308	30%	19%	28%	20%
Dec	3,539	1,333	6,190	2,424	60	13,545	215,853	30%	20%	28%	20%
Jan to Current Totals	49,472	18,874	97,321	42,619	7,566	215,853					
%Savings by Source of Supply	43%	18%	23%	22%	3%	28%					

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

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).

TABLE 3: PAST YEAR'S RETAIL WATER USE AF AND SAVINGS (2015 Compared to 2013)

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

<u>2013</u>	<u>North County Ground water</u>	<u>South County Ground water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2013 Monthly Total</u>	<u>2013 Cumulative Use</u>
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	

<u>2015</u>	<u>North County Ground water</u>	<u>South County Ground water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2015 Monthly Use</u>	<u>2015 Cumulative Use</u>	<i>Cumulative District Source Savings</i>	<i>Cumulative NonDistrict Source Savings</i>	<u>All Sources Cumulative %Savings from 2013 <+> savings</u>	<u>Statewide Cumulative Savings (since Jan 2015)</u>
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					
<i>%Savings by Source of Supply</i>	31%	26%	25%	23%	38%	27%					

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

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).

Values may not add up due to rounding.

TABLE 4: 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.

<u>2013</u>	<u>North County Ground- water</u>	<u>South County Ground- water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2013 Monthly Total</u>	<u>2013 Cumulative Use Feb to Dec</u>
<i>January water use values are NOT used in water savings calculations or cumulative use values.</i>							
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	

<u>2014</u>	<u>North County Ground- water</u>	<u>South County Ground- water</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>SJWC Surface</u>	<u>2014 Monthly Use</u>	<u>2014 Cumulative Use Feb to Dec</u>	<u>Cumulative % Savings from 2013 <+> savings</u>
<i>January water use values are NOT used in water savings calculations or cumulative use values.</i>								
Jan	6,485.1	1,508.7	8,137.3	3,631.3	0.3	19,762.7	19,762.7	Not 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		
<i>%Savings by Source of Supply</i>	-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.

TABLE 6: 2017 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water Retailer Savings	<u>Jan to Jan</u>	<u>Jan to Feb</u>	<u>Jan to Mar</u>	<u>Jan to April</u>	<u>Jan to May</u>	<u>Jan to June</u>	<u>Jan to July</u>	<u>Jan to Aug</u>	<u>Jan to Sept</u>	<u>Jan to Oct</u>	<u>Jan to Nov</u>	<u>Jan to Dec</u>
San Jose Water Company	14%	19%	23%									
Santa Clara, city	18%	18%	19%									
Sunnyvale	6%	17%	18%									
San Jose Municipal Water	11%	21%	24%									
California Water Service	33%	38%	40%									
Palo Alto	29%	38%	33%									
Mountain View	20%	31%	27%									
Great Oaks	15%	19%	23%									
Milpitas	12%	19%	17%									
Gilroy	5%	12%	18%									
Morgan Hill	3%	14%	23%									
Purissima Hills Water	53%	50%	52%									
Stanford	32%	38%	¹									
Combined Cumulative Savings	15%	21%	24%									
Month to Month Water Retailer Savings	<u>Jan to Jan</u>	<u>Feb to Feb</u>	<u>Mar to Mar</u>	<u>April to April</u>	<u>May to May</u>	<u>June to June</u>	<u>July to July</u>	<u>Aug to Aug</u>	<u>Sept to Sept</u>	<u>Oct to Oct</u>	<u>Nov to Nov</u>	<u>Dec to Dec</u>
San Jose Water Company	14%	24%	30%									
Santa Clara (City of)	18%	19%	21%									
Sunnyvale	6%	27%	19%									
San Jose Municipal Water	11%	30%	29%									
California Water Service	33%	42%	43%									
Palo Alto	29%	45%	27%									
Mountain View	20%	40%	20%									
Great Oaks	15%	24%	30%									
Milpitas	12%	25%	13%									
Gilroy	5%	19%	28%									
Morgan Hill	3%	24%	35%									
Purissima Hills Water	53%	46%	54%									
Stanford	32%	42%	¹									
Combined Month to Month 2017	15%	27%	28%									

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

TABLE 7: 2016 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water Retailer Savings	<u>Jan to Jan</u>	<u>Jan to Feb</u>	<u>Jan to Mar</u>	<u>Jan to April</u>	<u>Jan to May</u>	<u>Jan to June</u>	<u>Jan to July</u>	<u>Jan to Aug</u>	<u>Jan to Sept</u>	<u>Jan to Oct</u>	<u>Jan to Nov</u>	<u>Jan to Dec</u>
San Jose Water Company	16%	17%	22%	27%	29%	29%	29%	29%	28%	29%	29%	29%
Santa Clara, city	19%	16%	18%	20%	23%	23%	22%	22%	20%	21%	21%	21%
Sunnyvale	14%	18%	21%	23%	27%	26%	26%	25%	23%	23%	24%	24%
San Jose Municipal Water	11%	16%	22%	26%	29%	28%	28%	28%	27%	27%	27%	27%
California Water Service	35%	33%	37%	39%	38%	35%	33%	31%	30%	31%	32%	32%
Palo Alto	24%	29%	27%	30%	31%	29%	27%	28%	26%	27%	27%	27%
Mountain View	30%	31%	28%	31%	34%	33%	32%	31%	29%	29%	29%	29%
Great Oaks	19%	20%	25%	29%	32%	30%	31%	30%	29%	29%	30%	29%
Milpitas	17%	18%	16%	18%	22%	21%	21%	21%	19%	20%	20%	19%
Gilroy	8%	11%	20%	25%	26%	27%	26%	26%	25%	25%	25%	25%
Morgan Hill	5%	13%	24%	31%	34%	31%	30%	28%	27%	28%	29%	30%
Purissima Hills Water	59%	45%	49%	40%	39%	32%	29%	29%	26%	29%	30%	31%
Stanford	34%	39%	36%	39%	38%	37%	35%	35%	34%	34%	35%	35%
Combined Cumulative Savings	18%	19%	23%	27%	29%	29%	28%	28%	27%	27%	28%	28%
Month to Month Water Retailer Savings	<u>Jan to Jan</u>	<u>Feb to Feb</u>	<u>Mar to Mar</u>	<u>April to April</u>	<u>May to May</u>	<u>June to June</u>	<u>July to July</u>	<u>Aug to Aug</u>	<u>Sept to Sept</u>	<u>Oct to Oct</u>	<u>Nov to Nov</u>	<u>Dec to Dec</u>
San Jose Water Company	16%	18%	31%	36%	36%	28%	28%	28%	26%	33%	34%	31%
Santa Clara (City of)	19%	12%	22%	26%	29%	23%	17%	25%	5%	27%	23%	14%
Sunnyvale	14%	22%	25%	28%	36%	22%	26%	20%	12%	25%	30%	19%
San Jose Municipal Water	11%	22%	31%	33%	38%	25%	29%	25%	19%	30%	32%	26%
California Water Service	35%	31%	44%	42%	37%	26%	24%	23%	24%	37%	41%	42%
Palo Alto	24%	34%	23%	37%	35%	19%	14%	34%	11%	35%	30%	24%
Mountain View	30%	32%	23%	35%	42%	27%	28%	27%	10%	34%	32%	19%
Great Oaks	19%	21%	33%	38%	37%	26%	31%	26%	26%	29%	33%	25%
Milpitas	17%	20%	12%	24%	31%	18%	22%	21%	5%	23%	21%	12%
Gilroy	8%	13%	34%	33%	31%	28%	23%	23%	21%	27%	27%	21%
Morgan Hill	5%	19%	38%	43%	41%	21%	27%	19%	22%	34%	43%	35%
Purissima Hills Water	59%	26%	54%	22%	36%	11%	22%	25%	15%	45%	53%	47%
Stanford	34%	43%	31%	44%	38%	30%	25%	35%	29%	36%	47%	25%
Combined Month to Month 2016	18%	21%	29%	35%	36%	26%	26%	26%	21%	31%	32%	27%

TABLE 8: 2015 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water Retailer Savings	<u>Jan to Jan</u>	<u>Jan to Feb</u>	<u>Jan to Mar</u>	<u>Jan to April</u>	<u>Jan to May</u>	<u>Jan to June</u>	<u>Jan to July</u>	<u>Jan to Aug</u>	<u>Jan to Sept</u>	<u>Jan to Oct</u>	<u>Jan to Nov</u>	<u>Jan to 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 Savings	-2%	4%	5%	11%	18%	22%	25%	26%	27%	27%	27%	27%
Month to Month Water Retailer Savings	<u>Jan to Jan</u>	<u>Feb to Feb</u>	<u>Mar to Mar</u>	<u>April to April</u>	<u>May to May</u>	<u>June to June</u>	<u>July to July</u>	<u>Aug to Aug</u>	<u>Sept to Sept</u>	<u>Oct to Oct</u>	<u>Nov to Nov</u>	<u>Dec to Dec</u>
San Jose Water Company	-3%	5%	7%	25%	36%	35%	38%	36%	31%	28%	33%	30%
Santa Clara (City of)	2%	7%	3%	11%	26%	29%	20%	33%	11%	17%	30%	16%
Sunnyvale	-6%	18%	4%	27%	38%	36%	37%	36%	25%	21%	29%	20%
San Jose Municipal Water	-8%	11%	7%	24%	39%	33%	35%	34%	25%	24%	30%	21%
California Water Service	8%	15%	8%	26%	40%	40%	39%	37%	34%	36%	42%	44%
Palo Alto	10%	19%	6%	25%	46%	31%	31%	38%	28%	32%	36%	26%
Mountain View	0%	24%	3%	27%	38%	33%	31%	41%	25%	27%	37%	19%
Great Oaks	0%	10%	10%	25%	38%	37%	36%	35%	33%	30%	34%	27%
Milpitas	1%	11%	-1%	17%	31%	24%	25%	32%	13%	16%	23%	10%
Gilroy	-5%	5%	13%	24%	34%	33%	35%	32%	28%	27%	30%	24%
Morgan Hill	-8%	3%	17%	39%	35%	35%	42%	34%	36%	35%	46%	38%
Purissima Hills Water	-4%	25%	-3%	40%	37%	40%	41%	27%	19%	8%	37%	47%
Stanford	-3%	13%	8%	29%	44%	35%	19%	42%	18%	37%	43%	37%
Combined Month to Month 2015	-2%	9%	7%	24%	36%	34%	36%	35%	28%	27%	33%	27%

TABLE 9: 2014 RETAILER CUMULATIVE SAVINGS SUMMARY

(Savings calculated from February 2014 to December 2014)

Cumulative Water Retailer Savings	<u>Feb to Feb</u>	<u>Feb to Mar</u>	<u>Feb to April</u>	<u>Feb to May</u>	<u>Feb to June</u>	<u>Feb to July</u>	<u>Feb to Aug</u>	<u>Feb to Sept</u>	<u>Feb to Oct</u>	<u>Feb to Nov</u>	<u>Feb to Dec</u>
San Jose Water Company	3%	6%	10%	10%	9%	9%	10%	11%	11%	12%	13%
Santa Clara, city	7%	8%	9%	7%	8%	8%	8%	8%	8%	9%	10%
Sunnyvale	16%	15%	17%	15%	14%	14%	14%	13%	13%	13%	14%
San Jose Municipal Water	15%	16%	18%	14%	12%	12%	12%	12%	12%	12%	13%
California Water Service	15%	18%	19%	15%	13%	13%	13%	13%	14%	14%	16%
Palo Alto	32%	25%	16%	17%	16%	13%	15%	15%	15%	16%	16%
Mountain View	24%	18%	18%	17%	14%	14%	14%	14%	14%	15%	16%
Great Oaks	7%	11%	16%	15%	13%	14%	14%	15%	15%	16%	16%
Milpitas	11%	11%	11%	11%	10%	10%	11%	11%	11%	11%	11%
Gilroy	2%	11%	17%	14%	13%	12%	12%	13%	13%	14%	14%
Morgan Hill	-7%	9%	15%	16%	16%	16%	15%	15%	16%	18%	19%
Purissima Hills Water	45%	34%	28%	14%	14%	12%	14%	14%	14%	16%	16%
Stanford	24%	21%	15%	10%	10%	7%	8%	8%	6%	8%	7%
Combined Cumulative Savings	9%	10%	13%	12%	11%	11%	11%	12%	12%	13%	13%
Month to Month Water Retailer Savings	<u>Feb to Feb</u>	<u>Mar to Mar</u>	<u>Apr to Apr</u>	<u>May to May</u>	<u>June to June</u>	<u>July to July</u>	<u>Aug to Aug</u>	<u>Sept to Sept</u>	<u>Oct to Oct</u>	<u>Nov to Nov</u>	<u>Dec to Dec</u>
San Jose Water Company	3%	8%	16%	9%	7%	11%	13%	14%	16%	18%	26%
Santa Clara (City of)	7%	9%	9%	3%	12%	6%	12%	8%	8%	12%	24%
Sunnyvale	16%	14%	20%	12%	10%	13%	13%	12%	8%	20%	23%
San Jose Municipal Water	15%	16%	20%	8%	5%	10%	12%	12%	11%	18%	22%
California Water Service	15%	20%	20%	9%	8%	10%	13%	15%	19%	24%	40%
Palo Alto	32%	19%	3%	18%	16%	-1%	26%	14%	11%	33%	16%
Mountain View	24%	13%	18%	14%	5%	14%	17%	13%	13%	27%	22%
Great Oaks	7%	14%	22%	14%	8%	16%	17%	19%	17%	21%	22%
Milpitas	11%	11%	10%	11%	8%	10%	13%	12%	8%	16%	10%
Gilroy	2%	18%	24%	10%	7%	12%	12%	17%	13%	23%	24%
Morgan Hill	-7%	20%	23%	17%	14%	17%	13%	14%	24%	42%	36%
Purissima Hills Water	45%	23%	22%	-19%	15%	5%	23%	13%	14%	46%	26%
Stanford	24%	17%	7%	-1%	10%	-10%	17%	3%	-8%	28%	-15%
Combined Month to Month 2015	9%	12%	16%	10%	8%	11%	14%	14%	14%	20%	25%

Water Use and Reductions Data

California Water Service

2013	Groundwater	Treated Water	SFPUC	Surface	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Surface	2017 Monthly Use
Jan	215.0	510.0	-	-	725.0	Jan	312.0	171.0	-	-	483.0
Feb	254.0	477.0	-	-	731.0	Feb	229.0	192.0	-	-	421.0
Mar	446.0	544.0	-	-	990.0	Mar	289.0	275.0	-	-	564.0
Apr	439.0	786.0	-	-	1,225.0	Apr	-	-	-	-	-
May	672.0	906.0	-	-	1,578.0	May	-	-	-	-	-
Jun	709.0	930.0	-	-	1,639.0	Jun	-	-	-	-	-
Jul	690.0	1,049.0	-	-	1,739.0	Jul	-	-	-	-	-
Aug	437.0	1,241.0	-	-	1,678.0	Aug	-	-	-	-	-
Sep	321.0	1,221.0	-	-	1,542.0	Sep	-	-	-	-	-
Oct	363.0	1,068.0	-	-	1,431.0	Oct	-	-	-	-	-
Nov	183.0	844.0	-	-	1,027.0	Nov	-	-	-	-	-
Dec	262.0	626.0	-	-	888.0	Dec	-	-	-	-	-
Jan to Current Month Totals	915.0	1,531.0	-	-	2,446.0	Jan to Current Month Totals	830.0	638.0	-	-	1,468.0
January to December Total	4,991.0	10,202.0	-	-	15,193.0	%Savings by Source of Supply	9%	58%			40%

Gilroy

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Surface Water	2017 Monthly Use
Jan	428.0	-	-	-	428.0	Jan	407.8	-	-	-	407.8
Feb	443.0	-	-	-	443.0	Feb	360.1	-	-	-	360.1
Mar	623.0	-	-	-	623.0	Mar	451.2	-	-	-	451.2
Apr	751.0	-	-	-	751.0	Apr	-	-	-	-	-
May	952.0	-	-	-	952.0	May	-	-	-	-	-
Jun	1,002.6	-	-	-	1,002.6	Jun	-	-	-	-	-
Jul	1,099.5	-	-	-	1,099.5	Jul	-	-	-	-	-
Aug	1,045.0	-	-	-	1,045.0	Aug	-	-	-	-	-
Sep	950.0	-	-	-	950.0	Sep	-	-	-	-	-
Oct	856.0	-	-	-	856.0	Oct	-	-	-	-	-
Nov	632.0	-	-	-	632.0	Nov	-	-	-	-	-
Dec	541.0	-	-	-	541.0	Dec	-	-	-	-	-
Jan to Current Month Totals	1,494.0	-	-	-	1,494.0	Jan to Current Month Totals	1,219.2	-	-	-	1,219.2
January to December Total	9,323.1	-	-	-	9,323.1	%Savings by Source of Supply	18%				18%

Water Use and Reductions Data

Great Oaks

2013	Ground water - Zone 2	Ground water - Zone 5	Treated Water	SFPUC	2013 Monthly Use	2017	Ground water - Zone 2	Ground water - Zone 5	Treated Water	SFPUC	2017 Monthly Use
Jan	240.8	415.2	-	-	656.0	Jan	10.8	547.2	-	-	558.1
Feb	277.6	376.7	-	-	654.3	Feb	12.9	486.4	-	-	499.3
Mar	430.5	409.7	-	-	840.2	Mar	47.9	541.9	-	-	589.8
Apr	652.3	376.3	-	-	1,028.6	Apr	-	-	-	-	-
May	901.6	391.4	-	-	1,293.0	May	-	-	-	-	-
Jun	970.8	368.9	-	-	1,339.7	Jun	-	-	-	-	-
Jul	1,056.8	366.9	-	-	1,423.7	Jul	-	-	-	-	-
Aug	1,040.8	342.0	-	-	1,382.8	Aug	-	-	-	-	-
Sep	882.6	368.9	-	-	1,251.5	Sep	-	-	-	-	-
Oct	751.0	359.7	-	-	1,110.7	Oct	-	-	-	-	-
Nov	534.4	343.3	-	-	877.7	Nov	-	-	-	-	-
Dec	444.5	306.2	-	-	750.7	Dec	-	-	-	-	-
Jan to Current Month Totals	948.9	1,201.6	-	-	2,150.5	Jan to Current Month Totals	71.7	1,575.4	-	-	1,647.1
January to December Total	8,183.7	4,425.2	-	-	12,608.9	%Savings by Source of Supply	92%	-31%	-	-	23%

Milpitas

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Surface Water	2017 Monthly Use
Jan	-	235.0	433.0	-	668.0	Jan	-	233.5	357.2	-	590.7
Feb	-	228.0	478.0	-	706.0	Feb	-	224.7	303.8	-	528.4
Mar	-	263.0	461.0	-	724.0	Mar	-	250.9	380.9	-	631.8
Apr	-	288.0	574.0	-	862.0	Apr	-	-	-	-	-
May	-	323.0	770.0	-	1,093.0	May	-	-	-	-	-
Jun	-	310.0	705.0	-	1,015.0	Jun	-	-	-	-	-
Jul	-	377.0	764.0	-	1,141.0	Jul	-	-	-	-	-
Aug	-	298.0	855.0	-	1,153.0	Aug	-	-	-	-	-
Sep	-	182.0	743.0	-	925.0	Sep	-	-	-	-	-
Oct	-	228.0	731.0	-	959.0	Oct	-	-	-	-	-
Nov	-	253.0	541.0	-	794.0	Nov	-	-	-	-	-
Dec	-	265.0	452.0	-	717.0	Dec	-	-	-	-	-
Jan to Current Month Totals		726.0	1,372.0		2,098.0	Jan to Current Month Totals	-	709.1	1,041.8	-	1,750.9
January to December Total	-	3,250.0	7,507.0	-	10,757.0	%Savings by Source of Supply	-	2%	24%	-	17%

Water Use and Reductions Data

Morgan Hill

2013	Groundwater	Treated Water	SFPUC	Other	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Other	2017 Monthly Use
Jan	323.0	-	-	-	323.0	Jan	313.9	-	-	-	313.9
Feb	367.0	-	-	-	367.0	Feb	280.3	-	-	-	280.3
Mar	528.0	-	-	-	528.0	Mar	345.7	-	-	-	345.7
Apr	748.0	-	-	-	748.0	Apr	-	-	-	-	-
May	943.0	-	-	-	943.0	May	-	-	-	-	-
Jun	907.0	-	-	-	907.0	Jun	-	-	-	-	-
Jul	1,116.0	-	-	-	1,116.0	Jul	-	-	-	-	-
Aug	976.0	-	-	-	976.0	Aug	-	-	-	-	-
Sep	955.0	-	-	-	955.0	Sep	-	-	-	-	-
Oct	894.0	-	-	-	894.0	Oct	-	-	-	-	-
Nov	665.0	-	-	-	665.0	Nov	-	-	-	-	-
Dec	518.0	-	-	-	518.0	Dec	-	-	-	-	-
Jan to Current Month Totals	1,218.0	-	-	-	1,218.0	Jan to Current Month Totals	939.9	-	-	-	939.9
January to December Total	8,940.0	-	-	-	8,940.0	%Savings by Source of Supply	23%	-	-	-	23%

Mountain View

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Surface Water	2017 Monthly Use
Jan	28.0	54.0	564.0	-	646.0	Jan	1.9	44.7	469.2	-	515.8
Feb	28.0	63.0	700.0	-	791.0	Feb	10.5	39.1	421.0	-	470.7
Mar	38.0	85.0	655.0	-	778.0	Mar	13.2	48.5	558.4	-	620.1
Apr	35.0	110.0	886.0	-	1,031.0	Apr	-	-	-	-	-
May	40.0	142.0	1,176.0	-	1,358.0	May	-	-	-	-	-
Jun	41.0	142.0	1,049.0	-	1,232.0	Jun	-	-	-	-	-
Jul	29.0	155.0	1,177.0	-	1,361.0	Jul	-	-	-	-	-
Aug	30.0	152.0	1,183.0	-	1,365.0	Aug	-	-	-	-	-
Sep	24.0	134.0	906.0	-	1,064.0	Sep	-	-	-	-	-
Oct	35.0	121.0	928.0	-	1,084.0	Oct	-	-	-	-	-
Nov	31.0	92.0	724.0	-	847.0	Nov	-	-	-	-	-
Dec	30.0	79.0	611.0	-	720.0	Dec	-	-	-	-	-
Jan to Current Month Totals	94.0	202.0	1,919.0	-	2,215.0	Jan to Current Month Totals	25.6	132.4	1,448.6	-	1,606.6
January to December Total	389.0	1,329.0	10,559.0	-	12,277.0	%Savings by Source of Supply	73%	34%	25%	-	27%

Water Use and Reductions Data

Palo Alto

<u>2013</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Other</u>	<u>2013 Monthly Use</u>	<u>2017</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Other</u>	<u>2017 Monthly Use</u>
Jan	-	-	696.0	-	696.0	Jan	-	-	494.9	-	494.9
Feb	-	-	857.5	-	857.5	Feb	-	-	475.0	-	475.0
Mar	-	-	943.0	-	943.0	Mar	-	-	691.0	-	691.0
Apr	-	-	1,237.3	-	1,237.3	Apr	-	-	-	-	-
May	-	-	1,479.7	-	1,479.7	May	-	-	-	-	-
Jun	-	-	1,484.3	-	1,484.3	Jun	-	-	-	-	-
Jul	-	-	1,340.2	-	1,340.2	Jul	-	-	-	-	-
Aug	-	-	1,520.7	-	1,520.7	Aug	-	-	-	-	-
Sep	-	-	1,237.3	-	1,237.3	Sep	-	-	-	-	-
Oct	-	-	1,041.1	-	1,041.1	Oct	-	-	-	-	-
Nov	-	-	807.9	-	807.9	Nov	-	-	-	-	-
Dec	-	-	791.2	-	791.2	Dec	-	-	-	-	-
Jan to Current Month Totals	-	-	2,496.4		2,496.4	Jan to Current Month Totals	-	-	1,661.0	-	1,661.0
January to December Total	-	-	13,435.9	-	13,435.9	%Savings by Source of Supply			33%		33%

Purissima Hills Water District

<u>2013</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Other</u>	<u>2013 Monthly Use</u>	<u>2017</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Other</u>	<u>2017 Monthly Use</u>
Jan	-	-	101.5	-	101.5	Jan	-	-	47.7	-	47.7
Feb	-	-	77.0	-	77.0	Feb	-	-	41.4	-	41.4
Mar	-	-	129.6	-	129.6	Mar	-	-	59.6	-	59.6
Apr	-	-	138.0	-	138.0	Apr	-	-	-	-	-
May	-	-	247.3	-	247.3	May	-	-	-	-	-
Jun	-	-	226.4	-	226.4	Jun	-	-	-	-	-
Jul	-	-	295.0	-	295.0	Jul	-	-	-	-	-
Aug	-	-	290.0	-	290.0	Aug	-	-	-	-	-
Sep	-	-	255.2	-	255.2	Sep	-	-	-	-	-
Oct	-	-	225.9	-	225.9	Oct	-	-	-	-	-
Nov	-	-	149.3	-	149.3	Nov	-	-	-	-	-
Dec	-	-	102.2	-	102.2	Dec	-	-	-	-	-
Jan to Current Month Totals	-	-	308.2		308.2	Jan to Current Month Totals	-	-	148.6	-	148.6
January to December Total	-	-	2,237.5	-	2,237.5	%Savings by Source of Supply			52%		52%

Water Use and Reductions Data

San Jose Municipal Water

2013	Ground Water Zone 2	Ground Water Zone 5	Treated Water	SFPUC	2013 Monthly Use	2017	Ground Water Zone 2	Ground Water Zone 5	Treated Water	SFPUC	2017 Monthly Use
Jan	35.1	25.5	728.0	286.0	1,074.6	Jan	1.1	14.4	636.1	299.8	951.4
Feb	37.2	21.8	762.0	354.0	1,175.0	Feb	0.1	18.0	530.0	275.5	823.6
Mar	46.7	25.0	1,020.0	339.0	1,430.7	Mar	0.5	14.8	349.1	651.8	1,016.2
Apr	67.8	30.9	1,278.0	414.0	1,790.7	Apr	-	-	-	-	-
May	39.9	27.9	1,653.0	540.0	2,260.8	May	-	-	-	-	-
Jun	45.2	33.2	1,691.0	493.0	2,262.4	Jun	-	-	-	-	-
Jul	47.3	31.4	1,854.0	560.0	2,492.7	Jul	-	-	-	-	-
Aug	50.8	36.5	1,750.0	574.0	2,411.3	Aug	-	-	-	-	-
Sep	33.6	31.3	1,530.0	466.0	2,060.9	Sep	-	-	-	-	-
Oct	36.3	44.0	1,380.0	461.0	1,921.3	Oct	-	-	-	-	-
Nov	33.4	52.0	1,039.0	379.0	1,503.4	Nov	-	-	-	-	-
Dec	26.4	32.5	885.0	326.0	1,269.9	Dec	-	-	-	-	-
Jan to Current Month Totals	119.0	72.3	2,510.0	979.0	3,680.3	Jan to Current Month Totals	1.7	47.2	1,515.2	1,227.1	2,791.2
January to December Total	499.7	392.0	15,570.0	5,192.0	21,653.7	%Savings by Source of Supply	99%	35%	40%	-25%	24%

San Jose Water Co

2013	Groundwater	Treated Water	SFPUC	Surface Water	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Surface Water	2017 Monthly Use
Jan	1,731.0	4,016.1	-	1,807.1	7,554.2	Jan	2,206.4	4,136.8	-	133.5	6,476.8
Feb	1,865.6	4,328.1	-	1,384.8	7,578.6	Feb	2,156.4	3,499.8	-	79.5	5,735.7
Mar	3,807.7	5,241.9	-	594.9	9,644.4	Mar	2,567.1	3,878.3	-	341.7	6,787.2
Apr	4,293.0	7,082.4	-	422.2	11,797.6	Apr	-	-	-	-	-
May	5,375.9	9,033.4	-	298.6	14,708.0	May	-	-	-	-	-
Jun	5,643.2	8,959.1	-	516.2	15,118.5	Jun	-	-	-	-	-
Jul	7,198.0	8,610.9	-	616.3	16,425.2	Jul	-	-	-	-	-
Aug	6,693.0	8,694.2	-	584.1	15,971.2	Aug	-	-	-	-	-
Sep	5,451.9	8,352.7	-	530.6	14,335.2	Sep	-	-	-	-	-
Oct	5,575.0	7,394.2	-	501.5	13,470.6	Oct	-	-	-	-	-
Nov	4,971.4	5,323.4	-	326.0	10,620.8	Nov	-	-	-	-	-
Dec	5,145.5	4,205.5	-	202.8	9,553.7	Dec	-	-	-	-	-
Jan to Current Month Totals	7,404.3	13,586.1	-	3,786.8	24,777.2	Jan to Current Month Totals	6,929.9	11,515.0	-	554.7	18,999.6
January to December Total	57,751.1	81,242.0	-	7,785.0	146,778.1	%Savings by Source of Supply	6%	15%	-	85%	23%

Water Use and Reductions Data

Santa Clara

2013	Groundwater	Treated Water	SFPUC	Other	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Other	2017 Monthly Use
Jan	802.0	287.0	207.0	-	1,296.0	Jan	651.6	229.6	186.1	-	1,067.3
Feb	735.0	370.0	219.0	-	1,324.0	Feb	742.7	178.5	157.4	-	1,078.6
Mar	951.0	428.0	199.0	-	1,578.0	Mar	825.0	225.3	203.5	-	1,253.8
Apr	1,059.0	434.0	224.0	-	1,717.0	Apr	-	-	-	-	-
May	1,378.0	492.0	226.0	-	2,096.0	May	-	-	-	-	-
Jun	1,520.0	467.0	180.0	-	2,167.0	Jun	-	-	-	-	-
Jul	1,545.0	454.0	204.0	-	2,203.0	Jul	-	-	-	-	-
Aug	1,688.0	450.0	217.0	-	2,355.0	Aug	-	-	-	-	-
Sep	1,233.0	442.0	183.0	-	1,858.0	Sep	-	-	-	-	-
Oct	1,301.0	428.0	234.0	-	1,963.0	Oct	-	-	-	-	-
Nov	1,062.0	356.0	194.0	-	1,612.0	Nov	-	-	-	-	-
Dec	933.0	342.0	173.0	-	1,448.0	Dec	-	-	-	-	-
January to Current Month Totals	2,488.0	1,085.0	625.0	-	4,198.0	January to Current Month Totals	2,219.3	633.4	547.0	-	3,399.7
January to December Total	14,207.0	4,950.0	2,460.0	-	21,617.0	%Savings by Source of Supply	11%	42%	12%	-	19%

Stanford

2013	Groundwater	Treated Water	SFPUC	Other	2013 Monthly Use	2017	Groundwater	Treated Water	SFPUC	Other	2017 Monthly Use
Jan	-	-	138.0	-	138.0	Jan	-	-	93.2	-	93.2
Feb	-	-	180.0	-	180.0	Feb*	-	-	103.9	-	103.9
Mar	-	-	176.0	-	176.0	Mar	-	-	-	-	-
Apr	-	-	220.0	-	220.0	Apr	-	-	-	-	-
May	-	-	260.0	-	260.0	May	-	-	-	-	-
Jun	-	-	246.0	-	246.0	Jun	-	-	-	-	-
Jul	-	-	218.0	-	218.0	Jul	-	-	-	-	-
Aug	-	-	262.0	-	262.0	Aug	-	-	-	-	-
Sep	-	-	215.0	-	215.0	Sep	-	-	-	-	-
Oct	-	-	180.0	-	180.0	Oct	-	-	-	-	-
Nov	-	-	172.0	-	172.0	Nov	-	-	-	-	-
Dec	-	-	130.0	-	130.0	Dec	-	-	-	-	-
Jan to Current Month	-	-	318.0	-	318.0	Jan to Current Month	-	-	197.2	-	197.2
January to December Total	-	-	2,397.0	-	2,397.0	%Savings by Source of Supply			38%		38%

Water Use and Reductions Data

Sunnyvale

<u>2013</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Surface Water</u>	<u>2013 Monthly Use</u>	<u>2017</u>	<u>Groundwater</u>	<u>Treated Water</u>	<u>SFPUC</u>	<u>Surface Water</u>	<u>2017 Monthly Use</u>
Jan	11.0	49.0	1,052.0	-	1,112.0	Jan	10.1	540.8	498.1	-	1,048.9
Feb	10.0	531.0	754.0	-	1,295.0	Feb	12.0	433.4	497.8	-	943.2
Mar	8.0	770.0	689.0	-	1,467.0	Mar	7.6	440.5	744.8	-	1,192.8
Apr	10.0	898.0	898.0	-	1,806.0	Apr	-	-	-	-	-
May	8.0	1,101.0	1,195.0	-	2,304.0	May	-	-	-	-	-
Jun	8.0	1,270.0	879.0	-	2,157.0	Jun	-	-	-	-	-
Jul	13.0	1,146.0	1,245.0	-	2,404.0	Jul	-	-	-	-	-
Aug	9.0	1,055.0	1,242.0	-	2,306.0	Aug	-	-	-	-	-
Sep	11.0	983.0	965.0	-	1,959.0	Sep	-	-	-	-	-
Oct	13.0	993.0	884.0	-	1,890.0	Oct	-	-	-	-	-
Nov	11.0	842.0	704.0	-	1,557.0	Nov	-	-	-	-	-
Dec	11.0	780.0	523.0	-	1,314.0	Dec	-	-	-	-	-
Jan to Current Month Totals	29.0	1,350.0	2,495.0	-	3,874.0	Jan to Current Month Totals	29.6	1,414.6	1,740.7	-	3,184.9
January to December Total	123.0	10,418.0	11,030.0	-	21,571.0	%Savings by Source of Supply	-2%	-5%	30%	-	18%

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 and how it is being collected for this report.

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

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.

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**Santa Clara Valley
Water District**



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J Logan

From: Tami Mulcahy <tamimulcahy@icloud.com>
Sent: Friday, May 12, 2017 1:14 PM
To: J Logan
Subject: For Environmental Commission

Dear Environmental Commission,

Thank you for watching Part 1 of Capture Rain Where It Falls at the last meeting. My apologies that Part 2 did not work.

Here is the link to Part 2. Part 2 is a rough, not final, awaiting feedback. This video is currently a hybrid between community education and also to make the case that green elements in the Right of Way (ROW) can supplant the current Shoulder Improvement Policy (SIP) requirement for asphalt/concrete swales.

<https://youtu.be/NGhbAbyVJoc>

The current revision to the Shoulder Improvement Policy (SIP) requires green infrastructure in the Right of Way. But it also continues to include a swale. Thus, the SIP revision continues the installation of a disconnected drainage network as it only applies to new homes or 50% or more remodels. Excess water drains to the frontage of a neighbor. We advocate to eliminate the swale.

The projects in this video demonstrate the degree to which a single house on a street can make a difference in capturing rain. The Shoulder Improvement Policy should reflect this potential. The SIP can fully embrace a green vision of our streets, which not only addresses stormwater pollution, but also prevents the widening of our streets and an erosion of our rural character.

With these videos, the Green Town water team demonstrates our commitment to compliment a fully green SIP with community education, encouraging homeowners to upgrade their right of way. As the video says, the right of way can move from draining rain to capturing it, simply by use of organic materials, grading the right of way into a gentle bioswale that could flow to a rain garden and/or an underlying rock catch basin/drainage ditch.

If anyone missed Part 1 or would like to see it again, the link is:

<https://youtu.be/W2jItFwmuvI>

Thank you for taking time to watch.

Tami Mulcahy