



DATE: January 9, 2017

AGENDA ITEM # 4

TO: Environmental Commission

FROM: J. Logan, Staff Liaison

SUBJECT: Receive report on water conservation and drought measures

BACKGROUND

The Environmental Commission determined methods for achieving the State's goals for reductions in water consumption. To this effort, the Commission continues to: 1) review and report on water conservation efforts within Santa Clara County; 2) explore model water conservation ordinances and enforcement procedures; 3) gather water consumption data from the City of Los Altos water retailer, Cal Water; 4) formulate water consumption data to display annual and monthly usage in the Climate Action Plan Dashboard; 5) provide education and outreach efforts to residents and commercial establishments in Los Altos; 6) utilize resources from the Santa Clara County Valley Water District; and 7) analyze the provisions in the current City of Los Altos Water Conservation Resolution to determine the effectiveness of water reduction efforts.

At the June 9, 2015 Council meeting, Council adopted Resolution No. 2015-15 for Water Conservation Measures. At the June 23, 2015 Council meeting, Council approved the City of Los Altos agency municipal operations water conservation efforts and approved Level 3 water reduction measures and prioritization.

Effective June 1, 2015, California Water Service (CWS), the Los Altos local water retailer, commenced implementation of Rule 14.1 reduction mandates and monthly water budget allocations for individual water users along with enforcement measures for meeting a 32% reduction in water usage for residents, businesses and for City municipal operations.

DISCUSSION

The issue of Water Conservation and drought measures will continue to be reviewed. Reports and updates on status of the drought and water conservation efforts will be presented and, in addition, the Commission will monitor the status of water data metrics provided by CWS for use in the CAP Dashboard.

Attachment:

A. Santa Clara Valley Water District Monthly Drought Status Report – December 2016

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 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%	
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 Savings	18%	19%	23%	27%	29%	29%	28%	28%	27%	27%	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%	
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	59%	26%	54%	22%	36%	11%	22%	25%	15%	45%	53%	
Stanford	34%	43%	31%	44%	38%	30%	25%	35%	29%	36%	¹	
Combined Month to Month 2015	18%	21%	29%	35%	36%	26%	26%	26%	21%	31%	32%	

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

TABLE 7: 2015 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water Retailer Savings	Jan to Jan	Jan to Feb	Jan to Mar	Jan to April	Jan to May	Jan to June	Jan to July	Jan to Aug	Jan to Sept	Jan to Oct	Jan to Nov	Jan to Dec
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	Jan to Jan	Feb to Feb	Mar to Mar	April to April	May to May	June to June	July to July	Aug to Aug	Sept to Sept	Oct to Oct	Nov to Nov	Dec to Dec
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 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	Savings SFPUC Supply
San Jose Water Company	3%	6%	10%	10%	9%	10%	10%	11%	11%	12%	13%	13%	13%	N/A
Santa Clara (City of)	7%	8%	9%	7%	8%	8%	8%	8%	8%	9%	10%	10%	9%	16%
Sunnyvale	16%	15%	17%	15%	14%	14%	14%	13%	13%	13%	14%	14%	7%	22%
San Jose Municipal Water	15%	16%	18%	14%	12%	12%	12%	12%	12%	12%	13%	13%	6%	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%	-6%	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%	9%	15%	16%	16%	16%	15%	15%	16%	18%	19%	19%	19%	N/A
Purissima Hills Water	45%	34%	28%	14%	14%	12%	14%	14%	14%	16%	16%	16%	N/A	16%
Stanford	24%	21%	15%	10%	10%	7%	8%	8%	6%	8%	7%	7%	N/A	7%
Total Cumulative Savings	9%	11%	13%	12%	11%	11%	11%	12%	12%	13%	13%	13%	11%	16%

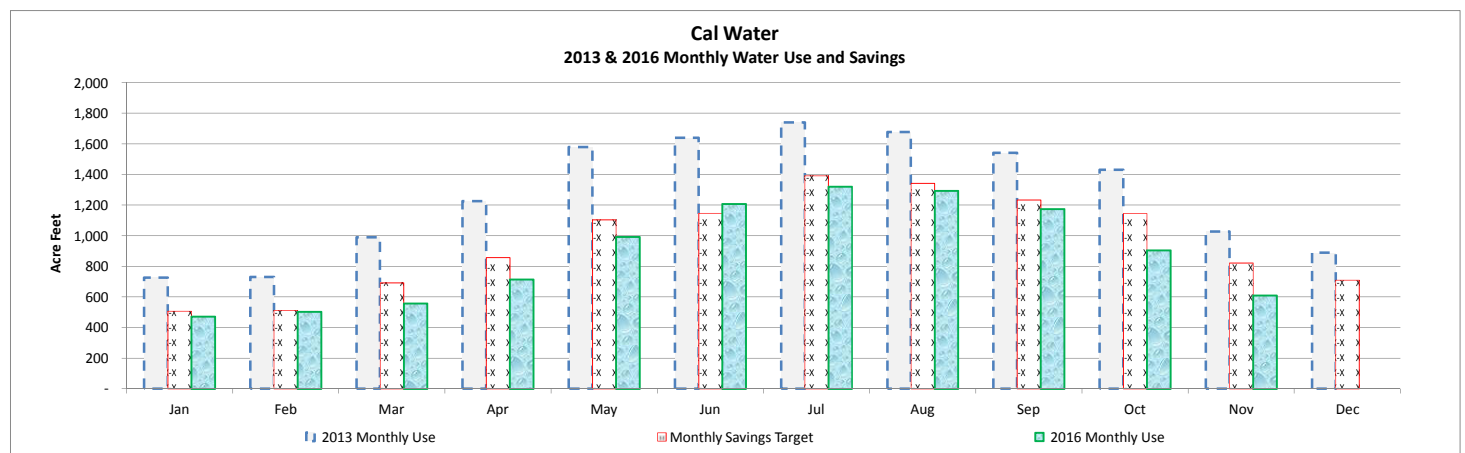
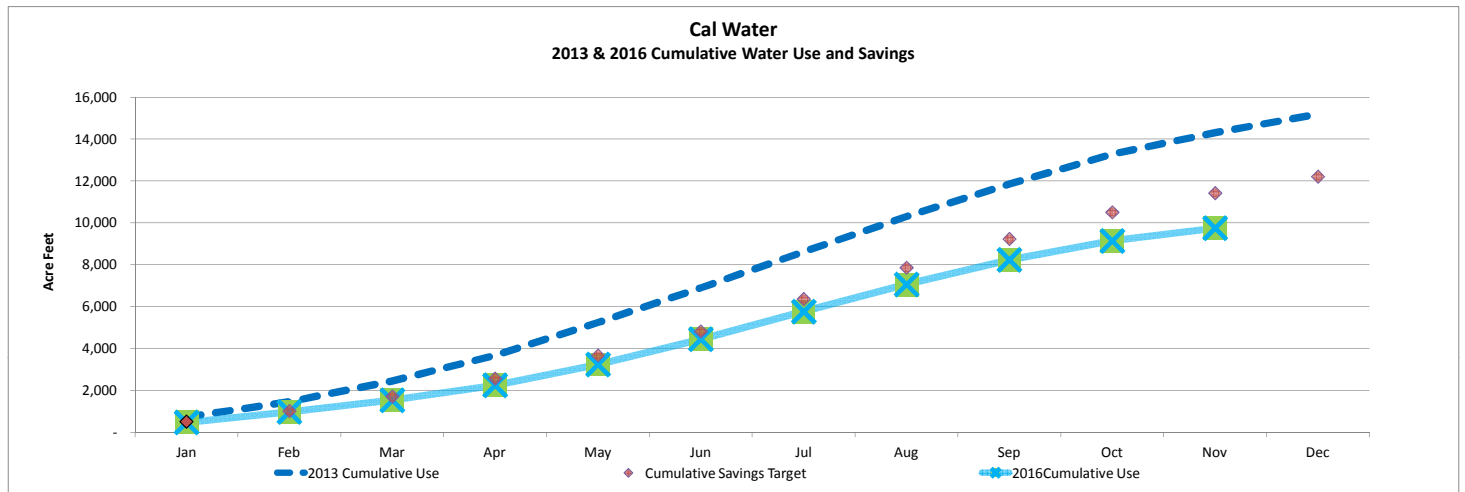
California Water Service Company

2013 and 2016 Water Use Compared to Target

2013	Groundwater	Treated Water	SFPUC	Surface	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	Surface	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%
-



Notes

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

The initial 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



As of 12/20/2016

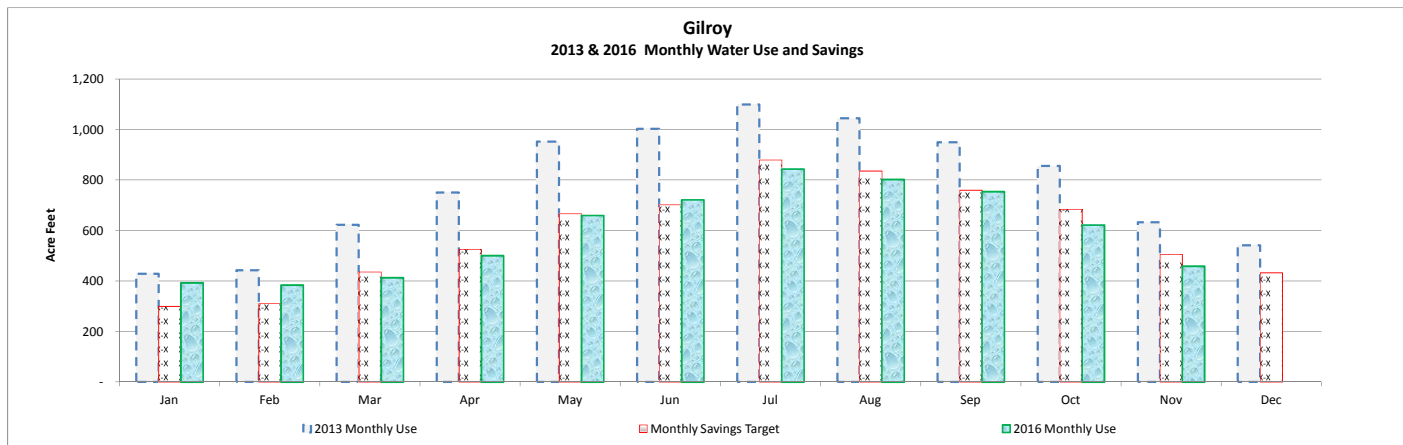
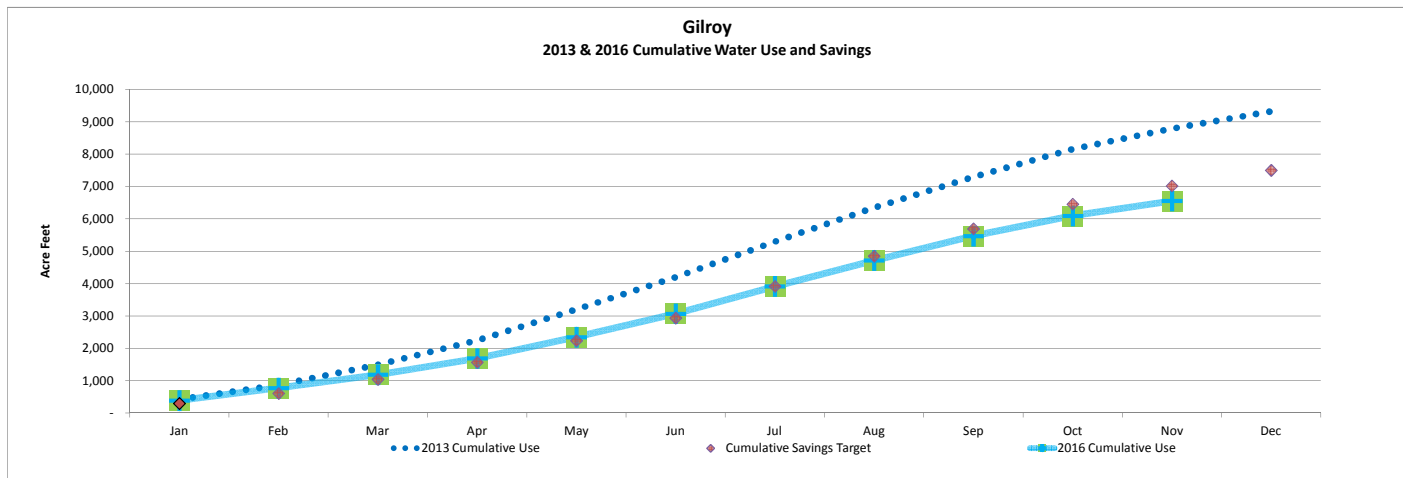
Gilroy

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	-	-	-	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	Groundwater	Treated Water	SFPUC	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	-	-	-	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%
-



Notes

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

The initial 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



As of 12/13/2016