



DATE: February 13, 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 – January 2017

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 December 2016 | Cumulative Savings Jan to December 2016 |
|--------------------------|------------------|---------------------------|-------------------------------|---|
| San Jose Water Co. | 20% | 103,714 | 31% | 29% |
| Santa Clara (City) | 20% | 17,160 | 14% | 21% |
| Sunnyvale | 15% | 16,491 | 19% | 24% |
| San Jose Municipal | 20% | 15,729 | 26% | 27% |
| California Water Service | 20% | 10,264 | 42% | 32% |
| Palo Alto | 10% | 9,873 | 24% | 27% |
| Mountain View | 10% | 8,741 | 19% | 29% |
| Great Oaks | 20% | 8,911 | 25% | 29% |
| Milpitas | 20% | 8,676 | 12% | 19% |
| Gilroy | 20% | 6,983 | 21% | 25% |
| Morgan Hill | 20% | 6,280 | 35% | 30% |
| Purissima Hills Water | 10% | 1,543 | 47% | 31% |
| Stanford | 10% | 1,470 (Nov ¹) | 47% (Nov ¹) | 35% (Nov ¹) |
| Total | | 215,836 | 27% | 28% |

Values may not add up due to rounding.

¹ Current month data not available as of 01/19/2017

Retailers' Water Use and Savings

TABLE 6: 2016 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 | 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% | ¹ |
| Combined Cumulative Savings | 18% | 19% | 23% | 27% | 29% | 29% | 28% | 28% | 27% | 27% | 28% | 28% |
| 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 | 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% | ¹ |
| Combined Month to Month 2015 | 18% | 21% | 29% | 35% | 36% | 26% | 26% | 26% | 21% | 31% | 32% | 27% |

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

Retailers' Water Use and Savings

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% |

Retailers' Water Use and Savings

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 |
|--|-------------------|-------------------|---------------------|-------------------|---------------------|---------------------|-------------------|---------------------|-------------------|-------------------|-------------------|
| 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 | Feb to Feb | Mar to Mar | Apr to Apr | 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% | 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% |

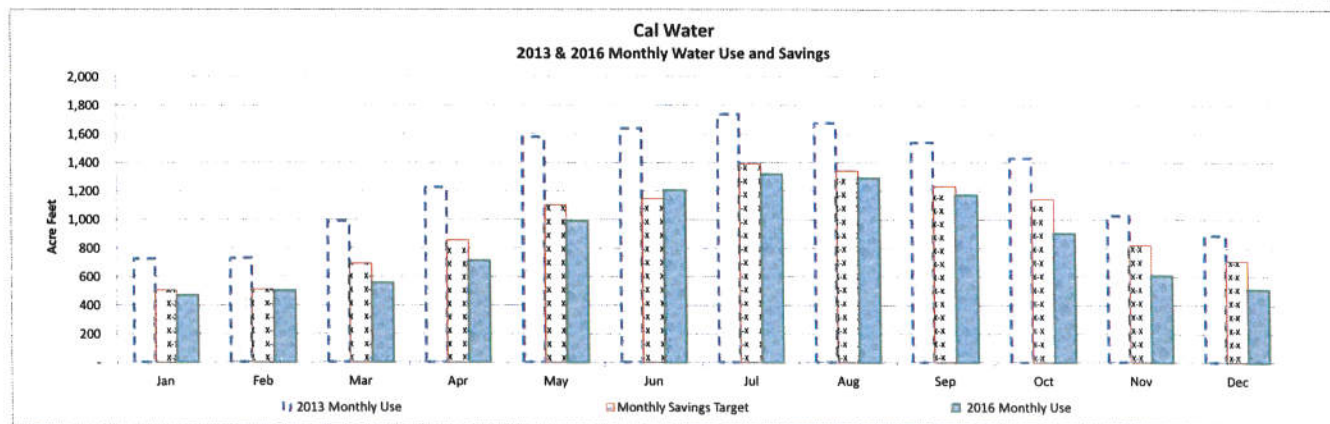
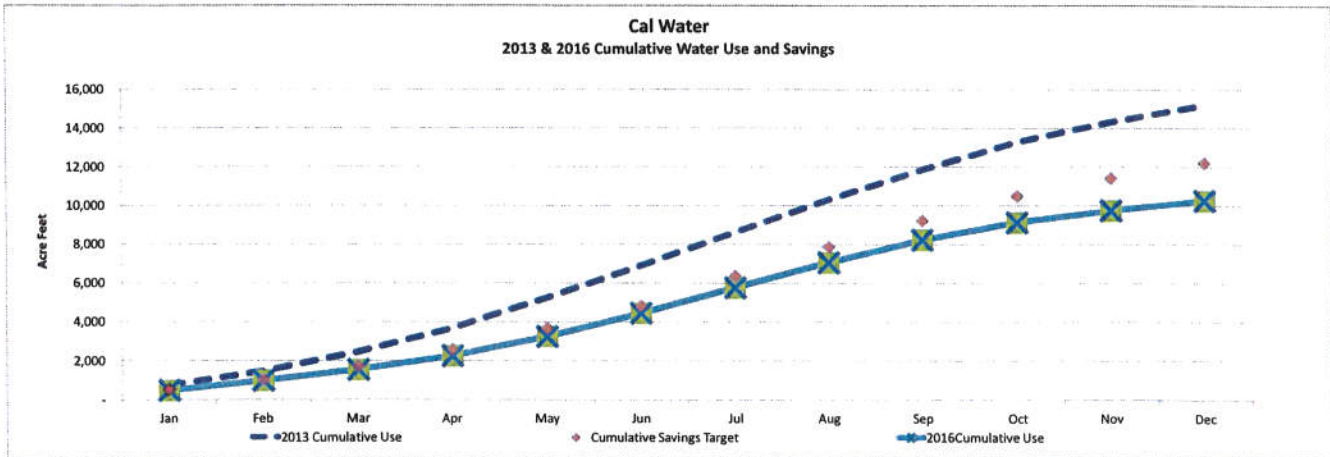
California Water Service Company

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 | 5,245.0 | 10,202.0 | - | - | 15,193.0 |
| 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 | 341.0 | 172.0 | - | - | 513.0 |
| Jan to Current Month | 2,490.0 | 7,774.0 | - | - | 10,264.0 |
| %Savings by Source of Supply | 53% | 24% | | | 32% |

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

