



CITY OF BEVERLY HILLS

PUBLIC WORKS SERVICES DEPARTMENT

MEMORANDUM

TO: PUBLIC WORKS COMMISSION

FROM: Debby Figoni, Water Conservation Administrator
Josette Descalzo, Environmental Compliance & Sustainability Program Manager
Michelle Tse, Planning & Research Analyst

DATE: July 14, 2016

SUBJECT: CONSERVATION PROGRAM & POLICY UPDATE

ATTACHMENTS:

1. State Water Resources Control Board Monthly Report – May 2016
2. Monthly Consumption Report to Date
3. Metropolitan Water District – Water Device Rebate Program
4. Metropolitan Water District – Turf Removal Rebate Program

This report is to provide an update on staff activities related to the City's water conservation program and outreach efforts.

State Water Resources Control Board Conservation Regulations and Next Steps

On May 18, 2016, the State Water Resources Control Board ("State Water Board") adopted a statewide water conservation approach that will be in effect through January 2017. The recent regulations will continue to prohibit many outdoor watering and water wasting activities and replaces the prior percentage reduction-based water conservation standard with a water supply deficit conservation target based on a supply and demand analysis or a "stress test."

The State Water Board required each water supplier to submit a self-certification target based on the projected water supply and demand for the next three years. Under the State Water Board's regulations, both urban water suppliers and wholesaler suppliers are required to report the underlying basis for their assertions and submit this information to the State Water Board by June 22, 2016. As part of the City's analysis, Metropolitan Water District ("MWD") provided information on June 15, 2016, indicating that it would be able to sufficiently supply water based on anticipated supply and demand for all of its 26 member agencies. Based on the State Water Board's supply and demand analysis, the City projected not having a water supply deficit over the next three years and submitted a self-certification target of 0%.

Prior to the June 22, 2016, submittal deadline, staff conveyed the preliminary findings with the Public Works Liaison Committee (Vice Mayor Krasne and Councilmember Gold). The Liaisons affirmed the City's commitment to water conservation and discussed that it would be prudent to establish a locally declared conservation target, which would minimally align with the 20% water use reduction by Year 2020 goal.

During the June 21, 2016, meeting, the City Council approved submitting the 0% conservation target to the State Water Board based on the water supply and demand analysis. Additionally, the City Council directed that the City should minimally maintain its existing conservation efforts of 23%. The City Council also approved to maintain the City's Stage D water use restrictions while staff works with the Conservation Subcommittee and the Commission on establishing a locally declared target, and returning within three months (September 2016) to the City Council with a comprehensive conservation program and policy that promotes water use efficiency.

The State Water Board staff indicated that many water providers would be submitting a self-conservation target of 0% but that many agencies are also intending to maintain robust conservation programs and enforce locally declared conservation targets. As part of the evaluation process, City staff contacted other water providers regarding their conservation targets. For instance, the City of Santa Monica submitted a conservation target of 0% but still plans to maintain a local declared target of 20% with penalties for excess use. Similarly, the City of Los Angeles is expecting to self-certify a conservation target of 0%, and continue their efforts to reduce the residential per capita by 20% by January 1, 2017, by implementing Mayor Garcetti's Directive No. 5.

Staff will continue to work with the Conservation Subcommittee of the Public Works Commission to evaluate how to approach the framework and improve the programs for ongoing water conservation regulations and meeting the requirements of Senate Bill X7-7, which sets an overall goal of reducing per capita use by 20% by December 31, 2020. One of the items being evaluated is to adopt a Water Efficiency Ordinance, which will prohibit outdoor water wasting activities such as:

- 1) Irrigation runoff to the streets
- 2) Irrigation within 48 hours after a rainfall
- 3) Irrigation of medians using potable water
- 4) Washing vehicles without a shutoff nozzle
- 5) Wash down of driveways and sidewalks
- 6) The use of potable water in fountains or decorative water feature without a recirculating system

In addition, the proposed ordinance will define "unreasonable water use," set water wasting criteria, enforcement and fines. The proposed ordinance framework will also include an Emergency Drought section that will have a stricter criteria for "unreasonable water use," enforcement and fines.

As part of these discussions, staff and the Conservation Subcommittee will further discuss transition strategies as the City shifts from penalty surcharge to fines for unreasonable water users.

Penalty Surcharges and Appeals Process Update

At its June 21, 2016, meeting, the City Council approved suspension of the penalty surcharges and in favor of developing a longer-term, more sustainable fee/fine structure program, which promotes water, use efficiency and discourages water excessive water use. Additionally, the City Council shared similar concerns as originally expressed by the Liaisons (Vice Mayor Krasne and Councilmember Gold), that while the conservation programs and policies are under development, staff should have clear public messaging to minimize the confusion between the penalty surcharges, development of excessive water fees and fines, and water rates. Staff has been updating the website and developing informational materials to address this issue.

Penalty surcharges will continue to appear on the utility bills until June 22, 2016. The City will continue to keep aggressive water conservation programs in place.

During this transitional time, water customers who intend to submit a Level 1 appeal must have it postmarked by July 14, 2016. Level 2 appeals must be postmarked within 15 days of the level 1 appeal decision. No late appeals can be accepted.

At this time, there are approximately 350 Level 2 appeals that have been received prior to the penalty surcharges being suspended. Staff will work with the Hearing Officer to address this backlog.

City Water Usage Reductions for June 2016

The following table shows water consumption for the City during the last several months. For the month of June, the City used 862.6 Acre Feet ("AF") compared to 1,077.0 AF in 2013. For comparison purposes, the table below shows the average water AF usage per day during each month.

Table 1: Summary of Beverly Hills Water Use Reductions Submitted to the State Water Resources Control Board

The Table below shows the City's water usage trend by volume from May 2015 to present compared to water usage in 2013. For 2016, the City's conservation percentage has averaged 22-percent.

Month	2013 Usage (Acre Feet)	2015/16 Usage (Acre Feet)	2013 Average Usage Per Day (Acre Feet)	2015/16 Average Usage Per Day (Acre Feet)	Percentage Reduction Compared to 2013
May-15	1047.3	869.6	33.78	28.1	17.0%
Jun-15	1077.4	841.7	35.91	28.1	21.9%
Jul-15	1185.5	929.0	38.24	30.0	21.6%
Aug-15	1184.4	976.6	38.21	31.5	17.5%
Sep-15	1156.0	918.8	38.53	30.6	20.5%
Oct-15	1105.5	897.4	35.7	28.9	22.2%
Nov-15	939.2	814.7	31.3	27.2	13.3%
Dec-15	888.6	779.3	28.7	25.1	12.3%
Jan-16	862.2	638.8	27.8	20.6	25.9%
Feb-16	762.9	663.6	27.3	22.9	13.0%
Mar-16	932.4	707.0	30.1	22.8	24.2%
Apr-16	969.0	742.5	32.3	24.8	23.4%
May-16	1047.3	798.7	33.8	25.7	23.8%
June-16	1077.0	862.6	34.7	28.8	20.0%

City Water Conservation Outreach and Enforcement Efforts

Staff's top priorities include notifying customers of potential leaks on their properties, conducting site visits, sending out letters to residents who are watering excessively and working with customers with surcharge issues. The Leak Program continues to be a great success. Calls continue to be made to customers with a flow of one gallon per minute or more, and a letter is sent. A letter is sent to customers with continuous water flows under a gallon per minute. Staff is slowly working their way down the list to notify as many customers as possible. Staff has a process of calls and letters to notify customers of leaks and excessive irrigation. To date, everyone has cooperated. However, if they do not after two months of clear and constant communication, staff will notify the City Prosecutor. Outreach flyers continue to be great tools for those with continuous flow issues. The response from residents and businesses for the City's assistance is incredible!

Staff has worked with several HOA's and hotels in an effort to help them locate their continuous flow issues and increase their efficiency practices wherever possible.

The surcharge fees have assisted in conservation efforts. In the near future, other tools will have to be used in order to keep customers aware of their usage. Excessive watering by gardeners is an issue staff will be tackling. On the other side are the calls from residents asking if the City's two-day watering schedule will be increasing as LADWP has done.

During the month of June, the Water Conservation Administrator and her staff conducted 39 site visits with residential high water users, customers with potential leaks and residents requesting landscape and irrigation assistance. The team also reached out to 93 potentially large leak customers and 23 customers with appeals, conservation or surcharge questions.

Additionally, a total of 11 outdoor water conservation cases were reported by the public and 63 wrong irrigation day cases occurred in June of 2016. No Notices of Violation (NOV) were issued this past month. Please note that a NOV is a pre-requisite to the issuance of a criminal misdemeanor citation (used for continued violations). Staff will continue to enforce all outdoor watering regulations as prescribed in State D. Letters are sent to all residences watering on the wrong day including those staying within their 30% reduction target zone.

Public Education Programs and Outreach

In June, the Water Conservation Administrator taught two Water Wise Landscaping Workshops focusing on irrigation and Water Tracker. Four more workshops will take place in July and August. Ads promoting the workshops were placed in the Beverly Hills Weekly and The Beverly Hills Courier. The Courier also wrote an article on the workshops encouraging residents to attend. The annual Water Quality Report contained information on looking for leaks, watering your lawn efficiently and watering trees in a drought.

Low flow showerheads and hose nozzles are being distributed around the City. In addition, sink aerators and restaurant spray nozzles have been ordered mainly to assist our commercial customers.

Four part-time, limited term positions staff have joined the Water Conservation Team. They are focusing their efforts on appeals, rebates, outreach, water audits, leaks and excessive watering.

Monthly Consumption Report Submitted to the State Water Resources Control Board – May 2016

Report made on	June 2015 by Debby Figoni
Supplier	Beverly Hills City of (640)
Reporting Month	0516
Stage/Mandatory	Stage D Yes
Days Outside Irrigation	2
Number Complaints	7
Number Follow-ups	54
Number Warnings	64
Number Penalties	0
Enforcement Comments	<p>During the month of May, there were 7 public complaints. There were 54 drive by cases of water waste, 40 of which were resolved. Additionally, the Water Conservation Administrator conducted 32 site visits with residential high water users, customers with potential leaks and residents requesting landscape and irrigation assistance. She also communicated with 42 large potential leak customers. Ninety-percent of these leaks have been repaired and the additional 10% are in progress for repair. There were no notices of violation issues in May 2016, but the City had 54 written warnings (mailed letters and/or door hangers).</p>
Water Production in 0516	798.7 AF
2013 Same Month Production	1047.3 AF
CII Water	153.8 AF
Commercial Water	0 AF
Agricultural Water 2013	0 AF
Non-revenue Water	55.9 AF
Residential Use Percentage	74 %
Qualification Comments	<p>Monthly production is calculated from local production and Metropolitan Water District (MWD) purchases. The percentage of residential use is calculated using the volume of water consumed by residential accounts compared to monthly production. Because the City of Beverly Hills uses a 60-day billing cycle, percentage of residential use reflects consumption based on the May 2015 ratio. Commercial, industrial, and institutional use is calculated as a percentage of monthly production, using the formula $100 - [\text{Percent Residential Use in May 2015}] - [\text{Percent Non-Revenue Water}]$. Non-revenue water is estimated to be 7% of total monthly production. This percent residential use estimate will be updated once May 2016 data becomes available.</p>
Population	42157
Estimated R-GPCD	146.8
Implementation Comments	<p>Created informative outreach flyers educating customers on how to find leaks, water trees, and efficiency irrigation lawn. These flyers are available all around the City and on our website. Articles in the local newspaper on water wise landscapes and articles in the City's quarterly newsletter on finding and repairing leaks. Six water wise landscaping workshops planned for the next couple of months. Hired additional staff to assist with outreach.</p>
Recycled Water	0 AF

All Accounts, Volume Consumed

Table 1, below, details total volume of consumption per month for the past calendar year for every account in the entire Beverly Hills and West Hollywood service area, comparing the prior calendar year to a 2013 baseline. The percent change is calculated to show increases or decreases in consumption per account type. A negative percentage indicates a reduction in consumption whereas a positive percentage indicates an increase. Volume is represented in acre feet units.

Table 1, All Accounts

		Water Consumption by Account Type				Units: AF		Prepared: 7/7/2016					
Accounts	Year	Jan-16	Feb-16	Mar-16	Apr-16	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Single-Family Residential Accounts	2013	345.6	362.4	446.6	496.1	556.7	579.2	620.3	637.2	603.2	556.3	483.3	456.5
	2015/16	301.7	278.3	317.0	356.7	454.9	435.1	456.9	476.5	449.9	432.6	394.0	328.0
	% Change	-13%	-23%	-29%	-28%	-18%	-25%	-26%	-25%	-25%	-22%	-18%	-28%
Multi-Family Residential Accounts	2013	202.9	185.8	209.0	205.7	215.2	210.7	222.5	223.9	216.7	221.8	207.3	208.9
	2015/16	169.5	157.0	166.3	158.3	186.3	177.4	186.2	189.5	184.0	188.5	174.2	175.8
	% Change	-16%	-15%	-20%	-23%	-13%	-16%	-16%	-15%	-15%	-15%	-16%	-16%
Commercial Accounts	2013	171.2	160.3	181.0	178.6	195.7	197.6	212.9	212.8	199.9	199.3	178.4	178.6
	2015/16	164.0	155.3	168.2	160.7	188.3	182.6	201.9	209.9	199.7	198.7	168.4	162.4
	% Change	-4%	-3%	-7%	-10%	-4%	-8%	-5%	-1%	0%	0%	-6%	-9%
Municipal Accounts	2013	25.0	26.9	36.5	40.4	42.9	44.6	49.2	51.2	47.6	42.6	34.2	31.8
	2015	19.3	17.1	19.6	20.7	27.4	25.3	28.0	29.9	28.9	29.3	24.8	21.9
	% Change	-22%	-36%	-46%	-49%	-36%	-43%	-43%	-42%	-39%	-31%	-27%	-31%
Fire Service Accounts	2013	-	-	0.2	0.6	0.7	0.7	0.8	1.1	1.3	1.4	1.4	1.3
	2015/16	0.9	0.9	0.9	0.9	1.7	1.8	1.8	1.0	0.9	0.9	1.0	1.0
	% Change	N/A	N/A	468%	47%	126%	142%	129%	-10%	-31%	-34%	-32%	-25%
Estimated Non-Revenue Water	2013	117.6	27.6	59.2	47.8	36.1	44.4	79.9	58.1	87.1	80.1	34.6	11.4
	2015	**16.7	55.0	34.9	44.7	11.0	19.5	54.3	69.8	55.1	47.3	52.3	90.1
	*2013 Total	862.2	762.9	932.4	969.3	1,047.3	1,077.4	1,185.5	1,184.4	1,156.0	1,101.5	939.2	888.6
	*2015/16 Total	638.8	663.6	706.9	742.0	869.6	841.7	929.0	976.6	918.5	897.4	814.7	779.3
	% Change	-26%	-13%	-24%	-23%	-17%	-22%	-22%	-18%	-21%	-19%	-13%	-12%

*Data for final three rows do not come from City of Beverly Hills billing data, but rather Metropolitan Water District invoices. Aggregate data for State reporting and parsed data for internal system analysis rely on different sources and methodologies. As such, monthly totals by year in the bottom rows do not equal the sum of consumption in the rows above, that difference is determined to be non-revenue water.

**This estimate indicates that more consumption took place in December and/or November. Due to the methodology used to parse 60-day rolling billing cycles into monthly estimates, there may be some months where estimated use is greater than the amount actually purchased or produced.

All Accounts, Consumption by Customer Type as a Percentage of Total Consumption

Table 2, below, indicates consumption as a percentage of total per month for all accounts in the entire Beverly Hills and West Hollywood service area.

Table 2, All Accounts

Accounts	Year	<i>Water Consumption by Account Type</i>				Units: AF Prepared: 7/7/2016							
		Jan-16	Feb-16	Mar-16	Apr-16	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
Single-Family Residential Accounts	2013	40%	47%	48%	51%	53%	54%	52%	54%	52%	51%	51%	51%
	2015/16	47%	42%	45%	48%	52%	52%	49%	49%	49%	48%	48%	42%
Multi-Family Residential Accounts	2013	24%	24%	22%	21%	21%	20%	19%	19%	19%	20%	22%	24%
	2015/16	27%	24%	24%	21%	21%	21%	20%	19%	20%	21%	21%	23%
Commercial Accounts	2013	20%	21%	19%	18%	19%	18%	18%	18%	17%	18%	19%	20%
	2015/16	26%	23%	24%	22%	22%	22%	22%	21%	22%	22%	21%	21%
Municipal Accounts	2013	3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
	2015/16	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Fire Service Accounts	2013	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
	2015/16	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Estimated Non-Revenue Water	2013	14%	4%	6%	5%	3%	4%	7%	5%	8%	7%	4%	1%
	2015/16	*-3%	8%	5%	6%	1%	2%	6%	7%	6%	5%	6%	12%
	2013 Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	2015/16 Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

*This estimate indicates that more consumption took place in December and/or November. Due to the methodology used to parse 60-day rolling billing cycles into monthly estimates, there may be some months where estimated use is greater than the amount actually purchased or produced.

City of Beverly Hills Water Accounts, Volume Consumed and Percent Reduced

Table 3, below, details the total volume of consumption per month for all accounts where the City of Beverly Hills is a customer, comparing the current year to a 2013 baseline. The percent change is calculated to show increases or decreases in consumption per account type. A negative percentage indicates a reduction in consumption whereas a positive percentage would indicate an increase. Volume is represented in acre feet units.

Table 3. Accounts Where City of Beverly Hills is a Customer

		Water Consumption by Account Type				Units: AF		Prepared: 7/7/2016					
Accounts	Year	Jan-16	Feb-16	Mar-16	Apr-16	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
City of Beverly Hills	2013	17.0	19.0	27.6	31.2	32.3	33.7	37.3	38.9	35.9	32.2	24.7	21.9
Accounts	2015	11.5	9.5	11.6	12.8	19.1	17.9	19.9	20.7	19.4	19.7	16.4	14.1
	% Change	-32%	-50%	-58%	-59%	-41%	-47%	-47%	-47%	-46%	-39%	-34%	-36%

Total Water Consumption, Purchased and Produced

Table 4, below, summarizes total consumption since January of 2013. Column 3, Percent Change Compared to Same Month 2013, compares 2015 and 2016 consumption data to a 2013 baseline. 2014 consumption data has been omitted in this report, but is available in the February 2016 Water Consumption Update. Negative percentages represent a reduction in consumption whereas positive percentages represent an increase. Volume is represented in acre feet units.

Table 4. Water Consumption Summary

Date	Consumption (Acre Feet)	Percent Change Compared to Same Month 2013	Residential Gallons Per Day Per Capita
Jan 2013	862.2		161.2
Feb	762.9		158
Mar	932.4		174.4
Apr	969.3		187.3
May	1047.3		185.4
Jun	1077.4		208.2
Jul	1185.5		221.7
Aug	1184.4		221.5
Sep	1156		223.4
Oct	1101.5		206
Nov	939.2		181.5
Dec	888.6		166.2
Jan 2015	806	-6.52%	142.7
Feb	782	2.50%	153.3
Mar	895.9	-3.91%	158.6
Apr	920.8	-5.00%	154.2
May	869.6	-16.97%	140.9
Jun	841.7	-21.88%	147.5
Jul	929	-21.64%	157.5
Aug	976.6	-17.54%	163.1
Sep	918.5	-20.54%	160.9
Oct	897.4	-18.53%	152.2
Nov	814.7	-13.26%	146.9
Dec	779.3	-12.30%	155.4
Jan 2016	633.8	-25.91%	106.7
*Feb	663.6	-13.02%	122.0
Mar	706.9	-24.18%	124.1
Apr	742.0	-23.45%	132.1
May	798.7	-23.74%	146.8
June	862.6	-19.94%	161.7

* February 2016, a 29-day period due to the leap year, is compared to February 2013, a 28-day period. Adjusting for the leap year, the City estimates 16.0% conservation for February 2016.

** Data for June 2016 is preliminary until final invoices are received from Metropolitan Water District.

METROPOLITAN WATER DISTRICT - Beverly Hills

Turf Removal Rebate Program - June 2016

RESIDENTIAL	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16					Total
Pending Applications	25	29	18	10	5	5	3	2	1	3	2	0	5					108
Total SF of Projects	41,750	45,548	24,716	11,816	4,378	5,399	5,635	2035	1786	3531	1341	0	6287					154,222
Building Type																		
Single Family Detached	23	27	16	10	5	5	3	2	0	3	2	0	5					101
Multi-tenant	2	2	2	0	0	0	0	0	1	0	0	0	0					7