

Attachment 2a



STAFF REPORT

Meeting Date: June 21, 2016

To: Honorable Mayor & City Council

From: Trish Rhay, Assistant Director of Public Works Services
Michelle Tse, Planning and Research Analyst
Josette Descalzo, Environmental Compliance and Sustainability Programs Manager

Subject: a. Proposed Water Conservation Target for Submittal to State Water Resources Control Board and Next Steps

Attachments: 1. Draft State Water Resources Control Board Self-Certification Forms
2. Metropolitan Water District Demand and Supply Analysis

INTRODUCTION

On May 18, 2016, the State Water Resources Control Board ("State Water Board") extended its emergency water conservation regulations through the end of January 2017.

The State Water Board originally adopted a Drought Emergency Regulation in May 2015, which required a statewide 25% reduction in potable urban water use through February 2016. Under that declaration, the City as a water supplier was mandated to reduce water usage by 32% compared to its usage in 2013. Under the new State Water Board conservation regulations, each water supplier is required to submit a self-certified conservation target, which is calculated by the City based on the prescribed supply and demand analysis – or "stress test." The analysis accounts for the City's projected three-year water supply under drought conditions compared to its anticipated water demands. The self-certified conservation target is calculated based on whether the City has sufficient water supply for the next three years, even if drought conditions continue.

The City must submit its self-certified conservation target derived from this analysis to the State Water Board, which will assess the City's conservation performance based on the target. Failure to comply with the self-certified conservation target will result in enforcement actions delivered by the State Water Board.

This report outlines the City's ongoing commitment to water conservation and the process by which the Public Works Commission, the Public Works Liaison Committee and staff completed the water supply needs assessment in order to calculate the self-

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certified conservation target and identifies next steps to meet the City's long-term conservation goals.

DISCUSSION:

Over the past year, Beverly Hills has aggressively moved to communicate with every resident and business in an effort to cut water use by implementing a variety of programs to achieve water conservation targets. These efforts include a water leak detection program for commercial and residential properties, elimination of parkland watering, Water Wise landscaping workshops and a commercial and residential rebate program for water-efficient devices and turf replacement. Enforcement actions, including fines, have been imposed on users violating City outdoor watering policies as well as for failing to achieve City-mandated water conservation goals. These efforts, over time, have resulted in significant water consumption reductions and have also prompted longer-term modifications to the water consumption habits of many residents and businesses in the community.

City Water Supply Demand Analysis

The State Water Board has required each water supplier to submit a self-certification form to establish its own conservation target based on the projected water supply and demand for the next three years and the associated deficit. Under the State Water Board's regulations, both urban water suppliers and wholesale suppliers are required to report the underlying basis for their assertions and submit this information as part of the self-certification form. For reference, a draft copy of the State Water Board's self-certification form is included as Attachment 1. Water suppliers are required to continue monthly reporting on their overall conservation efforts to the State Water Board by the 15th of each month.

The City's self-certification water conservation target must be submitted to the State Water Board by June 22, 2016. If the City does not submit its self-certified target, the State Water Board will impose the default conservation goals based on the existing tier structure, which is derived by the water supplier's residential gallons per capita per day usage. Under that approach, the City would be defaulted to the current conservation goal of 32%. Calendar year 2013 will continue to be the baseline for statewide water use comparisons.

To determine the conservation target, the City analyzed the water demand and water supply for the next three years including its projected local groundwater production. The City solicited information from Metropolitan Water District of Southern California ("MWD") to determine if it can supply the City's projected demands. All 26 of MWD's member agencies solicited the same water supply information from MWD.

Staff worked with the Conservation Subcommittee of the Public Works Commission (Chair Aronberg and Vice Chair Wolfe) on this issue, discussed the item during the June 2, 2016 Public Works Commission meeting, and subsequently presented this item at the June 7, 2016 Public Works Liaison Committee meeting (Vice Mayor Krasne and Councilmember Gold). During the Liaison Committee meeting, staff discussed the process of calculating the new conservation target, while reaffirming the City's commitment to water conservation. Staff informed the Liaisons that, based on the State Water Board's prescribed method and MWD's preliminary analysis, the City would likely have sufficient water supply for the next three years, even if the drought were to continue. A sufficient water supply would equate to a 0% self-certified conservation target.

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Based on the data submitted by the City of Beverly Hills and all 26 of its member agencies, MWD completed a water supply and demand analysis for its service area. On June 13, 2016, MWD confirmed it could sufficiently meet the water demands for all of its 26 member agencies (Attachment 2). As such, based on the State Water Board's required methodology, the City is not projected to have a water supply deficit over the next three years and would have a self-certification conservation target of 0% for the purposes of the State Water Board's regulations.

The following is a timeline of various milestones related to self-certification of the City's conservation target:

Date	Milestone
May 18, 2016	State Water Board released adopted conservation regulations
May 27, 2016	City deadline to submit water supply and demand information to water wholesaler (i.e. MWD).
June 2, 2016	Public Works Commission discussion regarding conservation policy given the State Water Board's adopted conservation regulations.
June 6, 2016	State Water Board released sample self-certification form.
June 15, 2016	Deadline for water wholesalers (including MWD) to release their water supply and demand assessments to water suppliers.
June 21, 2016	Staff recommends conservation target for City Council consideration.
June 22, 2016	Deadline for water suppliers (City) to submit self-certification form to State Water Board.

At a recent workshop, State Water Board staff indicated they expect many water supply agencies, in conformance with the Board's prescribed methodology, to submit a self-certified target of 0%. Locally, many agencies are also intending to submit a self-certified target of 0%. However, staff has determined that some of these agencies, like Beverly Hills, intend to maintain robust water conservation programs and enforce locally declared conservation targets, regardless of their self-certified targets for the State Water Board. For instance, the City of Santa Monica is expected to self-certify a 0% conservation target to the State Water Board, but still maintain their self-imposed 20% reduction and penalties for exceedances that are currently in effect. The City of Los Angeles is also expecting to self-certify a conservation target of 0% and is continuing their efforts to reduce the residential per capita by 20% by January 1, 2017 by implementing Mayor Garcetti's Executive Directive No. 5. The Public Works Commission and the Liaison Committee have been discussing establishing a similar locally declared conservation goal which could align with the 20% water use reduction by 2020 goal. Information regarding the 20% reduction goal is further discussed in the next section of this report.

In the interim, staff is also recommending the City maintain its Stage D water use restrictions until staff receives a recommendation from the Public Works Commission regarding a locally declared target. Staff anticipates returning to the City Council with a recommendation about moving away from Stage D at its July 19, 2016 meeting.

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Proposed Next Steps for Water Conservation Program to Achieve 20% Reduction by Year 2020

The City's 20% reduction target by 2020 is based on the annual daily gallons per capita usage during the years 1996-2005. This was the methodology prescribed by the State Department of Water Resources ("DWR"). Based on DWR's method of calculation, the City's minimum conservation goal is 233.4 gallons per capita per day. It is noted, however, that this goal was calculated based on historical usage during non-drought, non-emergency conditions. For comparison purposes, using the same calculation methodology, the City's average was approximately 215.6 gallons per capita per day in Year 2015 during drought conditions and while emergency water use restrictions were in place.

Staff will continue to work with the Conservation Subcommittee, the Public Works Commission, and Public Works Liaison Committee to further develop the following programs and policies to promote long-term conservation including the 20% by 2020 goal:

- 1) Amending the Municipal Code to include a water conservation ordinance that promotes water-use efficiency at all times. This could also include amending the Emergency Water Conservation regulations (i.e. Stages A-E)
- 2) Water audits for residential properties
- 3) Water leak program
- 4) Commercial and residential rebate program for water-efficient devices and turf replacement
- 5) Water wise landscaping
- 6) Workshops and rebates for businesses
- 7) Enforcement actions, including fines and the criminal prosecution of offenders

The Public Works Commission and the Liaison Committee also recommended suspending the penalty surcharges while a fine structure that would discourage excessive water use is developed and adopted, after which time the penalty surcharge would be repealed. A fine structure is a more sustainable approach than the existing penalty surcharge program; the penalty surcharge program was developed as a short-term measure to address immediate water conservation regulations imposed by the state. Discussion regarding the suspension of the penalty surcharge is separately agendized for City Council discussion at its June 21, 2016 meeting. The Public Works Commission recommended that a fine structure to replace the penalty surcharge be presented to the City Council within three months.

FISCAL IMPACT

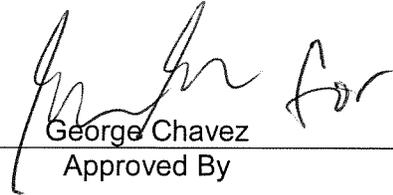
There is no fiscal impact for City submitting a self-certified conservation target of 0% based on the State Water Board's prescribed method for calculating the conservation target.

RECOMMENDATION

Staff recommends that the City submit a self-certification target of 0% to the State Water Board while, at the same time, continuing its dedication to developing and maintaining policies and programs to achieve or exceed its established goal of reducing water consumption by 20% throughout the community by the year 2020.

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The City must submit its self-certification target to the State Water Board by June 22, 2016. If the City does not meet this deadline, the State Water Board will impose the default conservation goal of 32% based on the State Water Board's existing framework.

 for
George Chavez
Approved By

Attachment 1

Water Supply Reliability Certification and Data Submission Form

Discussion Draft 6/6/2016

Welcome to the *Water Supply Reliability Certification and Data Submission Form* for Urban Water Suppliers. Registration and login are required to access the self-certification form. If you have registered on the DRINC Portal but do not see the self-certification form below, please click [Login](#). If you have not registered, please click on [Register](#).

Use this form to submit your agency's self-certification and provide required data regarding supply reliability to comply with the requirements of Section 864.5 of the [Drought Emergency Water Conservation regulation adopted by the State Water Board on May 18, 2016](#). For more information on the emergency regulation, please click [HERE](#).

- Read through the form and assemble all the information needed so you can finish the form in one session. A print version of the form can be downloaded [HERE](#).
- The system will automatically log you off after 60 minutes of inactivity and information will be lost.
- To correct an error or make a change in an already submitted form, **you must re-enter all data and re-submit all supporting documentation**; only information from the most recently submitted form will be reviewed.
- Help is available to explain many of the questions by clicking on the  icon. A Guidance Document for this form is available, please click [HERE](#).
- For assistance with the DRINC portal, please email the DRINC administrator at drinc@waterboards.ca.gov.
- Upon submission, you will receive a confirmation email.

 **Urban Water Supplier**

Beverly Hills City of (640)

Contact Information for Urban Water Supplier Submitting this Form

Management contact (general manager or equivalent) for the submittal

Name	Trish Rhay
Title	Assistant Director of Public Works Services
Email	trhay@beverlyhills.org
Phone	(310)285-2486
Street address	345 Foothill Road
City	Beverly Hills
Zip Code	90210

Technical contact for the submittal

Name	Josette Descalzo
Title	Environmental Compliance Manager
Email	jdescalzo@beverlyhills.org
Phone	(310)285-2554
Street address	345 Foothill Road
City	Beverly Hills
Zip Code	90210

A confirmation email will be sent to the email addresses provided above when the form is submitted.

27 **Step 1: Determine Annual Total Potable Water Demand**

28 **Purpose:** This step is to determine annual total potable water demand (per Section 864.5(b)(2) of the
29 Emergency Regulation).

30 **Directions:** Indicate actual potable water production for the calendar years 2013 and 2014.
31

32 Units of measure for data entered below

Potable Water Production in Calendar Year 2013
(in units selected)

33 Potable Water Production in Calendar Year 2014
(in units selected)

34 Notes and comments (optional)

35 Values below are converted to acre-feet and averaged automatically based on the above entry.
36

Potable Water Production in Calendar Year 2013 (in acre-feet)

Potable Water Production in Calendar Year 2014 (in acre-feet)

38 Calculated Annual Potable Water Demand (in acre-feet)

39 *Result is used in Step 3 and in the final conservation standard*

40 **Step 2: Estimate Annual Total Potable Water Supply**

41 **Purpose:** This step is to estimate annual total potable water supply, under the assumptions of the emergency
42 regulation section 864.5(b) for each of the next three water years (WY 2017-2019).

43 **Directions:** Identify each source of supply that your water system intends to rely on for potable water in
44 Worksheet 1 and the quantity of water available for the time period. The current conditions to use in
45 calculations are as of October 1, 2016.
46

- 47 • The precipitation in WY 2017 mirrors that of WY 2013, precipitation in WY 2018 mirrors that of WY
48 2014, precipitation in WY 2019 mirrors that of WY 2015. (Section 864.5(b)(1)). Only precipitation data
49 from the Western Regional Climate Center (e.g., http://www.wrcc.dri.edu/anom/cal_anom.html) or an
50 equivalent source may be used. **Do not average precipitation.**
- 51 • Potable water supply only includes sources of supply available to the supplier that could realistically be
52 used for potable drinking water purposes during the time period identified in the regulation.
- 53 • If a water source is not of sufficient quality to be realistically treated and use as potable water by the
54 water retailer, it shall not be included as a water supply.
- 55 • Consider requirements and assumptions that are used that impact supply reliability, for example, in the
56 case of groundwater, if your water agency has its own requirement not to lower the water level of an
57 aquifer below a certain amount, provide an explanation in the "Notes and comments".
- 58 • Groundwater: use the quantity of groundwater that is accessible, **without** addition of new wells or
59 completion of treatment projects that would fall outside the three-year projection period (2016-17
60 through 2018-19).

- If new diversions or treatment equipment or facilities will come on-line between now until the end of WY 2019, sufficient evidence must be provided to indicate is it going to be implemented (e.g., funds have been allocated, contract with a builder has been approved).
- If a water supply is dedicated for another purpose (e.g., agriculture) and is therefore committed for another use, it is not available and shall be **subtracted** for the subtotal of water supplies.
- Identify all sources of data used (e.g., “our water product information from Supervisor Control and Data Acquisition (SCADA)” and include a link to the source and identify a pinpoint citation to the pertinent information).
- Provide supporting documentation the covers each water source. For example, when the amount of water obtained from one river is summed in one number and there are multiple diversion or treatment points, then the supporting documentation shall describe each diversion and/or treatment point and the amount of water from each that are summed together and equal the amount on the worksheet.

Download Worksheet 1

Enter total available water supply for each of the next three water years from Worksheet 1

WY 2017 Total Available Water Supply in acre-feet	12115.00
WY 2018 Total Available Water Supply in acre-feet	12115.00
WY 2019 Total Available Water Supply in acre-feet	12115.00
Notes and comments (optional)	<i>Describe</i>

Step 3: Calculate Self-Certified Supply Conservation Standard

This step has two parts. Only complete one part of Step 3:

- **Step 3.1 Individualized Self-Certification Conservation Standard.** Total available potable water supply for individual water suppliers complete this step. If you complete this step, skip Step 3.2.
- **Step 3.2 Aggregated Self-Certification Conservation Standard (water wholesaler and all urban water supplier customers).** If you complete this step skip Step 3.1

Step 3.1: Individualized Self-Certification Conservation Standard

Average Annual Potable Water Demand	12114.950
Potable Water Supply in WY 2019	12115.00
Supply Shortfall at the end of WY 2019	-0.050

A positive number is used to calculate a new conservation standard, a negative amount indicates a surplus and the conservation standard is zero

Conservation Standard with Self-Certification of Supply (Supply shortfall as a percent of total potable water demand, automatically calculated from information provided and rounded to the nearest whole percentage point)	0 (a negative value above means your Conservation Standard is 0%)
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Does your water agency intend to have a conservation standard that is higher than the mandatory conservation standard calculated above?

N

Notes and comments (optional)

The City of Beverly Hills will continue to enhance its conservation efforts by implementing policies and programs that will meet and exceed the City's 20% reduction by the year 2020. This includes amending the municipal codes and creating robust programs to enhance water use

**Step 3.2: Aggregated Self-Certification Conservation Standard
(Wholesaler and its urban water supplier customers)**

Does this submittal include an aggregated conservation standard (per section 864.5(f))?

N

Section 864.5(f) If a wholesaler and all of its urban water supplier customers agree, in a legally-binding document, those suppliers and wholesaler may submit to the board, in lieu of the individualized self-certified conservation standard applicable pursuant to section 864.5 or section 865, an aggregated conservation standard, with all supporting documentation required for individualized self-certified conservation standards by section 864.5.

If no, complete Step 3.1 above and skip Step 3.2.

If yes, there must be a legally binding document signed by all parties. This document is uploaded in Step 5.

Entity submitting self-certification on behalf of the group

- Name of Contact Person
- Title
- Email address
- Phone number

Download Worksheet 2

Enter aggregate values from Worksheet 2

Aggregated Average Annual Potable Water Demand from Worksheet 2

Aggregate Potable Water Supply in WY 2019 from Worksheet 2

Aggregate Conservation Standard from Worksheet 2

Notes and comments (optional)

Describe

Step 4: Certification Form

Download and complete the certification form (Section 864.5(a)(3) and (h))

The General Manager or equivalent executive level staff person must sign and submit to the State Water Board a certified statement. The completed certification form is uploaded in Step 5.

Step 5: Upload Documents

Worksheet 1 (total available water supply for individual water supplier) **Required**

Upload Completed Worksheet 1 (Excel File)

Worksheet 2 (aggregated self-certification conservation standard – water wholesaler and its urban water supplier customers) **Required only for step 3.2**

Upload Completed Worksheet 2 (Excel File)

Certification (the certification to meet the requirements of Section 864.5) **Required**

Upload signed certification form (PDF file)

Supporting analysis and calculations (not to exceed 10 pages) **Required**

Upload supporting information (cannot be a pdf file)

Step 6: Check and Submit Form

All information supporting your submittal is subject to State Water Board review and a conservation standard may be rejected if the information does not support the self-certified supply as identified in the emergency regulation. Please note that all information submitted on or with this form may be subject to disclosure pursuant to the Public Records Act.

Click on the **Submit** button below to submit your agency's self-certification of supply, all of the information entered in the form above, and the uploaded attachments. A copy of this submission will be sent to the email addresses entered above.

Submit button

Email addresses that appear above in the contact section will receive the confirmation.

Attachment 2



The Metropolitan Water District of Southern California

NEWS RELEASE

P. O. Box 54153, Los Angeles, California 90054-0153 • (213) 217-6485 • www.mwdh2o.com

Contacts: Rebecca Kimitch, (213) 217-6450; (202) 821-5253, mobile
Bob Muir, (213) 217-6930; (213) 324-5213, mobile

June 15, 2016

METROPOLITAN WATER DISTRICT ABLE TO MEET REGION'S WATER SUPPLY DEMANDS, CALLS FOR CONTINUED CONSERVATION AMONG RESIDENTS

**Imported water supplier passes state's 'stress-test,'
relies on continued conservation amid ongoing drought**

The Metropolitan Water District of Southern California today released results of an analysis demonstrating it has sufficient water supplies to meet the demand of its member agencies over the next three years, thanks in large part to successful water conservation by Southland residents.

After the State Water Resources Control Board ended mandatory emergency conservation in May 2016, it asked water agencies to instead demonstrate whether they have sufficient supplies for the next three years, assuming the drought continues. Under the new regulations, if an agency has a shortfall, it must cut water use by that amount through January 2017.

"This so-called 'stress test' asked if we can provide water for our member agencies for the next three years, and our answer is yes," said Metropolitan General Manager Jeffrey Kightlinger. "To provide that assurance, we have invested to diversify our water portfolio with some of the nation's largest conservation programs, more storage, and ongoing efforts to improve reliability of imported water supplies."

While Metropolitan's stress-test results mean it will not be forced into mandatory conservation, long-term conservation remains a key pillar of its water supply reliability plan. By 2040, conservation and recycling will account for one-third of Metropolitan's water portfolio according to its Integrated Water Resources Plan which was updated in January and guides the agency's long-term water management policies.

"Metropolitan is focused on supporting long-term water conservation and moving toward a more sustainable lifestyle," said Brandon Goshi, manager of water policy and strategy. "Rather than look to water rationing as a solution in dry years, we are focused on how to be reliable every year." To that end, Metropolitan has invested nearly \$1 billion over the past 25 years to develop drought-resilient local supplies, increase water conservation and reduce per capita water use.

more

In April, Metropolitan's board of directors approved an investment of \$100 million over the next two years for conservation programs and rebates for permanent water-saving devices. In May, the board declared a Water Supply Alert calling for continued awareness and reinforced conservation throughout the district's 5,200-square-mile service area.

The stress-test is based on a careful analysis of anticipated conditions, taking into account water supply challenges such as the ongoing drought, uncertainty regarding imported water deliveries from Northern California via the Sacramento-San Joaquin Bay Delta, and limitations on the Colorado River.

"We are constantly assessing conditions to ensure we have sufficient supplies," Kightlinger said. "That said, if we have an exceptional drop in supplies, or an unusual spike in demand, we will absolutely turn to our other tools, such as our allocation plan, to ensure that we maintain water reliability."

Water supply wholesalers are required to provide projections on the amount of water they expect to deliver to retailers based on a three-year water supply projection that assumes current supply conditions plus an assumed hydrology based on the 2013, 2014 and 2015 water years, and a total potable water demand based on the supplier's average annual total potable water production for 2013 and 2014. Metropolitan's water supply projections are posted on our website at www.mwdh2o.com/AboutYourWater/Planning/.

Metropolitan's member agencies and other urban water retailers are required to self-certify their water supply using a three-year water supply projection starting with current supply conditions plus an assumed hydrology based on the 2013, 2014 and 2015 water years, and submit that information to the state board by June 22, 2016.

###

The Metropolitan Water District of Southern California is a state-established cooperative of 26 cities and water agencies serving nearly 19 million people in six counties. The district imports water from the Colorado River and Northern California to supplement local supplies, and helps its members to develop increased water conservation, recycling, storage and other resource-management programs.

**State Water Resources Control Board Drought Emergency Conservation
Urban Wholesaler Supply Reliability Analysis - June 15, 2016**

Metropolitan Water District of Southern California Supplies Available to Urban Water Suppliers

	2017	2018	2019
City of Anaheim	19,682	19,666	19,663
City of Beverly Hills	10,917	10,917	10,917
City of Burbank	14,271	14,246	14,246
Calleguas MWD	111,980	111,931	111,752
Central Basin MWD	53,065	53,096	37,127
City of Compton	389	0	361
Eastern MWD	97,217	99,805	101,053
Foothill MWD	9,380	9,409	9,525
City of Fullerton	8,762	8,766	8,765
City of Glendale	19,114	19,292	19,394
Inland Empire Utilities Agency	69,752	69,752	61,269
Las Virgenes MWD	23,517	23,517	23,517
City of Long Beach	26,003	25,998	25,993
Los Angeles DWP	385,624	387,624	424,024
Municipal Water District of Orange County	223,056	222,426	221,165
City of Pasadena	21,714	21,714	21,714
San Diego County Water Authority	290,798	257,237	233,242
City of San Fernando	0	0	0
City of San Marino	962	962	962
City of Santa Ana	11,577	11,583	9,581
City of Santa Monica	4,883	4,883	4,883
Three Valleys MWD	67,970	71,828	74,269
City of Torrance	13,875	7,975	7,975
Upper San Gabriel Valley MWD	48,963	48,651	66,784
West Basin MWD	128,218	126,840	125,612
Western MWD	75,141	73,774	73,524
Supplies Available to Urban Water Suppliers	1,736,826	1,701,888	1,707,314

Wholesale Water Supply Assessment

Demands for Metropolitan Water Supply

	2017	2018	2019
Total Member Agency Wholesale Requests	1,736,826	1,701,888	1,707,314
Demand Contingency	10,000	10,000	10,000
Total Water Demand	1,746,826	1,711,888	1,717,314

Metropolitan Water Supply Sources

	2017	2018	2019
Total State Water Project Supplies	736,960	105,280	421,120
Total Colorado River Aqueduct Supplies	752,000	776,000	752,000
Total New Structural Conservation	62,451	58,422	52,320
Total Storage: Take/(Put)	195,416	772,187	491,874
Total Water Supply	1,746,826	1,711,888	1,717,314

Water Supply and Demand Balance

	2017	2018	2019
Total Water Demand	1,746,826	1,711,888	1,717,314
Total Water Supply	1,746,826	1,711,888	1,717,314
Water Balance: Surplus/(Shortage)	0	0	0
Reduction to Wholesale Water Requests	0%	0%	0%

Wholesale Water Demands

Member Agency Wholesale Requests

	2017	2018	2019
City of Anaheim	19,682	19,666	19,663
City of Beverly Hills	10,917	10,917	10,917
City of Burbank	14,271	14,246	14,246
Calleguas MWD	111,980	111,931	111,752
Central Basin MWD	53,065	53,096	37,127
City of Compton	389	0	361
Eastern MWD	97,217	99,805	101,053
Foothill MWD	9,380	9,409	9,525
City of Fullerton	8,762	8,766	8,765
City of Glendale	19,114	19,292	19,394
Inland Empire Utilities Agency	69,752	69,752	61,269
Las Virgenes MWD	23,517	23,517	23,517
City of Long Beach	26,003	25,998	25,993
Los Angeles DWP	385,624	387,624	424,024
Municipal Water District of Orange County	223,056	222,426	221,165
City of Pasadena	21,714	21,714	21,714
San Diego County Water Authority	290,798	257,237	233,242
City of San Fernando	0	0	0
City of San Marino	962	962	962
City of Santa Ana	11,577	11,583	9,581
City of Santa Monica	4,883	4,883	4,883
Three Valleys MWD	67,970	71,828	74,269
City of Torrance	13,875	7,975	7,975
Upper San Gabriel Valley MWD	48,963	48,651	66,784
West Basin MWD	128,218	126,840	125,612
Western MWD	75,141	73,774	73,524
Total Member Agency Wholesale Requests	1,736,826	1,701,888	1,707,314

Imported Water Supplies

State Water Project Base Supply Programs

	2017	2018	2019
State Water Project Allocation	35%	5%	20%
MWD Table A	669,025	95,575	382,300
DWCV Table A	67,935	9,705	38,820
Total State Water Project Supplies	736,960	105,280	421,120

Colorado River Aqueduct Base Supply Programs

	2017	2018	2019
Basic Apportionment – Priority 4	550,000	550,000	550,000
IID/MWD Conservation Program	85,000	85,000	85,000
Priority 5 Apportionment (Surplus)	0	0	0
Canal Lining Supplies - San Luis Rey	16,000	16,000	16,000
PVID Land Management Program	130,000	130,000	130,000
Lower Colorado Water Supply Project	8,000	8,000	8,000
Binational ICS	0	24,000	0
Forbearance for Present Perfected Rights	(2,000)	(2,000)	(2,000)
CVWD SWP/QSA Transfer Obligation	(35,000)	(35,000)	(35,000)
DWCV SWP Table A Obligation	(67,935)	(9,705)	(38,820)
DWCV SWP Table A Transfer Callback	67,935	9,705	38,820
SNWA Agreement Payback	0	0	0
Total Colorado River Aqueduct Supplies	752,000	776,000	752,000

Imported Water Supplies Documentation

State Water Project Base Supply Programs

Program	Reference
State Water Project Allocation	<u>Historical State Water Project Allocations</u>
MWD Table A	<u>2015 Urban Water Management Plan; A.3-18</u>
DWCV Table A	<u>2015 Urban Water Management Plan; A.3-19</u>

Colorado River Aqueduct Base Supply Programs

Program	Reference
Basic Apportionment – Priority 4	<u>2015 Urban Water Management Plan; A.3-1</u>
IID/MWD Conservation Program	<u>2015 Urban Water Management Plan; A.3-3</u>
Priority 5 Apportionment (Surplus)	<u>2015 Urban Water Management Plan; A.3-5</u>
Canal Lining Supplies - San Luis Rey	<u>2015 Urban Water Management Plan; A.3-8</u>
PVID Land Management Program	<u>2015 Urban Water Management Plan; A.3-5</u>
Lower Colorado Water Supply Project	<u>2015 Urban Water Management Plan; A.3-13</u>
Binational ICS	<u>2015 Urban Water Management Plan; A.3-14</u>
Forbearance for Present Perfected Rights	<u>2015 Urban Water Management Plan; A.3-3</u>
CVWD SWP/QSA Transfer Obligation	<u>2015 Urban Water Management Plan; A.3-10</u>
DWCV SWP Table A Obligation	<u>2015 Urban Water Management Plan; A.3-19</u>
DWCV SWP Table A Transfer Callback	<u>2015 Urban Water Management Plan; A.3-19</u>
SNWA Agreement Payback	<u>2015 Urban Water Management Plan; A.3-12</u>

Other Water Supplies

Growth in Structural Conservation

	2017	2018	2019
Existing Structural Conservation 2013-2014	162,733	162,733	162,733
Existing Structural Conservation	225,183	221,154	215,052
Total New Structural Conservation	62,451	58,422	52,320

Other Water Supplies Documentation

Structural conservation is device and program-based conservation originally funded by Metropolitan and/or member and local agencies. Examples are ULFT Toilet retrofits, Irrigation Controllers and Turf Removal. For additional information reference:

[Annual Progress Report on Achievements in Conservation, Recycling and Groundwater Recharge 2015 Integrated Water Resources Plan Update; 3.20](#)

Water Supplies from Storage

Annual Storage Use

	2017	2018	2019
Puts to Storage	0	0	0
Takes from Storage	195,416	772,187	491,874
Total Storage: Take/(Put)	195,416	772,187	491,874

Annual Storage Accounting

	2017	2018	2019
Total Estimated Starting Storage Balance	2,117,000	1,921,584	1,149,398
Total Storage: Take/(Put)	195,416	772,187	491,874
Total Estimated Ending Storage Balance	1,921,584	1,149,398	657,524

Water Supplies from Storage Documentation

2017 Total Estimated Starting Storage Balance includes projected dry-year storage of 1,487,000 acre-feet, and 630,000 acre-feet of additional emergency storage. For additional information reference: [Water Surplus and Drought Management Report as of 5/10/2016](#)

Metropolitan Water Storage Programs

Program	Reference
In-Region Surface Storage	<u>2015 Urban Water Management Plan; A.3-37</u>
Flexible Storage Accounts	<u>2015 Urban Water Management Plan; A.3-40</u>
State Water Project Carryover	<u>2015 Urban Water Management Plan; A.3-18</u>
Groundwater Conjunctive Use Programs	<u>2015 Urban Water Management Plan; A.3-44</u>
Kern Delta Water Management Program	<u>2015 Urban Water Management Plan; A.3-31</u>
Antelope Valley East Kern Program	<u>2015 Urban Water Management Plan; A.3-26</u>
San Bernardino Valley MWD Program	<u>2015 Urban Water Management Plan; A.3-24</u>
Arvin-Edison Water Management Program	<u>2015 Urban Water Management Plan; A.3-22</u>
Semitropic Water Banking and Exchange	<u>2015 Urban Water Management Plan; A.3-21</u>
Mojave Water Agency Storage Program	<u>2015 Urban Water Management Plan; 3-27</u>
Desert Water/Coachella Valley Programs	<u>2015 Urban Water Management Plan; A.3-19</u>
Lake Mead ICS Program	<u>2015 Urban Water Management Plan; A.3-14</u>
Emergency Storage	<u>2015 Urban Water Management Plan; A.3-38</u>