



ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT, ZONE 7

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551 • PHONE (925) 454-5000 • FAX (925) 454-5727

**ORIGINATING SECTION: INTEGRATED PLANNING**  
**CONTACT: SAL SEGURA / AMPARO FLORES**

**AGENDA DATE:** April 20, 2016

**ITEM NO. 9**

**SUBJECT:** 2016 Annual Review of Sustainable Water Supply for Zone 7 Water Agency

**SUMMARY:**

- Zone 7 is projected to receive a 45% allocation (36,300 AF) from the State Water Project (SWP) for 2016.
- The current allocation is large enough so that no recovery is required from Zone 7's drought supplies stored in Kern County for 2016.
- Lake Del Valle also captured more local runoff than in 2015; Zone 7 anticipates receiving 8,000 AF in 2016.
- Zone 7 has 45,100 AF of water supply available in 2016, not including water available in storage.
- Although Zone 7 has 171,900 AF of water supply in storage, only 18,100 AF was assumed available for use in 2016 for this analysis, which includes SWP Carryover, minimal groundwater pumping, and a small amount of Lake Del Valle carryover.
- Zone 7 also has agreements with the California Department of Water Resources to purchase water from Yuba and the Multi-Year Pool program, should it be available.
- Together, water available in 2016 includes 45,100 AF of new water, 18,100 AF from storage, and possibly additional purchases, should water be made available.
- Requested treated and untreated deliveries for 2016 are 47,900 AF. This is 54% higher than actual 2015 deliveries (31,045 AF) due to state mandated conservation in place during 2015, and water demands are projected to increase by 9.8% percent between 2016 and 2020.
- Zone 7 can deliver 100% of requested water demands in 2016 and 2017 even assuming drought conditions are more severe next year.
- Current conservation levels indicate much lower demands than delivery requests; consequently, Zone 7 staff will continue to monitor both state and local conditions, and will adjust operations and projections accordingly.

**FUNDING:**

Reductions in water use associated with local compliance with statewide conservation regulations and targets will decrease water sales revenue.

**RECOMMENDED ACTION:**

Information only.

**ATTACHMENTS:**

Memorandum

## INTEROFFICE MEMORANDUM

**DATE:** April 20, 2016  
**TO:** Jill Duerig, General Manager  
**FROM:** Sal Segura, Associate Engineer, Integrated Planning  
**SUBJECT:** Annual Review of Sustainable Water Supply for Zone 7 Water Agency

On October 17, 2012, Zone 7 Water Agency (Zone 7) adopted the Water Supply Reliability Policy (Resolution 13-4230).<sup>1</sup> Resolution 13-4230 requires that Zone 7 staff complete an annual review of sustainable water supplies (Annual Review); the purpose of this memorandum is to comply with this requirement. The 2016 annual review covers the following:

- Status of the Current Drought and Key Planning Assumptions
- Projected Water Demands: Next Five Years
- Available Water Supplies to Zone 7 at the Beginning of 2016
- Comparison of Supply and Demand: Next Five Years
- Programs Necessary to Meet Water Demands

### SUMMARY OF FINDINGS

As of April 1, 2016, Zone 7 has received a 45% allocation (36,300 AF) from the State Water Project (SWP) for 2016. Lake Del Valle also captured local runoff, and Zone 7 anticipates receiving approximately 8,000 AF. Additionally, the current allocation is large enough (i.e., more than double last year's allocation [20%]) so that no recovery is required from Zone 7's drought supplies stored in Kern County. Furthermore, thanks to the incredible drought response from the Tri-Valley, Zone 7 was able to carryover water from 2015 into 2016. Zone 7 has 53,100 AF of supply available for 2016 assuming no recovery from banking programs.

A comparison of water supply and demand indicates that Zone 7 can meet 100% of requested water deliveries over the next five years even if there is a 97% recovery of water demands in 2016 to 2013 levels and the drought worsens next year (e.g., 2017 is a 1977 hydrological year type).

Zone 7 is evaluating several potential future water supply options that include the California WaterFix, Bay Area Regional Desalination, and Potable Reuse, although none are likely to be online during the short planning horizon covered by this Annual Report. Zone 7 still continues to monitor State-mandated water conservation activities, monitor local conditions, adjust operations as necessary to optimize use of available resources, remain prepared for another year of drought, and continue to regularly meet with its local water supply retailers and untreated water customers.

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<sup>1</sup> A copy of Resolution 13-4230 is provided as Attachment B.

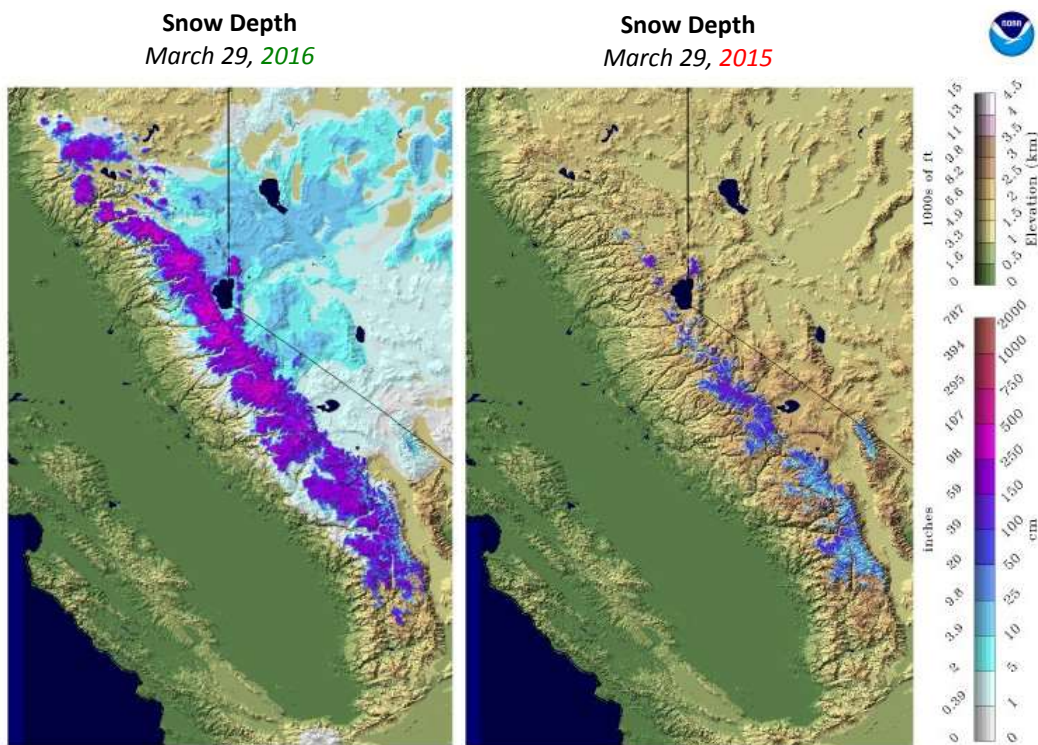
## STATUS OF THE CURRENT DROUGHT AND KEY PLANNING ASSUMPTIONS

On April 1, 2015, the Statewide Sierra snowpack was measured at only five percent of average – the lowest level ever recorded. This record low snowpack, in combination with decreased water levels in reservoirs and decreased flow in rivers, caused Governor Brown to adopt Executive Order B-29-15, which required a 25 percent reduction in water use statewide. In a separate resolution (2015-0013), the State Water Resources Control Board (SWRCB) adopted emergency regulations for statewide urban water conservation, implementing the Governor’s Executive Order.

### Improved Sierra Snowpack in 2016: 17 times more snow as of March 29, 2016

In contrast, the Statewide Sierra snowpack was estimated to be 86 percent of average as of March 29, 2016; this is 17 times more snow than in 2015. Storage levels in northern California are also higher than in 2015 (see attachments). This striking contrast is illustrated on Figure 1, and prompted the Department of Water Resources to increase the State Water Project allocation from 30 percent in February to 45 percent in March. The Sierra Snowpack, however, is still below average, and as of April 5, 2016, State mandated water use restrictions are still in place. The State Board will consider extension/modification of the emergency regulations beginning with a workshop on April 20, 2016.

**Figure 1. Statewide Snowpack in the Sierra Nevada in 2016 is significantly deeper in 2016 than in 2015<sup>(a)</sup>**

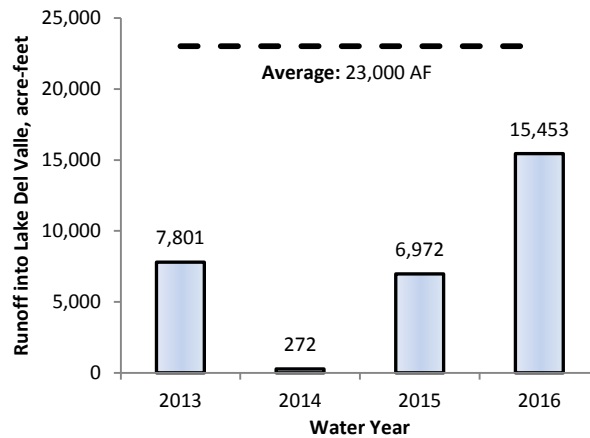


<sup>(a)</sup> Source: National Weather Service Remote Sensing Center, [www.noahrs.noaa.gov/nsa](http://www.noahrs.noaa.gov/nsa)

### Improved Local Runoff in 2016: 2.2 times more local water

The Tri-Valley area has also experienced significantly more runoff this year compared to the same time last year. This increase is shown on Figure 2, which shows that runoff into Lake Del Valle as of March 29, 2016, is already 2.2 times higher (15,453 AF divided by 6,972 AF) than in 2015. Figure 2 also shows that runoff is still well below average even though local rainfall is about 90 percent of average; this discrepancy is associated with antecedent dry conditions associated with low precipitation in 2013 through 2015 (i.e., dry soils absorbed much of the rainfall).

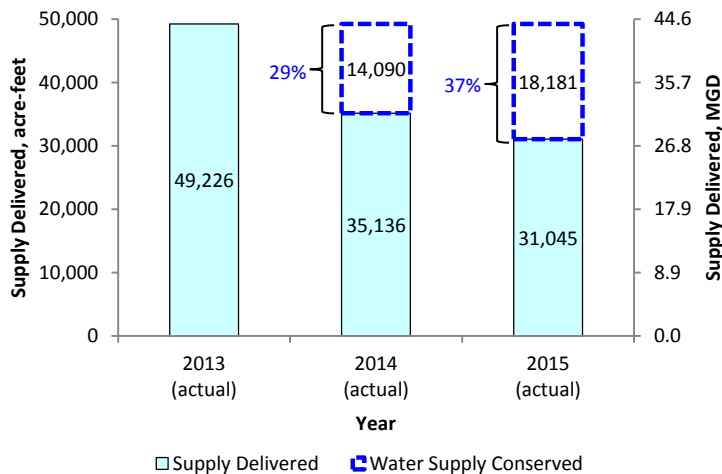
Figure 2. Runoff into Lake Del Valle measured by USGS Stream Gauge Arroyo Valle Below Lang Canyon



### Improved Water Supply for Zone 7

As will be shown in this memorandum, the current State Water Project allocation (45%), when combined with local water supplies, ensures that Zone 7 has significantly more water supplies in 2016, than in 2015, and will not need to recover any drought supplies in Kern County for 2016.

Figure 3. Tri-Valley’s Response to the Drought: 32,000 AF of water supply conserved over the past two years relative to 2013



Furthermore, the Tri-Valley’s successful response to the drought reduced the required water supply delivery from Zone 7, relative to 2013 water demand, by 29% in 2014 and 37% in 2015; this represents a cumulative water supply savings of over 32,000 acre-feet over the past two years. This dramatic response by the Tri-Valley area is illustrated on Figure 3.

These conditions will allow Zone 7 to meet 100% of delivery requests made by the retailers.

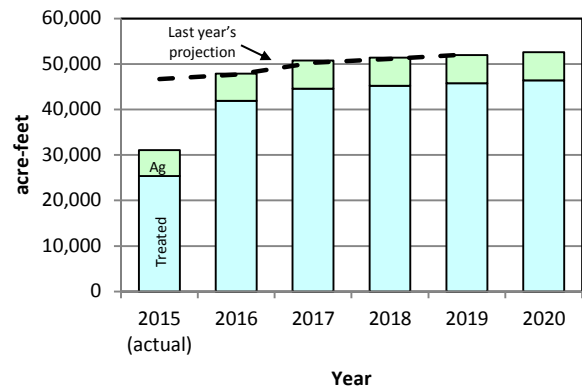
### Annual Sustainability Report Assumptions

To illustrate Zone 7’s ability to meet 100% of delivery requests made by the retailers, the analysis in this memorandum conservatively assumes critically dry conditions (1977) in 2017, followed by normal years in 2018 through 2020.

## PROJECTED WATER DEMANDS: NEXT FIVE YEARS

Every year Zone 7 receives delivery requests from all of its customers to meet projected water supply needs for the next five years (see Figure 4 and Table 1). As shown, requests for 2016 are significantly higher than actual 2015 water demand. Additionally, water requests between 2017 and 2019 are nearly identical to last year's report. Zone 7's Retailers are projecting a 97% recovery from the drought in 2016 (see Figure 5), while Zone 7's projection for 2016 is substantially lower (see Figure 5). For conservative planning purposes, Zone 7 staff decided to use the Retailers' higher delivery requests for this analysis; if actual water use is lower, then Zone 7 would have even more water supply available for 2017 than shown in this report. Figure 6 shows untreated water demand requests used in the analysis.

**Figure 4. Demands are projected to recover, and are nearly identical to last year's report**



**Table 1. 5-Year Water Demand Requests are Similar to Last Year's Report, acre-feet<sup>(a)</sup>**

Component	2013 (actual)	2014 (actual)	2015 (actual)	2016	2017	2018	2019	2020
M&I <sup>(b,c,d)</sup>	43,052	30,155	25,406	41,900	44,600	45,200	45,800	46,400
Untreated <sup>(e)</sup>	6,174	4,981	5,639	6,000	6,200	6,200	6,200	6,200
<b>Total</b>	<b>49,226</b>	<b>35,136</b>	<b>31,045</b>	<b>47,900</b>	<b>50,800</b>	<b>51,400</b>	<b>52,000</b>	<b>52,600</b>
<i>2015 Annual Report</i>			46,700	47,700	50,300	51,100	52,100	--
<i>% Increase from 2015 Annual Report</i>				0.4%	1.0%	0.6%	-0.2%	

(a) Projected demands were rounded to the nearest 100 acre-feet.

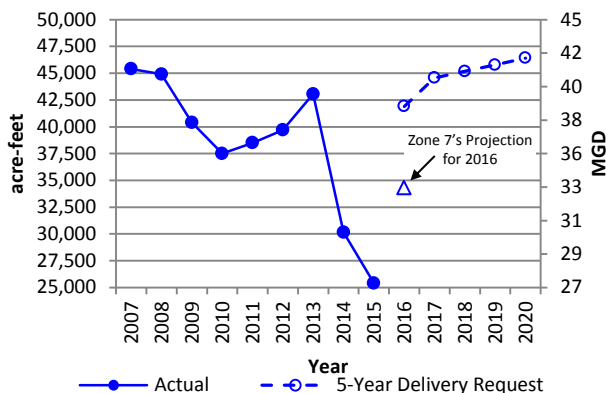
(b) M&I = Municipal and Industrial.

(c) Demand projections were provided as requests by California Water Service Company, Dublin San Ramon Services District, City of Livermore, City of Pleasanton, and Zone 7's direct retail customers.

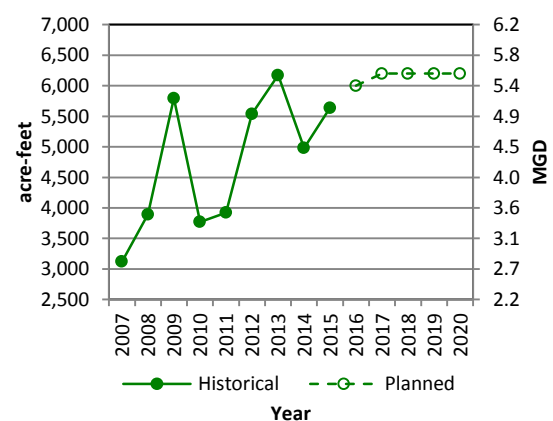
(d) Demands include Zone 7's unaccounted-for water and the groundwater-pumping quota for Dublin San Ramon Services District.

(e) Zone 7's untreated water demand is primarily for irrigation.

**Figure 5. Retailers are projecting a 97% recovery from 2015**



**Figure 6. Agricultural demands are highly variable, and could increase by over 500 AF between 2016 & 2020**



## AVAILABLE WATER SUPPLIES TO ZONE 7 AT THE BEGINNING OF 2016

The purpose of this section is to review the water supplies, including contracted supply and storage, available to Zone 7 at the beginning of 2016.

### Projected Yield from Contracted Water Supplies in 2016

Each year Zone 7 receives water from its contracts with DWR for imported SWP water<sup>2</sup>, its local water right permit on Arroyo del Valle, its contract with BBID, and its contract with DWR for Yuba Accord Water and the SWP multi-year pool (a pilot project that may replace the turnback pool).

Figure 7. Zone 7 is expecting 45,100 acre-feet from existing contracts in 2016

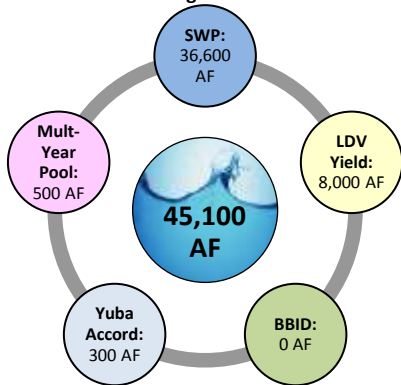


Table 2 presents the projected yield in 2016, an estimate for 2017 assuming 1977 hydrologic conditions, and then a comparison to the long-term average yield. As shown in Table 2 and Figure 7, Zone 7 expects 45,100 acre-feet of water supply from its current contracts in 2016, or 44,500 after accounting for operational losses. If the drought continues into 2017, and conditions are more severe (i.e., 1977 conditions), Zone 7 may only receive 8,400 AF in 2017.

Table 2 also shows that the long-term average yield is projected to be around 55,900 AF after operational losses.

Table 2. Projected Yield from Existing Contracted Water Supplies, acre-feet

Source <sup>(a)</sup>	2016 (2010)	2017 (1977)	2018 (Average)	2019 (Average)	2020 (Average)
Table A <sup>(b)</sup>	36,300	8,100	50,000	50,000	50,000
Byron Bethany Irrigation District (BBID)	0	0	0	0	0
LDV Yield	8,000	0	7,300	7,300	7,300
Yuba Accord	300	200	1,500	1,500	1,500
Multi-Year Program	500	100	0	0	0
<b>Subtotal</b>	<b>45,100</b>	<b>8,400</b>	<b>58,800</b>	<b>58,800</b>	<b>58,800</b>
Operational Losses <sup>(d)</sup>	(600) <sup>(e)</sup>	0	(2,900)	(2,900)	(2,900)
Carryover into Following Year	(9,500)	0	(10,000)	(10,000)	(10,000)
<b>Total Supply for Direct Use</b>	<b>34,000</b>	<b>8,400</b>	<b>45,900</b>	<b>45,900</b>	<b>45,900</b>

<sup>(a)</sup> See 2015 Urban Water Management Plan: [www.zone7water.com/publications-reports/reports-planning-documents](http://www.zone7water.com/publications-reports/reports-planning-documents).

<sup>(b)</sup> 2016 yield is based on 45% (current 2016 allocation) of 80,619 AF.

<sup>(c)</sup> Long-term average yield is 62% of Zone 7's Table A amount (80,619 AF) per DWR's Final 2015 Delivery Capability Report.

<sup>(d)</sup> Operational losses associated with artificial groundwater recharge, brine losses, evaporative losses, and putting water into non-local banking programs.

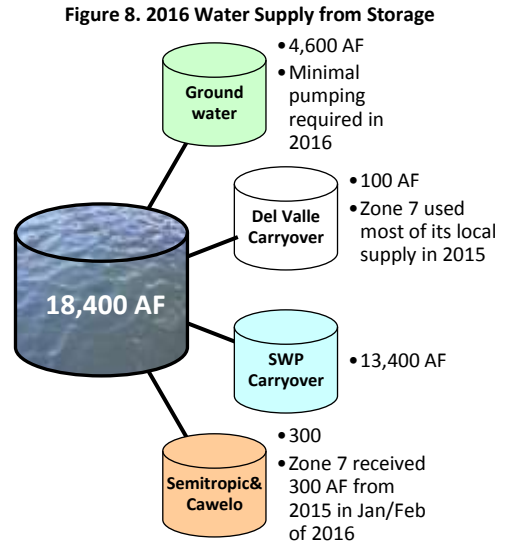
<sup>(e)</sup> Quantity is based on the Annual Operations Plan for 2016.

<sup>2</sup> This includes carryover from 2015, which is discussed in the next section.



### Available Storage at the Beginning of 2016

Zone 7 currently stores water in various storage facilities, including Kern County groundwater-banking programs, to help meet water demands when needed. Figure 8 summarizes the available storage in 2016. Table 3 summarizes the total accrued water in storage available to Zone 7 over the next five years, the estimated water in storage available in 2016, and estimated water supply available from storage between 2017 and 2020. As shown in Table 3, Zone 7 is not planning on banked water recovery in 2016, and should have access to its full pump back amounts in 2017 should conditions become critically dry again.



**Table 3. Available Storage, acre-feet**

Source	Total Accrued Water in Storage <sup>(a)</sup>	Estimated Supply in Storage Planned for Use			
		2016 (2010) <sup>(b)</sup>	2017 (1977) <sup>(b)</sup>	2018 (Normal) <sup>(c)</sup>	2019 & 2020 (Normal) <sup>(c)</sup>
Main Groundwater Basin	84,000	4,600 <sup>(b)</sup>	14,100 <sup>(b)</sup>	6,000 <sup>(c)</sup>	6,000 <sup>(c)</sup>
Lake Del Valle Carryover <sup>(d)</sup>	100	100	0	0	0
State Water Project Carryover <sup>(e)</sup>	13,400	13,400	9,500	0	10,000
Semitropic <sup>(g)</sup>	59,200	300 <sup>(f)</sup>	9,100	0 <sup>(f)</sup>	0 <sup>(f)</sup>
Cawelo <sup>(h)</sup>	15,200	0 <sup>(f)</sup>	10,000	0 <sup>(f)</sup>	0 <sup>(f)</sup>
<b>Total</b>	<b>171,900</b>	<b>18,400</b>	<b>42,700</b>	<b>6,000</b>	<b>16,000</b>

- <sup>(a)</sup> Accrued storage estimate is for the beginning of the Water Year (10/1/15). For groundwater, this is 67% of operational storage.
- <sup>(b)</sup> Minimal pumping is required in 2016 due to the larger SWP allocation of 45%, which allows Zone 7 to plan for a larger pumping amount in 2017 in case of dry conditions. For 2017, Zone 7 staff estimates that approximately 14,100 acre-feet would be available.
- <sup>(c)</sup> A conservatively small pumping amount of 6,000 acre-feet was used from 2018 to 2020 to plan for recovery of the groundwater basin if 2017 is critically dry.
- <sup>(d)</sup> Zone 7 used most of its local supply in 2015, and carried over only 100 AF into 2016. The analysis conservatively assumed there would be no carryover from 2017 to 2020.
- <sup>(e)</sup> Zone 7's total SWP carryover from 2015 into 2016 is 13,400 acre-feet, while this analysis assumed Zone 7 would carryover approximately 9,500 acre-feet from 2016 into 2017. Zone 7 typically carries over about 10,000 acre-feet from year to year during average conditions.
- <sup>(f)</sup> Zone 7 is not planning to recover any water from either Semitropic or Cawelo in 2016, or during average hydrologic years. However, 300 AF of recovery from Semitropic in January and February of 2016 was associated with delivery of 2015 recovery requests.
- <sup>(g)</sup> On an annual basis, Zone 7 can pump back up to 9,100 acre-feet from Semitropic, and depending on the SWP allocation, also request exchange water.
- <sup>(h)</sup> For this analysis, it was assumed that Zone 7 would be able to access 10,000 acre-feet in 2017, and that the remainder (5,200 acre-feet) could be available in 2018 to 2020.

## COMPARISON OF SUPPLY AND DEMAND: NEXT FIVE YEARS

Table 4 compares available water supplies to projected baseline water demands over the next five years. For comparative purposes in this memorandum, long-term average supplies and water supply in storage available for use over the next five years were used to compare with projected water demands between 2018 and 2020. As shown in Table 4, Zone 7 can deliver enough water supply to meet 100% of delivery requests for 2016 and 2017 even if there is no conservation in 2016, and drought conditions worsen in 2017. Table 4 also shows that Zone 7 can meet 100% of water deliveries if normal hydrologic conditions return in 2018.

Figure 9. Zone 7 can deliver 100% of requested deliveries in 2016 and 2017 even if there is a 97% recovery in demands this year

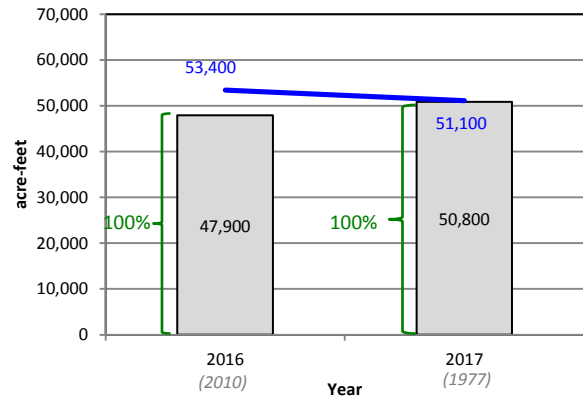


Table 4. Comparison of Supply and Demand: Next Five Years

Component	2016 (1991)	2017 (1977)	2018 (Normal)	2019 (Normal)	2020 (Normal)
Water Supply (minus carryover) <sup>(a)</sup>	35,000	8,400	45,900	45,900	45,900
Water Supply in Storage Available for Use	18,400	42,700	6,000	16,000	16,000
Total Water Supply <sup>(b)</sup>	53,400	51,100	51,900	61,900	61,900
Water Demand <sup>(c)</sup>	47,900	50,800	51,400	52,000	52,600
<b>% of Demand Delivered</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

<sup>(a)</sup> This analysis assumes that Zone 7 carries 9,500 AF into 2017, 0 AF into 2018, and 10,000 AF into 2019 and 2020. This carry over was subtracted from total water supply in the preceding year so that it was not double counted in total available water supply.

<sup>(b)</sup> Excess water supplies are used to replenish the local groundwater basin and banking programs in Kern County.

<sup>(c)</sup> Includes both M&I and Untreated water demands, which are based on the Retailers' delivery requests.



## **PROGRAMS NECESSARY TO MEET WATER DEMANDS**

The review completed as part of this memorandum indicates that Zone 7 has sufficient water supplies to meet projected water demands over the next five years even if there is little to no conservation, and water demands recover to 97% of 2013 levels by 2016. As discussed, however, Zone 7's actual water demands are currently much lower than 2013 levels, which means there will likely be much more supply available between 2016 and 2020 than shown in the conservative analysis completed in this report. Excess water supply will be used to replenish the local groundwater basin and banking programs in Kern County.

As presented in the 2015 Urban Water Management Plan, and evaluated in detail in the 2015 Water Supply Evaluation Update, Zone 7 is evaluating several potential future water supply options to bolster long-term water supply reliability, including:

- California WaterFix
- Bay Area Regional Desalination
- Potable Reuse (both direct and indirect)

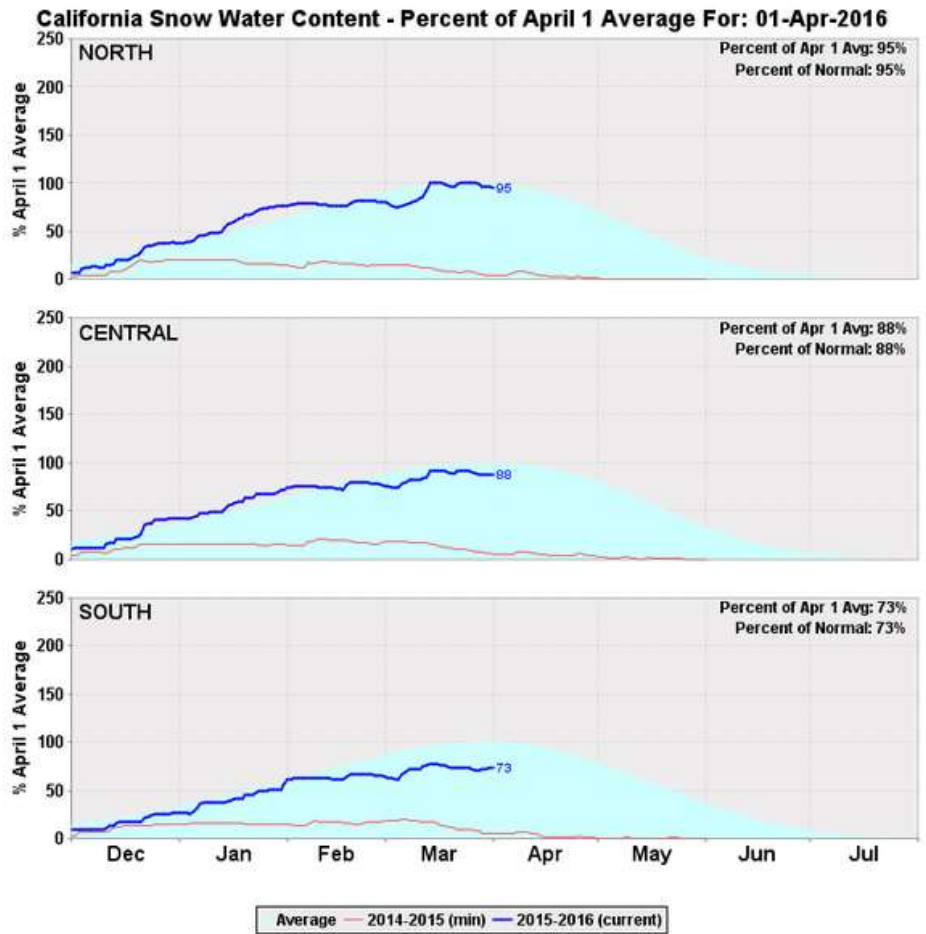
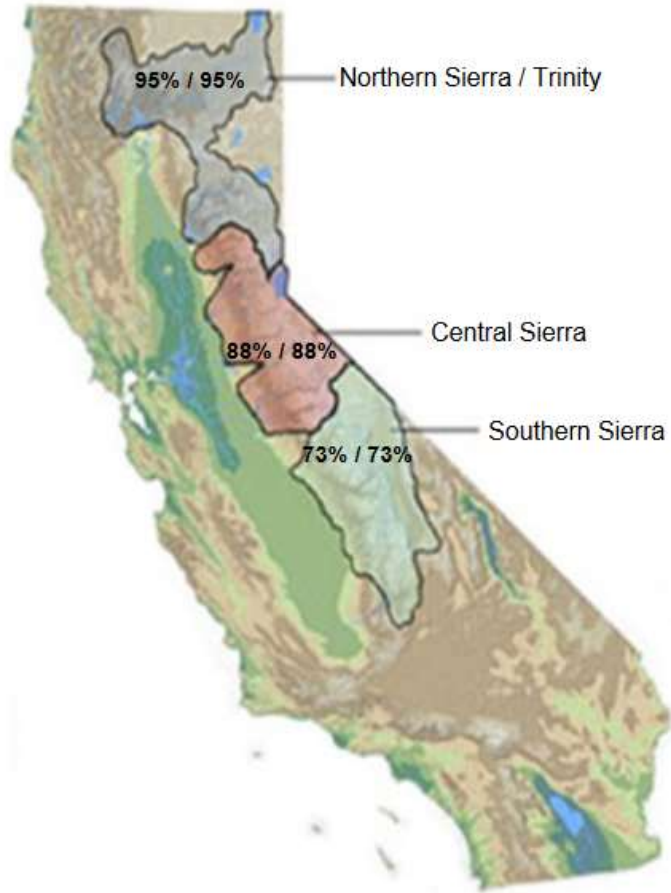
As of April 5, 2016, the State of California still has mandatory water conservation regulations and targets in place. The State Board will evaluate the need for continued implementation of the emergency drought regulations beginning with a workshop on April 20, 2016.

Zone 7 will continue to monitor State-mandated conservation activities. Zone 7 staff will also continue to monitor local conditions, adjust operations as necessary to optimize use of available resources, remain prepared for another year of drought, and continue to regularly meet with its local water supply retailers and untreated water customers.

**ATTACHMENT A: LATEST HYDROLOGIC CONDITIONS**

# California Snow Water Content as of April 3, 2016

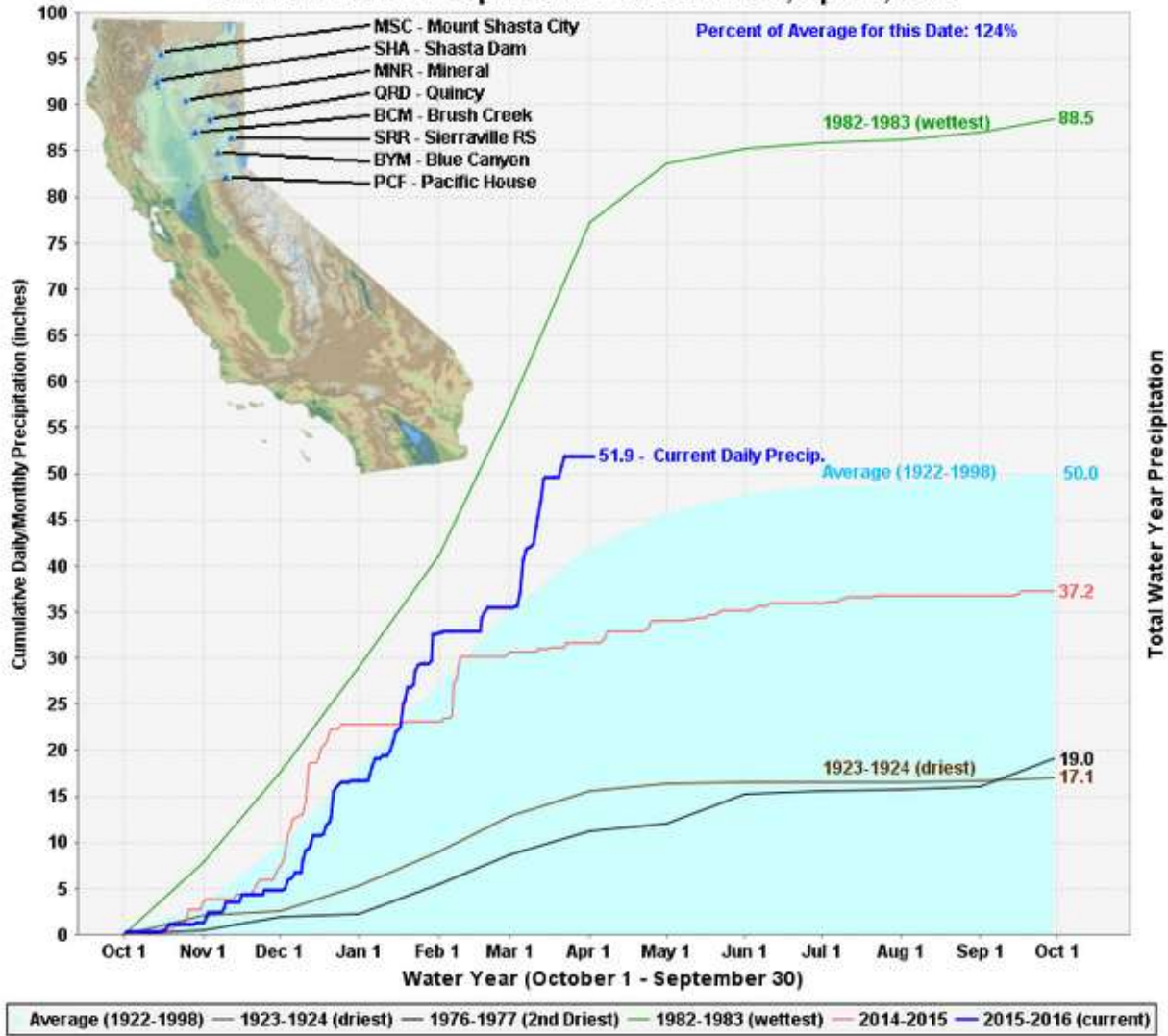
% of April 1 Average / % of Normal for This Date



Statewide Percent of average to date 86%

Statewide Average: 86% / 86%

### Northern Sierra Precipitation: 8-Station Index, April 3, 2016

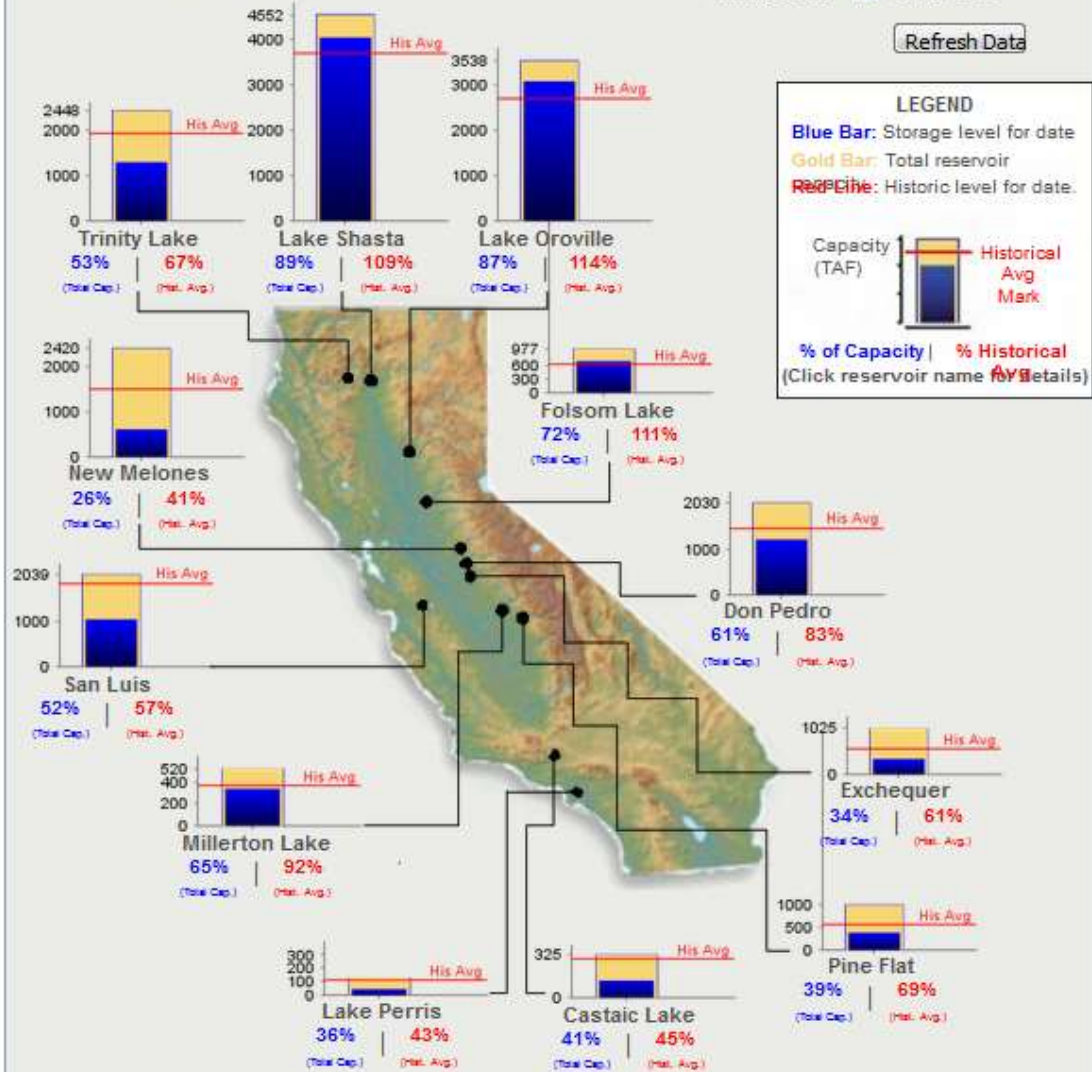


CONDITIONS FOR MAJOR RESERVOIRS: 03-APR-2016

Data as of Midnight: 03-Apr-2016

Change Date:

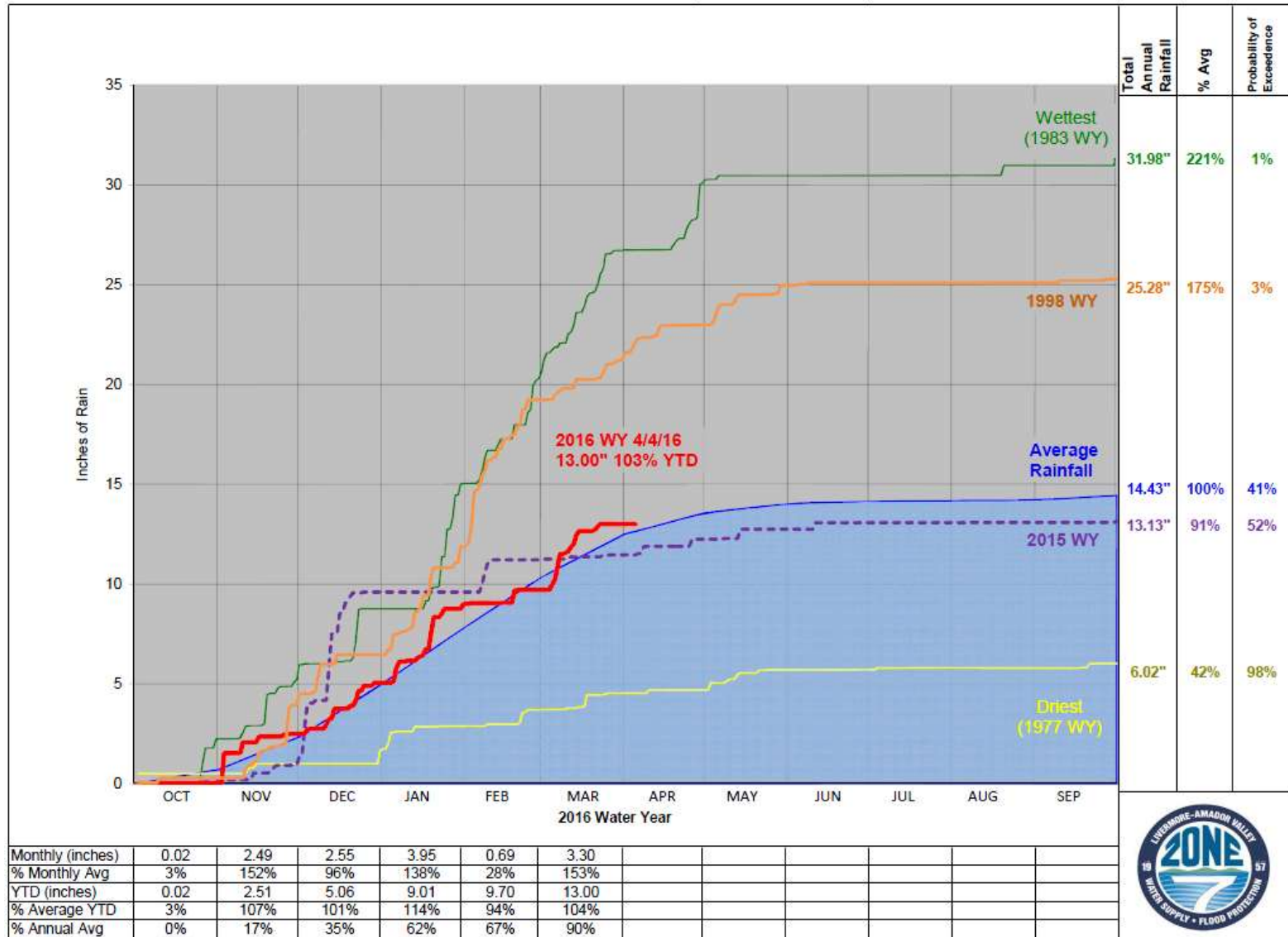
[Refresh Data](#)



[Click for printable version of current data.](#)

Report Generated: 04-Apr-2016 7:56 AM

### Local Rainfall (Livermore Station 15E NOAA)



**ATTACHMENT B: WATER SUPPLY RELIABILITY POLICY**



ZONE 7  
ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

BOARD OF DIRECTORS

RESOLUTION NO 13-4230

INTRODUCED BY DIRECTOR QUIGLEY  
SECONDED BY DIRECTOR STEVENS

**Water Supply Reliability Policy**

WHEREAS, the Zone 7 Board of Directors desires to maintain a highly reliable Municipal and Industrial (M&I) water supply system so that existing and future M&I water demands can be met during varying hydrologic conditions; and

WHEREAS, the Board has an obligation to communicate to its M&I customers and municipalities within its service area the ability of Zone 7's water supply system to meet projected water demands; and

WHEREAS, the Board on August 18, 2004 adopted Resolution No. 04-2662 setting forth its Reliability Policy for Municipal & Industrial Water Supplies; and

WHEREAS, the Board desires to revise the Reliability Policy to reflect recent data, analysis, and studies.

NOW, THEREFORE, BE IT RESOLVED that the Board hereby rescinds Resolution No. 04-2662 adopting the August 18, 2004 Reliability Policy for Municipal & Industrial Water Supplies; and

BE IT FURTHER RESOLVED that the Board hereby adopts the following level of service goals to guide the management of Zone 7's M&I water supplies as well as its Capital Improvement Program (CIP):

Goal 1. Zone 7 will meet its treated water customers' water supply needs, in accordance with Zone 7's most current Contracts for M&I Water Supply, including existing and projected demands as specified in Zone 7's most recent Urban Water Management Plan (UWMP), during normal, average, and drought conditions, as follows:

- At least 85% of M&I water demands 99% of the time
- 100% of M&I water demands 90% of the time

Goal 2: Provide sufficient treated water production capacity and infrastructure to meet at least 80% of the maximum month M&I contractual demands should any one of Zone 7's major supply, production, or transmission facilities experience an extended unplanned outage of at least one week.

BE IT FURTHER RESOLVED that to ensure that this Board policy is carried out effectively, the Zone 7 General Manager will provide a water supply status report to the Board every five years with the Zone 7 Urban Water Management Plan that specifies how these goals will be, or are being, achieved.

If the General Manager finds that the goals cannot be met during the first five years of the Urban Water Management Plan, then the Board will hold a public hearing within two months of the General Manager's finding to consider remedial actions that will bring Zone 7 into substantial compliance with the stated level of service goals. Remedial actions may include, but are not limited to, voluntary conservation or mandatory rationing to reduce water demands, acquisition of additional water supplies, and/or a moratorium on new water connections. After reviewing staff analyses and information gathered at the public hearing, the Board shall, as expeditiously as is feasible, take any additional actions that are necessary to meet the level of service goals during the following five-year period; and

BE IT FURTHER RESOLVED that the Zone 7 General Manager shall prepare an Annual Review of the Sustainable Water Supply Report which includes the following information:

- (1) An estimate of the current annual average water demand for M&I water as well as a five-year projection based on the same information used to prepare the UWMP and CIP;
- (2) A Summary of available water supplies to Zone 7 at the beginning of the calendar year;
- (3) A comparison of current water demand with the available water supplies; and
- (4) A discussion of water conservation requirements and other long-term supply programs needed to meet Zone 7 M&I water demands for single-dry and multiple-dry year conditions, as specified in the Zone 7's UWMP.

A summary of this review will be provided to M&I customers.

### Definitions

*Level of Service for Annual Water Supply Needs*—the level of service is the percent of existing or projected water demand that Zone 7's water supply system can meet during two key conditions: (1) during various hydrologic conditions and (2) during unplanned outages of major facilities.

*Capital Improvement Program (CIP)*—the CIP is Zone 7's formal program for developing surface and ground water supplies, along with associated infrastructure, including import water conveyance facilities, surface water treatment plants, groundwater wells, and M&I water transmission system to meet projected water demands.

*Normal conditions*—conditions that most closely represent median runoff or allocation from all normally contracted or available water supplies from the historic record.

*Average conditions*—conditions that most closely represent the average runoff or allocation from all normally contracted or legally available water supplies from the historic record.

*Drought conditions*—conditions that most closely represent reduced runoff or allocation level from the historic record from all normally contracted or legally available water supplies, including both single-dry and multiple-dry year conditions.

*Single-dry year condition*—a condition that most closely represents the lowest yield over a one-year period from the historic record from all normally contracted or legally available supplies.

*Multiple-dry year condition*—a condition that most closely represents three or more consecutive dry years from the historic record that represent the lowest yields from all normally contracted or legally available supplies.

*Available water supplies*—consist solely of (1) water supplies that Zone 7 has contracted for (e.g., listed under Schedule A of the State Water Contract, dry-year water options, special contracts with other water districts, etc.) and (2) water actually stored in surface and subsurface reservoirs.

*Maximum Month*—the largest monthly average water use.

ADOPTED BY THE FOLLOWING VOTE:

AYES: DIRECTORS FIGUERS, GRECI, MACHAEVICH, PALMER, QUIGLEY, RAMIREZ HOLMES STEVENS

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

I certify that the foregoing is a correct copy of a Resolution adopted by the Board of Directors of Zone 7 of the Alameda County Flood Control and Water Conservation District on October 17, 2012.

By   
President, Board of Directors