



REGULAR MEETING 8:00 A.M. OPERATIONS CENTER - 1200 SOUTH GENE AUTRY TRAIL – PALM SPRINGS – CALIFORNIA

About Desert Water Agency:

Desert Water Agency operates independently of any other local government. Its autonomous elected board members are directly accountable to the people they serve. The Agency is one of the desert's two State Water Contractors and provides water and resource management, including recycling, for a 325-square-mile area of Western Riverside County, encompassing parts of Cathedral City, Desert Hot Springs, outlying Riverside County and Palm Springs.

- 1. PLEDGE OF ALLEGIANCE**
- 2. APPROVAL OF MINUTES – A. February 21, 2017** **CIOFFI**
- 3. GENERAL MANAGER'S REPORT** **KRAUSE**
- 4. COMMITTEE REPORTS – A. Executive – February 24, 2017** **CIOFFI**
- 5. PUBLIC INPUT:**
Members of the public may comment on any item not listed on the agenda, but within the jurisdiction of the Agency. In addition, members of the public may speak on any item listed on the agenda as that item comes up for consideration. Speakers are requested to keep their comments to no more than three (3) minutes. As provided in the Brown Act, the Board is prohibited from acting on items not listed on the agenda.
- 6. ITEMS FOR ACTION**
 - A. Water Use Violation(s) – Civil Penalty Hearing(s) **METZGER**
 - B. Consider Approval of 2nd Amendment to Sentinel Energy Center Agreement **KRAUSE**
 - C. Consider Authorization to Enter into MOA for Management of San Geronio Sub-Basin **KRAUSE**
 - D. Consider Adoption of Resolution No. 1153 Consolidating DWA Board Elections with Statewide Elections **RIDDELL**
 - E. Consider Adoption of Resolution No. 1154 Back-Up Facility Charges (PPT) **JOHNSON**
 - F. Consider Approval to Advertise for Bids – 2016/2017 Replacement Pipeline **JOHNSON**
 - G. Consider Adoption of Resolution No. 1155 Statutory Pass-Through Payments **KRIEGER**
- 7. ITEMS FOR DISCUSSION**
 - A. State Water Contractors' Meeting – February 16, 2017 **RIDDELL**
 - B. Directors' Report on ACWA DC Conference Attendance **CIOFFI/STUART**
- 8. OUTREACH & CONSERVATION** **METZGER**
 - A. Media Information
 - B. Activities
- 9. DIRECTORS COMMENTS AND REQUESTS**
- 10. CLOSED SESSION**
 - A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al
 - B. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Agua Caliente Band of Cahuilla Indians vs. County of Riverside, et al
 - C. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Desert Water Agency vs. U.S. Department of Interior
 - D. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION
Pursuant to Government Code Section 54956.9 (d) (1)
Name of Case: Mission Springs Water District vs. Desert Water Agency

E. CONFERENCE WITH REAL PROPERTY NEGOTIATORS

Pursuant to Government Code Section 54956.8

Property: 1.17 acre lot North of the Northeast corner of Sunrise Way and Mesquite Avenue,

APN No. 502-560-038

Agency Negotiators: Mark S. Krause, General Manager and Steven L. Johnson, Asst. General Manager

Negotiating Parties: DWA and New Mesquite HOA

Under Negotiation: Price and terms of possible acquisition

F. CONFERENCE WITH REAL PROPERTY NEGOTIATORS

Pursuant to Government Code Section 54956.8

Property: 0.504 acre west of Indian Canyon Drive between Racquet Club Rd. and Via Olivera

APN No. 504-260-026 and portions of APN No. 504-260-025 and 504-260-027

Agency Negotiators: Mark S. Krause, General Manager and Steven L. Johnson, Asst. General Manager

Negotiating Parties: DWA and Ayres Advisors

Under Negotiation: Price and terms

G. CONFERENCE WITH REAL PROPERTY NEGOTIATORS

Pursuant to Government Code Section 54956.8

Property: Conveyance of Property APN No. 687-030-019 to City of Cathedral City and

Conveyance of Easement APN 677-420-021 to City of Cathedral City

Agency Negotiators: Mark S. Krause, General Manager and Steven L. Johnson, Asst. General Manager

Negotiating Parties: DWA and City of Cathedral City

Under Negotiation: Terms

11. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

12. ADJOURN

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting is asked to contact Desert Water Agency's Executive Secretary, at (760) 323-4971, at least 48 working hours prior to the meeting to enable the Agency to make reasonable arrangements. Copies of records provided to Board members which relate to any agenda item to be discussed in open session may be obtained from the Agency at the address indicated on the agenda.

**MINUTES
OF THE REGULAR MEETING
OF THE
DESERT WATER AGENCY
BOARD OF DIRECTORS**

February 21, 2017

DWA Board:	James Cioffi, President)	Attendance
	Joseph K. Stuart, Vice President)	
	Kristin Bloomer, Secretary-Treasurer)	
	Patricia G. Oygar, Director)	
	Craig A. Ewing, Director)	

DWA Staff:	Mark S. Krause, General Manager)
	Steve Johnson, Asst. General Manager)
	Martin S. Krieger, Finance Director)
	Sylvia Baca, Asst. Secretary of the Board)
	Ashley Metzger, Outreach & Conserv. Mgr.)
	Irene Gaudinez, Human Resources Manager)
	Michael Abdelnour, Water Operations Supervisor)

Consultant:	Michael T. Riddell, Best Best & Krieger)
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Public:	David Freedman, P.S. Sustainability Comm.)
	Paul & Kristy Scaletta, Retired DWA employees)
	Tom Abdelnour, Indio resident)

17732. President Cioffi opened the meeting at 8:00 a.m. and asked everyone to join him in the Pledge of Allegiance. **Pledge of Allegiance**

17733. President Cioffi called for approval of the February 7, 2017 Regular Board meeting minutes. He noted that a revised copy (page 8764) was provided to the Board and staff this morning. **Approval of 02/07/17 Regular Board Mtg. Minutes**

Director Ewing moved for approval. After a second by Director Oygar, the minutes were approved with the revision noted.

17734. President Cioffi called upon General Manager Krause to provide an update on Agency operations. **General Manager's Report**

Mr. Krause stated the photos included were from the initial damage to the Oroville Dam. He provided notes from the SWC Water Operations Committee meeting held on February 17, 2017. **Oroville Dam**

Mr. Krause noted that SWC issued a press release on the recent hiring of its new General Manager, Jennifer Pierre.

GM's Report
(Cont.)
SWC Press Release-
New GM

Mr. Krause provided an update on Whitewater Basin deliveries. On February 15 at 3:00 p.m., deliveries were stopped as part of the Colorado River Aqueduct maintenance schedule. Deliveries will resume in mid-March and are scheduled to last the remainder of the year for a total delivery of 300,000 acre-feet.

Water Delivery Update

Concluding his report, Mr. Krause noted several meetings and activities he participated in during the past several weeks.

General Manager's
Meetings & Activities

17735. President Cioffi noted the minutes for the February 13, 2017 Executive Committee were provided in the Board's packet.

Committee Reports
Executive 02/13/17

17736. President Cioffi opened the meeting for public input.

Public Input

There being no one from the public wishing to address the Board, President Cioffi closed the public comment period.

17737. President Cioffi called upon Secretary-Treasurer Bloomer to provide an overview of financial activities for the month of January 2017.

**Secretary-Treasurer's
Report (January 2017)**

Secretary-Treasurer Bloomer reported that the Operating Fund received \$1,392,805 in Water Sales Revenue and \$64,717 in Reclamation Sales Revenue. Included in the Miscellaneous receipts is \$537,167 in Prop 84 Grant Funds (Turf buy back) and \$105,873 from C-Power (SCE demand program-4th quarter). \$1,946,701 was paid out in Accounts Payable. Year-to-date Total Water Sales are 13% over budget, Year-to-date Total Revenues are 12% over budget, and Year-to-date Total Expenses are 17% under budget. There were 22,340 active services as of January 31, 2017 compared to 22,347 as of December 31, 2016 and compared to 21,710 as of January 31, 2013.

Operating Fund

Reporting on the General Fund, Ms. Bloomer stated that \$7,594,663 was received in Property Tax Revenue. \$780,505 was received in Groundwater Assessments (\$714,777 from Operating fund and \$65,728 from private pumpers). \$339,261 was received from CVWD (Water management agreement July-September 2016). \$2,269,507 was paid out in State Water Project charges (YTD payments: July – January=\$11,221,426).

General Fund

Reporting on the Wastewater Fund, Ms. Bloomer stated that \$13,177 was received in Sewer Capacity charges. There are a total of 67 contracts (47 Cathedral City Cove and 20 Dream Homes). One contract was paid in full with total delinquents of 29 (43%). \$89,464 was paid out in Accounts Payable.

Wastewater Fund

17738. President Cioffi called upon General Manager Krause to present staff's request for adoption of Resolution No. 1150 Granting Retirement Status to Michael Abdelnour.

Items for Action:

Request Adoption of
Reso. 1150 Granting
Retirement Status to
Michael Abdelnour

Mr. Krause provided a brief highlight of various projects Mr. Abdelnour has worked on over the years.

President Cioffi then read aloud Resolution No. 1150 highlighting Mr. Abdelnour's years of service to Desert Water Agency.

Director Ewing made a motion to adopt Resolution No. 1150. President Cioffi seconded the motion, which carried unanimously.

**RESOLUTION NO. 1150
A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE DESERT WATER AGENCY
GRANTING RETIREMENT STATUS TO
MICHAEL J ABDELNOUR**

**Resolution No. 1150
Adopted**

Mr. Abdelnour expressed his appreciation to the Board of Directors and staff for their support and generosity.

17739. President Cioffi asked General Manager Krause to present staff's request for adoption of Resolution No. 1151 Supporting the Nomination of Melody McDonald to the Office of ACWA/JPIA Executive Committee.

Request Adoption of
Reso. 1151/Support
Melody McDonald
ACWA/JPIA Exec.
Comm.

Mr. Krause stated the Board is being asked to consider supporting the nomination of Melody McDonald, Director of the San Bernardino Valley Water Conservation District and current member of ACWA/JPIA Executive Committee. If the Board concurs in the nomination, it may do so by adopting Resolution No. 1151. Following adoption, staff will forward a copy to San Bernardino Valley Water Conservation District and ACWA/JPIA offices.

President Cioffi made a motion to adopt Resolution No. 1151. Director Ewing seconded the motion, which carried unanimously.

**RESOLUTION NO. 1151
RESOLUTION OF THE BOARD OF DIRECTORS
OF DESERT WATER AGENCY CONCURRING
IN NOMINATION OF MELODY MCDONALD TO
THE EXECUTIVE COMMITTEE OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES
JOINT POWERS INSURANCE AUTHORITY ("ACWA JPIA")**

**Resolution No. 1151
Adopted**

11740. President Cioffi asked Finance Director Krieger to present staff's request for adoption of Resolution No. 1152 Authorizing the Investment of Monies in the Local Agency Investment Fund (LAIF) and Acknowledging Assignment of Signatories.

Action Items:
(Cont.)

Request Adoption of
Reso. 1152 Authorizing
Investment of Monies
in LAIF &
Acknowledging
Assignment of
Signatories

Mr. Krieger stated with the recent retirement of Controller, Lee Lahtinen, it is necessary to update the signers for the Investment of Monies in the LAIF account. As noted within the resolution, General Manager Krause, Assistant General Manager Johnson, Finance Director Krieger and Accounting Supervisor Saenz are the authorized signers. Upon adoption of the Resolution, a certified copy will be provided to LAIF in order to update the Agency's account.

Vice President Stuart made a motion to adopt Resolution No. 1152. Secretary-Treasurer Bloomer seconded the motion, which carried unanimously.

**RESOLUTION NO. 1152
A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE DESERT WATER AGENCY
AUTHORIZING INVESTMENT OF MONIES
IN THE LOCAL AGENCY INVESTMENT FUND**

**Resolution No. 1152
Adopted**

11741. President Cioffi asked Finance Director Krieger to present staff's request to augment the 2016/2017 Budgets.

Request to Augment
2016/2017 Budgets

Mr. Krieger explained with the recent rate adjustments implemented on January 1, 2017, it is necessary to augment the 2016/2017 Operating Budget to reflect those adjustments. Rate adjustments were made to the monthly fixed meter charges and monthly fire service charges. The requested augment to the Operating Fund reflects an increase of \$534,000 to the Water Sales line item (volumetric & fixed charges included in this category) and an increase of \$52,500 to the Fire Protection line item. The total estimated revenue due to the adjustments is \$587,500 (January 1 thru June 30).

Operating Fund

Continuing his report, Mr. Krieger stated it is necessary to augment (increase) the Maintenance of Mains expense by \$575,000 to perform the City of Palm Springs valve can adjustments (approved prior & current year work). The net effect of the revenue and expense augmentation is a positive \$11,500. Staff has increased the Contingency Work Order (16-499) by \$11,500 to offset the costs associated with email server upgrades.

Concluding his report, Mr. Krieger stated it is also necessary to augment the 2016/2017 General Fund to reflect the addition of the Indio Subbasin Management Plan expense in the amount of \$30,000. This item was not previously anticipated during the 2016/2017 budget process. In order to recognize the additional expense, the Reserve for Operations is

General Fund

being reduced by \$30,000. Staff recommends approval of the augmented 2016/2017 Operating & General Fund budgets.

Action Items:
(Cont.)
Request to Augment
2016/2017 Budgets

In response to President Cioffi, Assistant General Manager Johnson said that he recently met with Marcus Fuller, Assistant City Manager regarding joint efforts on a street priority list.

There was discussion on possible borrowing of Measure J funds for the Agency's replacement pipeline projects.

Director Ewing made a motion to approve the request to augment the 2016/2017 Operating and General Fund budgets. After a second by Vice President Stuart, the motion carried unanimously.

17742. President Cioffi asked General Manager Krause to report on the January Water Production Comparison.

Discussion Items:
January Water
Production

Mr. Krause reported that the Agency and its customers achieved a 29 percent reduction in potable water production during January 2017 compared to January 2013. He noted the cumulative savings June 2015 through January 2017 is 24 percent. He also noted the amount of fresh water outflow to the ocean was 5,825,397-acre feet for January.

17743. President Cioffi asked Agency Counsel Riddell to discuss the Consideration of Consolidating DWA Board Elections with Statewide Elections.

Consider Consolidation
of DWA Board
Elections with
Statewide Elections

Mr. Riddell noted at the last meeting, it was requested that staff look into consolidating the Agency's elections with Statewide elections. He explained that Senate Bill 415, the Voter Participation Act will take effect on January 1, 2018. The Act prohibits a special district from holding an election other than on a statewide election date if holding an election on a non-concurrent date has previously resulted in voter turnout for a regularly scheduled election in its subdivision at least 25% less than the average turnout within the subdivision of the previous 4 statewide general elections.

Continuing his report, Mr. Riddell stated, if the Board approves, the new election date would be moved from November 7, 2017 to November 6, 2018. Board Members whose terms would have expired in 2017 would be extended to 2018 and those with terms expiring in 2019 extended to 2020. If the Board is interested in this change, the deadline to take action is 240 days prior to the upcoming election.

Concluding his report, Mr. Riddell said for other special districts that have changed their election dates, the Riverside County Registrar of Voters indicated that there would be cost savings from aligning the current election schedule with the statewide elections. At this time, staff

has not received any information back from the County Registrar. It is anticipated that information will be received in time for the next Board meeting of March 7. He stated that the Board can still request changing the election date even if not compelled by the voter turnout. He noted a typographical error in the title of the draft resolution.

Discussion Items:
(Cont.)

Consider Consolidation
of DWA Board
Elections with
Statewide Elections

There was discussion on voter turnout for statewide elections and whether there is a cost benefit to change. It was decided that staff would return with further information at the March 7 meeting for the Board to make a decision.

17744. Director Ewing announced that he was not able to participate in ACWA's Groundwater Committee webinar last week.

Directors
Comments/Requests

President Cioffi expressed his appreciation to Damien Gilchrist, Water Service Worker III for his hard work and response to a leak that occurred in his neighborhood yesterday.

Staff Appreciation-
Damien Gilchrist

17745. At 9:12 a.m., President Cioffi convened into Closed Session for the purpose of Conference with Legal Counsel, (A) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Agua Caliente Band of Cahuilla Indians vs. Coachella Valley Water District, et al; (B) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), ACBCI vs. County of Riverside, et al; (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Desert Water Agency vs. U.S. Department of Interior; (D) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Mission Springs Water District vs. Desert Water Agency; and (E) Real Property Negotiators, pursuant to Government Code Section 54956.8, Property-APN 502-560-038, Agency Negotiators: Mark S. Krause, General Manager and Steve L. Johnson, Assistant General Manager, Negotiating Parties: Chris Thomsen, New Mesquite HOA, Under Negotiation: Price and terms of possible acquisition.

Closed Session:

A. Existing Litigation –
ACBCI vs. CVWD, et
al.
B. Existing Litigation –
ACBCI vs. Riverside
County
C. Existing Litigation –
DWA vs. U.S. Dept. of
Interior
D. Existing Litigation –
MSWD vs. DWA
E. Real Property
Negotiators

17746. At 9:44 a.m., President Cioffi reconvened the meeting into open session and announced there was no reportable action.

**Reconvene –No
Reportable Action**

17747. In the absence of any further business, President Cioffi adjourned the meeting at 9:45 a.m.

Adjournment

James Cioffi, President

ATTEST:

Kristin Bloomer, Secretary-Treasurer

GENERAL MANAGER'S REPORT MARCH 7, 2017

City of Maxwell as of Saturday morning, February 18, 2017

Sites Project Office is flooded.



Water Delivery Update

Whitewater Basin Water Deliveries:

On February 15th, 2017 deliveries to the basin were stopped for scheduled CRA maintenance. Water deliveries are scheduled to resume on March 13, 2017 and are scheduled to last the entire year. MWD would like deliver between 300,000 and 400,000 acre-feet to the basin.

During January 2017, The Whitewater Hydro Plant operated for approximately 10 days, generating 220,050 kwh of electricity. This output earned a total of \$19,408.03.

Turn-Back Pool A Purchase Agreement:

On March 1, 2017, the Agency submitted a commitment agreement to DWR for Turn-Back Pool A water. The Agency agreed to purchase 375 AF of water at a price of \$34.44/AF. If, however, the Table A allocation exceeds 75%, the Agency is not committed to purchase the Pool A water.

As previously mentioned, the March 21 Board meeting will be cancelled due to a lack of quorum. Staff will send out the required notices.

Whitewater Mutual Irrigation Headwork Damage:

The rains on Monday February 27, 2017 caused major flooding damage to the Whitewater Mutual Irrigation Headworks system. Mud and debris flowed into the trough that the pumps deliver water to, resulting in flow restrictions to the customers downstream. The trough has a metal lid that covers most of the opening, however, mud and debris did infiltrate around the trough outlet pipe. Agency construction crews worked over 2 days to clear the mud and debris from the trough and the surrounding roadway.





General Manager's Meetings and Activities

Meetings:

02/21/2017	DWA Board Meeting	DWA
02/21/2017	DWA/CVWD/MWD Coordination Meeting	Conf. Call
02/24/2017	Executive Committee Meeting	DWA
02/27/2017	DWA/CVWD/MWD Coordination Meeting (Article 21/Pool A)	Etiwanda
02/27/2017	Travel to Washington D.C. / ACWA	D.C.
02/28/2017	Meetings with D.C. Representatives/ ACWA	D.C.
03/1/2017	Meetings with D.C. Representatives/ ACWA	D.C.
03/02/2017	Travel Day	Ontario

Activities:

- 1) Sites Reservoir Agreement
- 2) E-Billing – Completed and now tracking
- 3) Outreach Talking Points – KMIR
- 4) Snow Creek Hydro SCE contract extension - ongoing
- 5) Whitewater Hydro – Developing new administration procedures
- 6) State and Federal Contractors Water Authority and Delta Specific Project Committee (Standing)
- 7) Property Acquisition - New Mesquite HOA – Ongoing
- 8) MSWD Lawsuit – Ongoing
- 9) ACBCI Section 14 Facilities & Easements
- 10) CPV Agreement Amendment
- 11) Chain of Title
- 12) Lake Oroville Spillway Damage
- 13) Replacement Pipelines 2016-2017
- 14) Lake Oroville NMFS Requirements
- 15) DWA/CVWD/MWD Operations Coordination/Article 21/Pool A
- 16) DWA/CVWD/MWD Agreements Update
- 17) Recycled Water Effluent Reservoir Coating Failures
- 18) SGMA Alternative Plans and Bridge Documents/Tribal Comments
- 19) SWP 2017 Water Supply
- 20) SGMA San Geronio Pass Sub-Basin MOU
- 21) ACBCI Law Suits
- 22) Lake Perris Dam Remediation
- 23) Drought Pricing Study
- 24) Section 14 Pipeline Easements
- 25) DOI Regulation
- 26) DWA Asphalt Paving Repairs

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

RE: WATER USE VIOLATION – CIVIL PENALTY HEARINGS

Starting in March, 2016, staff began issuing water use violations under the new ordinance; to date, more than 460 violations have been issued. Recipients of the violations have 7 days to request a hearing in writing. Two violations will be reviewed at today's board meeting.

The following is a summary of the procedure for the hearings.

Staff has provided the Board with the correspondence for each of the violations including photographic evidence. Photographs will also be reviewed during the hearing to provide the board and customer a common point of reference for discussion.

Staff will introduce each violation with a summary of the event. After the introduction the customer will be invited by the Board to speak concerning the violation. If the recipient of the violation is not present or does not wish to speak, staff will read the violation summary and submit the written petition into the record for board action.

Each petition will be discussed and voted on separately.

As a point of reference, staff has notified Agency customers concerning water conservation regulations in several different ways:

Initial Notifications Upon Restrictions Going into Effect

1. Published the ordinance in The Public Record
2. Published the ordinance in the Agency Website
3. Social media outlets
4. KMIR, KESQ, KPCC, the Joey English Show
5. Desert Sun Valley Voice
6. Palm Desert Patch
7. Email to Palm Springs and Cathedral City Chambers
8. Emails to HOA in our contact list
9. Emails to high volume users

Comprehensive Notifications – Since June 2015

1. Direct mail to all customers
2. Bill inserts
3. Bill on envelope messaging
4. Billboards
5. Online advertising (KESQ)
6. Television advertising (Time Warner)
7. Social media
8. Several public presentations on TV
9. Print and radio Interviews
10. DWA and CVWD websites
11. Rates brochure given to all new customers

1. Robert Swanson, 2010 N Acacia Rd, Palm Springs

- a. On Monday, January 30 at 8:45 a.m. a Desert Water Agency representative observed water use violations at said address and reported them.
 - i. Irrigating during restricted hours
- b. Fine amount \$50
 - i. Single-family home
 - ii. First violation
- c. Reason for petition
 - i. Unaware of restrictions
 - ii. Had recently moved
 - iii. Power outage
 - iv. Does not know where timer is
- d. Other information
 - i. Customer does not have smart irrigation controller



2010



Robert D Swanson
2010 E Acacia rd
Palm springs, Ca 92262

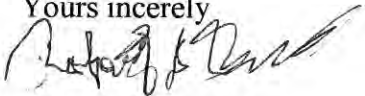
Feb 3, 2017

Desert Water Agency

I am contesting your fine for my home at 2010 East Acacia Rd, Palm springs for the following reasons:

I was not aware of this ordinance, as I just moved to this home less than 3 months ago from Rancho Mirage and left the water controller timer as it was set when I moved in. About 3 days before your agent came by my home, Southern California Electric cut off my electricity and the timer for about 8 hours for work in the area. This you can verify with them as the date was Wednesday January 25. I volunteer at Desert Regional Hospital and had to hitch a ride as I couldn't open the garage door without electricity. I am a senior citizen relying on Social Security(81 years old). Since I am home much of the time, I wondered why the agent who came by and photographed my home couldn't have stopped by and rang my bell. He could have shown me where the sprinkler timer is as I don't want to waste water either. Do you have to cheat seniors just to make extra money? I do have a gardener, but they don't seem to be showing up as they should. I do not know where the timer is but would think since you came by anyway, you could have stopped and talked to me and helped remedy this situation. I hope you can waive this fine at this time, as I want to save water as well. I wonder how these golf clubs and other public agencies can waste water by spraying sidewalks, etc. at all hours of the day.

Yours incerely



Robert D Swanson

January 31, 2017

Robert Swanson
2010 N Acacia Rd E
Palm Springs, CA 92262

RE: FINE ON [REDACTED] 2010 N Acacia Rd E

Dear Valued Customer:

Due to a water use violation observed and documented by a Desert Water Agency representative on Monday, January 30, 2017 at 8:45 am, you are being served with a complaint to impose a civil (monetary) penalty.

You have 7 days to request, in writing, a hearing on this violation. If you do request a hearing, you will need to come to the Agency and present information that refutes the alleged violation. If you do not request a hearing within 7 days of this complaint, the civil penalty of **\$50.00** will be added onto your water bill.

You were cited for:

- ***Outdoor irrigation shall be restricted to Mondays, Wednesdays, & Fridays, before 7:00 a.m. and after 7:00 p.m.***

This is a violation of Desert Water Agency's Ordinance No. 65. For a first violation within any 12-month period, the civil penalty shall be \$100 for a multi-family residential, commercial or institutional establishment or \$50 for a single-family residential customer.

For a second violation within any 12-month period, the civil penalty shall be \$200 for a multi-family residential, commercial or institutional establishment or \$100 for a single-family residential customer.

For a third and each subsequent violation within any 12-month period, the civil penalty shall be \$500 for a multi-family residential, commercial or institutional establishment or \$250 for a single-family residential customer.

Failure to pay the civil penalty on your water bill may result in termination of water service. In addition, the Agency staff shall be authorized to discontinue water service for any violation of the Ordinance.

If you have any additional questions, please contact us.

Thank you,

Ashley Metzger
Outreach & Conservation Manager
Desert Water Agency
On behalf of General Manager Mark Krause

2. James Basile, 2100 E Rochelle Rd, Palm Springs

- a. On Monday, February 13 at 12:10 p.m. a Desert Water Agency representative observed water use violations at said address and reported them.
 - i. Irrigating during restricted hours
- b. Fine amount \$50
 - i. Single-family home
 - ii. First violation
- c. Reason for petition
 - i. Power outage
 - ii. Backup battery in timer failed
 - iii. Innocent error/penalty unfair
- d. Other information
 - i. Customer does not have smart irrigation controller. When customer came to office, he was informed about the smart controller program and was encouraged to apply.



Ashley Metzger

From: James Basile <zacale@aol.com>
Sent: Wednesday, February 22, 2017 8:54 AM
To: Ashley Metzger
Subject: Watering Fine Appeal

I am writing this in response to the letter I received last Thursday 2-16-17 . I was notified that I was being fined \$50.00 for watering my lawn at 12:10pm on Monday 2-13-17 , which is accurate . Except I was completely unaware that it was happening ! I have done everything I can to reduce my water usage throughout this current drought , and thankfully this winter has allowed me to completely shut the landscape water off for long periods of time . The circumstances as to why my irrigation came on at noon on Monday are as follows : My landscape company comes to my house on Saturday`s , which they were there on Sat. 2-11-17 , they did there job properly , which includes checking my irrigation timer , everything was working properly , and programmed properly . My watering times were set to come on at 12:00am , for 2 minutes , per station on Mon.,Wed.,Fri . Saturday night between 8-9pm , Palm Springs had a downpour , and my house lost power briefly . The battery in my irrigation clock (that was replaced in October) , must have failed . Because when I received your letter , I immediately checked my entire system and found out that that my clock had reset itself , Noon had become Midnight . I work all week , so I was not aware that the irrigation was coming on during the day . For someone to be assessed a \$50.00 dollar penalty , for a completely , innocent error , is very unfair . And I am asking to have it reversed . Thank you for taking the the time to read my message . James Basile 2100 E Rochelle Rd . Palm Springs .

February 13, 2017

James Basile
2100 E Rochelle Rd
Palm Springs, CA 92262

RE: FINE ON [REDACTED] 2100 E Rochelle Rd

Dear Valued Customer:

Due to a water use violation observed and documented by a Desert Water Agency representative on Monday, February 13, 2017 at 12:10 pm, you are being served with a complaint to impose a civil (monetary) penalty.

You have 7 days to request, in writing, a hearing on this violation. If you do request a hearing, you will need to come to the Agency and present information that refutes the alleged violation. If you do not request a hearing within 7 days of this complaint, the civil penalty of **\$50.00** will be added onto your water bill.

You were cited for:

- ***Outdoor irrigation shall be restricted to Mondays, Wednesdays, & Fridays, before 7:00 a.m. and after 7:00 p.m.***

This is a violation of Desert Water Agency's Ordinance No. 65. For a first violation within any 12-month period, the civil penalty shall be \$100 for a multi-family residential, commercial or institutional establishment or \$50 for a single-family residential customer.

For a second violation within any 12-month period, the civil penalty shall be \$200 for a multi-family residential, commercial or institutional establishment or \$100 for a single-family residential customer.

For a third and each subsequent violation within any 12-month period, the civil penalty shall be \$500 for a multi-family residential, commercial or institutional establishment or \$250 for a single-family residential customer.

Failure to pay the civil penalty on your water bill may result in termination of water service. In addition, the Agency staff shall be authorized to discontinue water service for any violation of the Ordinance.

If you have any additional questions, please contact us.

Thank you,

Ashley Metzger
Outreach & Conservation Manager
Desert Water Agency
On behalf of General Manager Mark Krause

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

**RE: CONSIDER APPROVAL OF 2ND AMENDMENT AGREEMENT WITH
SENTINEL ENERGY CENTER TO ACCEPT FUNDS FOR
CONSERVATION PROGRAM FUNDING**

Background

Since 2008, the Sentinel Energy Center ("Sentinel", formerly CPV Sentinel) has provided Desert Water Agency with funding for its smart irrigation controller program. With this funding, DWA has installed about 2,500 controllers.

The conservation funding agreement with CPV Sentinel previously had a maximum contribution level of \$3 million. That amount is nearly exhausted (\$2,957,569). The remaining \$42,431 will be invoiced to Sentinel once it is fully expended. We currently have \$8,791 that has not been spent and expect to invoice by end of FY 2016-17.

Continuing partnership

DWA staff met with Sentinel staff in March of 2016 to determine if additional funding could be contributed to continue supporting Desert Water Agency conservation programs.

Sentinel expressed a willingness to continue working with Desert Water Agency in order to meet permit obligations to the California Energy Commission ("CEC"). Sentinel operates on a calendar year budget, and determined that they were willing to contribute \$100,000 in the 2017 year. Sentinel expressed that they would likely continue annual contributions to DWA for the life of the project.

Staff discussed the parameters of this funding with Sentinel. Funds will continue to be used for the smart irrigation controller program and can be used to support the FreeSprinklerNozzles.com program. In the future other trackable conservation programs can be considered for these funds, but DWA may need to provide a memo for CEC approval.

Second amendment to agreement

This agreement presented following the staff report is intended to reflect Sentinel Energy Center's additional contribution (the \$100,000 committed in 2017 beyond the

\$3,000,000 commitment) and allow DWA to start encumbering the funding ahead of Sentinel's payment.

The agreement also sets forth the process for requesting and receiving funding in future years and notes that the funds can be used for controllers or irrigation upgrades, such as nozzle replacement.

DWA will be required, under this agreement, to provide Sentinel with updates on the number of controller installations a quarterly basis. This process will be feasible and require minimal staff time.

Staff recommendation

Staff recommends that the Board of Directors authorize the General Manager to execute a second amendment to its existing Conservation Agreement with CPV Sentinel to accept their \$100,000 contribution to DWA conservation programs. Staff would allocate about 80% of the funding to support controllers and 20% of the funding to support the new FreeSprinklerNozzles.com program.

Using the funds in this manner would allow DWA to put about 5,000 nozzles in place for a savings of about 7 million gallons or 21.5 AF per year and install about 275 controllers for a savings of about 35 million gallons or 109 AF per year. Staff is working to reinvigorate the controller program and will continue outreach as necessary to boost installation.

Savings projected may not be achieved given that the drought restrictions lower the baseline for new controllers being installed. (e.g. controllers are being installed for grass areas that were brown/dead during the drought)

SECOND AMENDMENT TO WATER CONSERVATION FUNDING AGREEMENT

Desert Water Agency (“DWA”) and Sentinel Energy Center, LLC, as successor in interest to CPV Sentinel, LLC (“Sentinel”) (collectively, the “Parties”) enter into this Second Amendment to Water Conservation Funding Agreement (“Second Amendment”) as of the last date either Party signs this Second Amendment.

I. RECITALS

A. DWA and Sentinel entered into a Water Conservation Funding Agreement dated August 23, 2008, thereafter amended on January 14, 2010 (the “Agreement”) for the purpose of conserving freshwater supplies within DWA pursuant to requirements imposed by the California Energy Commission (“CEC”) as a condition of approval of a power plant to be constructed within DWA’s boundaries (the “Project”). Capitalized terms used herein and not otherwise defined have the meaning set forth in the Agreement.

B. The Agreement required, among other things, that Sentinel provide a deposit of money with DWA in the amount of \$300,000 to be replenished annually as funds were expended, for use by DWA in purchasing and installing ET Irrigation Controllers for DWA’s customers in furtherance of water conservation measures, with water savings intended to offset the water that would be used by Sentinel in its operation of the Project. The Agreement provided that Sentinel’s obligation to provide the deposit of funds to be used by DWA for that purpose would cease upon DWA’s installation of 4,800 ET Irrigation Controllers, and that Sentinel’s total monetary obligation under the Agreement would not exceed \$3,000,000. The Agreement further provided that DWA would monitor the effectiveness of these water conservations efforts in a manner approved by the CEC so as to meet all requirements imposed by the CEC upon Sentinel.

C. Sentinel has now expended \$3,000,000 on water conservation efforts by DWA, and therefore has satisfied its obligations set forth in the Agreement. However, Sentinel wishes to deposit additional sums to DWA for DWA's continued use in advancing water conservation measures within DWA in order to continue to ensure that the Project causes no net increase in the freshwater use within the Basin.

D. The purpose of this Second Amendment is to provide for Sentinel's delivery of additional funds to DWA for DWA's use in pursuing the water conservation measures described in the Agreement to satisfy the CEC's requirements.

II. TERMS OF THE SECOND AMENDMENT

For valuable consideration, including the commitments and promises contained in this Second Amendment, the Parties agree to the following, notwithstanding Sentinel's completion of the total funding obligation set forth in Section II.C.4:

A. On or before July 1, 2017, Sentinel shall provide DWA the sum of \$100,000, which shall be applied to DWA's ET Irrigation Controller programs and irrigation system upgrade programs.

B. Each year, DWA will submit a new funding request to Sentinel for additional funds to be used by DWA for the purposes described in Section II.A. above. Sentinel will advise DWA in writing whether funds will be made available by Sentinel for that year, and if so in what amount. If Sentinel does not respond within 30 days of DWA's request, Sentinel shall be deemed to have elected not to make a contribution for such year. In reliance on that commitment, if any, DWA will budget and begin expending funds. Sentinel will deliver the committed funds, if any, to DWA by July 1 of each year for DWA's use on the water conservation measures described in Section II.A. above. DWA releases and indemnifies Sentinel

from any claims that may arise against Sentinel in connection with DWA's expenditure of such funds.

C. On a quarterly basis, DWA will advise Sentinel of the number of ET Irrigation Controllers installed for DWA customers and other improvements made during the previous year, and the total number of ET Irrigation Controllers and a description of other water conservation measures completed with Sentinel funding.

D. Sentinel shall have sole discretion to determine whether it will provide additional funds to DWA in any year, and if so, the amount to be provided to DWA for that year.

E. Except as expressly set forth in this Second Amendment, the Agreement remains in full force and effect. From and after the date hereof, references to the Agreement shall be deemed to refer to the Agreement as it has been amended by this Second Amendment.

IN WITNESS WHEREOF, the Parties have caused this Second Amendment to be executed and deemed effective as of the last date that either Party executes this Second Amendment below.

DATED: , 2017 SENTINEL ENERGY CENTER, LLC

By: _____
Mark McDaniels
Its: Manager

DATED: , 2017 Approved as to Form:
MORGAN, LEWIS & BOCKIUS LLP

By: _____
Neeraj Arora
Attorneys for Sentinel Energy Center, LLC

DATED: , 2017 DESERT WATER AGENCY

By: _____
Mark S. Krause
Its: General Manager/Chief Engineer

DATED: , 2017 Approved as to Form:
BEST BEST & KRIEGER LLP

By: _____
Michael T. Riddell
Attorneys for Desert Water Agency

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

**RE: CONSIDER AUTHORIZATION FOR THE GENERAL MANAGER TO
ENTER INTO A MOA FOR THE MANAGEMENT OF SAN GORGONIO
SUB-BASIN**

In 2014, Governor Brown passed legislation that provides a statewide framework for sustainable groundwater management in California (Senate Bill [SB] 1168, Assembly Bill [AB] 1739, and SB 1319). This legislation referred to as the Sustainable Groundwater Management Act (SGMA), is intended to support local groundwater management through the oversight of a Groundwater Sustainability Agency(s) (GSA). The SGMA requires all area of a basin be covered by one or more GSAs in all high and medium priority basins by June 30, 2017. The DWR has designated the San Gorgonio Sub-basin as a medium priority and is, therefore, subject to the SGMA. DWA has been named the "exclusive" GSA for the area within its boundaries that overlie a portion of the San Gorgonio Sub-basin (SGMA Section 10723(c)(1)(C)). The SGMA also requires GSAs to develop and adopt a groundwater sustainability plan (GSP) for the San Gorgonio Sub-basin by January 31, 2022. The creation of a GPS for the San Gorgonio Sub-basin will require DWA to meet, confer, and collaborate with the San Gorgonio Pass Water Agency, City of Banning, Cabazon Water District, Banning Heights Mutual Water Company, and Mission Springs Water District (Partners).

The General Manager, Mark Krause, is requesting authorization to enter into a Memorandum of Agreement (MOA) with the Partners. The purpose of the MOA is to facilitate the coordination and cooperation with other Ground Water Sustainability Agencies (GSAs)" being formed by the Partners. The Partners mutually desire and intend to cooperate and coordinate in the subsequent preparing and implementing one or more GSP(s). Coordination and information sharing among the Partners will assist in meeting the requirements of the SGMA for the formation of GSP for the San Gorgonio Sub-basin.

Granting the general manager the authority to enter into the MOA that covers the San Gorgonio Sub-basin will allow DWA to move forward on developing and submitting a GSP with the Partners.

Staff recommends that the Board authorize the General Manager to enter into a MOA with the Partners for the purpose of developing GSP that governs the management of the San Gorgonio Sub-basin.

**MEMORANDUM OF AGREEMENT TO FORM A GROUNDWATER SUSTAINABILITY
AGENCY FOR A PORTION OF THE SAN GORGONIO PASS SUBBASIN AND TO
COORDINATE WITH OTHER GROUNDWATER SUSTAINABILITY AGENCIES**

This 2017 Memorandum of Agreement (MOA) is entered into by and among Cabazon Water District (CWD), City of Banning (Banning), Banning Heights Mutual Water Company (BHMWC), San Gorgonio Pass Water Agency (SGPWA), Mission Springs Water District (MSWD), and Desert Water Agency (DWA), which may be referred to herein individually as a “Party” and collectively as the “Parties.”

Pursuant to the Sustainable Groundwater Management Act (SGMA) and as further set forth herein, the purposes of this MOA are to form a Groundwater Sustainability Agency (GSA) for a portion of the San Gorgonio Pass Subbasin, as described in greater detail below (Basin), the members of which GSA shall be CWD, Banning, BHMWC, and SGPWA (herein, the SGP-GSA), and to establish that the SGP-GSA will coordinate and cooperate with other GSAs that already exist and will be formed in the Basin.

WHEREAS, on September 16, 2014, Governor Jerry Brown signed into law Senate Bills 1168 and 1319, and Assembly Bill 1739, collectively known as the Sustainable Groundwater Management Act (SGMA), codified in certain provisions of the California Government Code, commencing with Section 65350.5, and in Part 2.74 of Division 6 of the California Water Code, commencing with Section 10720; and

WHEREAS, SGMA went into effect on January 1, 2015; and

WHEREAS, various clarifying amendments to SGMA were signed into law in 2015, including Senate Bills 13 and 226, and Assembly Bills 617 and 939, allowing, among other things, mutual water companies and water corporations regulated by the Public Utilities Commission to participate in a GSA through a memorandum of agreement or other legal agreement; and

WHEREAS, the San Gorgonio Pass Subbasin (Basin), as further depicted in **Exhibit A** to this MOA, is identified by the California Department of Water Resources (DWR) Bulletin 118 as Subbasin No. 7-21.04 of the Coachella Valley Groundwater Basin, and is designated by DWR as medium priority, and therefore, except as provided by SGMA, the Basin is subject to the requirements of SGMA; and

WHEREAS, the Parties recognize and agree that a portion of the Basin (the “Adjudicated Area”) is subject to the Beaumont Basin adjudication and Judgment in the case referred to as *San Timoteo Watershed Management Authority v. City of Banning, et al.*, Riverside County Superior Court Case No. RIC 389197, and that pursuant to SGMA Section 10720.8(a)(1), said portion of the Basin generally is not subject to the requirements of SGMA and will not be managed by the SGP-GSA; and

WHEREAS, SGMA Section 10720.7 requires the Basin, as a medium priority basin which is not designated by DWR as being subject to critical conditions of overdraft, to be managed by a Groundwater Sustainability Plan (GSP) or coordinated GSPs by January 31, 2022; and

WHEREAS, SGMA Section 10727(b) authorizes (1) a single GSP covering the entire Basin developed and implemented by one GSA, (2) a single GSP covering the entire Basin developed and

implemented by multiple GSAs, or (3) multiple GSPs developed and implemented by multiple GSAs and coordinated pursuant to a single coordination agreement that covers the entire Basin; and

WHEREAS, SGMA Section 10735.2 requires the formation of a GSA or multiple GSAs for the Basin by June 30, 2017; and

WHEREAS, SGMA Section 10723.6(a) authorizes a combination of local agencies to form a GSA pursuant to a joint powers agreement, a memorandum of agreement, or other legal agreement, and SGMA Section 10723.6(b) authorizes a water corporation regulated by the Public Utilities Commission or a mutual water company to participate in a GSA through a memorandum of agreement or other legal agreement; and

WHEREAS, for purposes of forming the SGP-GSA, as further depicted in **Exhibit B** to this MOA, CWD, Banning, and SGPWA are local agencies as defined by SGMA, and BHMWC is a mutual water company, wherein each overlies at least a portion of the Basin and each has respective water supply, water management, and/or land use responsibilities within the Basin, and thus each is authorized by SGMA to become part of the SGP-GSA; and

WHEREAS, pursuant to SGMA Section 10723(c)(1)(C), DWA has been established as the exclusive GSA for a certain portion of the Basin (herein, the DWA-GSA), as further specified and depicted in **Exhibit C** to this MOA; and

WHEREAS, on or about September 28, 2016, MSWD filed an amended notice of intent to be a GSA for an approximately one-square mile area in the northeastern portion of the Basin that lies within the service areas of MSWD and SGPWA, which one-square mile area is further specified and depicted in **Exhibit D** to this MOA and is referred to herein as the “Verbenia Area”; and

WHEREAS, on or about January 10, 2017, SGPWA also filed a notice of intent to be a GSA for the Verbenia Area, as further specified and depicted in **Exhibit D** to this MOA; and

WHEREAS, on or about January 13, 2017, DWR designated the Verbenia Area to be in overlap for purposes of the competing GSA notices filed by MSWD and SGPWA, and thus MSWD and SGPWA are working together to establish a separate GSA for the Verbenia Area (herein, the Verbenia-GSA); and

WHEREAS, in accordance with the terms of this MOA, and in furtherance of the shared intent of the Parties to maximize funding opportunities for the Basin and avoid potential intervention in the Basin by the State Water Resources Control Board, the Parties agree that the SGP-GSA formed by this MOA will cover the entire Basin except (A) that portion of the Basin covered by the DWA-GSA wherein DWA is the exclusive GSA, (B) that portion of the Basin to be covered by the Verbenia-GSA to be established by MSWD and SGPWA, and (C) the Adjudicated Area portion of the Basin, and the Parties mutually desire and intend that the SGP-GSA, the DWA-GSA, and the Verbenia-GSA will cooperate and coordinate in subsequently preparing and implementing one or more GSPs for sustainable management of the Basin; and

WHEREAS, the Parties mutually desire and intend to work with local stakeholders and interested entities in the Basin that are not Parties to this MOA, including but not limited to the Morongo Band of Mission Indians (MBMI), the County of Riverside, High Valleys Water District,

overlying landowners, and others, and as further specified in this MOA, to carry out the policy, purposes, and requirements of SGMA in the Basin; and

WHEREAS, in accordance with SGMA Section 10720.3 and other applicable law, the Parties mutually understand and agree that nothing in SGMA and nothing in this MOA grants or confers any new or additional authority, discretion, or jurisdiction to any of the Parties over any Tribal lands or activities of the MBMI, and that any ongoing or continued participation by MBMI in relation to this MOA or the Parties' implementation of SGMA in the Basin is completely voluntary on the part of MBMI.

NOW, THEREFORE, in consideration of the promises, terms, conditions, and covenants contained herein, it is mutually understood and agreed as follows:

I. Incorporation of Recitals

The Recitals stated above are incorporated herein by reference.

II. Purposes

The purposes of this MOA are as follows:

- A. To form the SGP-GSA for a portion of the Basin as specified herein and as depicted in **Exhibit B** to this MOA pursuant to applicable provisions and requirements of SGMA, including but not limited to SGMA Sections 10723 and 10723.6; and
- B. To establish initial terms for the SGP-GSA, the DWA-GSA, and the Verbenia-GSA to cooperate and coordinate with each other in preparing and implementing one or more GSPs for the Basin and carrying out the policy, purposes, and requirements of SGMA in the Basin.

III. Approval of MOA and Formation of the SGP-GSA

Approval of this MOA and formation of the SGP-GSA shall be accomplished as follows:

- A. CWD, Banning, and SGPWA each will hold its own noticed public hearing pursuant to SGMA Section 10723(b) and Government Code Section 6066 and at such hearing will consider approval of a Resolution by its governing board to enter this MOA and jointly form the SGP-GSA as specified in this MOA;
- B. BHMWC will conduct an official meeting in accordance with any articles of incorporation, bylaws, or other laws applicable to BHMWC and at such meeting will consider approval of a Resolution by its governing board to enter this MOA and jointly form the SGP-GSA as specified in this MOA;
- C. DWA and MSWD each will hold its own regular or special meeting and at such meeting will consider approval of a Resolution by its governing board to enter this MOA;

- D. Upon the foregoing approvals by CWD, Banning, BHMWC, and SGPWA, there shall be established the San Gorgonio Pass Subbasin Groundwater Sustainability Agency (SGP-GSA), the members of which shall be CWD, Banning, BHMWC, and SGPWA as provided in this MOA.

IV. Definitions

The following terms, whether used in the singular or plural, and when used with initial capitalization, shall have the meanings specified herein. The Parties agree that any definitions set forth herein are intended to be consistent with SGMA, and in the event of any discrepancy between a defined term in this MOA and a defined term in SGMA, the terms of SGMA shall control.

- A. **Adjudicated Area** refers to that portion of the Basin that is subject to the Beaumont Basin adjudication and Judgment in the case referred to as *San Timoteo Watershed Management Authority v. City of Banning, et al.*, Riverside County Superior Court Case No. RIC 389197.
- B. **Basin** refers to the San Gorgonio Pass Subbasin, designated by the California Department of Water Resources Bulletin 118 as Subbasin No. 7-21.04, as further specified and depicted in **Exhibit A** to this MOA.
- C. **Banning** means the City of Banning.
- D. **BHMWC** means the Banning Heights Mutual Water Company.
- E. **CWD** means the Cabazon Water District.
- F. **DWA** means the Desert Water Agency.
- G. **DWR** means the California Department of Water Resources.
- H. **DWA-GSA** refers to the GSA that has been established for a certain portion of the Basin pursuant to SGMA Section 10723(c)(1)(C), wherein DWA has been designated as the exclusive GSA, as further specified and depicted in **Exhibit C** to this MOA.
- I. **GSA** means Groundwater Sustainability Agency, as defined by SGMA.
- J. **GSP** means Groundwater Sustainability Plan, as defined by SGMA.
- K. **MBMI** means the Morongo Band of Mission Indians.
- L. **Memorandum of Agreement** or **MOA** refers to this Memorandum of Agreement.
- M. **MSWD** means the Mission Springs Water District.
- N. **Party** or **Parties** refers individually or collectively to Cabazon Water District, City of Banning, Banning Heights Mutual Water Company, Mission Springs Water District, San Gorgonio Pass Water Agency, and Desert Water Agency, as signatories to this MOA.

- O. **SGMA** refers to the Sustainable Groundwater Management Act.
- P. **SGP-GSA** refers to the San Gorgonio Pass Subbasin GSA formed under this MOA, the members of which GSA are CWD, Banning, BHMWC, and SGPWA.
- Q. **SGPWA** means the San Gorgonio Pass Water Agency.
- R. **Verbenia-GSA** refers to a GSA to be formed by MSWD and SGPWA for an approximately one-square mile area in the northeastern portion of the Basin that lies within the service areas of MSWD and SGPWA, as further specified and depicted in **Exhibit D** to this MOA.

V. **Boundaries of GSAs**

- A. The boundaries of the SGP-GSA shall be the entire Basin except (A) that portion of the Basin covered by the DWA-GSA wherein DWA is the exclusive GSA, as further specified and depicted in **Exhibit C** to this MOA, (B) that portion of the Basin to be covered by the Verbenia-GSA to be established by MSWD and SGPWA, as further specified and depicted in **Exhibit B** to this MOA, and (C) that portion of the Basin constituting the Adjudicated Area.
- B. The boundaries of DWA-GSA are that portion of the Basin within which DWA is the exclusive GSA pursuant to SGMA Section 10723(c)(1)(C), as further specified and depicted in **Exhibit C** to this MOA.
- C. The boundaries of the Verbenia-GSA are the approximately one-square mile area in the northeastern portion of the Basin that lies within the service areas of MSWD and SGPWA, as further specified and depicted in **Exhibit D** to this MOA.
- D. The Parties understand and agree that pursuant to SGMA Section 10720.8, the portion of the Basin which is subject to the Beaumont Basin adjudication and Judgment in the case referred to as *San Timoteo Watershed Management Authority v. City of Banning, et al.*, Riverside County Superior Court Case No. RIC 389197, generally is not subject to the requirements of SGMA.
- E. The Parties understand and agree in accordance with SGMA Section 10720.3 and other applicable law that nothing in SGMA and nothing in this MOA grants or confers any new or additional authority, discretion, or jurisdiction to any of the Parties over any Tribal lands or activities of the MBMI, and that any ongoing or continued participation by MBMI in relation to this MOA or the Parties' implementation of SGMA in the Basin is completely voluntary on the part of MBMI.

VI. **Coordination and Cooperation**

- A. Continued Cooperation. The Parties to this MOA will continue to meet, confer, coordinate, and collaborate to discuss and develop technical, managerial, financial, and other criteria and procedures for the preparation, governance, and implementation of a GSP or coordinated GSPs in the Basin and to carry out the policy, purposes, and requirements of SGMA in the Basin.

- B. Points of Contact. Each Party shall designate a principal contact person for that Party, who may be changed from time to time at the sole discretion of the designating Party. The principal contact person for each Party shall be responsible for coordinating with the principal contact persons for the other Parties in scheduling meetings and other activities under this MOA.
- C. Management Areas. The Parties acknowledge that SGMA, and provisions of the SGMA regulations promulgated by DWR, including but not limited to Section 354.20 (23 C.C.R. § 354.20), authorize the establishment of management areas for the development and implementation of sustainable groundwater management within the Basin, and accordingly the Parties acknowledge and agree that the establishment of management areas within the Basin is a governance alternative that the Parties may explore.

VII. Roles and Responsibilities

- A. The Parties agree to jointly establish their roles and responsibilities for implementing a GSP or coordinated GSPs for the Basin in accordance with SGMA.
- B. The Parties agree to work in good faith and coordinate all activities to carry out the purposes of this MOA in implementing the policy, purposes, and requirements of SGMA in the Basin.
- C. CWD, Banning, BHMWC, and SGPWA, as members of the SGP-GSA, shall coordinate with each other to cause all applicable noticing and submission of required information to DWR regarding formation of the SGP-GSA.
- D. SGPWA shall continue to undertake ongoing CASGEM reporting activities in the Basin as provided by terms outside of this MOA.
- E. As provided in this MOA, the Parties will continue to meet, confer, coordinate, and collaborate to discuss and develop governance, management, technical, financial, and other matters, including respective roles and responsibilities for activities such as, but not limited to, the following:
 - i. Modeling;
 - ii. Metering;
 - iii. Monitoring;
 - iv. Hiring consultants;
 - v. Developing and maintaining list of interested persons under SGMA Section 10723.4;
 - vi. Budgeting; and
 - vii. Other initial tasks as determined by the Parties.

VIII. Funding and Budgeting

The Parties agree to cooperate and coordinate in pursuing state and/or federal grant and loan funding opportunities that may apply to carrying out SGMA in the Basin. The Parties shall mutually develop reasonable budgets and cost sharing agreements or arrangements for work to be undertaken in carrying out SGMA in the Basin.

IX. Stakeholder Access

- A. The Parties agree to work together in ensuring public outreach and involvement of the public and other interested stakeholders throughout the SGMA process, including but not limited to all beneficial uses and users of groundwater as provided in SGMA Section 10723.2.
- B. The Parties acknowledge, agree, and desire that the preparation, adoption, and implementation of one or more GSPs for the Basin, and the ongoing process of ensuring compliance with the requirements of SGMA in the Basin, will involve close coordination and cooperation with the Morongo Band of Mission Indians.

X. Term, Termination, and Withdrawal

- A. Term. This MOA shall continue and remain in effect unless and until terminated by the unanimous written consent of the Parties, or as otherwise provided in this MOA or as authorized by law.
- B. Withdrawal. Any Party may decide, in its sole discretion, to withdraw from this MOA by providing ninety (90) days written notice to the other Parties. A Party that withdraws from this MOA shall remain obligated to pay its share of costs and expenses incurred or accrued under this MOA and any related cost sharing agreement or arrangement up to the date the Party provides its notice of withdrawal as provided herein. Withdrawal by a Party shall not cause or require the termination of this MOA or the existence of the SGP-GSA with respect to the non-withdrawing Parties.
 - 1. In the event of withdrawal by BHMWC from this MOA and the SGP-GSA, CWD, Banning, and SGPWA, as the local agency parties to the SGP-GSA, shall meet and confer regarding: (i) whether the SGP-GSA wishes to retain its GSA status over the affected portion of the Basin; (ii) whether one or more of the local agency parties of the SGP-GSA wishes to retain GSA status over the affected portion of the Basin; or (iii) whether to address the GSA issues in a different manner. Any resolution of such and other GSA issues shall be undertaken in a manner that satisfies all requirements of SGMA and DWR, including any requirement to file new GSA notices.
 - 2. In the event of withdrawal by CWD, Banning, or SGPWA from this MOA and the SGP-GSA, said three local agency parties shall meet and confer regarding whether the withdrawing local agency party wishes to seek GSA status for a portion of the Basin underlying the service area or management area of the withdrawing party. Said three local agency parties also shall meet and confer regarding: (i) whether the SGP-GSA, or one or both of the non-withdrawing

local agency parties, wishes to retain GSA status over the affected portion of the Basin; (ii) whether to enter a co-GSA management or other arrangement with the withdrawing party; or (iii) whether to address the GSA issues in a different manner. Any resolution of such and other GSA issues shall be undertaken in a manner that satisfies all requirements of SGMA and DWR, including any requirement to file new GSA notices.

3. Any decision by DWA or MSWD not to execute this MOA, or any decision by DWA or MSWD to withdraw after executing this MOA shall not cause or require the termination of this MOA and shall not affect the formation or continued existence of the SGP-GSA.

XI. Notice Provisions

All notices required by this MOA shall be made in writing and delivered to the respective representatives of the Parties at their respective addresses as follows:

Banning Heights Mutual Water Company
President
7091 Bluff Street
Banning, CA 92220, Fax: 951-849-6068

Desert Water Agency
General Manager
1200 S Gene Autry Trail
Palm Springs, CA 92264, Fax: 760-325-6505

City of Banning
City Manager
99 East Ramsey Street
Banning, CA 92220, Fax: 951-922-3128

San Geronio Pass Water Agency
General Manager
1210 Beaumont Avenue
Beaumont, CA 92223, Fax: 951-845-0281

Cabazon Water District
General Manager
14618 Broadway
P.O. Box 297
Cabazon, CA 92230, Fax: 951-849-2519

Mission Springs Water District
General Manager
66575 Second Street
Desert Hot Springs, CA 92240, Fax: 760-329-2482

Any Party may change the address to which notices are to be given under this MOA by providing the other Parties with written notice of such change at least fifteen (15) calendar days prior to the effective date of the change. All notices shall be effective upon receipt and shall be deemed received upon confirmed personal service, confirmed facsimile delivery, confirmed courier service, or on the fifth (5th) calendar day following deposit of the notice in registered first class mail.

XII. General Terms

- A. Amendments. Amendments to this MOA require unanimous written consent of all Parties and approval by the Parties' respective governing boards; provided, however, that amendments to this MOA pertaining to the SGP-GSA only require unanimous written consent and board approval of the members of the SGP-GSA.
- B. Successors and Assigns. The terms of this MOA shall be binding upon all successors in interest and assigns of each Party; provided, however, that no Party shall assign its

rights or obligations under this MOA without the signed written consent of all other Parties to this MOA.

- C. Waiver. No waiver of any provision of this MOA by any Party shall be construed as a further or continuing waiver of such provision or any other provision of this MOA by the waiving Party or any other Party.
- D. Authorized Representatives. Each person executing this MOA on behalf of a Party hereto affirmatively represents that such person has the requisite authority to sign this MOA on behalf of the respective Party.
- E. Exemption from CEQA. The Parties recognize and agree that, pursuant to SGMA Section 10728.6 and Public Resources Code Section 21065, neither this MOA nor the preparation or adoption of a GSP constitutes a “project” or approval of a project under the California Environmental Quality Act (CEQA) or the State CEQA Guidelines, and therefore this MOA is expressly exempt from CEQA review.
- F. Governing Law and Venue. This MOA shall be governed by and construed in accordance with the laws of the State of California. Any suit, action, or proceeding brought under the scope of this MOA shall be brought and maintained to the extent allowed by law in the County of Riverside, California.
- G. Attorney’s Fees, Costs, and Expenses. In the event of a dispute among any or all of the Parties arising under this MOA, each Party shall assume and be responsible for its own attorney’s fees, costs, and expenses.
- H. Entire Agreement/Integration. This MOA constitutes the entire agreement among the Parties regarding the specific provisions of this MOA, and the Parties hereto have made no agreements, representations or warranties relating to the specific provisions of this MOA which are not set forth herein.
- I. Construction and Interpretation. The Parties agree and acknowledge that this MOA has been developed through a negotiated process among the Parties, and that each Party has had a full and fair opportunity to review the terms of this MOA with the advice of its own legal counsel and to revise the terms of this MOA, such that each Party constitutes a drafting Party to this MOA. Consequently, the Parties understand and agree that no rule of construction shall be applied to resolve any ambiguities against any particular Party as the drafting Party in construing or interpreting this MOA.
- J. Force Majeure. No Party shall be liable for the consequences of any unforeseeable force majeure event that (1) is beyond its reasonable control, (2) is not caused by the fault or negligence of such Party, (3) causes such Party to be unable to perform its obligations under this MOA, and (4) cannot be overcome by the exercise of due diligence. In the event of the occurrence of a force majeure event, the Party unable to perform shall promptly notify the other Parties in writing to the extent practicable. It shall further pursue its best efforts to resume its obligations under this MOA as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

- K. Execution in Counterparts. This MOA may be executed in counterparts, each of which shall be deemed an original and all of which when taken together shall constitute one and the same instrument.
- L. No Third Party Beneficiaries. This MOA is not intended, and will not be construed, to confer a benefit or create any right on a third party or the power or right of any third party to bring an action to enforce any of the terms of this MOA.
- M. Timing and Captions. Any provision of this MOA referencing a time, number of days, or period for performance shall be measured in calendar days. The captions of the various articles, sections, and paragraphs of this MOA are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, terms, or intent of this MOA.

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

[Signature Pages to Follow]

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

CITY OF BANNING

By:_____

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

CABAZON WATER DISTRICT

By:_____

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

BANNING HEIGHTS MUTUAL WATER COMPANY

By:_____

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

SAN GORGONIO PASS WATER AGENCY

By:_____

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

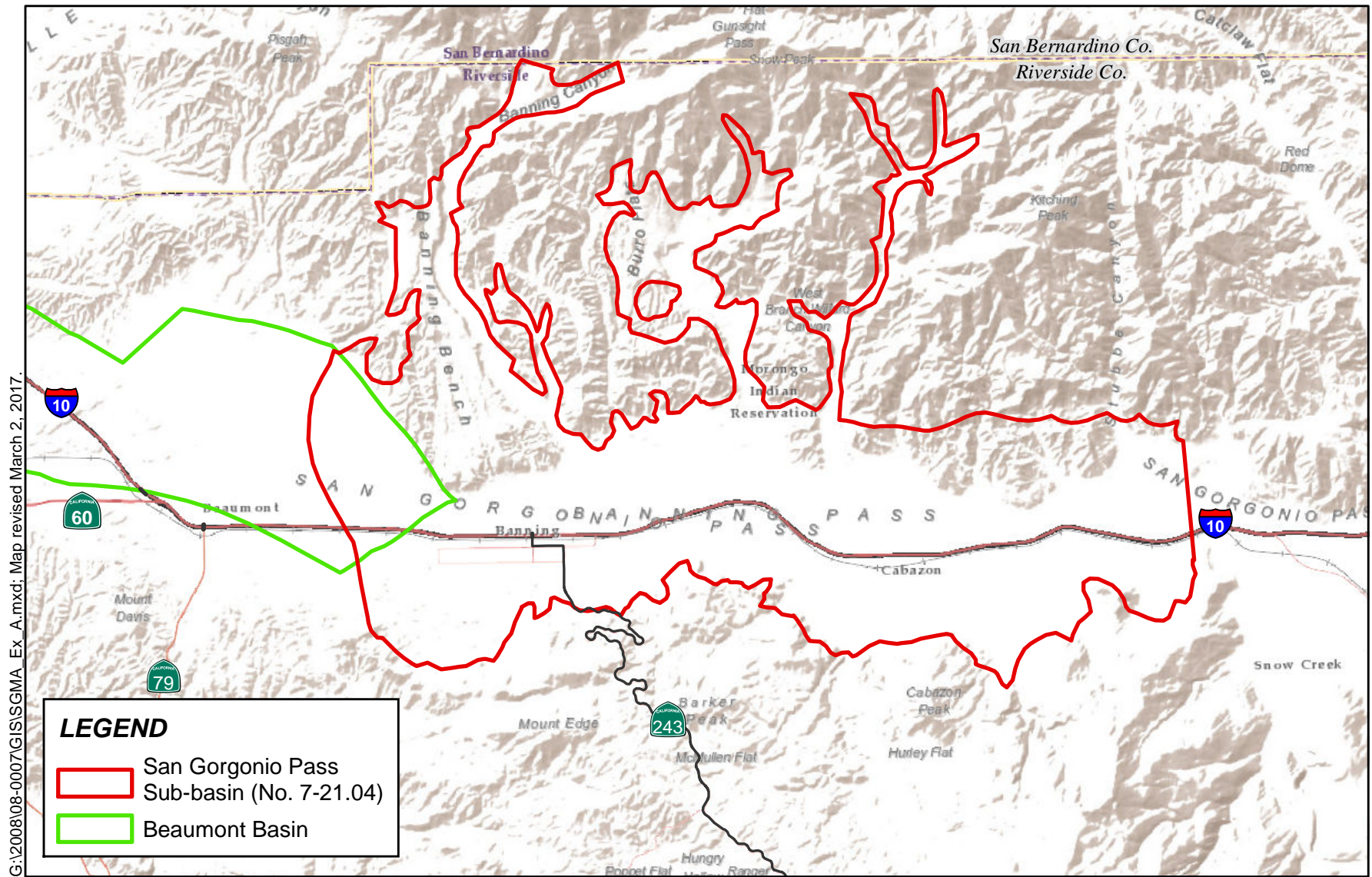
MISSION SPRINGS WATER DISTRICT

By:_____

IN WITNESS WHEREOF, the Parties hereto have approved and executed this MOA as of the respective dates specified in the adopting Resolution of each Party as provided above in Article III of this MOA.

DESERT WATER AGENCY

By:_____



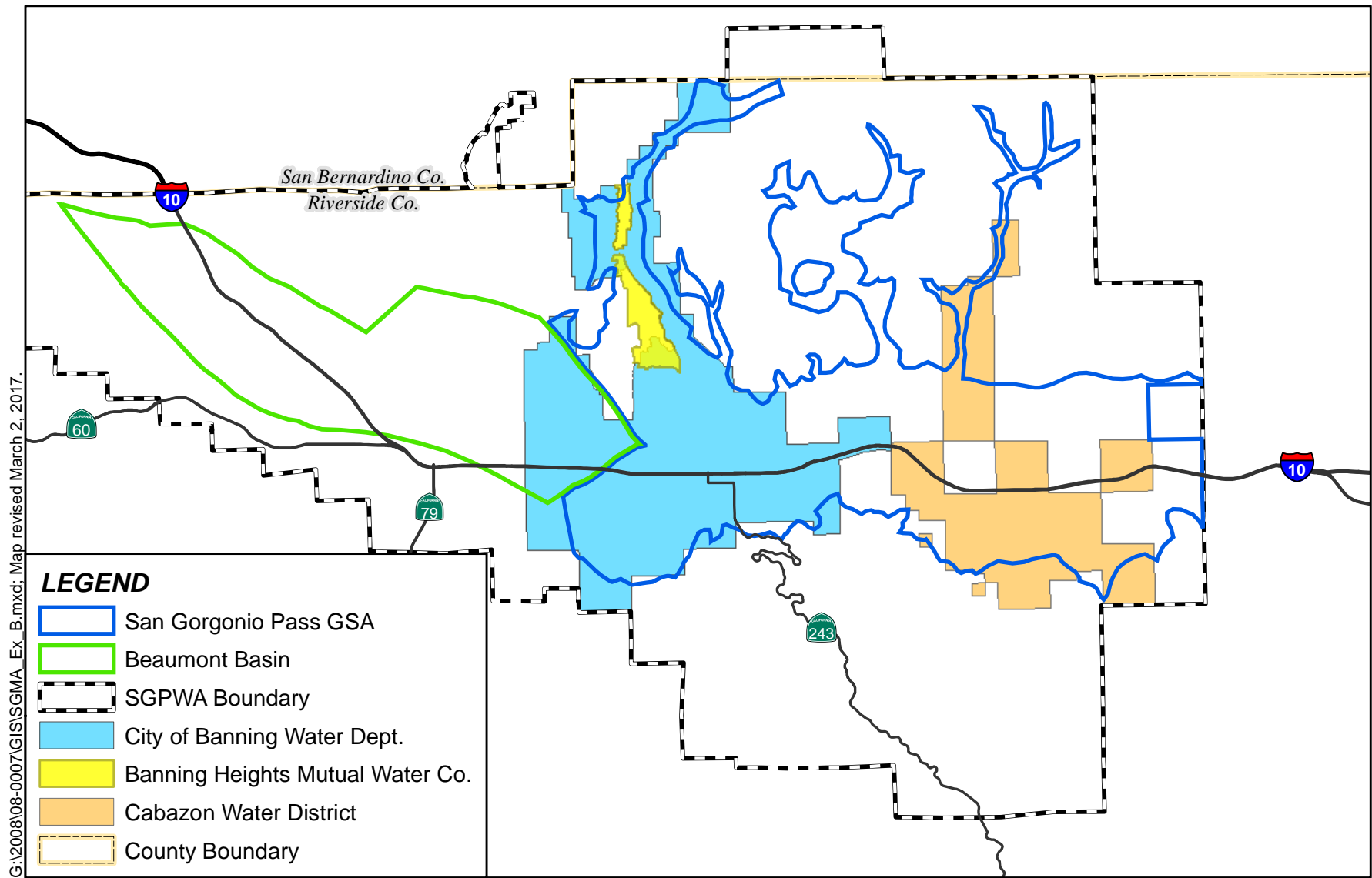
Sources: Calif. Dept. of Water Resources, 2016;
Riverside Co. GIS, 2016.



0 2 4 6 Miles

Exhibit A San Gorgonio Pass Sub-basin

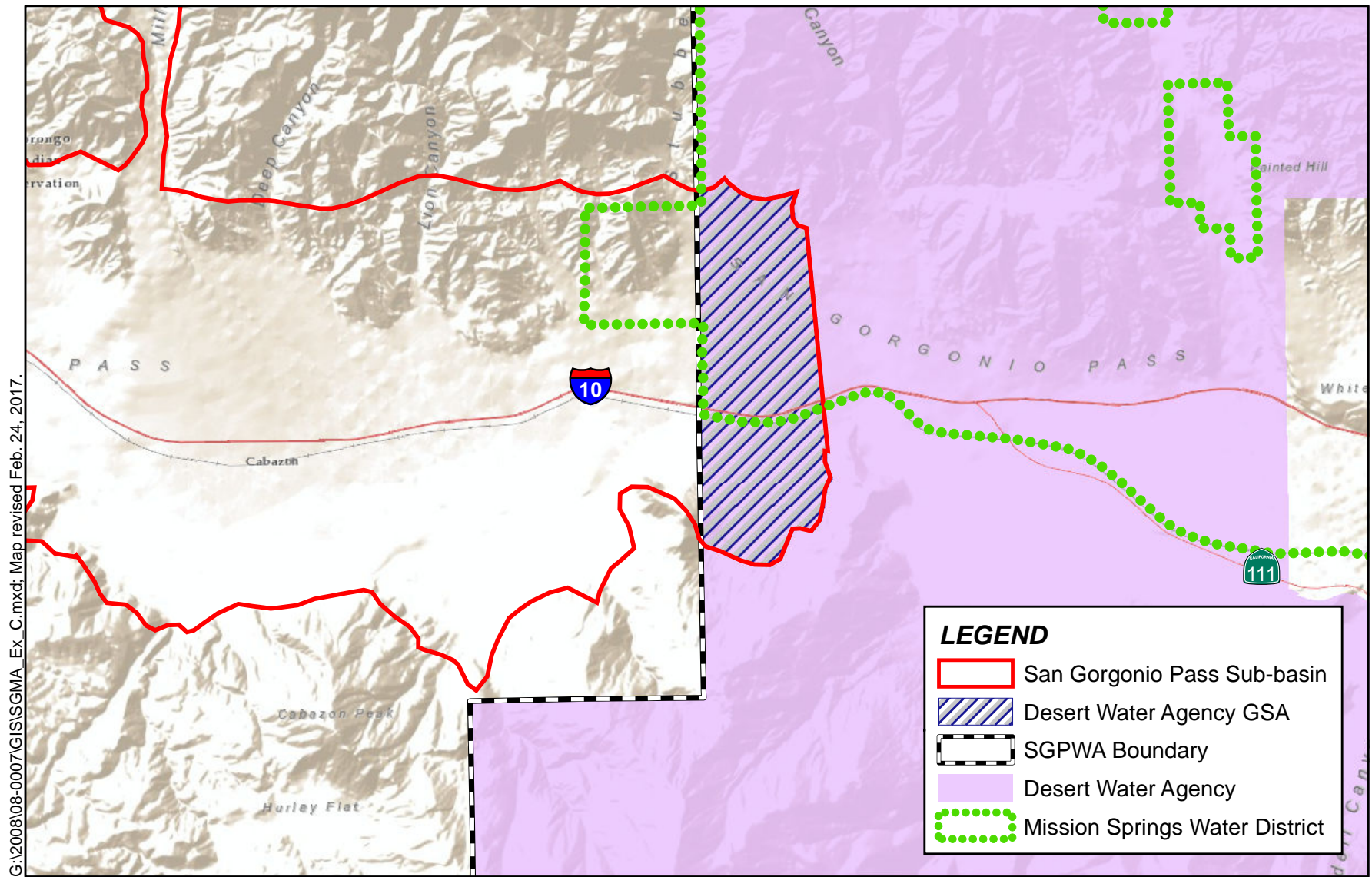
ALBERT A.
WEBB
ASSOCIATES



Sources: Calif. Dept. of Water Resources, 2016;
LAFCO 2010; Riverside Co. GIS, 2017.



Exhibit B
SGP GSA Portion of Sub-basin



Sources: Calif. Dept. of Water Resources, 2016;
Riverside Co. GIS, 2016.

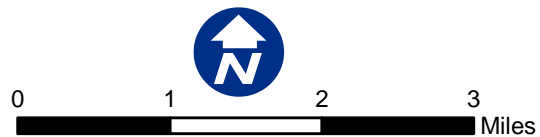
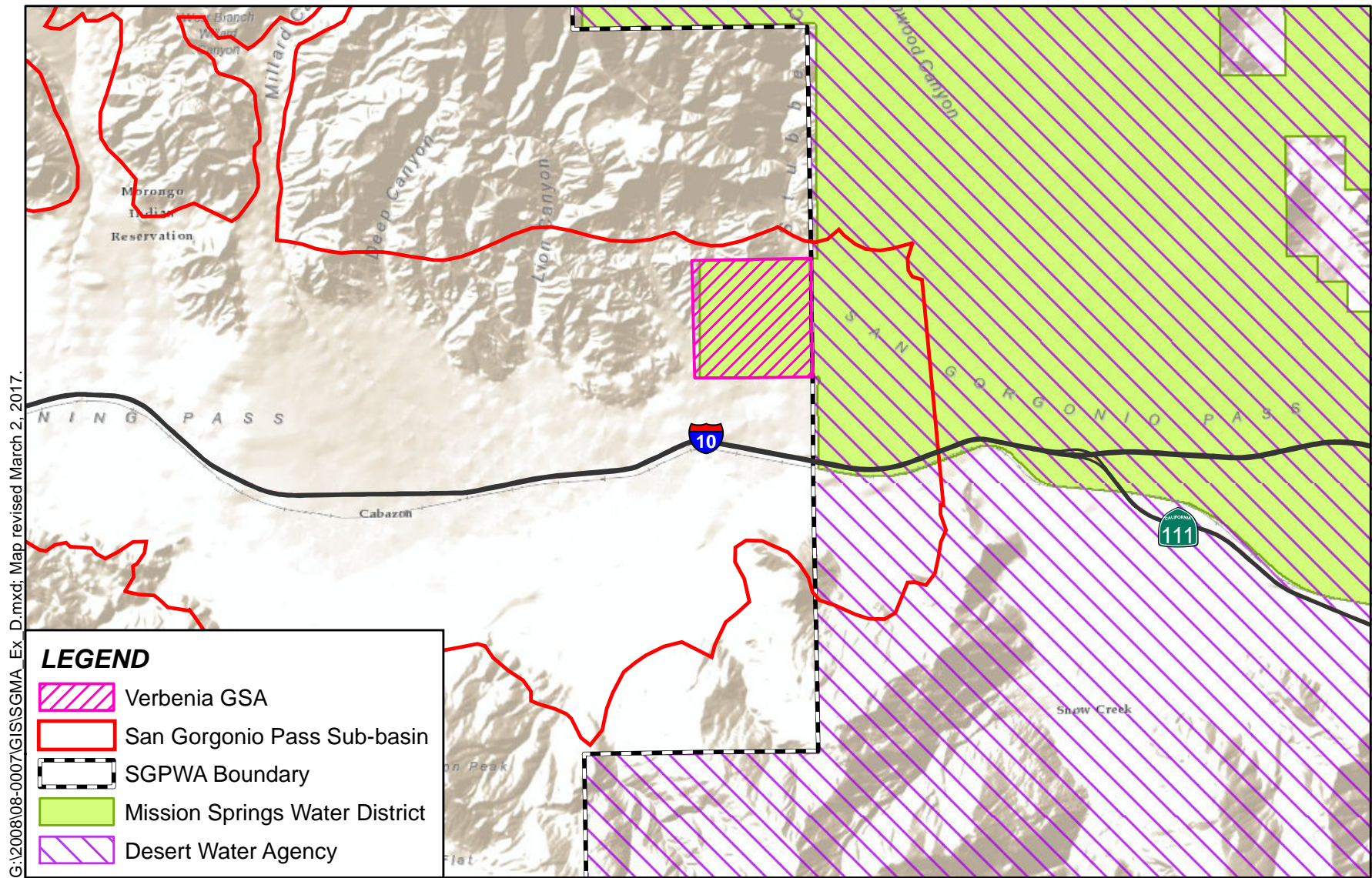


Exhibit C

Desert Water Agency GSA





Sources: Calif. Dept. of Water Resources, 2016;
LAFCO 2010; Riverside Co. GIS, 2017.



0 1 2 3
Miles

Exhibit D

Verbenia GSA

ALBERT A.
WEBB
ASSOCIATES

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

**RE: CONSIDER ADOPTION OF RESOLUTION NO. 1153 CHANGING
THE REGULAR ELECTION DATE FROM NOVEMBER ODD
NUMBERED YEARS TO STATEWIDE ELECTION DATE IN
NOVEMBER EVEN NUMBERED YEARS**

As discussed at the February 21, 2017 Board meeting, Senate Bill 415 prohibits a political subdivision such as a special district from holding an election other than on a statewide election date if holding an election on a non-concurrent date has previously resulted in voter turnout for a regularly scheduled election in the political subdivision being at least 25% less than the average voter turnout within the political subdivision for the previous 4 statewide general elections.

Attached to this report is the Agency's voter turnout for the last four elections and also the comparable voter turnout numbers for the County and Desert Healthcare District for the last four elections held on even numbered years.

Staff was provided the following cost estimate by the Riverside County Registrar of Voters office:

Cost Estimate	
November 7, 2017 Election	\$130,000 - \$140,000
*Change of Election Notice (for 2018)	\$22,000
November 6, 2018 Election	\$130,000 - \$140,000

There is no change in the cost estimate between odd and even election dates because the County is taking into account anticipated increase in postage costs, election supplies and registered voters.

If the change in election date is approved, it is requested that the new election date be moved from November 2017 to November 2018 with Board Members whose terms would have expired in 2017 being extended to 2018 and Board Members whose terms would have expired in 2019 being extended to 2020.

Elections Code Section 10404(i) states that those governing body members whose terms of office would have, prior to the adoption of the resolution, expired prior to that election shall, instead, continue in their offices until their successors are elected and qualified, but in no event shall the term be extended beyond December 31 of the year following the year in which the request for consolidation is approved by the board of supervisors.

Current General Municipal Election Dates (3 seats)	Consolidate with the following potential Statewide Election Dates
November 7, 2017 James Cioffi Patricia G. Oygur Joseph K. Stuart	November 6, 2018 (+12 months)

Current General Municipal Election Dates (2 seats)	Consolidate with the following potential Statewide Election Dates
November 5, 2019 Kristin Bloomer Craig A. Ewing	November 3, 2020 (+12 months)

* Per Election Code 10404 2(f) - Within 30 days after the approval of the resolution, the elections official shall notify all registered voters of the district affected by the consolidation of the approval of the resolution by the Board of Supervisors. The notice shall be delivered by mail and **at the cost of the district.**

RESOLUTION NO. 1153

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY CHANGING THE REGULAR ELECTION DATE FOR ELECTION OF ITS BOARD OF DIRECTORS FROM NOVEMBER OF ODD-NUMBERED YEARS TO THE STATEWIDE GENERAL ELECTION DATE IN NOVEMBER OF EVEN-NUMBERED YEARS

WHEREAS, currently the regular election date for election of the Board of Directors of Desert Water Agency is in November of each odd-numbered year; and

WHEREAS, the California Voter Participation Rights Act (SB 415) becomes effective on January 1, 2018 and prohibits local governmental entities, including special districts, from holding a regular election on a date other than on a statewide primary or general election date of even-numbered years, if holding a regular election on a non-statewide election date has previously resulted in a “significant decrease in voter turnout,” which is defined by SB 415 to mean at least 25% less voter turnout than the average voter turnout within the governmental entity for the previous four statewide general elections (November of 2010, 2012, 2014 and 2016); and

WHEREAS, elections conducted in odd-numbered years historically have resulted in lower voter participation and higher expenses to this Agency; and

WHEREAS, in order to change this Agency’s regular election date to ensure compliance with SB 415, Elections Code Section 1303(b) authorizes the Board of Directors at this time to adopt a resolution changing the Agency’s regular election date from November of odd-numbered years to the statewide general election date in November of even-numbered years; and

WHEREAS, the resolution must then be submitted to the Riverside County Board of Supervisors no later than March 12, 2017, which is at least 240 days before the next Agency regular election date, and the resolution must be approved by the Board of Supervisors in order to change the Agency’s regular election date; and

WHEREAS, it is the intent and desire of this Board of Directors to change the Agency’s regular election date for election of its Board of Directors from November of odd-numbered years to the statewide general election date in November of even-numbered years; and

WHEREAS, Elections Code Section 10404(i) provides that upon approval by the Board of Supervisors, changing the regular election date to November of even-numbered years, current Directors continue to serve until their positions are filled by election in the even-numbered year, so as to match their terms with a changed regular election date; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Desert Water Agency as follows:

1. Pursuant to Elections Code Sections 1303(b) and 10404(b), the Agency hereby chooses to change the Agency’s regular election date for election of the Board of Directors from

the first Tuesday after the first Monday in November of odd-numbered years to the statewide general election date on the first Tuesday after the first Monday in November of even-numbered years.

2. Special elections called for the purposes of filling Board vacancies, submitting measures to the Agency's electors for consideration, or other such matters, shall not be affected by this resolution and may be conducted on any date authorized by applicable law.

3. The Riverside County Board of Supervisors is hereby requested to consolidate all future Agency regular elections with the statewide general elections to be conducted in November of even-numbered years. The President of this Board of Directors shall be authorized to take any and all actions, and to execute any documents necessary, to assist the Agency's General Manager in presenting this resolution to the Riverside County Board of Supervisors for its approval.

4. The Secretary of the Board of Directors of Desert Water Agency shall transmit certified copies of this resolution to the Clerk of the Board of Supervisors and to the Office of the Registrar of Voters for the County of Riverside.

ADOPTED this 7th day of March, 2017.

James Cioffi, President
Desert Water Agency

ATTEST:

Kristin Bloomer, Secretary-Treasurer
Desert Water Agency

CERTIFICATION

I, Sylvia Baca, Secretary of the Board of Directors of Desert Water Agency, do hereby certify that the attached is a true and correct copy of Resolution No. 1153 adopted by said Board of Directors at its regularly scheduled meeting of March 7, 2017.

Sylvia Baca
Secretary of the Board of Directors
Desert Water Agency

DESERT WATER AGENCY – ELECTION STATISTICS

2009 - 2018

Year	Candidates	Cost	Registered Voters	Ballots Cast	Turnout	Notes
2009 DWA Election	Oygar Starrs Cioffi Rancano	\$89,627	36,132	12,301	34.04%	
2010 Statewide	Statewide				57.36%	
2011 DWA Election	Ewing Kieley Paduano	\$95,475	37,341	20,045	39.98%	
2012 Statewide	Statewide				70.98%	
2013 DWA Election	Cioffi Paduano Oygar Stuart	\$103,905	38,916	12,579	32.32%	
2014 Statewide	Statewide				40.12%	
2015 DWA Election	Bloomer Ewing Oberhaus	\$111,945	37,315	15,762	42.24%	
2016 Statewide	Statewide				75.24%	
2017					Cost Estimate: \$130,000 - \$140,000	
2018					Cost Estimate: \$130,000 - \$140,000	
					Change of Election Notice: \$22,000	

4 Year Statewide Average = 60.925%
 4 Year DWA Average = 37.145%
 Difference = 23.780%

DESERT HEALTHCARE DISTRICT – ELECTION STATISTICS 2010 - 2016

Year	Registered Voters	Ballots Cast	Turnout
2010	NO ELECTION		
2010 Statewide	Statewide		57.36%
2012	88,372	66,386	75.12%
2012 Statewide	Statewide		70.98%
2014	85,240	44,526	52.24%
2014 Statewide	Statewide		40.12%
2016	94,853	74,628	78.68%
2016 Statewide	Statewide		75.24%

4 Year Statewide Average = 60.925%
 4 Year DHCD Average = 51.510%
 Difference = 9.415%

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

**RE: REQUEST BOARD ADOPTION OF RESOLUTION NO. 1154
ESTABLISHING BACKUP FACILITY CHARGES, SUPPLEMENTAL
IMPORTED WATER CAPACITY CHARGES, AND SERVICE
CONNECTION CHARGES**

Overview

After a comprehensive review of the existing Backup Facility Charges, Supplemental Imported Water Capacity Charges, and Service Connection Charges, staff is requesting the Board of Directors adopt Resolution No. 1154.

Resolution No. 1154

After reviewing all of the components of the Supplemental Imported Water Capacity Charges (SIWCC), staff concluded that no changes be made to the current SIWCC values, therefore, the Resolution reflects no changes to these values.

The Resolution adjusts the Backup Facility Charges and Service Connection Charges based on revised calculations performed by staff. As required by law, the Desert Valleys Builders Association (DVBA) was provided a copy of the proposed changes for review and comments. The DVBA had no comments regarding the Service Connection Charges, which were adjusted to reflect current material and labor costs. DVBA did, however, question the Backup Facility Charge calculations. Staff reviewed the Agency's methodology and compared it with industry standards.

The current methodology used by the Agency to calculate its Backup Facility Charges looks only at the current capacity used by the system. This methodology has been in use by the Agency since the 1970's when it was first introduced by the Agency's engineering consultant. It has remained unchanged to provide consistency between charges levied on existing and future customers.

After reviewing the current methodology and comparing it with current industry standards it is apparent that the methodology needs to be updated. The method should be based on total capacity of the system. As a result of this analysis, staff developed new calculations that utilized the total system capacity. On March 2, 2017, the Agency received a letter of support from the DVBA (attached) for the new calculations.

Staff is requesting the Board of Directors adopt Resolution No. 1154.

Backup Facility Charge	Current	Proposed	Approx. % Change
<u>Meter Size</u>	<u>Base Zone</u>	<u>Base Zone</u>	
3/4 x 5/8	\$2,400	\$2,550	6%
1	\$4,700	\$6,375	36%
1.5	\$10,360	\$12,750	23%
2	\$21,460	\$20,405	-5%
<u>Meter Size</u>	<u>A Zone</u>	<u>A Zone</u>	<u>A Zone</u>
3/4 x 5/8	\$5,400	\$4,225	-22%
1	\$11,000	\$10,570	-4%
1.5	\$21,280	\$21,145	-1%
2	\$44,080	\$33,835	-23%
<u>Meter Size</u>	<u>B Zone</u>	<u>B Zone</u>	<u>B Zone</u>
3/4 x 5/8	\$6,200	\$5,760	-7%
1	\$12,500	\$14,405	15%
1.5	\$25,200	\$28,815	14%
2	\$52,200	\$46,105	-12%
<u>Meter Size</u>	<u>C Zone</u>	<u>C Zone</u>	<u>C Zone</u>
3/4 x 5/8	\$17,400	\$6,245	-64%
1	\$34,900	\$15,610	-55%
1.5	\$53,200	\$31,225	-41%
2	\$110,200	\$49,960	-55%
Service Connection Charge	Current	Proposed	
<u>Service Size</u>			
1	\$1,625	\$1,800	11%
2	\$2,770	\$3,230	17%
Pavement Patch	\$1,100	\$1,380	25%
Concrete Patch	\$600	\$664	11%



2017 BOARD OF DIRECTORS

PRESIDENT

Fred Bell
Nobell Energy Solutions

1st VICE PRESIDENT

Deborah McGarrey
Southern California Gas Company

2nd VICE PRESIDENT

Tom Dubose
Development Design &
Engineering

SECRETARY/TREASURER

Eileen Eske
Pacific Premier Bank

**VICE PRESIDENT
OF ASSOCIATES**

Allan Levin
Allan Levin & Associates

PAST PRESIDENT

Bruce Maize
Discovery Builders

CHIEF EXECUTIVE OFFICER

Gretchen Gutierrez

DIRECTORS

Brian Benedetti
Brian Benedetti Construction
Mark Benedetti
BMC Select Build
Margaret Drury
Margaret Drury Construction
Mario Gonzales
GHA Companies
Mark Gran
Strictly Business Consulting
Joe Hayes
First Bank
Todd Hooks
Agua Caliente Band of Cahuilla Indians
Dave Lippert
Lippert Construction, Inc
Heather Loutsenhizer
Davis Reed
Paul Mahoney
PMA Advertising
Dan Olivier
Nethery Mueller Olivier
Alan Pace
Petra Geotechnical
John Powell, Jr.
Coachella Valley Water District
Phil Smith
Sunrise Company
Patrick Swarthout
Habitat for Humanity
Jeff Wattenbarger
Wattenbarger Construction

March 2, 2017

Desert Water Agency
Mark Krause, General Manager
C/O Steve Johnson, Asst. General Manager
1200 South Gene Autry Trail
Palm Springs, CA 92264

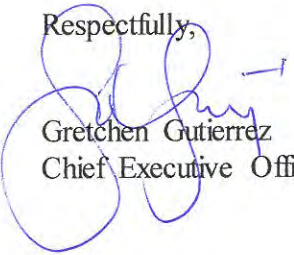
Re: Backup Facility Charges

Dear Mr. Krause,

The Desert Valleys Builders Association appreciates the many opportunities to review and comment on the Desert Water Agency's *Backup Facility & Connection Charges* rate adjustment "nexus" studies, over the past two months. While working with staff, we have had the opportunity to develop a better understanding of DWA's system, as well as, to provide input in bettering the supporting documentation.

The Desert Valleys Builders Association is satisfied that the Desert Water Agency has met all "nexus" requirements, as stated in the Mitigation Fee Act, in determining appropriate Backup Facility Charges.

Respectfully,


Gretchen Gutierrez
Chief Executive Officer

RESOLUTION NO. 1154

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY ESTABLISHING BACKUP FACILITY, SUPPLEMENTAL IMPORTED WATER CAPACITY AND SERVICE CONNECTION CHARGES

WHEREAS, by previous action this Board has approved various rates, fees and charges for water service, as provided by law; and

WHEREAS, it is appropriate at this time to revise the Agency's charges for backup facility, supplemental imported water capacity and service connection charges; and

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Desert Water Agency that the Agency's charges for backup facility, supplemental imported water capacity and service connection charges shall be as follows:

1. Backup Facility Charges. Every applicant for a regular service connection shall, in addition to other charges, pay a Backup Facility Charge based on the size and location of the applicant's service and meter connection as follows:

<u>Meter</u>	<u>Charge</u>
5/8 x 3/4 inch	\$2,550
1 inch	\$6,375
1-1/2 inch	\$12,750
2 inch	\$20,405

<u>Zone A</u>	<u>Charge</u>
5/8 x 3/4 inch	\$4,225
1 inch	\$10,570
1-1/2 inch	\$21,145
2 inch	\$33,835

Backup Facility Charges (Cont.)

<u>Zone B</u>	<u>Charge</u>
5/8 x 3/4 inch	\$5,760
1 inch	\$14,405
1-1/2 inch	\$28,815
2 inch	\$46,105

<u>Zone C</u>	<u>Charge</u>
5/8 x 3/4 inch	\$6,245
1 inch	\$15,610
1-1/2 inch	\$31,225
2 inch	\$49,960

2. Supplemental Imported Water Capacity Charges. Every applicant for a regular service connection shall, in addition to other charges, pay a Supplemental Imported Water Capacity Charge based on the size of the applicant's service and meter connection as follows:

Meter Size

<u>Residential</u>	<u>Charge</u>
5/8 x 3/4 inch	\$1,370.00
1 inch	\$2,250.00
1-1/2 inch	\$4,440.00
2 inch	\$10,960.00
3 inch	\$72,070.00

<u>Commercial</u>	<u>Charge</u>
5/8 x 3/4 inch	\$1,250.00
1 inch	\$2,740.00
1-1/2 inch	\$8,830.00
2 inch	\$15,090.00
3 inch	\$21,350.00
6 inch	\$677,430.00

<u>Irrigation</u>	<u>Charge</u>
5/8 x 3/4 inch	\$1,720.00
1 inch	\$6,530.00
1-1/2 inch	\$25,210.00
2 inch	\$23,970.00

3. Backup Facility Charges and Supplemental Imported Water Capacity Charges for Increased Service. A Backup Facility Charge and a Supplemental Imported Water Capacity Charge shall be required for all existing regular service connections for which increased capacity is requested and larger service connections and meters are installed. Said charges shall apply to the difference in service capacity between the new meter and service, and the meter and service which is being replaced.

4. Exemption. The Backup Facility Charge shall apply to all applications for regular service, regardless of the type of use, but shall not apply to applications for temporary service. The Backup Facility Charge may be exempted, or partially exempted for private commercial fire protection service, and where certain water supply, storage, treatment and transmission facilities are required of an applicant. The exemption will be determined by the Agency, whose decision will be final.

5. Accounting of Funds. All revenues collected from backup facility charges shall be deposited with other such fees in a separate capital facilities account or fund in a manner to avoid any commingling of the charges with other revenues and funds of the Agency, except for temporary investments, and such revenues may be expended solely for the purpose for which the backup facility charges are collected. Any interest income earned by moneys in said account or fund shall also be deposited in that account or fund and may be expended only for the purpose for which the backup facility charges are imposed. The Agency shall make findings once each fiscal year with respect to any portion of the backup facility charges remaining unexpended or uncommitted in the account five or more years after deposit of the charges. The findings shall identify the purpose to which the backup facility charges are to be put, and will demonstrate a reasonable relationship between the charges and the purpose for which the charges were imposed.

6. Service Connection Charge. The charge for service connection shall be as follows:

	<u>Size</u>	<u>Charge</u>
a.)	1 inch	\$1,800.00
	2 inch	\$3,230.00
b.)	Pavement Patch	\$1,380.00
	Concrete Patch	\$664.00

7. Connection Charge. A charge for all new connections based on the front footage served thereby shall be levied and collected at the rate of \$70.00 per lineal foot of frontage, or the actual rate in accordance with a valid main extension refund agreement, whichever is greater.

8. Effective Date: The charges set forth herein shall become effective on March 7, 2017.

ADOPTED this 7th day of March 2017.

James Cioffi, President
Board of Directors

ATTEST:

Kristin Bloomer, Secretary-Treasurer
Board of Directors

**BACKUP FACILITY CHARGES
FOR WATER SERVICE
MARCH 7, 2017**

New development creates an additional demand for water. In order to meet the new demand, new wells must be constructed to provide more water, new storage tanks must be constructed to store water for emergency use, equalizing, and fire storage, and new transmission pipelines must be constructed to transport water from wells to storage tanks and throughout the distribution system. New development in hillside areas and service areas above the Base Zone places demand upon facilities, such as booster pumping plants, water storage tanks and transmission pipelines, whose basic function is to lift the water up to and store in these higher zones.

For the past eight years, new development has added an annual average of about 400 service connections to the Desert Water Agency water system. At this growth rate, every three years new connections will create a demand for water equivalent to the production capacity of one well. The increased demand will also burden storage, transmission, and booster pumping facilities in all Zones. These facilities must be in place ahead of new connections. Therefore, in most cases, the facilities are constructed in anticipation of demand, and costs of the facilities are recovered through the Backup Facility Charge.

Staff has reviewed the costs that make up the Backup Facility Charge and find that a tiered rate is justified to recover cost of the well plants, booster plants, treatment plants, surface water facilities, storage reservoirs, and transmission mains required by each zone.

All new development requiring water service will be charged for Backup Facilities. The charge is based upon the capacity/service size ratio of the service provided and the proportional potential demand placed upon the available water production, transmission, treatment, pressure boosting and storage facilities. The charge is not based upon the type of service connection (i.e., residential, commercial, and industrial). The amount of the charge for any particular development is based on the number of services, service size, meter size and the assigned

number of capacity units per service as determined by the Agency. The capacity unit (C.U.) is based on the capacity/service size ratio of the service connection.

Service capacity ratios have historically been based on the relationship between capacity and pipe diameter. Originally established in 1973, the service capacity/diameter relationship for the Agency was based on a 1" service size capacity ratio of $Q=KD^{2.54}$. Depending on the specific hydraulic formula selected the service size relationship can range from $D^{2.5}$ to $D^{2.667}$. These hydraulic formula and capacity/diameter relationships are empirical and therefore approximate. The selected relationship of $D^{2.54}$ is reasonable in that it is slightly less than the median relationship of $D^{2.58}$.

However, capacity is ultimately limited by the maximum continuous operation flow rate of the meter installed on each service connection. To account for this, the Agency has opted to utilize the AWWA meter factors in lieu of the abovementioned $D^{2.54}$ formula. AWWA meter factors are an industry standard and, therefore, a reasonable method to use in determining equivalent capacity units within the system.

To determine the standard capacity for the Agency's entire water system all active services smaller and larger than the standard one-inch service are converted to one-inch equivalent capacity units using the AWWA meter factors discussed above.

Calculation of the C.U. for each service size in the Agency's system is shown in the table below.

SYSTEM CAPACITY UNITS

<u>SERVICE SIZE</u>	<u>SERVICES</u>	<u>AWWA METER FACTORS</u>	<u>CAPACITY UNITS</u>
5/8" X 3/4"	210	0.40	84
1"	18,565	1.00	18,565
1-1/2"	862	2.00	1,724
2"	2,975	3.20	9,520
Total	22,612		29,893

The charge per capacity unit is obtained by determining the cost of water production, pressure boosting, treatment, storage and transmission facilities and dividing it by the total capacity units

served by the facilities. The method for determining facility cost and total capacity units is discussed below.

The total number of current capacity units of each zone is obtained from the Desert Water Agency Information Systems Department.

<u>ZONES</u>	<u>EXISTING CAPACITY UNITS WITHIN ZONE</u>
BASE	28,125
A	1,282
B	468
C	18
TOTAL	29,893

To determine the total capacity units for each zone, we must first calculate the max demand day (MDD) value utilizing the current General Plan formula:

- $MDD = 1.85 \times \text{Average Day Annual Demand (ADD)}$

Using annual production data from 2010 to 2013 (years that were not affected by State mandated drought conservation requirements), the ADD calculated equals 32.6 MGD, therefore, the MDD is equal to 60.3 MGD. If the MDD is equal to 60.3 MGD, the current gal/C.U./day is equal to 2,017 gal/C.U./day ($60.3\text{MGD} \div 29,893$).

Since all service capacity must be met by the Base system pumping capacity, the current max demand on the Base system is equal to the MDD, or 60.3 MGD. The current pumping capacity for the Base system is 76.7 MGD, therefore, all of the existing units are using 78.6% of the total capacity of the Base system ($60.3\text{ MGD} \div 76.7\text{ MGD}$). The total maximum capacity units for the entire system are then equal to 38,031 ($29,893 \div 0.786$).

The current demand on Zone A is 2.58 MGD ($2,017 \times 1,282$). The current pumping capacity for Zone A is 7.70 MGD, therefore, the existing Zone A units are using 33.5% of the total pumping capacity of Zone A ($2.58\text{ MGD} \div 7.70\text{ MGD}$). The total Zone A capacity units are then equal to 3,826 ($1,282 \div 0.335$).

The current demand on Zone B is 0.94 MGD (2,017 x 468). The current pumping capacity for Zone B is 0.79 MGD, therefore, the existing Zone B units are using 118% of the total pumping capacity of Zone B ($0.94 \text{ MGD} \div 0.79 \text{ MGD}$). The total Zone B capacity units are then equal to 396 ($468 \div 1.18$), which is 72 units less than the existing amount of 468 units; therefore, Zone B requires additional pumping capacity to accommodate the additional 72 units. The amount of pumping capacity required is equal to 100 gpm ($72 \text{ CU} \times 2,017 \text{ gal/CU/Day} \div 1,440 \text{ min/day}$). The additional pumping capacity can be achieved by a 20 HP pump. Using the current cost of \$3,869/HP for Zone B, this additional 20 HP will cost \$77,380 and will be added to the Zone B total pumping costs.

The current demand on Zone C is 0.036 MGD (2,017 x 18). The current pumping capacity for Zone C is 0.43 MGD, therefore, the existing Zone C units are using 8.3% of the total pumping capacity of Zone C ($0.036 \text{ MGD} \div 0.43 \text{ MGD}$). The total Zone C capacity units are then equal to 216 ($18 \div 0.083$).

<u>ZONES</u>	<u>TOTAL CAPACITY UNITS WITHIN ZONE</u>	<u>TOTAL CAPACITY UNITS SERVED PER ZONE</u>
BASE	33,719	38,031
A	3,826	4,294
B	468	684
C	216	216
TOTAL	<hr/> 38,031	

Facility costs per zone were determined by analyzing facility cost valuation from Agency Annual Operating Statistics Reports, cost estimates prepared in conjunction with the currently proposed budget and rate study, and by assessing the current facilities inventory by zone using the 2008 General Plan Update. The facilities cost valuation per capacity unit was determined from the total number of capacity units and the facilities costs per zone.

The proposed Backup Facility Charge consists of a Base-Zone Charge and successively higher tiered charges for each pumped zone supplied from the Base-Zone and any additional zone supplying water to a higher zone. The A-Zone receives all of its water supply from facilities in the Base-Zone, the B-Zone receives all of its water supply from facilities in the A-Zone, and the C-Zone receives all of its water supply from facilities in the B-Zone. Water is booster-pumped through each successive zone to get to its final destination.

The Base Zone charge is composed of costs per capacity unit for production (wells and surface water supply), storage, pressure boosting, treatment and transmission facilities assignable to Base-Zone service.

PUMPING/WATER PRODUCTION COST

In order to calculate the cost of pumping water per capacity unit we first determine the cost of those facilities from approved capital improvement budgets. The ratio of plant cost to horsepower is determined.

<u>DESCRIPTION</u>	<u>YEAR CONSTRUCTED</u>	<u>PUMPING PLANT HORSEPOWER</u>	<u>PUMPING PLANT COST*</u>
Well 39	2010	450 HP Pumping Plant	\$1,320,156.59
Well 40	2009	450 HP Pumping Plant	\$1,498,356.82
Well 41	2006	450 HP Pumping Plant	\$1,561,858.76
Well 42	2006	200 HP Pumping Plant	\$1,175,156.15
TOTAL		1,550 HP	\$5,555,528.32

* Current Capital Improvement Budget Amounts for Pumping Plants.

The most current pumping plant estimated costs are used to determine the ratio of pumping plant cost to unit of horsepower from the table above. The unit cost of pumping per horsepower is $\$5,555,528.32 / 1,550 \text{ hp} = \$3,584/\text{hp}$. By applying this ratio to each active pumping plant the cost of each plant and the entire system pumping cost is determined by zone.

Similarly, the cost of pressure boosting facilities is determined.

<u>DESCRIPTION</u>	<u>YEAR CONSTRUCTED</u>	<u>BOOSTER PLANT HORSEPOWER</u>	<u>BOOSTER PLANT COST*</u>
Zone 1240 Booster	2016	80 HP Booster Plant	\$950,000
Janis Tuscany Booster Upgrades	2016	225 HP Booster Pumping Plant	\$230,000
TOTAL		305 HP	\$1,180,000

* Actual project costs, unadjusted for present value.

The most current pumping plant costs are used to determine the ratio of booster pumping plant cost to unit of horsepower from the table above. The unit cost of booster pumping per horsepower is \$1,180,000/305 hp= \$3,869/hp. By applying this ratio to each active pumping plant the cost of each plant and the entire system booster pumping cost is determined by zone. However, when available the actual cost of the plant is used below in lieu of the unit costs.

BASE-ZONE PUMPING COSTS

<u>WELL/BOOSTER BASE ZONES</u>	<u>DESCRIPTION</u>	<u>PLANT HORSE POWER</u>	<u>ZONE PUMPING COST (\$3,584/HP)</u>
Palm Springs	Well Pumping Plants	7,670	\$27,489,280
Chino	Well Pumping Plants	1,100	\$3,942,400
Chino	Booster Pumping Plants	475	\$1,837,775*
East	Well Pumping Plants	2,750	\$9,856,000
TOTAL			\$43,125,455

*\$3,869/HP Unit Cost of Booster Pumping Per Horsepower.

A-ZONE PUMPING COSTS

<u>WELL/BOOSTER A-ZONE</u>	<u>DESCRIPTION</u>	<u>PLANT HORSEPOWER</u>	<u>ZONE PUMPING COST (\$3,869/HP)</u>
Andreas Hills	Acanto Booster	300	\$1,160,700
Janis Tuscany	Janis Tuscany Booster	150	\$580,350
Terrace	Terrace Booster	45	\$174,105
Palm Oasis	Well 17 Pumping Plant	150	\$537,600*
Palm Oasis	Well 17 Booster	80	\$309,520
TOTAL			\$2,762,275

*\$3,584/HP Unit Cost of Well Pumping Per Horsepower.

B-ZONE PUMPING COSTS

WELL/BOOSTER B-ZONE	<u>DESCRIPTION</u>	<u>PLANT HORSEPOWER</u>	<u>ZONE PUMPING COST (\$3,869/HP)</u>
Lower Southridge	Araby Booster	50	\$193,450
Foothill	Foothill Booster	60	\$232,140
Chino West	Zone 1240 Booster	50	\$193,450
Additional	Capacity Needs	20	\$77,380
TOTAL			\$696,420

C-ZONE PUMPING COSTS

WELL/BOOSTER C-ZONE	<u>DESCRIPTION</u>	<u>PLANT HORSEPOWER</u>	<u>ZONE PUMPING COST (ACTUAL)</u>
Upper Southridge	Southridge-2 Booster	90	*\$260,477
TOTAL			\$260,477

*Actual cost of contract (\$2,894/HP Unit Cost)

PUMPING COST PER ZONE SUMMARY

<u>ZONE</u>	<u>PUMPING COSTS WITHIN ZONE</u>	<u>CAPACITY UNITS SERVED BY ZONE</u>	<u>CAPACITY UNIT COSTS WITHIN ZONE</u>	<u>CUMULATIVE CAPACITY UNIT PUMPING COST PER ZONE</u>
BASE	\$43,125,455	38,031	\$1,133	\$1,133
A	\$2,762,275	4,294	\$643	\$1,776
B	\$696,420	684	\$1,018	\$2,794
C	\$260,477	216	\$1,205	\$3,999

The cumulative capacity unit pumping cost in the Base-Zone is the cost of pumping in the base zone divided by the total system capacity unit because the entire system including the upper zones benefit from the pumping done in the Base-Zone. This unit cost is passed onto all zones. The cumulative cost pumping in the elevated Zones is the accumulated cost from each zone the water was pumped through.

WATER TREATMENT COSTS

In order to calculate the cost of water treatment per capacity unit we first determine the cost of those facilities from actual project costs. Only water in the Base-Zone is treated. However, this water is used in the Base-Zone and all elevated zones.

FOREBAY TREATMENT

<u>DESCRIPTION</u>	<u>YEAR CONSTR</u> <u>UCTED</u>	<u>*FOREBAY COST</u>
Well 14 Forebay	1993	\$376,750
Well 16 Forebay	1993	\$376,750
TOTAL		\$753,500

*Based on \$2.75/gallon input value.

The cost of forebay treatment per capacity unit is therefore, $\$753,500/38,031 \text{ C.U.} = \$20/\text{C.U.}$

UV TREATMENT

<u>DESCRIPTION</u>	<u>YEAR CONSTR</u> <u>UCTED</u>	<u>*FOREBAY COST</u>
UV Treatment (Snow Creek/Falls Creek)	2014	\$317,142
TOTAL		\$317,142

*Actual project costs.

The cost of UV treatment per capacity unit is therefore, $\$317,142/38,031 \text{ C.U.} = \$8/\text{C.U.}$

CHLORINE INJECTION TREATMENT

<u>DESCRIPTION</u>	<u>NUMBER OF</u> <u>ACTIVE SITES</u>	<u>AVG. COST</u> <u>PER SITE</u>	<u>ZONE PUMPING</u> <u>COST (ACTUAL)</u>
Chlorine storage building and pad, injection vault	9	\$30,440	\$273,960
TOTAL			\$273,960

*Based on average construction cost per site to install chlorine injection facilities.

The cost of chlorine injection treatment per capacity unit is therefore, $\$273,960/38,031 \text{ C.U.} = \$7/\text{C.U.}$

TREATMENT COST PER ZONE SUMMARY

<u>ZONE</u>	<u>FOREBAY TREATMENT COST PER ZONE</u>	<u>UV TREATMENT COST PER ZONE</u>	<u>CHLORINE INJECTION TREATMENT COST PER ZONE</u>	<u>TOTAL TREATMENT COST PER ZONE</u>
BASE	\$20	\$8	\$7	\$35
A	\$20	\$8	\$7	\$35
B	\$20	\$8	\$7	\$35
C	\$20	\$8	\$7	\$35

SURFACE WATER (STREAM) COSTS

In order to calculate the cost of surface water per capacity unit we first determine the cost of those facilities from actual project costs. Surface water is transmitted from the diversions into the Base-Zones where it is transmitted to all elevated zones.

<u>DESCRIPTION</u>	<u>YEAR CONSTRUCTED</u>	<u>*SURFACE WATER FACILITY COST</u>
Snow Creek Diversion	1990	\$2,000,000
Falls Creek Diversion	1990	\$1,300,000
Chino North Diversion	1991	\$458,000
TOTAL		\$3,758,000

* Actual project costs, unadjusted for present value.

The cost of treatment per capacity unit is therefore, \$3,758,000/38,031 C.U.=\$98/C.U.

The surface water capacity unit cost per zone is as follows:

<u>ZONE</u>	<u>COST OF TREATMENT PER CAPACITY UNIT</u>
BASE ZONE	\$98
A-ZONE	\$98
B-ZONE	\$98
C-ZONE	\$98

WATER STORAGE COSTS

In order to calculate the cost of water storage per capacity unit we first determine the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of storage cost to volume is determined.

<u>DESCRIPTION</u>	<u>YEAR CONSTRUCTED</u>	<u>RESERVOIR STORAGE CAPACITY</u>	<u>RESERVOIR COST*</u>
Tahquitz Reservoir II Zone 1060	2004	5,000,000 gallons	\$2,299,785**
	2016	500,000 gallons	\$1,544,800*
TOTAL		5,500,000 gallons	\$3,844,585

*Revised Budget Amount for project.

** Actual project costs, unadjusted for present value.

The most current water storage estimated costs are used to determine the ratio of water storage cost to unit of storage volume from the table above. The unit cost of water storage per gallon is $\$3,844,585 / 5,500,000 \text{ GAL} = \text{\$0.70/GAL}$. By applying this ratio to each water storage reservoir, the cost of each reservoir and the entire system water storage costs are determined by zone.

FUTURE STORAGE CAPACITY REQUIREMENTS

The General Plan requires that the Agency have 18 hours ADD emergency storage, along with fire flow and equalization storage during energy Time of Use (T.O.U.) periods. The 18 hour ADD during T.O.U periods is 28 MG. The fire flow requirement for the system is 6.48 MG and the equalization, or operational storage is 40% of the MDD and is therefore equal to 24.1 MG. Adding all of these components equates to 58.58 MG of storage. The current storage capacity for the system is 58.85 MG, therefore, additional storage must be constructed.

The existing pumping capacity of the system will accommodate an additional 8,138 capacity units (38,031 – 29,893). These additional units will add 16.4 MGD to the MDD. This additional demand will increase the storage requirement to 73 MG, requiring 14 MG of additional storage (73-58.85). The cost for the additional storage will be \$9,800,000 ($\$0.70/\text{gal} \times 14 \text{ MG}$). This additional storage cost will be added to the Base Zone.

BASE-ZONE WATER STORAGE COSTS

<u>DESCRIPTION</u>	<u>WATER STORAGE CAPACI TY (GAL.)</u>	<u>UNIT COST PER UNIT STORAGE (\$/GAL.)</u>	<u>ZONE STORAGE COST</u>
Palm Springs Main	34,650,000	0.70	\$24,255,000
Palm Springs Chino	7,300,000	0.70	\$5,110,000
Palm Springs East	10,000,000	0.70	\$7,000,000
Additional Storage	14,000,000	0.70	\$9,800,000
TOTAL			\$46,165,000

A-ZONE WATER STORAGE COSTS

<u>DESCRIPTION</u>	<u>WATER STORAGE CAPACITY (GAL.)</u>	<u>UNIT COST PER UNIT STORAGE (\$/GAL.)</u>	<u>ZONE STORAGE COST</u>
Andreas Hills	3,000,000	0.70	\$2,100,000
Janis Tuscany	0.00	0.70	\$0.00
Terrace	725,000	0.70	\$507,500
Palm Oasis	2,050,000	0.70	\$1,435,000
Chino West	500,000	3.00*	\$1,500,000*
TOTAL			\$5,542,500

*Actual project costs.

B-ZONE WATER STORAGE COSTS

<u>DESCRIPTION</u>	<u>WATER STORAGE CAPACI TY (GAL.)</u>	<u>UNIT COST PER UNIT STORAGE (\$/GAL.)</u>	<u>ZONE STORAGE COST</u>
Lower Southridge	400,000	0.70	\$280,000
Foothill	600,000	0.70	\$420,000
TOTAL			\$700,000

C-ZONE WATER STORAGE COSTS

<u>DESCRIPTION</u>	<u>WATER STORAGE CAPACITY (GAL.)</u>	<u>UNIT COST PER UNIT STORAGE (\$/GAL.)</u>	<u>ZONE STORAGE COST</u>
Upper Southridge	0.00	0.70	\$0.00
TOTAL			\$0.00

STORAGE COST

PER ZONE SUMMARY

<u>ZONE</u>	<u>STORAGE COSTS WITHIN ZONE E</u>	<u>CAPACITY UNITS SERVED BY ZONE</u>	<u>CAPACITY UNIT COSTS WITHIN ZONE</u>	<u>CUMULATIVE CAPACITY UNIT STORAGE COST PER ZONE</u>
BASE	\$46,165,000	38,031	\$1,213	\$1,213
A-ZONE	\$5,542,500	4,294	\$1,290	\$2,503
B-ZONE	\$700,000	684	\$1,023	\$3,526
C-ZONE	\$0.00	216	\$0.00	\$3,526

The cumulative capacity unit storage cost in the Base-Zone is the cost of storage in the Base-Zone divided by the total system capacity unit because the entire system including the upper zones benefit from the storage in the Base-Zone. This unit cost is passed onto all zones. The cumulative cost storage in the elevated zones is the accumulated cost from each zone the water was stored in, and then pumped out from.

WATER TRANSMISSION MAIN COSTS

Historically, the Agency has calculated the cost of water transmission mains per capacity unit by determining the cost of those facilities from actual project costs and approved capital improvement budgets. The ratio of cost per lineal foot to diameter is determined.

<u>DESCRIPTION</u>	<u>YEAR CONSTR UCTED</u>	<u>PIPELINE LENGTH (L.F.)</u>	<u>*PIPELINE COST</u>	<u>PIPELINE UNIT COST (\$/L.F.)</u>
12" Alejo/Tamarisk/ Indian Canyon	2012/2014/2015	4,958	\$1,290,176	\$260/L.F.
14"	-	-	-	-
15"	-	-	-	-
16" Sunny Dunes	2013	1,100	\$301,462	\$274/L.F.
18"	-	-	-	-
20" E. Well Field	-	-	-	-
24" E. Well Field	-	-	-	-
26"	-	-	-	-
30" N. Well Field	-	-	-	-
36" Avenida Caballeros	2014/2015	2,659	\$2,509,219	\$944/L.F.
42"	-	-	-	-

* Actual project cost, unadjusted for present value.

Due to the lack of current data available for the varying sizes of transmission mains in our system, the Agency has opted to utilize a "unit construction cost for pipelines" equation used by Eastern Municipal Water District (EMWD) in their 2015 rate study (study conducted by Kennedy/Jenks Consultants). Said equation assumes that unit cost (\$/linear foot) = Diameter (inch) x 40.47 x [Diameter (inch) ^{-0.309}]. Utilization of said equation allows the Agency to determine uniform unit construction estimates for all sizes of transmission mains in our system.

*ESTIMATED WATER TRANSMISSION MAIN UNIT CONSTRUCTION COSTS	
TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (\$/L.F.)
12"	225
14"	250
15"	265
16"	275
18"	300
20"	320
24"	365
26"	385
30"	425
36"	480
42"	535

*Based on the following EMWD assumption: cost \$/L.F. = Diameter (inch) x 40.47 x [Diameter (inch)^{-0.309}].

The most current water transmission main estimated costs are used to determine the ratio of water main cost to diameter as shown in the table on the previous page. By applying these ratios to system transmission mains, the cost of all size mains for the entire system is determined by zone.

FUTURE TRANSMISSION MAIN COSTS

It is anticipated that the additional storage facilities will require approximately 1 mile of new 24" diameter transmission main. The cost of future transmission main is equal to \$365/L.F. x 5,280 L.F. = \$1,927,000, to be added to the Base Zone total.

BASE-ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH (\$/L.F.)	ZONE TRANSMISSION MAIN COST
12"	*222,839	225	\$50,138,775
14"	2,430	250	\$607,500
15"	940	265	\$249,100
16"	34,359	275	\$9,448,725
18"	5,252	300	\$1,575,600
20"	24,228	320	\$7,752,960
24"	99,712	365	\$36,394,880
24" future	5,280	365	\$1,927,000
26"	2,620	385	\$1,008,700
30"	57,433	425	\$24,409,025
36"	30,618	480	\$14,696,640
42"	70	535	\$37,450
TOTAL			\$148,246,355

*Approximately 60% of all 12" mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total 12" mains are included in the above table.

A-ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN IN	TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH (\$/L.F.)	ZONE TRANSMISSION MAIN COST
Andreas Hills	12"	*5,323	225	\$1,197,675
Andreas Hills	16"	6,832	275	\$1,878,800
Janis Tuscany	12"	4,626	225	\$1,040,850
Janis Tuscany	16"	3,782	275	\$1,040,050
Janis Tuscany	24"	1,450	365	\$529,250
Terrace	12"	*2,526	225	\$568,350
Palm Oasis	12"	*10,280	225	\$2,313,000
Palm Oasis	16"	4,200	275	\$1,155,000
TOTAL				\$9,722,975

*Approximately 60% of all 12" mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total 12" mains are included in the above table.

B-ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN	TRANSMISSION MAIN DIAMETER (INCHES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH (\$/L.F.)	ZONE TRANSMISSION MAIN COST
Foothill	*12"	2,690	225	\$605,250
Chino West	*12"	2,762	225	\$621,450
TOTAL				\$1,226,700

*Approximately 60% of all 12" mains in the system are transmission mains with the remaining 40% being distribution mains. Therefore, only 60% of the total 12" mains are included in the above table.

C-ZONE WATER TRANSMISSION MAIN COSTS

TRANSMISSION MAIN	TRANSMISSION MAIN DIAMETER (INC HES)	TRANSMISSION MAIN LENGTH (L.F.)	UNIT COST PER UNIT LENGTH (\$/L.F.)	ZONE TRANSMISSION MAIN COST
None	0	0	\$0	\$0
TOTAL				\$0

TRANSMISSION MAIN COST PER ZONE SUMMARY

<u>ZONE</u>	TRANSMISSION MAIN COSTS <u>WITHIN</u> <u>ZONE</u>	CAPACITY UNITS SERVED BY <u>ZONE</u>	CAPACITY UNIT COSTS WITHIN <u>ZONE</u>	CUMULATIVE CAPACITY UNIT STORAGE COST <u>PER ZONE</u>
Base	\$148,246,355	38,031	\$3,898	\$3,898
A-Zone	\$9,722,975	4,294	\$2,264	\$6,162
B-Zone	\$1,226,700	684	\$1,793	\$7,955
C-Zone	\$0	216	\$0	\$7,955

The cumulative capacity unit water transmission main cost in the Base-Zone is the cost of water transmission in the Base-Zone divided by the total system capacity unit because the entire system including the upper zones benefit from water transmission in the Base-Zone. This unit cost is passed onto all zones. The cumulative cost water transmission in the elevated zones is the

accumulated cost from each zone the water was transmitted to and then pumped out from that zone.

The cost of a 1-inch service in each of the Agency zones are comprised of the cumulative capacity unit costs for water production (wells), pressure boosting (boosters), treatment, storage and transmission facilities.

COST PER ZONE SUMMARY

<u>ZONES</u>	<u>PUMPING COST</u>	<u>TREATMENT COST</u>	<u>STORAGE COST</u>	<u>TRANSMISSION COST</u>	<u>SURFACE WATER COST</u>	<u>TOTAL CAPACITY UNIT COST</u>
BASE	\$1,133	\$35	\$1,213	\$3,898	\$98	\$6,377
A	\$1,776	\$35	\$2,503	\$6,162	\$98	\$10,574
B	\$2,794	\$35	\$3,526	\$7,955	\$98	\$14,408
C	\$3,999	\$35	\$3,526	\$7,955	\$98	\$15,613

In order to determine the capacity unit cost for each meter size the AWWA meter factors are used. The table below shows the capacity unit charge (Backup Facility Charge) per meter size.

<u>METER SIZE</u>	<u>AWWA METER FACTOR</u>	<u>BASE-ZONE</u>	<u>A-ZONE</u>	<u>B-ZONE</u>	<u>C-ZONE</u>
3/4 X 5/8	0.4	\$2,550	\$4,229	\$5,763	\$6,245
1	1.0	\$6,377	\$10,574	\$14,408	\$15,613
1.5	2.0	\$12,754	\$21,148	\$28,816	\$31,226
2	3.2	\$20,406	\$33,836	\$46,105	\$49,961

FINAL BACKUP FACILITY CHARGE COST SUMMARY

<u>METER SIZE</u>	<u>AWWA METER FACTOR</u>	<u>BASE-ZONE</u>	<u>A-ZONE</u>	<u>B-ZONE</u>	<u>C-ZONE</u>
3/4 X 5/8	0.4	\$2,550	\$4,225	\$5,760	\$6,245
1	1.0	\$6,375	\$10,570	\$14,405	\$15,610
1.5	2.0	\$12,750	\$21,145	\$28,815	\$31,225
2	3.2	\$20,405	\$33,835	\$46,105	\$49,960

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

RE: REQUEST FOR AUTHORIZATION TO CALL FOR BIDS FOR CONSTRUCTION OF 2016/2017 REPLACEMENT PIPELINES (W PASEO EL MIRADOR, E PASEO EL MIRADOR, PASATIEMPO RD, LINDA VISTA RD, BROADMOOR DR, STEVENS RD, W CAMINO NORTE, VIA MONTE VISTA, E CAMINO NORTE, N VINE AVE, AND SUNNY DUNES RD)

The 2016/2017 Capital Improvement Budget includes Work Order No. 16-160 for replacement pipelines (approximately 12,400 linear feet of 8" ductile iron pipe). The budget amount for the work order is \$3,372,600.00 to include engineering, construction, inspection and overhead costs. The Engineer's construction cost estimate for the project is \$2,727,500, with an estimated inspection cost of \$410,000 and estimated Agency labor cost of \$190,000.

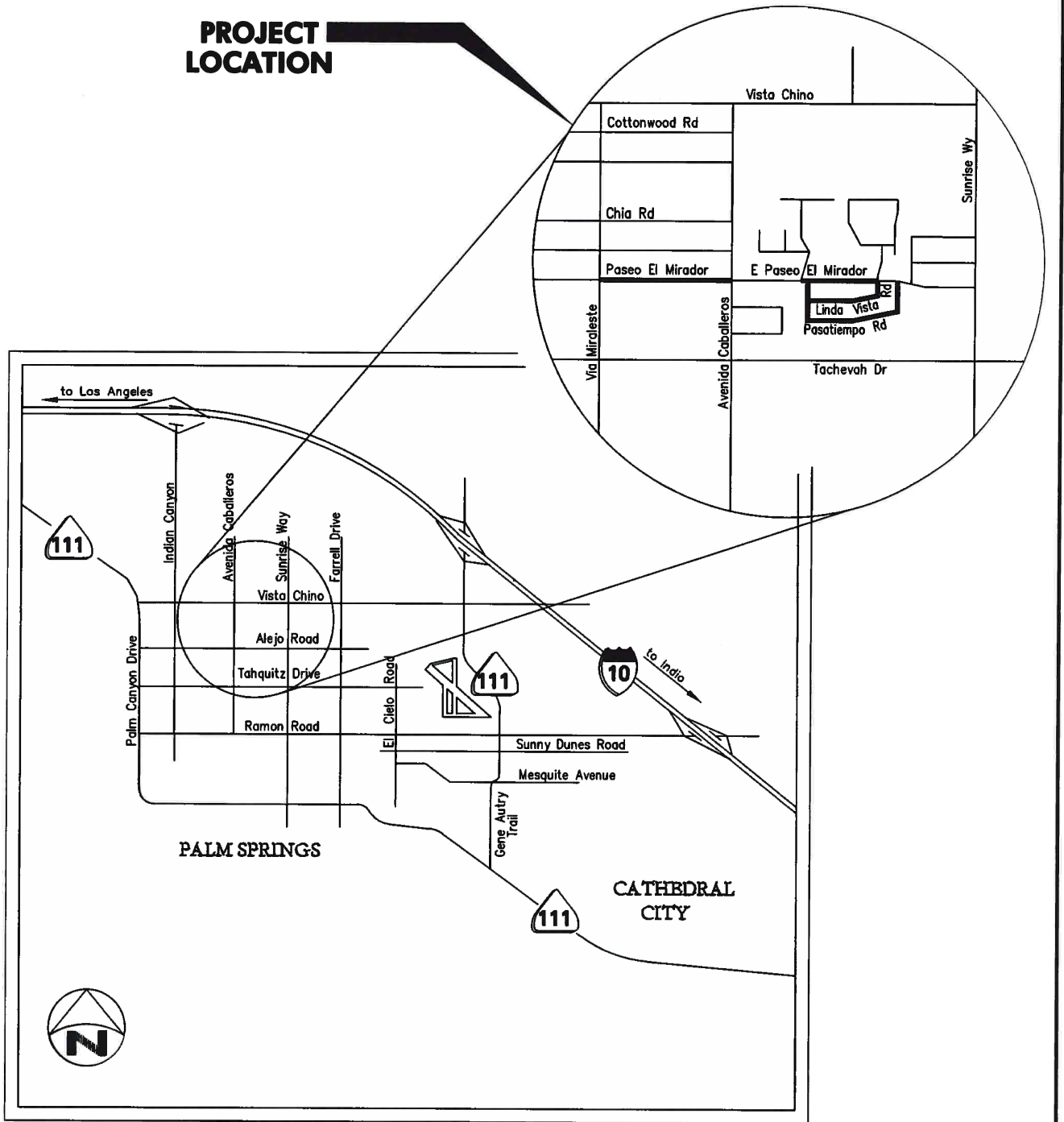
The attached map shows the location(s) for the replacement pipelines within several streets throughout the Palm Springs area. All of the pipelines have exhibited several leak occurrences over the past couple of years, are unlined steel mains, and have an average age of 67 years.

Staff has also determined that the age (78 years) and frequent leaks on Sunny Dunes Road, which have drastically increased as a result of recent City of Palm Springs paving rehabilitation work within the area, necessitates adding said main to the replacement project (approximately 1,000 linear feet of 16" ductile iron pipe and 100 linear feet of 8" ductile iron pipe). The Engineer's construction cost estimate for Sunny Dunes Road is \$385,600, with an estimated inspection cost of \$57,500 and estimated Agency labor cost of \$27,000. Staff will evaluate the bids to determine a budget augmentation amount that will cover the costs to facilitate this work. The Sunny Dunes Road mainline replacement has been included in the abovementioned map as well.

With authorization being granted today, the bid opening for the project will tentatively be held on April 11, 2017 with the Contract award scheduled for the meeting of the Board of Directors on April 18, 2017. Work is expected to commence in June 2017, with completion expected in early November 2017.

Staff requests authorization to advertise for bids for construction of the 2016/2017 replacement pipelines.

PROJECT LOCATION

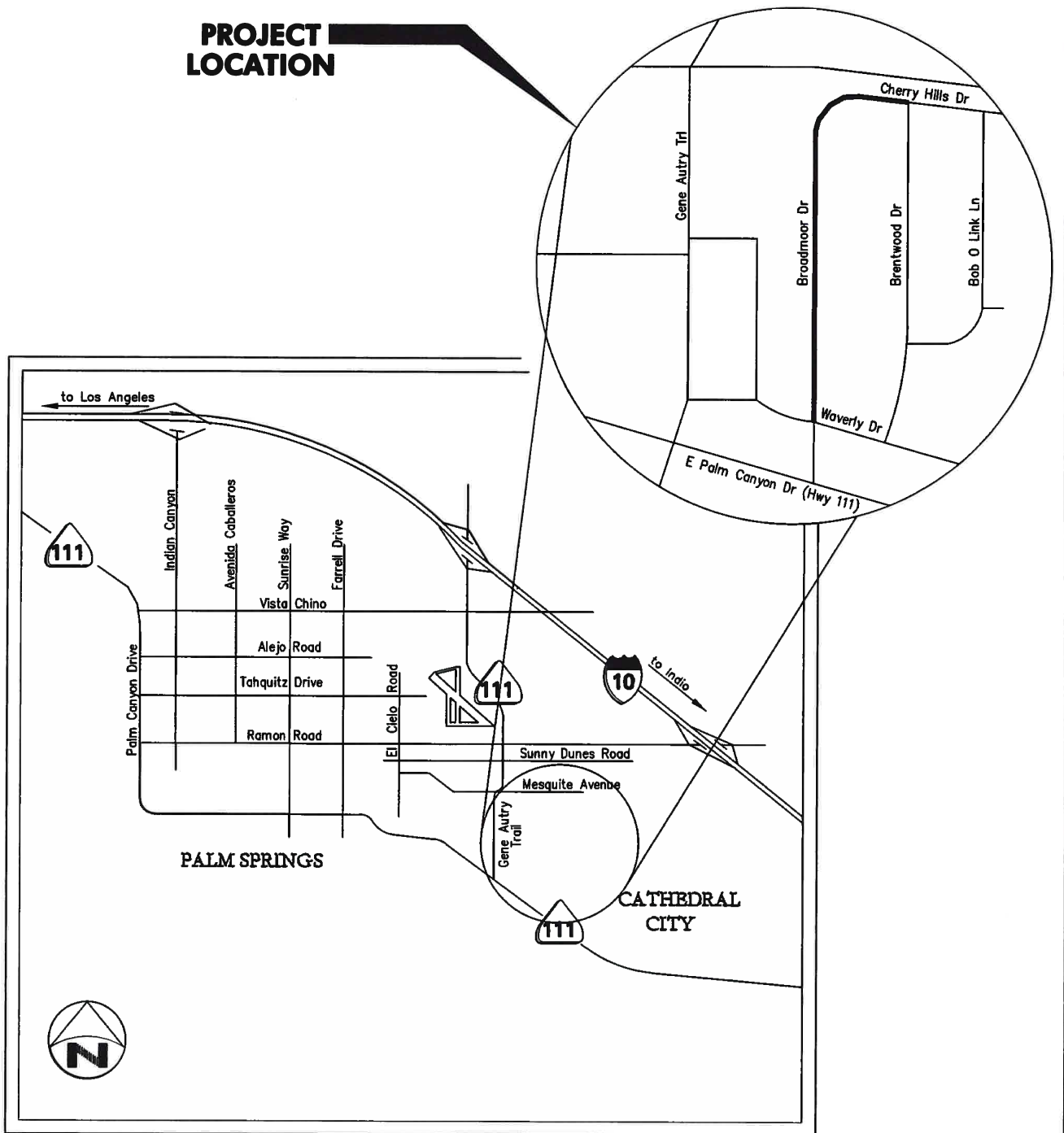


LOCATION MAP

NOT TO SCALE

FY 2016/2017	DWG. BY SER	DATE 2/17	SCALE N.T.S.	W.O.NO. 16-160
REPLACEMENT PIPELINES	APP'D BY MK	REVISED	PERMIT	FILE NO.
AREA 1	CHK'D BY DT			SHEET 1 OF 4
DESERT WATER AGENCY PALM SPRINGS, CALIFORNIA				

PROJECT LOCATION

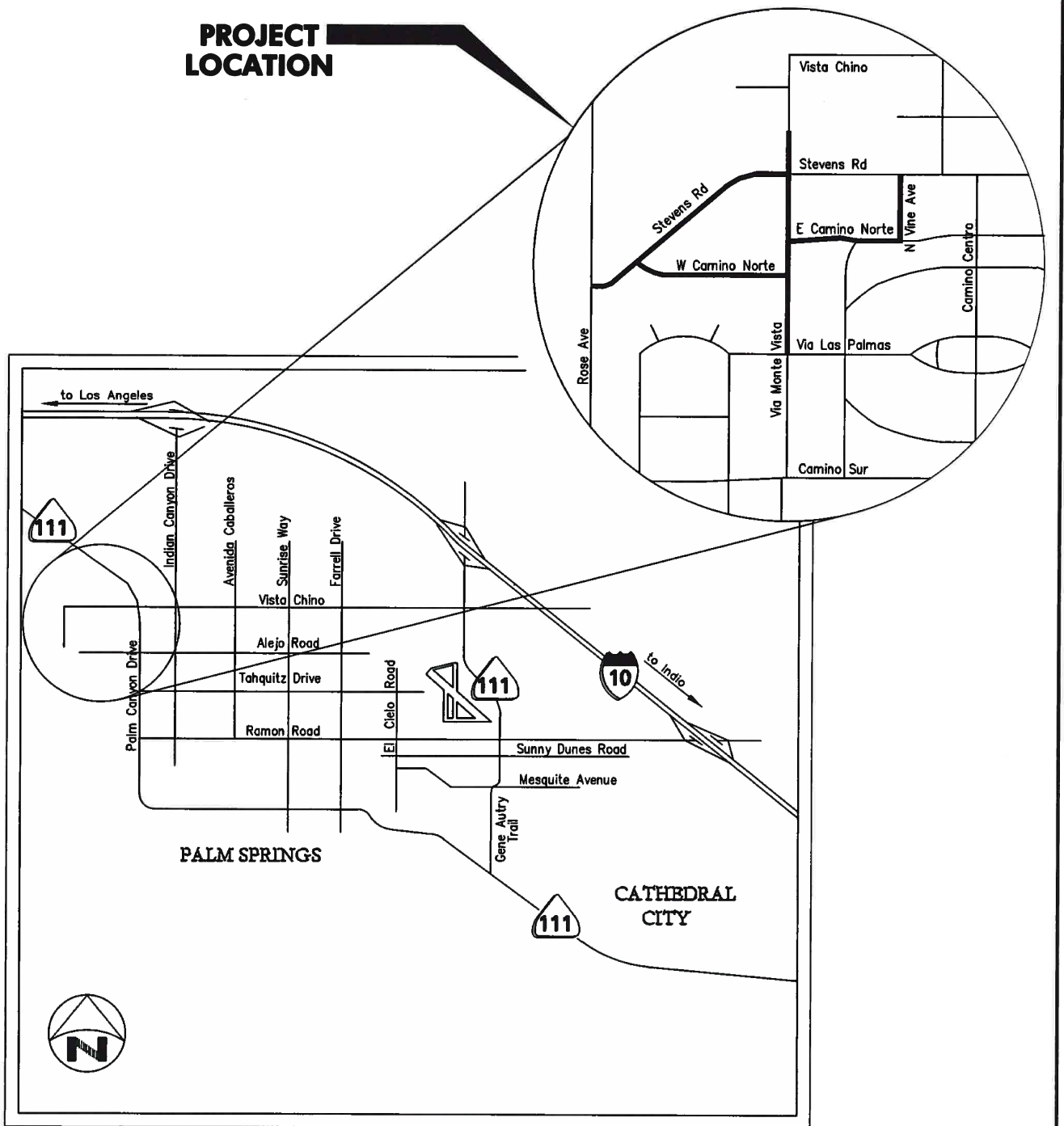


LOCATION MAP

NOT TO SCALE

FY 2016/2017	DWG. BY SER	DATE 2/17	SCALE N.T.S.	W.O.NO. 16-160
REPLACEMENT PIPELINES	APP'D BY MK	REVISED	PERMIT	FILE NO.
AREA 2	CHK'D BY DT			SHEET 2 OF 4
DESERT WATER AGENCY PALM SPRINGS, CALIFORNIA				

PROJECT LOCATION

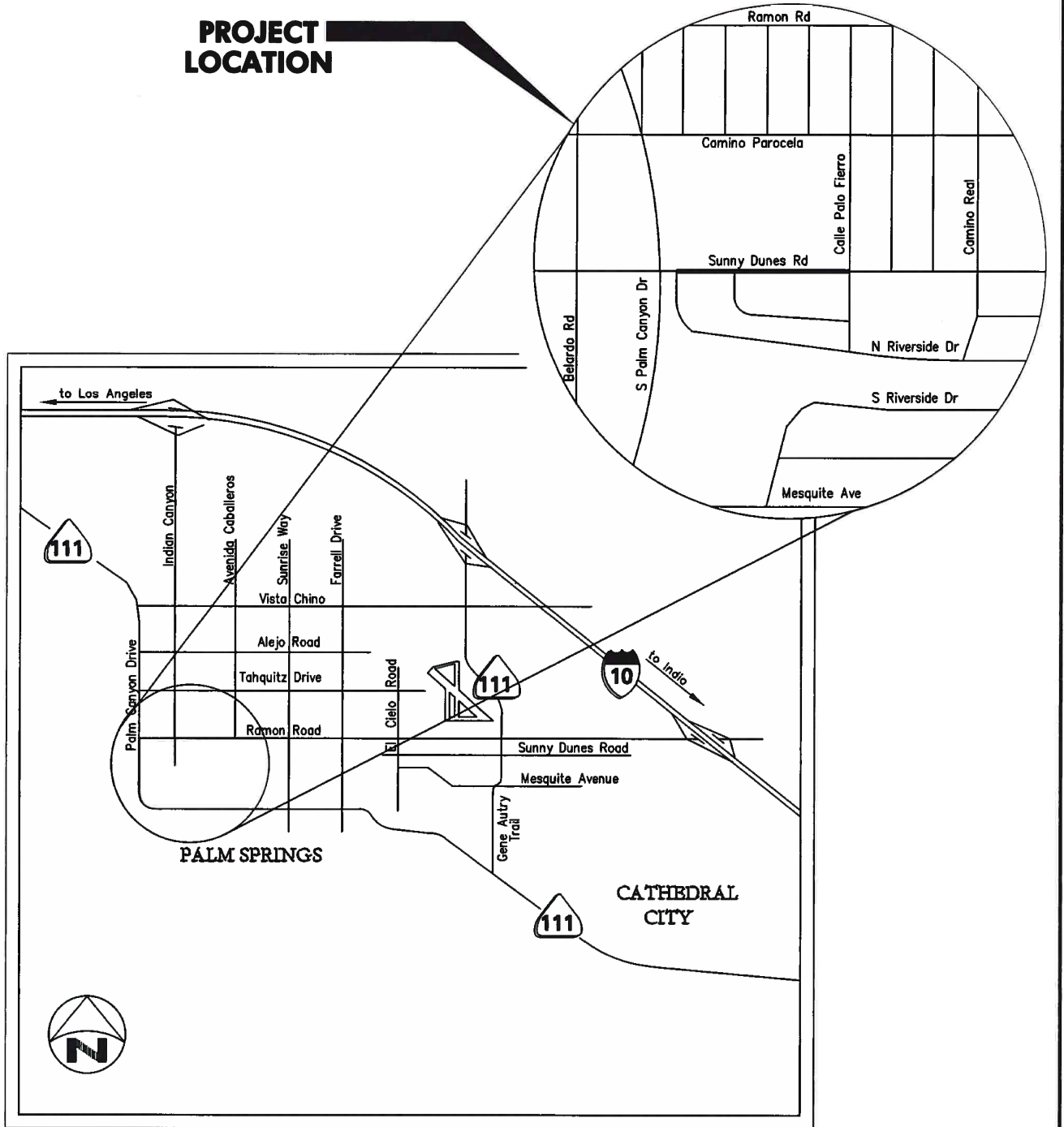


LOCATION MAP

NOT TO SCALE

FY 2016/2017 REPLACEMENT PIPELINES AREA 3 DESERT WATER AGENCY PALM SPRINGS, CALIFORNIA	DWG. BY SER	DATE 2/17	SCALE N.T.S.	W.O.NO. 16-160
	APP'D BY MK	REVISED	PERMIT	FILE NO.
	CHK'D BY DT			SHEET 3 OF 4

PROJECT LOCATION



LOCATION MAP

NOT TO SCALE

FY 2016/2017 REPLACEMENT PIPELINES AREA 4 DESERT WATER AGENCY PALM SPRINGS, CALIFORNIA	DWG. BY	DATE	SCALE	W.O.NO.
	SER	2/17	N.T.S.	16-160
	APP'D BY	REVISED	PERMIT	FILE NO.
	MK			
	CHK'D BY			SHEET
	DT			4 OF 4

**STAFF REPORT
TO
DESERT WATER AGENCY
BOARD OF DIRECTORS**

MARCH 7, 2017

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1155 STATUTORY
PASS-THROUGH PAYMENTS**

Staff received correspondence from the County of Riverside in regards to a proposed refunding bond issue of the Successor Agency to the Redevelopment Agency for the County.

Assembly Bill No. 1484 allows successor agencies to refund the bonds of their former redevelopment agencies to provide debt service savings. The County is planning to issue bonds in Fiscal 2016-17 in order to take advantage of lower bond costs to reduce their annual debt service payments.

By refunding the bonds and reissuing them at a lower cost, the County would have more money available to satisfy the statutory pass-through obligations. The refunding bond issue strengthens the Agency's ability to receive pass-through payments.

In order for the County to proceed with the refunding bond issue, the County needs a subordination acknowledgement from DWA. Additionally, the refunding bonds will not be issued unless the new debt service is lower than the debt service on the existing bonds. Furthermore, if the Agency does not respond (with a resolution), the subordination will be automatically deemed approved by the Agency.

Legal Counsel has prepared Resolution No. 1155 for the Board's consideration. Staff recommends adoption of Resolution No. 1155.

RESOLUTION NO. 1155

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY APPROVING THE SUBORDINATION OF STATUTORY PASS-THROUGH PAYMENTS TO DEBT SERVICE PAYMENTS ON REFUNDING BONDS TO BE ISSUED BY THE SUCCESSOR AGENCY TO THE REDEVELOPMENT AGENCY FOR THE COUNTY OF RIVERSIDE FOR THE MID-COUNTY REDEVELOPMENT PROJECT AREA

WHEREAS, the Redevelopment Agency for the County of Riverside has issued tax increment bonds that are currently outstanding to finance projects for the Mid-County Redevelopment Project Area, which is located within the boundaries of Desert Water Agency; and

WHEREAS, the Successor Agency to the Redevelopment Agency for the County of Riverside (“Successor Agency”) expects to issue refunding bonds to replace the currently outstanding bonds, to take advantage of lower interest rates available in the current bond market, the effect of which will be to lower the total debt service payments required to be collected from the real property located within this redevelopment project area; and

WHEREAS, Desert Water Agency receives statutory pass-through payments of a portion of the tax increment revenue generated within this redevelopment project area, as provided by law, affecting portions of Desert Water Agency identified by the Successor Agency as the First Fringe Area and the Sixth Fringe Pseudo Area; and

WHEREAS, the Successor Agency has requested that Desert Water Agency acknowledge in writing that its statutory pass-through payments for the First Fringe Area and in the Sixth Fringe Pseudo Area shall be subordinated to the debt service obligations for the refunding bonds to be paid from tax increment revenue collected from the properties within those areas; and

WHEREAS, as provided by law, in order for Desert Water Agency to disapprove the requested subordination, Desert Water Agency would be required to make a finding, based on substantial evidence, that the Successor Agency will not be able to pay the debt service on the

refunding bonds and the statutory pass-through payments that the Successor Agency is required to pay to Desert Water Agency; and

WHEREAS, based on the information provided by the Successor Agency, Desert Water Agency believes that issuance of the refunding bonds will lower the annual debt service burden on the properties within the redevelopment project area, thereby enhancing the likelihood that the Successor Agency will be able to pay debt service on the refunding bonds and also pay the statutory pass-through payments required to be paid to Desert Water Agency; and

WHEREAS, the Successor Agency has further indicated that it will not issue refunding bonds unless the debt service on the refunding bonds will be lower than the debt service on the existing bonds to be refunded;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Desert Water Agency hereby approves the subordination of its statutory pass-through payments to the debt service payments on refunding bonds to be issued by the Successor Agency for the Mid-County Redevelopment Project Area, affecting Desert Water Agency's First Fringe Area and Sixth Fringe Area Pseudo Area, and does hereby authorize execution of written acknowledgments of same as requested by the Successor Agency and as provided by law.

ADOPTED this 7th day of March, 2017.

James Cioffi, President
Board of Directors

ATTEST:

Kristin Bloomer, Secretary-Treasurer
Board of Directors

February 23, 2017

MEMORANDUM

TO: GENERAL MANAGER AND BOARD OF DIRECTORS
OF DESERT WATER AGENCY

FROM: BEST BEST & KRIEGER LLP

RE: FEBRUARY 16, 2017 MEETING OF THE BOARD OF DIRECTORS OF THE
STATE WATER CONTRACTORS, INC.

The February 16, 2017 meeting of the Board of Directors of the State Water Contractors, Inc., was conducted at the Tsakopoulos Library Galleria in downtown Sacramento.

1. Life Cycle Model for Winter Run Salmon.

As its first item of business, the SWC Board authorized splitting a total cost of up to \$80,000 with the San Luis & Delta Mendota Water Authority to review a life cycle model that the National Marine Fisheries Service developed for the winter run salmon. The life cycle model prepared by NMFS appears to have impacts for Cal WaterFix, and yet has not been adequately vetted by peer review. The SWC's salmon biologists have questions regarding the parameters used to develop the model. SWC biologist Chuck Hanson has already been authorized to review the model, but the Board wanted to also engage the services of a statistician and a fisheries modeler to review the model. The SWC Board authored splitting cost with the SL&DMWA for that additional work.

2. Study of Out Migrating Salmon Smolts.

The biological opinions issued in 2008 and 2009 restricted flows in the Delta in a way that draws out migrating salmon smolts to the pumps in the South Delta. The Contractors would like to compare the effects of predation on salmon smolt mortality with the operation of the pumps for the SWP. Salmon smolts are tagged and released at Vernalis, at a location near where the San Joaquin River enters the Delta. The Contractors believe that most of the smolts are eaten by larger fish before they ever get to the vicinity of the pumps. Therefore, the Contractors would like to release tagged salmon smolts closer to the pumps and monitor how

many of those are lost to predation, rather than at the pumps. These smolts can be tagged with sensors that reveal when the smolt has been eaten, by detecting stomach enzymes within the belly of a larger fish. Therefore, the proposal is to release tagged salmon smolts just east of the Clifton Court Forebay, and track them to determine how many are eaten by predators. The total cost of this project exceeds \$500,000, but will be shared with a number of agencies such that the share of the costs to the Contractors will be approximately \$155,000. The SWC's Board authorized that expenditure as well.

3. San Joaquin River Flow Augmentation.

The SWC Board also authorized splitting a total expenditure with the San Luis & Delta Mendota Water Authority to purchase up 100,000 acre feet of water from Oakdale Irrigation District and San Joaquin River Irrigation District to augment flows in the San Joaquin River in the April-May pulse flow period. Although this expenditure was approved, it may turn out to be unnecessary because the larger than average snow pack in the San Joaquin River watershed will likely produce sufficient flows in the April-May period, such that it is unnecessary to purchase additional water in order to satisfy the pulse flow requirements.

4. Water Operations Update.

On the date of the meeting, DWR personnel were all preoccupied in dealing with the spillway erosion problems at Lake Oroville. Therefore, John Leahigh of DWR was not present to provide his usual report on water supply conditions. Instead, Alyson Febbo of the State Water Contractors provided a report. As of the date of the meeting, the Feather River watershed had received 13.5 inches of rainfall over the previous ten days, and was anticipating another 7.5 inches in the next subsequent ten days. The snow pack was quite heavy, and snow levels were low in the mountains. Water was being released at Lake Oroville and at Shasta in order to free flood control space. Exports from the Delta were at full throttle for both the SWP and the CVP. In the San Luis Reservoir, the SWP share of storage had encroached into the CVP share of storage space by 12,000 acre feet. However, that encroachment would need to be eliminated, because the CVP was quickly filling its share of storage as well. Precipitation to date was at 219% of average in the Northern Sierra, 223% of average in the San Joaquin watershed, and 220% of average in the Tulare Basin region. Snow pack was not quite at that level but was

still at 179% of average statewide. Alyson could not indicate whether the allocation was likely to be increased, especially given the spillway problems at Oroville, which required the release of water from storage in order to reduce the potential for a catastrophic problem if a spillway structure were to fail.

5. Legislative Report.

Tim Haines of the SWC provided a written report of legislative matters, a copy of which is enclosed with this memo. The written report was prepared by Cathy Cole, lobbyist for Metropolitan Water District. Tim Haines called particular attention to AB 313, a bill that would transfer SGMA enforcement from the State Water Resources Control Board to the Department of Water Resources, and would transition operation of the State Water Project away from DWR and to a new commission to be governed by nine political appointees of the Governor. Tim Haines and the SWC Board expressed concern about the prospect of transferring operation of the State Water Project to a political body governed by political appointees. Tim did state that the legislation was unlikely to survive the process and be enacted.

6. SWC Bylaw Revisions.

SWC General Manager Terry Erlewine provided an update regarding proposed revisions to the SWC Bylaws. A number of the proposed revisions were inconsequential, including changing the name “entitlement” to “Table A Amount” consistent with a requirement set forth in the Monterey settlement; a change to provide that the SWC “may” engage an assistant general manager, instead of being required to do so; the addition of a provision allowing the SWC to hire a general counsel, as it already has; and a change in the way that dues are accessed to SWC members. The proposed change in the way that dues are assessed was more substantive, and generated some discussion.

In 2005, when the SWC engaged in the process of relicensing the power plant at Oroville, the Board and the members agreed that the relicensing expenses should be split evenly between the Energy Fund, which is allocated among members in accordance with the energy costs that each experiences, and the Dues Fund, which is allocated among members in proportion to their Table A Amounts. Now that those cost have been incurred and relicensing expenses are no longer significant, the proposal is to move all of the dues back to the Energy Fund so that they

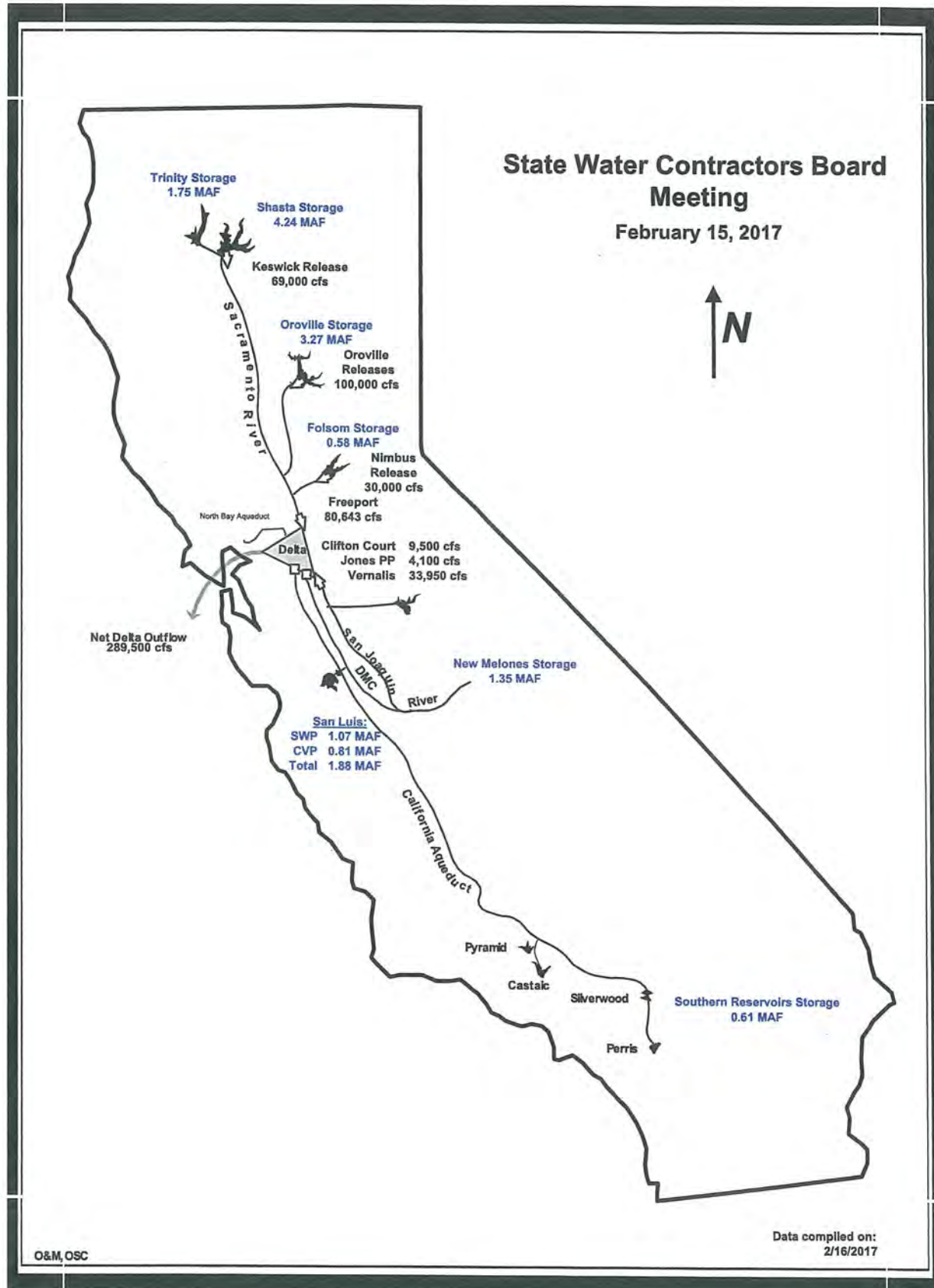
may be shared among members in proportion to their energy costs. However, the group also discussed a proposal to simply empower the SWC Board to create funds as necessary in a given circumstance, and to determine how the dues should be allocated among members for each fund.

Currently the bylaws provide that any changes in the dues must be approved by two-thirds of the total members of the SWC. The proposal is to simply entrust the dues allocation methodology to the Board itself, such that a majority of the Board could make that decision in lieu of two-thirds of the total membership. Those in attendance at the meeting appeared to be comfortable with that concept, trusting the Board to fairly allocate dues among the members. However, since the bylaws currently provide that a change in methodology requires approval by two-thirds of the members, that change to the bylaws can only occur if approved by two-thirds of the members when the amendments are ultimately circulated for approval within the next few weeks.

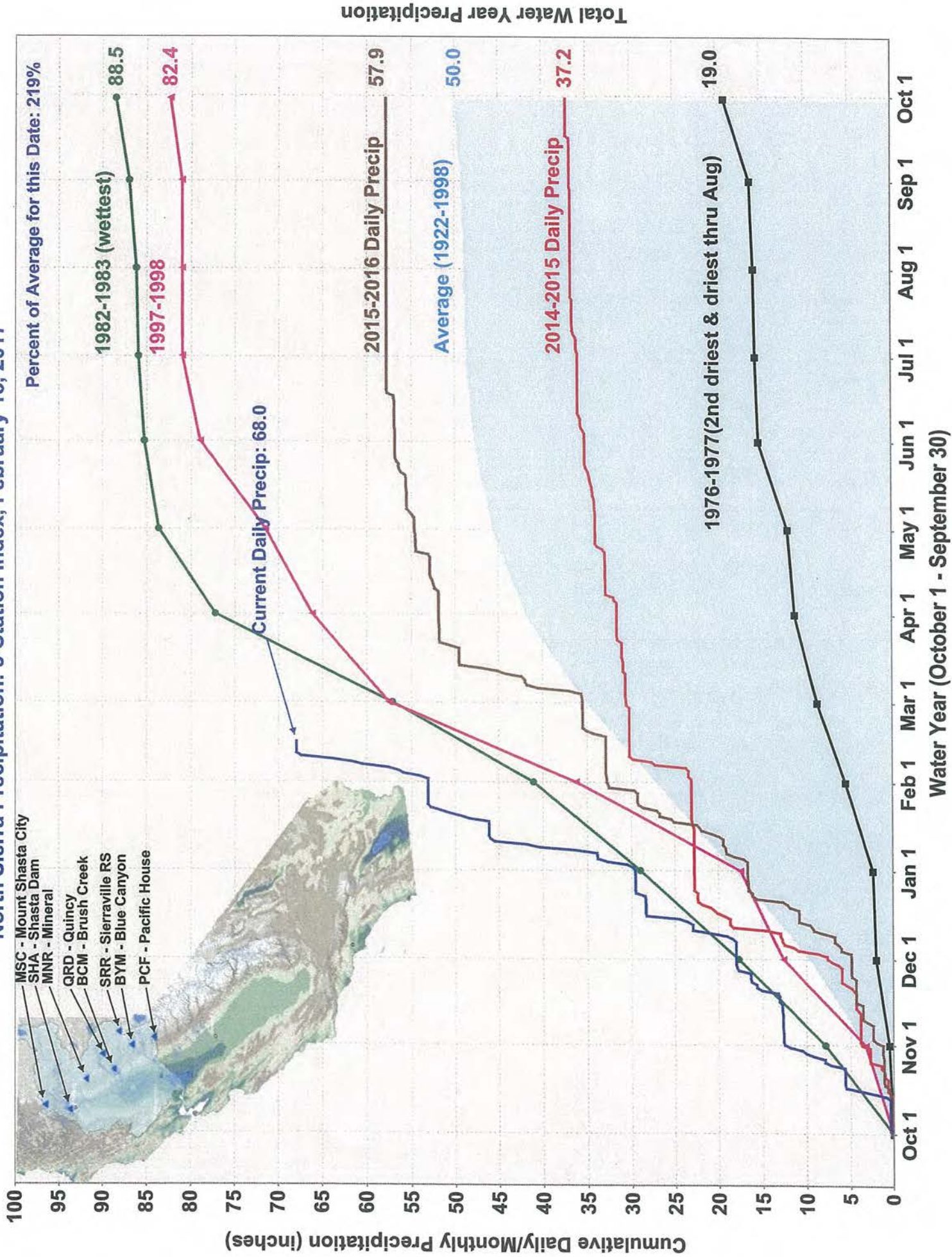
7. New SWC General Manager.

SWC Board President Doug Headrick announce that the Board had decided to hire Jennifer Pierre as the new General Manager of the State Water Contractors to succeed Terry Erlewine who is retiring from his position. Headrick reported that Jennifer Pierre was highly recommended and has worked for years on Cal WaterFix and the Bay Delta Conservation Plan as a principal at ICF International.

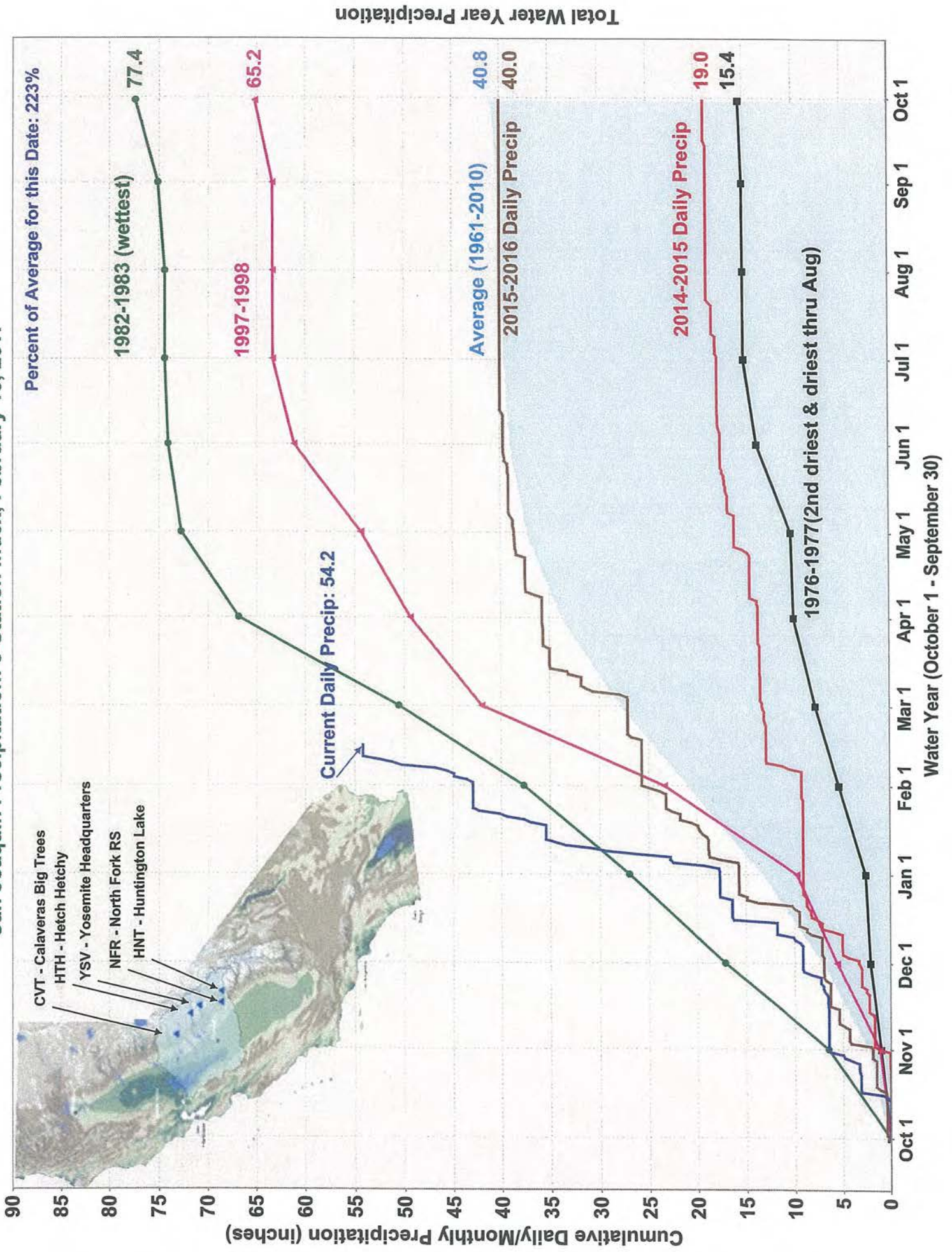
MICHAEL T. RIDDELL



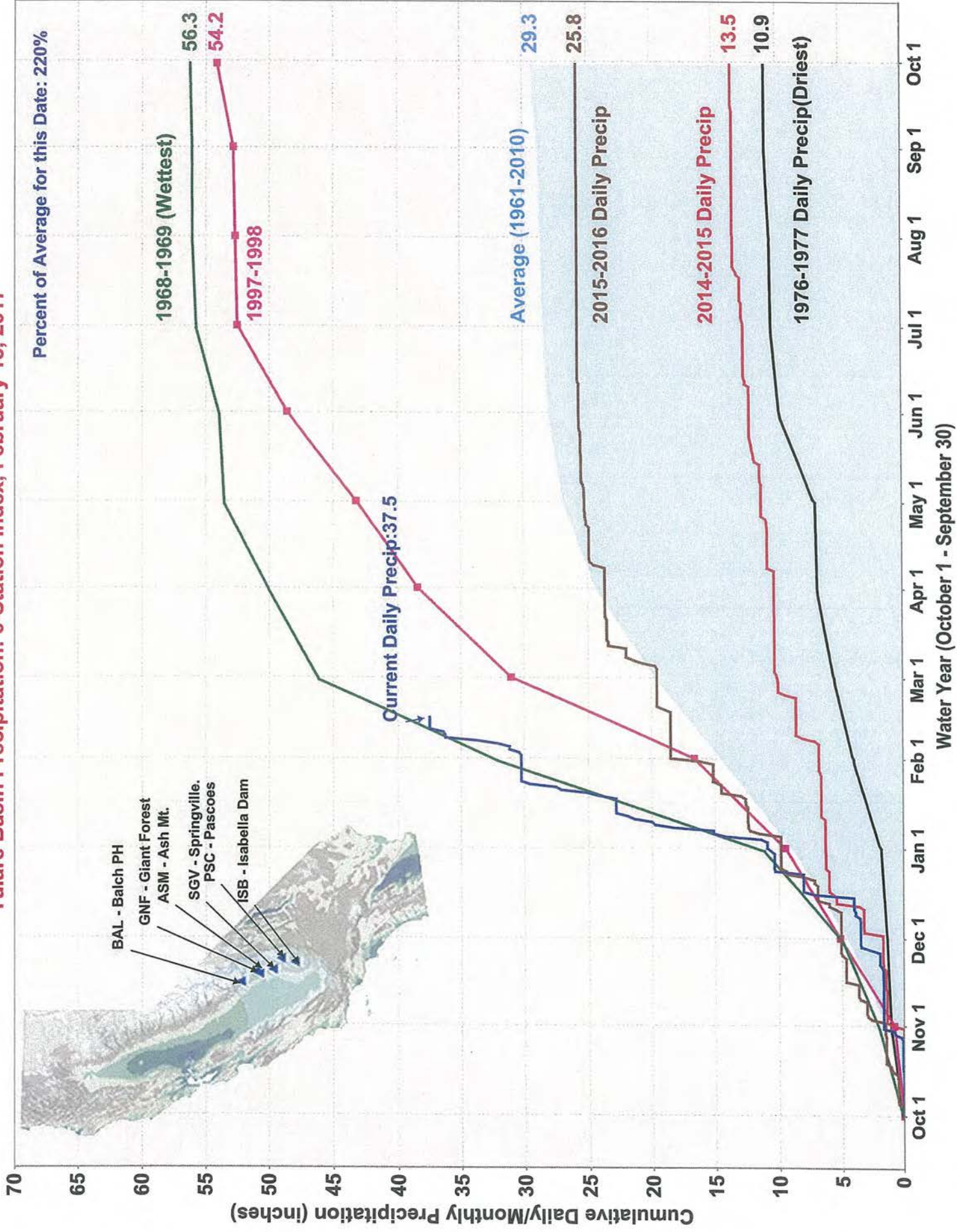
North Sierra Precipitation: 8-Station Index, February 15, 2017



San Joaquin Precipitation: 5-Station Index, February 15, 2017

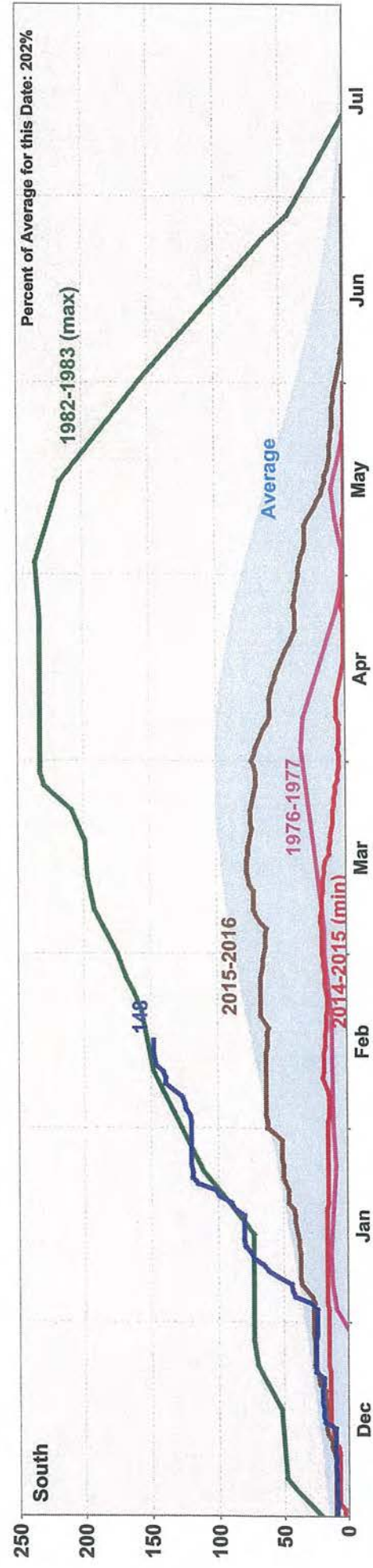
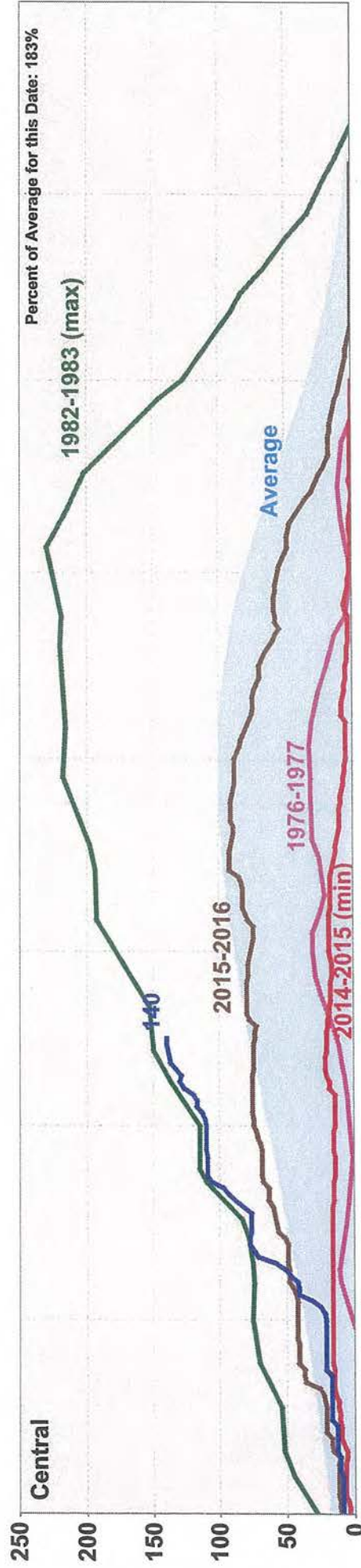
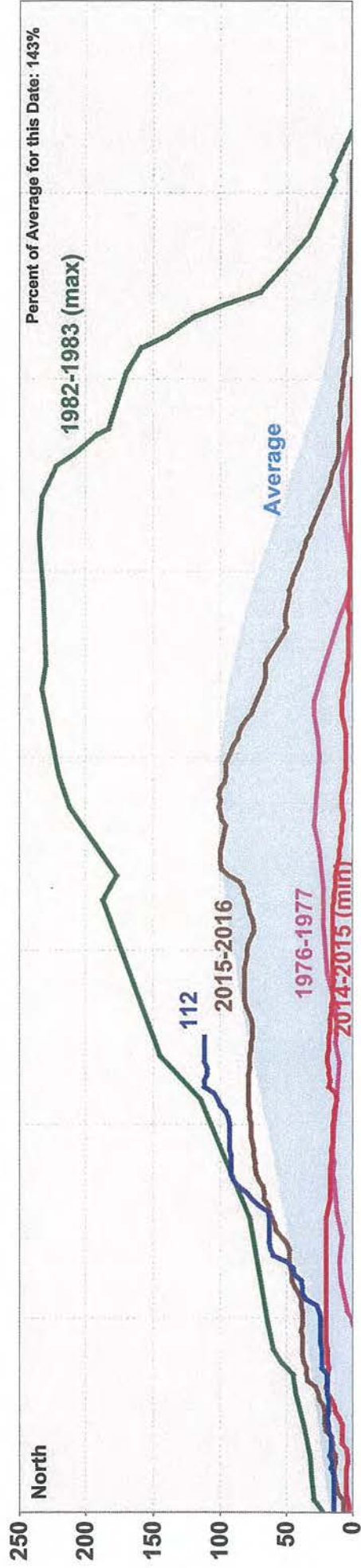


Tulare Basin Precipitation: 6-Station Index, February 15, 2017



Total Water Year Precipitation

California Snow Water Content, February 15, 2017, Percent of April 1 Average

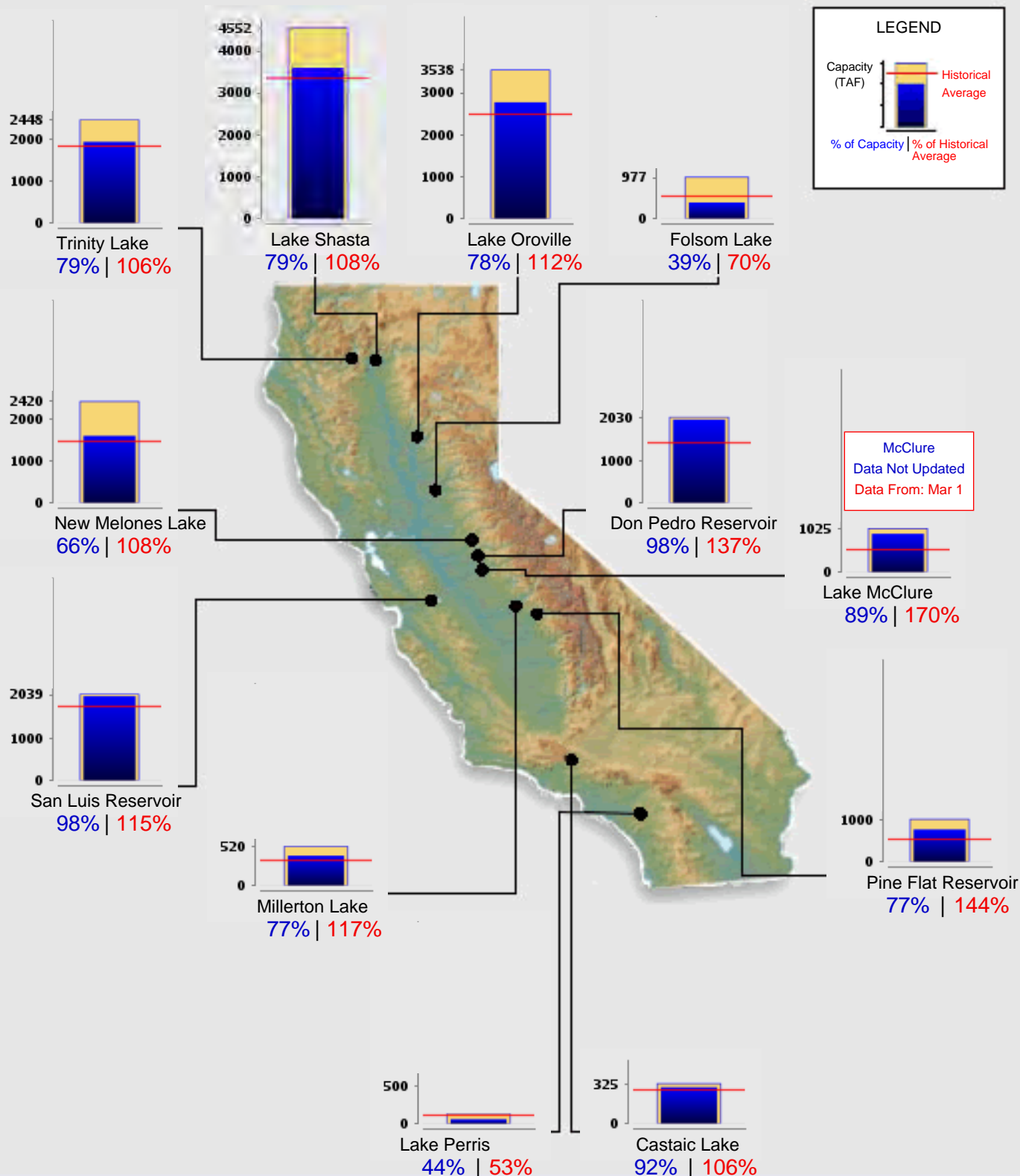




Reservoir Conditions

Ending At Midnight - March 2, 2017

CURRENT RESERVOIR CONDITIONS



**State Water Contractors
State Legislative Report
February 2017**

Legislative Calendar

The pace is picking up at the State Capitol now that legislators have settled in and the policy committees begin their work.

Key legislative deadlines, over the near term, include:

February 17 - bill introduction deadline. Bills must be in print for 30 days before being heard by committee.

April 28 - deadline for policy bills with fiscal impacts to pass policy committees.

CA Water Fix

The Senate Natural Resources and Water Committee, chaired by Senator Robert Hertzberg (D-Van Nuys), had planned to hold the first of two oversight hearings on CA Water Fix on February 14. In light of the Brown Administration's attention on the Oroville situation, both hearings have been postponed. .

CA Natural Resources Secretary John Laird and Cindy Messer, Chief Deputy Director of DWR, were invited to provide a project overview and basis for moving forward. A second panel consisting of Department of Fish and Wildlife Director Chuck Bonham, Tom Howard, Executive Officer of the SWRCB, and Randy Fiorini, Chair of the Delta Stewardship Council, were asked to describe their respective agency's role in permitting or otherwise authorizing actions to advance the project and timelines for doing so.

Jeff Mount, representing the Public Policy Institute, had been asked to describe the thought process behind PPIC's "Grand Compromise" and key elements of that plan.

On February 28, the Committee had invited a spectrum of perspectives to join them to share their points-of-view on the project. Metropolitan's Roger Patterson; Brent Walthall with the Kern County Water Agency; Doug Obegi from the Natural Resources Defense Council; Barbara Barrigan-Parrilla, spokesperson for Restore the Delta; and a representative from the San Diego County Water Authority were confirmed as panelists. Additional panelists were invited but had not yet confirmed, prior to the postponement.

Last week, nine legislators (four Senate; five Assembly) representing the Delta region, penned a letter to Governor Brown announcing the formation of an informal Delta Caucus. Their letter called out the common concerns they share for protection and stewardship of the Sacramento-San Joaquin Delta. The caucus intends to keep legislators updated and educated on important issues affecting their region and look to provide a venue for collaboration of topics associated with the Delta.

On February 7, Nancy McFadden, Executive Secretary to Governor Brown, presented an initial list of more than \$100 billion in targeted infrastructure projects to the National Governors Association. The list of 51 road, water, energy and other public works projects was submitted for inclusion in a list of projects to be presented to the Trump Administration. Trump has promised to spend \$1 trillion on infrastructure to produce jobs and revitalize aging public works.

The list includes 25 transportation, six emergency response, three energy-related and fourteen water reliability, storage, flood protection and ecosystem enhancement projects. The water-related projects include facilitation of low-interest loans for water users funding CA Water Fix; expansion of San Luis Reservoir; raising Folsom Dam; among others.

State Budget

On January 10, Governor Brown released his proposed budget for 2017/18. The Governor continues to exercise fiscal prudence to balance the state checkbook and has taken steps to further strengthen the state's rainy day fund, pay down debt and limit spending increases. Governor has identified his funding priorities for the coming year including investments in education, addressing the most vulnerable populations in California; utilizing Cap-and-Trade auction revenues; and investing in key physical infrastructure to support state operations.

With respect to Cap-and-Trade, Governor has proposed to spend \$2.2 billion, which includes \$27.5 million for water and energy efficiency projects.

His budget proposes spending \$178.7 million as continued response to the drought, including further protections of fish and wildlife as well as emergency response for most impacted communities.

Recent Bill Introductions

Over frustration with SWRCB's plan for unimpaired flows on the San Joaquin River, Assembly Member Adam Gray (D-Merced) introduced AB 313, a bill to restructure the administration and enforcement of water rights and the State Water Project. Under his bill, water rights administration and implementation of the Sustainable Groundwater Management Act would move from the SWRCB to DWR and the Office of Administrative Hearings would handle water rights hearings and SGMA enforcement.

Inspired by the 2010 report by the Little Hoover Commission entitled "Managing for Change: Modernizing California's Water Governance," AB 313 seeks to eliminate any conflict of interest in having DWR administer water rights by proposing that the State Water Project be transferred to a new State Water Project Authority, governed by nine gubernatorial appointees, all subject to Senate confirmation.

SWC Bylaws Potential Revisions

State Water Contractors
February 16, 2017

SWC Bylaws

- Developed with Establishment of SWC in 1982
- Numerous Minor Revisions in 1980s and 1990s
- Last Major Revisions ² 2004 and 2005
 - May 2004 ² Revised Organization Purpose
 - March 2005 ² Revised Dues, establishing a new Energy Fund and using prior year deliveries/energy use to allocate costs
 - May 2005 ² Cleanup of numerous bylaws provisions, including addition of email and fax as methods for communication
- Bylaws Committee (Melville, Arakawa and Creel) designated to look at changes in January 2016
- Legal Committee Reviewed Draft Changes and Made Editorial Revisions

Numerous Editorial and Procedural Revisions

- Provide option for electronic records
- Shorten Meeting Notice Requirement for Membership Meetings from 20 days to 10 days
- Delete ability to report by Fax
- Roberts Rules of Order apply to Meetings of Members
- Increase threshold for calling a meeting of members from 5% to 10%
- Drop definition of Quorum at Regular Meetings

Organization

- Add Authority for board to hire General Counsel and define as reporting to Board of Directors

Dues (Section 4.05)

- Changes Require 2/3 Vote of Membership
- Inclusion of FERC Relicensing Cost Allocation
 - Currently FERC Costs are half Energy Fund and half Dues Fund
 - Split was implemented to split the difference on resolution of Hyatt Thermalito cost issue
 - Proposal is to include all FERC Relicensing Costs to Energy Fund, reflecting resolution of Hyatt Thermalito cost issue
- Alternative is to not Specify Dues Breakdown in Bylaws and leave for Board Action
- &KDQJH ' HWHUPLQDWLRQ RI ' XHV IURP 'SHVROXWLRQµ WR ' \$FWLRQµ
- Change Date for Dues Payment from September 1 to July 1

Next Steps

- Decision on Policy Questions
- Authorize Written Ballot with changes
- Distribute Written Ballot with Complete Redline/Strikeout Text for SWC Member Review
- Target: Complete Revisions Prior to FY 2017-18 Budget Process

**DESERT WATER AGENCY
MEDIA INFORMATION
FEBRUARY 2017**

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
02/02/17	1-2	LOS ANGELES TIMES	California Snowpack Reaches 173% Of Average, Replenishing A Third Of State's 'Snow-Deficit'
02/03/17	3	THE DESERT SUN	Drought-easing California Snow Heaviest In 22 Years
02/03/17	4	PRESS ENTERPRISE	Drought Be Gone
02/03/17	5-6	LOS ANGELES TIMES	Snowfall Pays Down Water Deficit
02/04/17	7	THE DESERT SUN	Valley Voice: Rain or Shine, Saving Water Is Always Smart In Our Desert
02/08/17	8	THE DESERT SUN	Coalition Calls For An End To State's Drought Emergency
02/08/17	9	PRESS ENTERPRISE	Drought-era Water Cutbacks Likely To Be Extended Today
02/08/17	10-11	LOS ANGELES TIMES	Water Rules At Issue As Drought Recedes
02/09/17	12-13	THE DESERT SUN	State Extends Drought Measures, Despite Rain
02/09/17	14-15	PRESS ENTERPRISE	Water Savings Measure Extended
02/09/17	16-17	LOS ANGELES TIMES	Drought Restrictions To Remain
02/10/17	18	PRESS ENTERPRISE	Drought Just Keeps Dwindling In Region, State
02/10/17	19-20	LOS ANGELES TIMES	That Sinking Feeling In The San Joaquin Valley Groundwater Pumping Is Causing Areas To Collapse
02/12/17	21	PRESS ENTERPRISE	Agencies Living Up To Soboba Water Deal
02/16/17	22	PRESS ENTERPRISE	Riverside County Water Supplier Ditches Most Restrictions

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
02/17/17	23	PRESS ENTERPRISE	Settlement To Pay For Perchlorate Removal
02/19/17	24-25	PRESS ENTERPRISE	Still Needing More Rain In District
02/19/17	26-27	LOS ANGELES TIMES	Drought Dwindles, But Persists
02/20/17	28-29	LOS ANGELES TIMES	Capital Journal
02/22/17	30-31	THE DESERT SUN	CVWD Pushes For Safe Water In Poor Areas
02/24/17	32-33	LOS ANGELES TIMES	At Lake Shasta, A Wet Milestone
02/26/17	34	THE DESERT SUN	Our Voice: CVWD Task Force Presses Vital Water Work
02/26/17	35-38	THE DESERT SUN	Ex-water District Official Criticizes System Of Rates, Taxes

California snowpack reaches 173% of average, replenishing a third of state's 'snow-deficit'

Joseph Serna, February 2, 2017

Snowfall from a series of blizzard-like storms that blanketed the Sierra Nevada last month deposited the equivalent of more than 5.7 trillion gallons of water along the rugged mountain range — enough water to fill California's largest reservoir more than four times, according to recent analysis.

In a study by the University of Colorado Boulder and NASA's Jet Propulsion Laboratory, in La Cañada Flintridge, scientists concluded this month that recent snowfall had replenished more than a third of the state's lingering "snow-water deficit."

The finding comes as the California Department of Water Resources released its latest snow survey results on Thursday. Thanks largely to a series of atmospheric rivers that ferried large amounts of tropical moisture to the parched West Coast, Sierra Nevada snowpack has now reached 173% of average.

Snow accumulation this year stands in sharp contrast to that of the previous five years — a period when much of the state was struggling through drought.

In order to determine how much less snow the Sierra experienced during that time, researchers used satellite and ground sensor data to calculate the size of seasonal snowpack and compared it with the historical average. What they found was that the Sierra Nevada collected about 17 trillion gallons *less* water than if the years had normal snowfall.

January's storms, however, replenished more than a third of that deficit, according to researchers. They, along with storms in the previous months, succeeded in removing about half the state from lingering drought conditions by filling reservoirs and raising Sierra snowpack to rooftop levels, according to the U.S. Drought Report.

But even though the rain and snow totals are eye-popping, their long-term impact on the drought remains far from clear, according to Jay Lund, director of the Center for Watershed Sciences at UC Davis, who was not involved in the study.

Over the last five years, numerous cities have turned to underground wells and basins for water. Exactly how much water has been pumped out over the years — and how much remains — is unknown, water officials say.

"That's where the deficit is really concentrated. Every time [consumers] didn't have enough water, they pumped," Lund said.

DWR officials acknowledge that California's groundwater hasn't been tracked as far back in time, or in as much detail, as the state's surface reservoirs and snowpack. In fact, officials may never arrive at an accurate measure.

"First of all, groundwater is pretty hard to estimate volume for. It's buried," Lund said. "It varies with the local geology. And if you want to ask how much is the total volume underground – how deep do you want to go?"

In many cases, consumers have pumped water from groundwater basins much faster than Mother Nature can replenish the stuff — a phenomenon that has caused the ground level in parts of California to sink.

A 2015 NASA report showed that groundwater pumping has caused land in some parts of the San Joaquin Valley to subside at an alarming rate.

Researchers say that when this winter's snow begins to melt later in the year, the runoff will help replenish localized groundwater and aquifers along river channels and floodplains. However, other parts of the state hit hard by drought won't reap the same benefits.

"It is important to realize that any aquifer recharge that occurs as a result of this winter's storms is just a small uptick in a century-long decline of groundwater storage, at least with respect to the once-vast reserves in the Central Valley," said James Famiglietti, a senior water scientist at JPL. "The drought may be easing, but California's chronic water scarcity is here to stay."

The study was produced by JPL and the University of Colorado's Center for Water Earth Science and Technology, and tapped NASA's satellites to measure the Sierra Nevada snowpack, which turns into a third of California's water supply when it melts in the spring and summer.

Drought-easing California snow heaviest in 22 years

ASSOCIATED PRESS, February 3, 2017

Ellen Knickmeyer and Rich Pedroncelli

PHILLIPS STATION - Clambering through a snowy meadow with drifts up to the tree branches, California's water managers measured the state's vital Sierra Nevada snowpack Thursday at a droughtbusting and welcome 173 percent of average.

Runoff from the overall Sierra snowpack, which provides arid California with a third of its water in a good year, stood at the highest level since 1995 for this point in the year, California's Department of Water Resources said.

State officials say Gov. Jerry Brown will wait until closer to the end of California's rain and snow season this spring to decide whether to lift an emergency declaration addressing the devastating fiveyear drought.

But Thursday's snowpack reading, which took place in a meadow that had been bare of snow at the height of the drought, was good news.

"It gives everything a much brighter outlook," said Frank Gehrke, the state's snow-survey chief, who conducts the snow surveys several times each winter.

Photographers and other journalists trailed Gehrke in a Groundhog Day-style ritual in the state, where water shortages from the drought and from overuse have often dominated the news.

Gehrke noted the snow plows rumbling and ski lifts humming up and down the mountain range when he poked a rod into the drifts at Phillips Station, about 90 miles east of Sacramento.

Gehrke had to change his route because the snow was so much higher than normal. At Phillips Station, his measurements showed snow at a level that would have melted down to 28.1 inches of water. That compares to 11.3 inches in an average year.

The state measures overall snowpack through more than 100 electronic sensors throughout the Sierra Nevada.

Statewide, snowpack stood at 173 percent of average for the date.

Back-to-back-to-back storms in January that each dropped a hurricane's worth of water have put the state at 108 percent of its normal rain and snow for the whole year, said Michael Dettinger, a hydrologist for the U.S. Geological Survey. That's with two months still left in the rainy season.

The storm systems, known as atmospheric rivers, "caught us all off-guard, how many came in so quickly, and turned everything around," Dettinger said.

January's storms have lifted the northern half of the state out of drought. On Thursday, 51 percent of the state remained in drought, compared to 95 percent at this time last year.

In January of 2014, Brown stood at Phillips Station to declare a drought emergency in California. He ordered mandatory conservation in cities and towns. Phillips Station at that point held no measurable snow, amid the state's driest three-year stretch in history.

State water officials lifted the statewide mandate for a 25 percent reduction in water use as the drought eased. Some conservation orders remain in effect.

Given this year's wealth of rain and snow, some farmers and city governments are urging the state to provide them with more water. That would mean cutting back on water the state allows to flow to the Pacific Ocean, to benefit struggling native species whose numbers have dwindled in the drought.

Conservation groups, meanwhile, say the state hasn't gone far enough to cut agricultural and urban water use, especially as warming temperatures from climate change threatens the cycle of snowfall and melt.

DROUGHT BE GONE

Huge Sierra snowpack 'incredibly good news' as key way to end crisis.

By Steve Scauzillo, February 3,

Snow levels in the Sierra Nevada – a source of about 30 percent of the drinking water for Southern California – have more than quadrupled in one month, according to a manual survey conducted Thursday by state hydrologists.

Water content contained within the 90.3 inches of snow measured at Phillips Station in the central Sierra Nevada contain a water equivalent of 28.1 inches, up from 6 inches on Jan. 3, the state Department of Water Resources reported.

The snow-water equivalent at the station was the largest since February 2005, said Ted Thomas, a DWR spokesman.

Electronic readings from 101 stations in the Sierra Nevada show the snowpack holds 31 inches of water, or about 173 percent of the average for this time of year, DWR officials reported. The water content for all the stations already exceeds averages usually seen on April 1 at 109 percent.

Water content means how much water is in the snow that gets released during spring and summer snowmelt. For instance, at Phillips Station, if all the snow were to melt today, it would create a pool of 28.1 inches of water in the meadow, said Frank Gehrke, water surveyor and chief of the California Cooperative Snow Surveys Program.

"This is a huge improvement over the last four years," Gehrke said shortly after he plunged a metal pole into the snowpack, something he has done for 30 years. Most snow arrived in the past 30 days as storm after storm pounded California, causing deaths, flooding, road closures and avalanches. "January really built a pretty amazing snowpack," he said.

So-called atmospheric rivers pummeled the state, mostly dropping rain in the south but snow in the Sierra Nevada from late December through January, allowing the state to recoup 37 percent of its snow-water deficit, according to satellite data from NASA, the Jet Propulsion Laboratory in La Cañada Flintridge and the University of Colorado Boulder.

The snow-water deficit is the deficit of snowpack water today compared with what it used to be before the state's five-year drought began in 2012.

From 2012 to 2016, the state's water deficit averaged 10.8 million acre-feet per year. One acre-foot is equal to 326,000 gallons, or the amount of water used by two Southern California families in one year. Over those five years, the state's water deficit was 54 million acre-feet. In one month, that deficit was reduced by 37 percent, said JPL scientists.

"This is incredibly good news," said Bob Muir, spokesman for the Metropolitan Water District of Southern California. "It is trending to be a droughtbusting year."

MWD, which supplies water to 19 million Southern Californians, will be on a buying spree this year. "We would like to take advantage of this wet weather."

The agency plans on filling the Diamond Valley Lake reservoir in Perris with state water, increasing it to 750,000 acre-feet from 580,000 acre-feet, he said. The cap is 810,000 acre-feet.

"This is all while demand is down. People are still carrying on water-saving practices," Muir said.

Noah Molotch, who led the JPL-University of Colorado study, said the state is still years away from making up its snow-water deficit completely.

"One snowy winter won't be able to entirely reverse that, but there is, at least, some cautious optimism," Molotch said. Muir said the residents of Southern California should continue water conservation plans because long-range forecasts are unpredictable. Of the past 10 rain years, eight were dry and two were wet. The dry and wet years can come and go arbitrarily, in part because of the effects of global climate change.

"They should continue to use water wisely. They are dealing with this new, modern water outlook," he said.

"People ask me if we are out of the drought, and I say absolutely not," said Bill Patzert, climatologist with JPL. "I don't want anybody flooded out with euphoria yet."

Weather forecasters predict more rain and snow in Northern California for the next five to seven days. About one-quarter inch of rain or less is predicted for Southern California today, said National Weather Service hydrologist Jayme Laber.

Los Angeles Times

DROUGHT WATCH

Snowfall pays down water deficit

Despite substantial rain and snow totals this winter, chronic scarcity will remain in parts of the state.

Joseph Serna, February 3, 2017

Snowfall from a series of blizzard-like storms that blanketed the Sierra Nevada last month deposited the equivalent of more than 5.7 trillion gallons of water along the rugged mountain range — enough water to fill California's largest reservoir more than four times, according to a recent analysis.

In a [study](#) by the University of Colorado Boulder and NASA's Jet Propulsion Laboratory in La Cañada Flintridge, scientists concluded this month that recent snowfall had replenished more than a third of the state's lingering "snow-water deficit."

The finding comes as the California Department of Water Resources released its latest snow survey results on Thursday. Thanks largely to a series of atmospheric rivers that ferried large amounts of tropical moisture to the parched West Coast, Sierra Nevada snowpack has now reached [173% of average](#).

Snow accumulation this year stands in sharp contrast to that of the previous five years — a period when much of the state was struggling through drought.

In order to determine how much less snow the Sierra experienced during that time, researchers used satellite and ground sensor data to calculate the size of seasonal snowpack and compared it with the historical average. What they found was that the Sierra Nevada collected about 17 trillion gallons less water than if the years had normal snowfall.

January's storms, however, replenished more than a third of that deficit, according to researchers. They, along with storms in the previous months, succeeded in removing about half the state from lingering drought conditions by filling reservoirs and raising Sierra snowpack to rooftop levels, according to the [U.S. Drought Report](#).

But even though the rain and snow totals are eye-popping, their long-term impact on the drought remains far from clear, according to Jay Lund, director of the Center for Watershed Sciences at UC Davis, who was not involved in the study.

Over the last five years, numerous cities have turned to underground wells and basins for water. Exactly how much water has been pumped out over the years — and how much remains — is unknown, water officials say.

"That's where the deficit is really concentrated. Every time [consumers] didn't have enough water, they pumped," Lund said.

DWR officials acknowledge that California's groundwater hasn't been tracked as far back in time,

or in as much detail, as the state's surface reservoirs and snowpack. In fact, officials may never arrive at an accurate measure.

"First of all, groundwater is pretty hard to estimate volume for. It's buried," Lund said. "It varies with the local geology. And if you want to ask how much is the total volume underground — how deep do you want to go?"

In many cases, consumers have pumped water from groundwater basins much faster than Mother Nature can replenish the stuff — a phenomenon that has caused the ground level in parts of California to sink.

A 2015 NASA report showed that groundwater pumping has caused land in some parts of the San Joaquin Valley to subside at an alarming rate.

Researchers say that when this winter's snow begins to melt later in the year, the runoff will help replenish localized groundwater and aquifers along river channels and floodplains.

However, other parts of the state hit hard by drought won't reap the same benefits.

"It is important to realize that any aquifer recharge that occurs as a result of this winter's storms is just a small uptick in a century-long decline of groundwater storage, at least with respect to the once-vast reserves in the Central Valley," said James Famiglietti, a senior water scientist at JPL.

"The drought may be easing, but California's chronic water scarcity is here to stay."

The study was produced by JPL and the University of Colorado's Center for Water Earth Science and Technology, and tapped NASA's satellites to measure the Sierra Nevada snowpack, which turns into a third of California's water supply when it melts in the spring and summer.

VALLEY VOICE – February 4, 2017

Rain or shine, saving water is always smart in our desert

With the heavy rain and snow in northern California and storms right here in our valley, those of us involved in local water systems are getting a lot of questions about the drought. The answers: Yes, precipitation near and far is benefiting our local water supply; yes, California's historic drought seems to be nearing an end; and yes, we must continue to use water wisely. We're proud the communities we serve have embraced conservation as a way of life. When the State Water Board issued mandatory water use restrictions based on a statewide drought emergency in 2014, the local water agencies were fortunate to have local supplies sufficient to withstand the drought. Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) have always managed the valley's water supplies as if we are in a drought. Now that rain has eased concerns, our message remains the same. Water agencies must continue responsible long-term management strategies and plan for more and longer future droughts.

Since the 1970s, the two agencies have imported more than 3.3 trillion gallons of water from Northern California and the Colorado River for groundwater replenishment. Importing water during wet and dry years is critical to keeping our groundwater basin sustainable. Our groundwater basin provides for massive water storage and makes our region less susceptible to the impacts of statewide drought.

While recent local storms are a good thing, Sierra snowpack and storage in reservoirs in Northern California will have the biggest impact on our imported supplies from our State Water Project contracts. Improved conditions will mean a healthy delivery of water to the valley to replenish the groundwater we use every day. Our imported supply only trickled into the west valley percolation ponds during the last few years due to the historic drought, but we expect to receive more water this year than in an average year.

Replenishment of the groundwater supply is critical to CVWD and DWA's long-term water management efforts and is part of the Coachella Valley Regional Water Management Plan. Sustainability ensures generations to come enjoy the same lifestyle here that water helps to provide.

Conservation also is key. Valley residents made significant usage cuts during the drought emergency, saving more than 21 billion gallons since June 2015. This reduction helped maintain groundwater levels. Savings will continue if residents and businesses make small efforts like shutting off irrigation when we have rain.

Statewide mandatory water-use restrictions remain in effect, including not washing down pavement, sidewalks and driveways and not watering so much it runs off of landscaping.

Many of you made permanent, beneficial changes to your water use. Between our two agencies, almost 8 million square feet of turf has been converted to desert-appropriate landscaping since June 2015. That's enough to cover 138 football fields. We've also recycled more than 9 billion gallons of wastewater since then, further reducing groundwater use.

Water agencies have a complicated story to tell during drought times, especially when we see restrictive state mandates. We appreciate all of the efforts of our customers. Water is a precious commodity that we work hard to protect. We're confident the permanent changes to landscaping and water use habits and our ongoing water management efforts will help us to weather the next drought.

John Powell, Jr. is president of the Coachella Valley Water District Board of Directors. He can be reached at jpowell@cvwd.org. James Cioffi is the president of the Desert Water Agency Board of Directors. He can be reached at jcioffi@dwa.org.

Coalition calls for an end to state's drought emergency

Scott Smith, Associated Press, February 8, 2017

FRESNO - A coalition of state and local leaders is pressing California to lift restrictions on urban water use after the wettest winter for years.

Water regulators in Sacramento on Wednesday will decide on a recommendation to extend the drought rules, uncertain if rain and snow will continue through spring.

Republican State Sen. Jim Nielsen of Gerber, who leads a swelling coalition of law makers and local water districts statewide, says it's time for Gov. Jerry Brown to end the drought emergency, or lose the public's trust.

Californians heeded the call during the historic drought, taking shorter showers and ripping out their lawns during the five-year drought, but the weather has dramatically changed, which everybody can see, Nielsen says in a letter to the governor also signed by other officials.

"This is an emergency?" Nielsen told The Associated Press. "It's pretty hard to argue to the public, the citizens of California, that we are now in an emergency."

January rains drenched the state rising reservoirs, and the snowpack measures at 182 percent

of normal. Tuesday storms swelled a creek in Marin County, flooding 40 homes. A rockslide blocked two lanes of a highway pass in the Santa Cruz mountains, officials said.

So much rain had fallen in Los Angeles by Monday that the yearly total for downtown hit about 15 ½ inches — exceeding the normal annual rainfall, even though the new rain year won't start until October, the National Weather Service says.

The state, however, is "not yet declaring an end to the drought," California Natural Resources Agency spokeswoman Nancy Vogel said in an emailed statement. The governor's office referred request for comment to Vogel.

Some residents in the San Joaquin Valley still survive on bottled water because their wells are depleted, and swings from wet to dry years is only intensifying with climate change, Vogel said.

Brown declared the drought emergency in 2014 during the driest four-year period in California's recorded history.

He later ordered California's nearly 40 million people to cut water use by 25 percent —the first mandate of its kind in the state's history.

The State Water Resources Control Board relaxed the requirement last year with more normal weather, allowing local districts to set their own conservation measures.

Water districts still must to weight their water supplies against demand, among requirements and report their water use to the state. Roughly 80 percent of local water districts in Northern and Southern California say they have ample water supplies, no longer requiring water-use cutbacks.

Tracy Quinn, a senior water policy analyst with the Natural Resources Defense Council, wants the state to hold onto its restrictions. She says it's unclear what weather the spring will bring, let alone next year.

She says water districts aren't always motivated by conservation but rather by money, because their revenue is tied to how much water they sell to customers. Many water districts say they've invested millions in water efficiency and don't need the state's oversight.

The healthy snowpack and brimming reservoirs also don't tell the whole story, she said, adding that the drought decimated groundwater supplies and will take years to be replenished.

"This is a long game," Quinn said. "Although we have had a welcomed respite from the drought, we don't know whether this is an aberration in an extended drought."

Drought-era water cutbacks likely to be extended today

Despite recent snow and rainfall, the state is expected to readopt amended rules.

By Suzanne Hurt, Staff Writer, February 8, 2017

Neither snow nor rain nor the pleas of water suppliers appear likely to stay California water officials from extending drought inspired water measures today.

Despite rainfall that has pushed many state reservoirs into flood control operations and Sierra Nevada snowpack water content measuring 182 percent of normal, the State Water Resources Control Board is expected to readopt amended statewide emergency water conservation regulations in Sacramento.

Heavy snow and rain has fallen since October, yet about 51 percent of the state lingers in a sixth year of drought. Drought has left groundwater depleted in many areas and some reservoirs critically low.

The state's water situation for 2016-2017 could change significantly and won't be known until at least the end of spring, according to a board staff report.

Under a draft board resolution, the amended regulations would be extended for 270 days unless future rainfall, snowpack or other conditions reported monthly to the board bring about an adjustment or end to the measures.

State residents still would be expected to reduce drinking water use and water suppliers to report the savings monthly to the board.

Water customers would be required to continue avoiding wasteful practices outlined in the original regulations, such as hosing down sidewalks and driveways, washing cars with hoses not equipped with shut-off nozzles, creating landscaping runoff, or watering landscaping within 48 hours of measurable rain.

Gov. Jerry Brown declared California was under a drought state of emergency in January 2014. First adopted May 5, 2015, following an executive order, the regulations initially included the governor's mandate for 25 percent statewide potable water savings over 2013 consumption.

On May 31, 2016, the regulations were extended and water suppliers were allowed to set their own water conservation targets based on their expected supply and demand after three more dry years. The regulation expires Feb. 28 unless the board extends it.

Los Angeles Times

Water rules at issue as drought recedes

With many reservoirs brimming, state will decide today whether to extend emergency conservation policies.

By Joseph Serna, February 8, 2017

The “atmospheric river” returned with a vengeance Tuesday to Northern California, where snow piled up in the Sierra Nevada and coastal riverbanks were overwhelmed, flooding rural towns.

It’s at least the third major storm series to hit the region since the beginning of the year, building Sierra Nevada snowpack to heights not seen in years. Many of the state’s reservoirs are brimming and the earth around them is beginning to soak in the moisture.

The rain has ended the drought in much of Northern California, but it leaves state water officials with a dilemma.

California’s top water cops will decide Wednesday whether to extend the state’s emergency drought rules.

The staff of the State Water Resources Control Board has recommended against nixing the regulations, which have been in effect since June 2015 and would expire Feb. 28.

If the five-person board agrees, urban water districts up and down the state would have to continue monthly reports on consumption, as well as “stress tests” to certify they have enough inventory to withstand three straight years of drought conditions .

The regulations would be extended for 270 days if approved at Wednesday’s meeting of the water board in Sacramento.

That meeting will occur amid conditions that are far from drought-like.

The latest Northern California storm system centered on the Bay Area but was widespread, dropping more than 7 inches of rain in Sonoma County to the north and 6 inches of rain in Santa Cruz County to the south and overwhelming coastal cities in between, according to the National Weather Service.

Flood warnings were issued for multiple counties in Northern California on Tuesday, with agencies expecting the Russian and Sacramento rivers to overflow their banks as the rain and melting snow flow down the mountains.

U.S. 101 was flooded in Novato, a tree limb fell on a house in Monterey, and a mudslide left a vehicle upside down in Santa Cruz County, the weather service said.

The San Benito County Sheriff’s Office issued a voluntary evacuation order for residents near Pacheco Creek after the creek flooded Tuesday morning. The area flooded last month during a previous trio of storms.

Atmospheric rivers — warm weather systems that flow east from Hawaii and the western Pacific — carry huge amounts of moisture and provide the majority of California’s water, according to the National Oceanic and Atmospheric Administration.

The state has missed out on many of them in recent years, but not this last fall or current winter. California is on pace for one of its wettest years on record and has seen its drought outlook dramatically improve since October.

The biggest deficit remains in Southern California, where it rains more infrequently and the watershed system isn't as vast for local reservoirs.

This week's storms brought gusty winds and dropped more than 2 inches of rain in San Luis Obispo and Ventura counties and lesser amounts in Los Angeles County, the weather service reported. There is less runoff from rain in the Southland because the soil has to recover more moisture after years of drought, climatologists say.

Another storm that hits San Luis Obispo County late Thursday should begin raining on Ventura and Los Angeles counties by Friday and could drop up to an inch and a half of rain, the weather service said.

Friday's storm is colder and is flowing in from the Gulf of Alaska, the weather service said.

Clear skies and warmer temperatures are expected over the weekend.

State extends drought measures, despite rain

Scott Smith, Associated Press, February 9, 2017

FRESNO - Water regulators in California on Wednesday extended what are now largely symbolic conservation measures lingering from the drought after the state has seen one of the wettest winters in years.

Regulators decided to retain the measures at least until spring as a precaution against the possible return of dry weather — even as another major storm bears down on the state.

“I don’t think there’s just one way to go,” Felicia Marcus, chairwoman of the State Water Resources Control Board, said after several local water districts urged members to lift the regulations. “The better decision is to extend it and see later where we are.”

The current regulations are largely symbolic because roughly 80 percent California water districts say they have ample supplies and aren’t requiring residents to cut back on water.

The regulations require water districts to make monthly reports on their water use and prohibit residents from wasting water, such as washing sidewalks with a hose and turning on sprinklers after it rains.

Californians heeded the call to conserve water during the height of the five-year drought. But opponents of the regulations say the weather has dramatically changed.

“Here in San Diego County we are not experiencing drought conditions — many areas of the state are not,” said Dana Frieauff, water resources manager of the San Diego County Water Authority, which has invested millions of dollars in desalination and water efficiency.

“We’re going to continue to encourage people to use water efficiently,” she said. “We don’t need the drought emergency regulations in place to have folks do that.”

State residents used roughly 20 percent less water in December compared to the same time in 2013, the year before the drought emergency was declared, officials reported during the board meeting.

Enough water has been saved since mandatory conservation began in June 2015 to serve nearly one-third of the state’s population for a year.

In January, storms drenched the state and filled some reservoirs. The Sierra Nevada snowpack, which provides much of the state’s water as it melts in the spring, recently measured at 182 percent of normal. The rain total in downtown Los Angeles since October — the start of the wet season — has reached 15 ½ inches — far exceeding the normal annual rainfall.

It’s unclear whether Brown might lift the drought emergency.

The governor’s office referred request for comment on ending the emergency to California Natural Resources Agency spokeswoman Nancy Vogel, who said in an email before the meeting that the state is “not yet declaring an end to the drought.”

Some residents in the San Joaquin Valley still survive on bottled water because their wells are depleted, and swings from wet to dry years is only intensifying with climate change, Vogel said.

Brown declared the drought emergency in 2014 during the driest four-year period in California’s recorded history.

He later ordered California's nearly 40 million people to cut water use by 25 percent —the first mandate of its kind in the state.

The State Water Resources Control Board relaxed the requirement last year, allowing districts to set their own conservation measures.

Joone Lopez, general manager of the Moulton Niguel Water District in Orange County, encouraged the state to leave the regulations in place.

The district receives much of its water from the Colorado River, a system that is overdrawn regardless of California's drought, she said.

"People recognize this historic drought was years in the making," Lopez said. "Two months of rain isn't going to get us out."

Water savings measure extended

State keeps rule despite storms, since many areas remain in drought

By Suzanne Hurt, February 9, 2017

State water officials extended drought-triggered water savings measures on Wednesday with mixed reactions from Southern California water suppliers even as statewide conservation appears to remain relatively high.

While many agencies, including the Municipal Water District of Orange County and Eastern Municipal Water District, urged state officials to drop or shorten an extension, others supported an extension, including Los Angeles and the Laguna Beach County Water District.

State Water Resources Control Board members indicated plans to revisit the matter in May after the normal end of the rainy season.

Laguna Beach County Water District General Manager Renae Hinchey told the board at its Sacramento meeting that the district continues sending customers the message that conservation must be a way of life.

"We're going to be in drought cycles and we need to live with that," she said at the Cal/EPA building Wednesday afternoon.

The Sierra Nevada snowpack water content is already at 127 percent of the April 1 average, yet half the state is locked in a sixth year of drought.

After about an hour of public comment on both sides of the issue, the five-member board unanimously extended an amended statewide emergency water conservation regulation for 270 days.

Hydrologists and drought experts "have the knowledge that the drought may be coming to a close," board member Steven Moore said.

But only Gov. Jerry Brown, who declared California was in a drought state of emergency in January 2014, can declare that emergency over.

The entire state needs to work together to reduce water use, which can affect climate change, Moore added.

"The drought could be over, but the need to conserve water is not," he said a day after more than a foot of snow fell in the Sierra Nevada, and Southern California continued soaking up rain.

Under the resolution, Californians still would be expected to reduce drinking water use, and more than 400 of the state's largest water suppliers must report the savings monthly to the board.

But 3,000 small suppliers will no longer have to report monthly, after half weren't doing so, board Climate and Conservation Manager Max Gornberg told the board.

In addition, water customers must continue avoiding wasteful practices outlined in the original regulation, such as hosing down sidewalks and driveways, washing cars with hoses not equipped

with shut-off nozzles, creating landscaping runoff and watering landscaping within 48 hours of measurable rain.

Earlier in the meeting, Gomberg said statewide cumulative water savings from June 2015 through December 2016, compared with the same period ending in 2013, were 22.5 percent – a slight dip from November's cumulative 22.6 percent.

With cumulative savings at 22.8 percent for October and 23 percent for September, conservation has virtually leveled off.

"Conservation numbers have remained incredibly strong," Gomberg said.

The current cumulative savings amount to more than 793 billion gallons, or 2,434,323 acre-feet of water saved.

State residents saved 20.6 percent more water in December than in the same month in 2013.

The Sierra snowpack water content, which creates spring and summer runoff that helps build water supplies, sits at 184 percent of normal for Feb. 8, and the south Sierra snowpack measures 208 percent of normal.

Yet 51 percent of the state – including most of Southern California and part of Northern California – remains in a drought, although with less intensity than in recent years.

Since at least Jan. 24, northwestern Los Angeles County, parts of Santa Barbara and Kern counties and most of Ventura County are now the only part of Southern California, and the state, to remain in extreme drought.

The California Department of Water Resources announced Wednesday that, according to new NASA radar satellite maps, groundwater pumping is causing areas of the San Joaquin Valley to sink rapidly – threatening state and federal aqueducts and flood control structures.

On Wednesday, Los Angeles Mayor Eric Garcetti urged the region's residents to save water to help the environment, which he said would also save money.

"The drought is not over, especially here in Southern California," he said at a City Hall news conference on another issue.

"Even as we have reservoirs that will get close to filling up, remember, the true reservoirs are the ones in the ground, and we're still pretty bone-dry in most of our aquifers in the city," Garcetti added.

At the board meeting, Eastern Municipal Water District General Manager Paul Jones was among many suppliers who said current hydrologic conditions and precipitation levels don't "rise to the level of an emergency" any longer.

Board chairwoman Felicia Marcus supported taking another look at the regulation after the rainy season. Decision makers have to consider the needs of all communities, and some remain in pain, she said.

"What does 'statewide' mean? Are we one state, or are we multiple states?" Marcus added. Staff writer Elizabeth Chou contributed to this report.

Los Angeles Times

Drought restrictions to remain

Despite record rainfall, state water board extends emergency rules

By Joseph Serna and Bettina Boxall, February 9, 2017

California's snowpack is at 184% of average for this time of year. Cities from San Francisco to Los Angeles have recorded their highest rain levels in years. Rockslides and flooding hit Northern California.

And the spillway of the state's massive dam at Lake Oroville, once a symbol of the state's brutal drought when it sat nearly empty, is actually eroding because of so much runoff from fall and winter rains.

Despite all this, the State Water Resources Control Board on Wednesday held firm in the face of opposition and extended the state's emergency drought regulations, pledging to revisit them in May, when the state's traditional rainy season has ended.

"We're certainly well-situated compared to previous years, but we've learned things can change suddenly. Warm rain or higher temperatures can quickly degrade snowpack," said board Chairwoman Felicia Marcus.

As it did last May, the board found on Wednesday that it was still too early to lift emergency rules that limit urban water use and mandate that municipal water agencies provide monthly reports on their water reserves, supply and demand.

"Many parts of the state are still in pain, but a lot fewer," Marcus said.

The board decided last spring that local water districts were allowed to set their own savings targets based on water supply and demand forecasts tailored to their areas.

That means that places that received a lot of rain — and communities that purchase or are entitled to water from sources there — see fewer restrictions, while dry areas without water from those replenished supplies are still under conservation requirements.

Much of Northern California is out of drought thanks to one of the wettest seasons on record. Southern California has also seen record rainfall, but parts of the Central Coast and Central Valley remain in drought.

Groundwater shortages remain in many areas, including the southern Central Valley.

Board members said it was most prudent to wait until the rainy season ends and assess the conditions statewide before making changes in regulations.

"Water conservation is a way of California from now on," said board member Steven Moore.

But that doesn't sit well with everyone.

Paul Helliher, general manager for the Humboldt Bay Municipal Water District, among the rainiest areas of the state, said that his agency has enough water stored to last another five years of drought and that monthly reporting is unnecessary. Other critics argued that water conservation can be handled on the local level.

State officials believe their process results in better conservation.

Since the emergency regulations were put in place, the state water board has seen greater compliance with agencies reporting their annual water use and customers adhering to conservation rules, Moore countered. Though the drought regulations may be nearing the end of their shelf life, the culture that made them such a success has to remain, he said.

The Metropolitan Water District of Southern California, which sought an end to the regulations, agreed with Moore's statement.

"While the emergency has ended, the need to conserve has not," district General Manager Jeffrey Kightlinger said in a statement. "Southern Californians have learned a lot about water conservation during the latest drought. We cannot afford to forget those lessons."

Back in Oroville, state engineers spent Wednesday trying to figure out how much water they could send down the dam's damaged spillway.

The state planned to make test releases, knowing the flows probably will enlarge the 30- foot-deep hole in the concrete spillway of California's second-largest reservoir.

Workers discovered the erosion a day earlier and stopped the high releases the state was making from the reservoir to maintain required space for runoff from an upcoming weekend storm.

To partially counter the spillway shutdown, they increased releases through Oroville's power plant on Wednesday. But there is a limit to that tactic.

That leaves the state with a difficult choice: keep sending water down the spillway, which will worsen the damage, or let the reservoir fill, which would send flows gushing down a separate emergency spillway that is not paved or gated.

Department of Water Resources officials want to avoid doing that if possible, but as a precaution, workers are clearing trees and debris from downstream areas. Engineers also are looking for ways to bolster the spillway.

"The dam is sound, and no imminent threat to the public exists," the department emphasized in a news release.

Oroville is the key reservoir in the State Water Project, which sends Northern California supplies to the urban Southland.

The recent parade of storms that have pounded Northern California filled reservoirs to above-average levels for this time of year, forcing managers to ramp up releases to make room for more inflow.

After the state halted spillway releases Tuesday, so much runoff continued to flow into the reservoir that Oroville went from 80% full to 84% overnight.

"At this point, they have to be prepared to use the broken spillway," said Ron Stork, who has studied Oroville operations as a policy staffer for Friends of the River, an environmental group. "If they don't, the reservoir is going to rise, and there is no place to put a big inflow."

Typically, reservoir releases are made through Oroville's power plant, and the spillway is used only for high releases. The last time managers opened the spillway valves was in 2011.

Drought just keeps dwindling in region, state

More than half of California out of such a condition, statistics show

By Suzanne Hurt, February 10, 2017

Snow and rain keep putting the hurt on California's weakening drought, which now encompasses less than half the state for the first time in four years.

This week, 53 percent of the state is out of drought and only 11 percent remains in "severe" to "extreme" conditions – with more rain and snow expected in the region today and Saturday.

"Extreme" drought conditions linger in a sliver of northwest Los Angeles County and parts of Ventura and Santa Barbara counties, according to this week's U.S. Drought Monitor

Southern California made other significant gains. The "severe" drought gripping half the region has shrunk to portions of Los Angeles, San Bernardino, Ventura, San Diego and Imperial counties and the rest of Santa Barbara County.

Meanwhile, Riverside and Orange counties are now experiencing nothing worse than moderate drought.

California's "abundant" rain and snow over several months are paying off, said Reno-based Western Regional Climate Center scientist David Simeral.

"These series of storms over the past 90 days have definitely impacted the state overall in terms of improving soil moisture levels and surface water flows, which fill our reservoirs with water," he said.

The Sierra Nevada snowpack water content now measures 179 percent of normal, or 126 percent of the April 1 average.

Since October, precipitation that's 4-8 inches above normal has fallen in Orange County, Los Angeles County's southern three-quarters, Riverside County's western third and San Bernardino County's southwest corner, Simeral said.

He produced the country's Feb. 7 drought assessment put out by the National Oceanic and Atmospheric Administration, U.S. Department of Agriculture and National Drought Mitigation Center.

The assessment is based on a range of indicators, including the Palmer Drought Severity Index, soil moisture, precipitation, stream flow activity and, in California's Sierra and farther north, snowpack water content.

The last time less than half of California was plagued by drought was April 16, 2013, when 48.39 percent was in drought. That rose to 63 percent by April 23, Simeral said.

The waning drought is "fantastic," said Western Municipal Water District Director of Water Resources Tim Barr.

The state Water Resources department has agreed to supply state water project contractors, who buy Northern California water and sell it to customers, with 60 percent of requested amounts, which is the total they got for the past three years, Barr said.

Like other suppliers, Western Municipal officials think the state is out of a drought emergency and want mandatory water savings requirements ended – as many told the State Water Resources Control Board on Wednesday before the board extended an emergency conservation regulation for 270 days.

Suppliers urge users to save water through pricing. The board shouldn't require suppliers to enforce the bans on such things as landscape runoff, Barr said. "I think it's up to every local supplier to determine whether they can meet the needs of their customers' demand," he said.

Los Angeles Times

That sinking feeling in the San Joaquin Valley Groundwater pumping is causing areas to collapse

By Joseph Serna, February 10, 2017

California's San Joaquin Valley continues to sink at an alarming rate because of groundwater pumping and irrigation, according to a new study by NASA.

Ground levels in some areas have dropped 1 to 2 feet in the last two years, creating deeper and wider "bowls" that continue to threaten the vital network of channels that transport water across Southern California, researchers say.

The findings underscore the fact that even as record rain and snow have brought much of California out of severe drought, some parts of the state will probably struggle with water problems for years to come.

Despite a new series of storms that battered California this week, state water regulators decided Wednesday to maintain drought restrictions for at least a few more months as they continue to assess recovery.

Researchers said subsidence has long been a problem in parts of California. "But the current rates jeopardize infrastructure serving millions of people," said William Croyle, acting director of the state Department of Water Resources. "Groundwater pumping now puts at risk the very system that brings water to the San Joaquin Valley."

Subsidence occurs when water is removed from underground aquifers and the surrounding soil collapses on itself.

Even if the underground water is replenished, subsided basins can't hold as much water as they did previously.

In the case of the Central Valley, where subsidence is uneven, roads and irrigation canals that span broad areas of terrain can buckle and break.

Since the 1960s, subsidence-related repairs have cost the State Water Project and Central Valley Project \$100 million.

The NASA study, which was based on satellite data, found that groundwater pumping near the California Aqueduct in Kings County resulted in a ground level drop of more than 2 feet between July 2013 and June 2016. The drop forced authorities to reduce aqueduct flow so water didn't wash over the channel's concrete banks.

The satellite data also revealed ground-surface depressions along short portions of the California Aqueduct, which carries supplies from Northern California to the San Joaquin Valley and Southern California.

The largest bowl, which is near Corcoran and extends 60 miles, sank roughly 22 inches between May 2015 and last September, the report stated. A 2015 study reported a 3-foot drop in ground level, but over a period of four years.

Subsidence in a 25-mile-wide bowl near El Nido measured 16 inches between May 2015 and September 2016. Some of the subsidence there was not caused by groundwater pumping but by the irrigation of local nut groves, officials said.

The Central Valley aquifer extends about 400 miles under the Sacramento and San Joaquin valleys.

The subterranean water, some of which seeped into the ground 10,000 to 20,000 years ago, constitutes the state's largest reservoir. Agricultural pumping from the aquifer has gone unregulated and unmonitored for decades, and there are no good figures on how much water has been removed.

It remains unclear how California's current, unusually wet winter may affect the state's aquifers, if at all, researchers say.

The study was written by researchers with Caltech and the Jet Propulsion Laboratory

Agencies living up to Soboba water deal

As the drought eases, they can add greater amounts to the San Jacinto Groundwater Basin

By Craig Shultz, February 12, 2017

Efforts to recharge the San Jacinto Groundwater Basin appear to be working – thanks to recent rains.

Under the terms of a federal judgment related to water rights for the Soboba Band of Luiseño Indians, the four water providers in the San Jacinto Valley are responsible for sustaining the amount of water in the basin. And, after years of drought, they easily exceeded minimum levels in the past year.

The agencies – Eastern Municipal Water District, Lake Hemet Municipal Water District and the cities of Hemet and San Jacinto – combined to put more than 12,000 acre-feet of water into the basin.

That is well in excess of the 7,500 acrefeet required by the Soboba Settlement Agreement.

The reason for the increase is simple.

“Mainly because now we have water,” said Hemet Mayor Linda Krupa, chairwoman of the Hemet-San Jacinto Watermaster Board, which oversees the program. “We didn’t have water last year.”

In 2006, the Soboba tribe, the Metropolitan Water District, Eastern, Lake Hemet and the Bureau of Indian Affairs signed the agreement, which led to the Soboba Band of Luiseño Indians Settlement Act of 2007, ending decades of conflict involving the tribe, the government and the water districts.

Soboba sued MWD seeking damages for seepage of water from the Soboba Reservation into MWD’s nearby San Jacinto Tunnel, which was constructed in the 1930s.

The agreement requires active management of the groundwater basins, which led to the formation of the Hemet-San Jacinto Watermaster.

Water delivery slowed as California’s extended drought resulted in MWD suspending water available for recharge from 2013 to 2016. But when deliveries from the State Water Project were increased last year, imported water became available and efforts resumed to store more water within the groundwater basin.

The Watermaster program buys the water and bills the agencies based on usage patterns.

Three of the agencies wrap the costs into water bills; San Jacinto charges its customers \$1.07 per billing unit to cover costs.

Councilman Andrew Kotyuk, who represents San Jacinto on the Watermaster board, said he’s pleased more water is available.

“My goal is to reduce our cost however we can for our residents,” he said.

The agencies have adopted a goal of recharging more than 23,000 acrefeet of water this year. If those figures are met, the agencies would be ahead of their average annual recharge rate and be credited with having put surplus water into the groundwater basin.

“It looks like we’re going to have an overabundance,” Krupa said. “It’s a good sign.”

RIVERSIDE COUNTY WATER SUPPLIER DITCHES MOST RESTRICTIONS

By Suzanne Hurt, February 16, 2017

Eastern Municipal Water District dropped most water restrictions Wednesday – moving from measures taken to meet the state’s mandatory conservation orders to encouraging voluntary savings among customers.

While state bans on wasteful water use remain, the district board voted unanimously to end its own restrictions and return the water rate structure to predrought emergency order levels after supplies increased following heavy rain and snowfall, especially in Northern California.

Western Riverside County remains in a moderate drought.

Since June 1, 2015, the district’s customers saved 28,000 acre-feet of water, or nearly 90 million gallons, over 2013 use – roughly what 56,000 households use in a year, said Eastern Municipal spokesman Kevin Pearson.

“Our customers stepped up,” he said. “The time is right for those restrictions to be eased.”

The district provides water to about 795,000 people living and working in a 555-square-mile area from Moreno Valley to Temecula, San Jacinto and Hemet. On Feb. 8, the State Water Resources Control Board extended an amended statewide emergency water conservation regulation for 270 days, despite many water suppliers’ pleas for an end to the regulation.

The district board took action so quickly partly to maintain public trust, so customers know there’s an actual emergency the next time the district takes steps under its water shortage contingency plan, Pearson said.

Customers will now be charged at a Tier 3 “excessive” rate of \$6.22 per billing unit, or 748 gallons, in most areas if they use 101 percent to 150 percent of their water budget, and a Tier 4 “wasteful” rate of \$11.38 per billing unit over 150 percent. Tier 3 rates had been suspended since June 2015.

Settlement to pay for perchlorate removal

A deal between defense contractor Goodrich Corp. and district to help clean water from Rialto-Colton basin

By Jim Steinberg, February 17, 2017

A defense industry contractor has agreed to pay \$700,000 or more annually for the operations and maintenance costs of a perchlorate removal system that uses microbes to break down the harmful chemical.

West Valley Water District made environmental cleanup history late last year by shipping water directly to customers from a \$23 million specialized treatment plant at its headquarters.

The agreement with Goodrich Corp. authorizes funding for 100 percent of operations and maintenance costs for up to \$700,000 annually for the first year and no cap for subsequent years in the life of the project, West Valley said in a statement.

Negotiations have been ongoing since 2014.

The talks were the result of a judicial consent decree that requires Goodrich, under the EPA's oversight, to fund cleanup facilities, said Matthew H. Litchfield, the district's general manager.

Perchlorate has polluted portions of the Rialto-Colton water basin, the result of past military, industrial and agricultural activities above it.

Experts say perchlorate inhibits iodide uptake into the thyroid gland and as a result causes disruptions of thyroid hormone production.

"This agreement secures our groundwater cleanup efforts for our customers. It was critical to the board of directors that the district receives compensation on behalf of our ratepayers for certain incurred costs and we are thrilled this long negotiation process is finally concluding," said Clifford O. Young Sr., the water district's board chairman.

Following the discovery of perchlorate in portions of the Rialto-Colton groundwater basin in 1997, the district and city of Rialto shuttered wells in the impacted area.

After years of testing and review by regulatory agencies, the district began using bio-remediation in September to remove perchlorate and restore water for potable use.

The plant can provide water for about 16,000 of West Valley's 66,000 customers.

West Valley has begun working on perchlorate destroying plant number two, called a fixed-bed biotreatment plant, which takes a slightly different approach to treatment with the same naturally occurring microbes. The second plant is expected to deliver water sometime in 2019, Litchfield said.

The operational costs of this second treatment technology also will be paid for by Goodrich, he said. Both treatment plants are at West Valley headquarters, 855 W. Base Line, Rialto.

"This is an offsetting revenue stream to keep operating costs (of the microbe treatment plants) off of the ratepayers," Litchfield said.

The district serves Bloomington, Colton, Fontana, Rialto, parts of unincorporated areas in San Bernardino, and part of Jurupa Valley.

Still needing more rain in district

Rancho Water expects that it will need to buy expensive imported water

By Aaron Claverie, February 19, 2017

Lake Oroville is overflowing. The pool in the backyard hasn't needed a splash of water for months. And the neighbor's formerly barren yard has a lush canopy of verdant weeds.

So why is the Rancho California Water District – which serves Temecula, Wine Country and some surrounding areas – warning customers about possible rate hikes later this year and urging conservation?

"This is the problem," Jeff Armstrong, the district's general manager, said Thursday. "Everyone's saying the drought's over. And you see what's happening in Northern California, the visuals."

The main issue, he said, is that this region, which has its own microclimate, still is recovering from a long period of below-average rainfall. In some years, he said, the region was getting less than half the rain it normally gets during a weather year.

During that time, the district used water from Vail Lake to augment the local supply, which, he said, helped keep rates lower than neighboring districts.

But the district – which imports around 60-75 percent of the 76,000 acre-feet it supplies each year – has drawn as much water as it can from the lake because of water quality issues: The lake needs enough water to allow sediment to sink to the bottom.

The recent storms, including this weekend's deluge, have helped a lot – thousands of acre-feet have been added relatively quickly – but the lake is still about one-quarter of capacity and there is no plan any time soon to resume boat launches, which were suspended indefinitely because of the low water level.

In the past, the district wasn't allowed to draw down the lake so severely because of a longstanding agreement that required a minimum elevation for recreation purposes.

That agreement was effectively voided when the district spent \$55 million to buy the land surrounding the lake in a 2014 bankruptcy proceeding.

Armstrong said the investment helped the district bank about \$7.5 million in savings by using Vail Lake water instead of buying imported water.

Looking ahead, Armstrong said the district will be able to buy all the water it wants from the state water project because of the tremendous rain and snowpack levels in the northern reaches of the state, but that water is considerably more expensive than the local supply.

"We're going to need a lot," he said, noting the difference in cost runs about \$150 per acre-foot for local water versus \$1,000 an acre-foot for imported water.

An acre-foot of water equals 326,000 gallons, about the amount two families use in a typical year.

Though the district buys water and possibly passes along those costs to ratepayers, it will be allowing the local groundwater basin to recharge.

Late last year, Congress approved a settlement with the Pechanga Band of Luiseño Indians that allows the tribe access to around 5,000 acre-feet of local groundwater each year.

The agreement, which should save the tribe millions of dollars annually, won't have a huge impact on the district's operations, but Armstrong said it illustrates how important the local groundwater basin is for the region, which includes the tribe's acreage and the agricultural industry in Wine Country and De Luz.

"We have to operate that basin with a safe yield range," he said, adding it's about 30 percent lower than normal.

The watershed, which includes groundwater supply and regulation of water flows to the coast, is governed by a court-appointed watermaster, which produces its own detailed reports.

District spokeswoman Meggan Valencia said customers will not be asked to remove more turf or turn off fountains. She said the message is to "continue doing what you're doing."

Asked about agricultural water use, which dwarfs residential use, she said the district recently started the CropSwap program, which provides financial incentives for farmers who remove thirsty crops for less water-intensive options. And the board could approve higher rates that would affect growers.

Because of the temporary nature of the problem – the lake and the groundwater basin will return to historic levels if allowed to – the district is discussing the possibility of temporary rate hikes that would have sunset clauses.

The board is expected to take up the issue in March ahead of the more formal budget hearings later in the spring, which will allow the board to review the projections and map out a rate plan.

Los Angeles Times

Drought dwindles, but persists

The region's water forecast is much brighter, if less so in the long term

William Yardley, February 19, 2017

California is not the only place in the West confronting startling amounts of rain and snow.

Drought conditions have declined substantially across the region in recent weeks, with heavy storms replenishing reservoirs and piling fresh powder on ski resorts.

Yet there is one place where the precipitation has been particularly welcome and could be transformative: the Colorado River basin, which provides water to nearly 40 million people across seven states.

"We're in a really good spot as far as snow accumulations," said Malcolm Wilson, who leads the Bureau of Reclamation's water resources group in the upper Colorado River basin.

In fact, if the Rocky Mountains continue to see substantial snowfall this winter, there is a chance that later this year water managers for the Colorado could do something that seemed inconceivable just a few weeks ago: They could start giving water away.

Under federal guidelines that kick in when water flows reach certain volumes, the Bureau of Reclamation, which oversees the river basin's largest reservoirs, Lake Powell and Lake Mead, could release enough water from the former to raise the elevation of the latter by 20 feet or more — providing a remarkable shot in the arm for a lake that has been declining steadily during a devastating drought that started in 2000.

The process — lowering one reservoir to lift another — is called equalization, and a few weeks ago, it was not even viewed as a viable option. Now, Wilson said, "it's in the realm of possibility."

Even if that optimistic scenario does not play out — the region would need several more weeks of strong precipitation without a substantial warmup — there is still reason to savor a moment of relief on the Colorado.

As of last month, the bureau was forecasting about a 50% chance that, for the first time, the river and its reservoirs would not be able to fulfill the water demands of states that rely on it, beginning in 2018.

But last week, the bureau quietly updated that forecast, saying the chance was only about 34%. By the end of this year, it expects Lake Mead to be at least 3 feet above the threshold at which an official shortage would be declared.

Not only that, the bureau said the likelihood of a shortage through 2021 is no greater than 33%. Just a few weeks ago, the chances of shortages in that time frame were about 60%.

Still, no one is declaring this the end of a drought that has fallowed farm fields, depleted groundwater and even inspired a dystopian novel, "The Water Knife," from 2015, which imagines the Southwest descending into crime and chaos as people fight over the shrinking Colorado.

While California has been climbing out of its drought — albeit the hard way, with brutal storms, mudslides and a mass evacuation ordered earlier below the damaged Oroville Dam spillway — the drought on the Colorado may never truly end.

That is because no matter how deep the snowpack may get one year — some drainages are seeing close to 200% of normal this year — the river itself functions at what its managers call a "structural deficit."

The amount of water to which cities, tribes, farmers and others have legal rights is larger than the amount that, on average, flows into the system.

In addition, climate change models for the future show declining snowpack and rising temperatures, potentially leading to more evaporation.

That all means that delicate negotiations underway to get the seven states that use the water — Arizona, California, Colorado, Nevada, New Mexico, Utah and Wyoming — to increase the amount they conserve are still crucial.

The effort, called the drought contingency plan, has been going on for several years, though negotiations intensified in 2016. The idea is to add a layer of voluntary conservation measures to prevent Lake Mead from falling below 1,075 feet, the level that triggers more painful, involuntary conservation measures.

Water managers had hoped to reach an agreement by the end of the Obama administration but ran into challenges resolving concerns among agricultural and other interests within individual states, particularly Arizona and California.

Now, some water managers worry they may face a new challenge: that the wet winter may reduce the sense of urgency to complete the drought contingency plan.

“It potentially makes it harder, to tell you the truth,” said Tom Buschatzke, the head of the Arizona Department of Water Resources, who is trying to build support for the plan among the state’s competing interests, “because sometimes crisis mode drives outcomes.”

Buschatzke noted that 2011 was also a very wet year, with strong snowpack, but less than four years later, water managers were again preparing for the possibility of a shortage. The Colorado provides 41% of Arizona’s water.

“We need to make sure the wet winter doesn’t stop the momentum we’ve built,” he said. “Mother Nature does not bail us out.”

Both the drought and the recent deluges demonstrate how the region’s water issues are connected. The Metropolitan Water District of Southern California relies on the Colorado for about 45% of its water on average, but during the drought, the Colorado has provided as much as 90%.

The recent heavy rain in California has changed the balance again, allowing the utility to leave more water in Lake Mead, which helps the rest of the basin guard against a shortage.

“For the last four years, it was all about where can we get extra water,” said Bill Hasencamp, who manages Colorado River resources for the Metropolitan Water District. “Now, all of a sudden in the last six weeks, it’s a completely different mindset. We’re storing as much water as we can in Lake Mead, storing it in our desert groundwater account, storing it in every reservoir account we have.”

Hasencamp said the improvement in short-term forecasts for the Colorado could make it easier for California to approve the drought contingency plan, in part because the state’s water rights already make it least likely to suffer major cuts.

Besides, he noted, the plan is merely a temporary fix, one that may not have to be implemented if Lake Mead improves for a few years. The truly complex negotiations will begin in 2020 for what is supposed to be a long-term solution.

“Lake Mead is like going to Vegas,” Hasencamp said. “You might win a couple of times. You might even hit a jackpot. But in the end, the odds are stacked against you.”

Los Angeles Times

George Skelton, February 20, 2017, Capitol Journal

You hear this every time there's a drought or deluge in California: "Why haven't they built more dams?" Truth is, they've built a bunch. And they're about done with it.

Tally them up. There are more than 1,400 dams in the state. At least 1,000 are major and 55 can hold 100,000 acre-feet or more of water.

One acre-foot is enough to supply two average households for a year.

There are 36 reservoirs that can contain at least 200,000 acre-feet. Eleven can hold 1 million or more.

The biggest is Shasta on the Sacramento River at 4.5 million acre-feet. Then comes Oroville with its broken spillways on the Feather River at 3.5 million.

The largest reservoir in Southern California is Diamond Valley in Riverside County at 810,000 acre feet. For perspective, Castaic Lake off Interstate 5 heading over the Grapevine is about 324,000 acre-feet.

So there's already a heap of storage capacity in California — or what's called "surface storage" in water talk, in contrast to underground aquifers. The largest 200 reservoirs alone have a combined capacity of 41 million acre-feet.

There's at least one dam on every river running off the west slope of the Sierra except for the Cosumnes, just south of Sacramento, says Jeffrey Mount, a water expert at the Public Policy Institute of California. "And that doesn't have enough water in it to make a dam worthwhile," he adds.

Thankfully. The Cosumnes frequently spills over its banks, flooding roads and barns. But just before it enters the Sacramento-San Joaquin River Delta, the natural-flowing Cosumnes forms a popular nature preserve that annually hosts thousands of migratory waterfowl, including giant sandhill cranes.

California has lost 95% of its wetlands since 1900. So pardon if talk of "balancing" what's left isn't really appealing.

Anyway, dams don't make it rain and end droughts. And lack of rain was our principal drought problem, regardless of corporate agriculture's squawking about governments and judges coddling salmon.

"You can build more dams, but there isn't more water flowing into California," says Jay Lund, a water expert and professor of civil and environmental engineering at UC Davis. "This year, there's more water than reservoirs. But if you can only fill them every 10 years, they make less sense economically."

There aren't many sensible dam sites left in California.

"We've already built the cheap dams," Lund says. "The remaining sites mostly are pretty expensive and are not going to give you that much water. Economically, you're not going to find a lot of people volunteering to pay for those dams. They'd be happy if someone else paid for one."

For environmental and cost reasons, Gov. Ronald Reagan killed dam proposals on the Eel River and the Middle Fork of the Feather nearly 50 years ago. An earthquake scare later scuttled a proposed dam on the American River above Folsom Lake.

There are earthquake faults all over California that unnerve dam builders. "There's nothing simple about water in California," Lund notes.

The best bet for the next major dam in California is called Sites, named after an old settlement in the low foothills of the Coast Range 14 miles west of the Sacramento River near Colusa.

This would be an “off-stream” reservoir that didn’t dam a river, so there’s much less opposition from environmentalists. Water would be piped into the reservoir from the Sacramento when it was running high.

It would have a capacity of 1.8 million acre-feet and be the seventh-largest reservoir in California. It’s estimated that 500,000 acre-feet could be delivered a year, split between agriculture, domestic and environmental use.

But there’d be only minor flood-control value, experts say.

The cost? About \$5 billion. Proponents are preparing to seek money from the \$7.5-billion water bond issue that voters approved in 2014. Of that, \$2.7 billion was set aside for water storage.

Under the measure, up to half a project’s cost could be paid for by the bond money. The rest would need to be footed by the water users on their monthly bills.

But before water districts in the San Joaquin Valley and Southern California commit to pitching in, they’d need assurance the water could be moved through the troubled delta. And that’s anything but certain.

Delta farmers and environmentalists are fighting Gov. Jerry Brown’s \$15.5-billion plan to dig two monstrous tunnels to siphon off fresh Sacramento River water before it ever reaches the estuary. And Brown hasn’t shown any interest in trying to fix the fish-chomping water transfer system that exists.

One other major dam is being promoted, but its economics are less promising and its environmental impact more controversial. It’s Temperance Flat near Fresno on the San Joaquin River above Friant Dam. Its backers also are eyeing a piece of the 2014 bond issue.

“The default reaction when we’re faced with a water emergency is the 20th century notion that large investments in concrete will somehow solve our problem,” Mount says.

“But if you’ve already tapped out that, the alternative is to look more closely at whether we can do a better job with what we have. And to date we haven’t done that.”

Operate the dams more efficiently. Recharge the aquifers. Expedite groundwater regulation. Capture storm runoff. Recycle. Desalinate.

Build Sites. Compromise and fix the delta.

One thing is not the answer: continuing to plant thirsty nut orchards in the arid San Joaquin Valley.

CVWD pushes for safe water in poor areas

Anna Rumer, February 22, 2017

The largest provider of water in the Coachella Valley is taking steps to provide safe drinking water to historically disadvantaged desert regions as part of a nationwide push to better serve the nearly 700,000 people in California whose water does not meet safety standards.

The Coachella Valley Water District announced on Feb. 2 that it has formed a new Disadvantaged Communities Infrastructure Task Force comprised of representatives from local underserved communities, government agencies and nonprofits to ensure everyone in the region has access to safe and affordable water.

CVWD serves about 109,000 residential and business customers, primarily in Riverside County, and estimates that about 10,000 Coachella Valley residents relying on private wells for water are not drinking water that is up to state code. The majority of these people live in the east valley, in historically underprivileged areas such as Mecca and Thermal, where almost half the population lives under the poverty line, according to the U.S. Census. In addition

to the estimated hundreds of private wells and small systems, two public water systems — Saint Anthony Trailer Park in Mecca and Oasis Gardens Water Co. in Thermal — are both out of compliance due to higher-than-permitted levels of arsenic in the water, according to data published by the State Water Resources Control Board.

Arsenic contamination, in addition to that of chromium-6 and microbes from nearby septic systems, is linked to health issues such as cancer, cardiovascular disease and kidney problems amongst others. But depending on bottled water, as many people with unsafe drinking water do, is expensive, and results in a high consumption of sugary sodas or juices, according to Mariela Magana with the Leadership Counsel for Justice and Accountability.

Magana grew up in the east valley, first in Thermal and then in Coachella as she got older. She remembers not being allowed to drink from the faucet as a kid, and the financial hardship of subsisting through the week on refilled plastic gallons and bottles of water. She also remembers drinking far more sugary drinks as a kid than she would now as an adult.

“For the most part these are people whose income is very low,” she said. “It adds to the other social issues they face ... it really is a multifaceted issue.”

The groundwork for the CVWD task force began years ago with Union De Polancos, a group of about 30 mobile home community members who were pushing for the infrastructure that would allow them to connect to the clean water of the CVWD system, according to Cástulo R. Estrada, vice president of the CVWD board of directors, who’s spearheading the task force. During his campaign for water board election, Estrada said he spoke a lot with these local advocates, and was moved by their plight.

“These communities have been here for 40 years, 30 years,” he said. “They’re not just popping up, they’ve been here.”

CVWD’s philosophy has long been not to serve people who are not customers of the district, Estrada said, which he thinks is hard to reconcile when there are people nearby who don’t have access to clean water.

“When I got on the board in 2014, my philosophy was that they’re in our service area and we have to take a more proactive approach,” he said, “and not rely on the nonprofits.”

The task force’s goals include pursuing grant funding for short-term solutions such as rebates for the installation of under-the-counter water filters, septic system improvements and well retrofits, as well as long-term solutions such as extending CVWD’s infrastructure into areas of need, according to the task force’s mission statement.

In addition to seeking out grant funding to connect underprivileged customers to the CVWD, Estrada said he hopes the task force can help influence board policy change, so that the clean water advocacy isn’t dependent on

outside funding. Like golf courses, which can connect to the CVWD system for free, Estrada says poor communities need to be prioritized.

"We need to be actively pursuing getting these folks connecting in the same way that we pursue connecting golf courses," he said.

Included in the task force are representatives from CVWD's board, the Riverside County Supervisor's Office, Assembly member Eduardo Garcia's office, Pueblo Unido Community Development Corporation, Building Healthy Communities, Leadership Counsel for Justice and Accountability, Coachella Valley Housing Coalition, Riverside County Transportation and Land Management Agency, mobile home park owners and community members.

The problem of unsafe drinking water extends far beyond the Coachella Valley. According to a map published recently by the State Water Resources Control Board, 292 public water systems serving more than 690,000 people in the state — nearly 2 percent of the population — are currently out of compliance with drinking water standards.

This is unacceptable to the Visalia-based Community Water Center, which was founded in 2006 to address the drinking water problems of California's Central Valley communities. In a Feb. 7 press phone call, cofounder and co-executive director Laurel Firestone compared California's situation to that of the highly-publicized Flint, Mich. water crisis, in which it was discovered that due to insufficient treatment, more than 100,000 people had been exposed to high levels of lead in their drinking water. In January 2016, a federal state of emergency was called for the city, and residents today are still advised to ingest only bottled or filtered water.

"We're here today because California has far more people suffering from unsafe drinking water than the population of Flint, Mich.," Firestone said. "Our state needs to address this. We can't wait any longer. And we look forward to working with the leaders of our state to develop a sustainable source of funding to finally make the human right to water a reality for all Californians."

The number of Californians without clean drinking water is likely an underestimate, said Jenny Rempel, Director of Education and Engagement for the Community Water Center out of Sacramento, as the data for the map doesn't include chromium- 6, perchlorate and a number of bacterial violations, nor does it include more than 1.5 million Californians who get their water from domestic wells and small water systems not regulated by the state.

Putting together a dedicated task force to this issue is a positive step for CVWD, said Phoebe Seaton with the Leadership Counsel for Justice and Accountability, but it has to be matched by the push statewide for a safe and affordable drinking water fund, which would not only identify the specific need but also look at funding from various sources to promote infrastructure and clean water in communities that have been going without.

Senate Bill 623, which was introduced Friday, would be the first step toward accomplishing that, designating resources to provide clean water across the state.

"I think what CVWD is doing ... is a critical component that needs to be married with this fund, because right now there isn't the money for (improvements,)" she said.

Overall, Seaton said she's "over the moon" knowing there will be real progress made towards solving the issue soon.

"There is so much enthusiasm in Sacramento on this, in the capitol and beyond," she said. "We're optimistic, it just feels like this is the year."

Reporter Ian James contributed to this story.

Los Angeles Times

At Lake Shasta, a wet milestone

Water flows from dam's top gates for first time in nearly 20 years

By Joseph Serna, February 24, 2017

LAKE SHASTA, Calif. — While California's other major dam has been the focus of national attention, the Shasta Dam was making history itself this week.

For the first time in almost two decades, water was released Wednesday from the topmost gates of the dam impounding Lake Shasta, California's largest reservoir, marking another milestone in what is shaping up to be the state's wettest year on record.

The release lasted just 15 minutes and was only a test to confirm that the gates were functioning properly in case they need to be used at a later time, according to the U.S. Bureau of Reclamation. The gates operated as expected, bureau spokesman Louis Moore said.

With the reservoir at 135% of its historical average for this time of year and nearly 93% of its capacity, dam engineers were releasing billions of gallons of water to make room for incoming flows from the surrounding foothills and Sierra Nevada, according to the bureau.

Water was flowing from the reservoir at up to 70,000 cubic feet per second into the Sacramento River, and communities downstream were preparing for a corresponding surge along its banks.

Shasta Dam is the linchpin of California's federal water project, which sends water down to cities and farms to the south. Oroville Dam is the heart of a separate state water project, which also moves water from the Sierra Nevada south.

Oroville was at the center of a major crisis when an emergency spillway showed signs of failing, prompting the evacuation of more than 100,000 residents downstream. Since then, officials have lowered water levels at Lake Oroville and the concerns have eased.

There have been no issues with the spillways at the Shasta Dam, though officials downstream have been talking about contingencies in the unlikely event that significantly more water needs to be released from it.

This week marked the first time the agency has used the gates at the top of the 602-foot-tall dam about 120 miles from the Oregon border in Northern California since the state's last huge rainy season in 1997-98.

A set of valves lower down on the dam were used for the first time in six years in January, which was a precursor to Wednesday's milestone.

To illustrate just how much rain has fallen on Northern California this year, Moore said, the reservoir held only 2.67 million acre-feet of water at this point last year; as of midnight Wednesday, he said, the reservoir was holding 4.21 million acre-feet.

An acre-foot of water is enough to supply the needs of a family of five for a year, Moore said.

In February alone, the reservoir has added 669,000 acre-feet of water, or a year's supply for more than 3.3 million people, he said.

"It's ridiculous," Moore said.

Lake Shasta has risen 3 feet in just the last three days, he said.

"Think of the vast size of the reservoir," Moore said. "That's a tremendous amount of water."

Even for locals, the dam has something new to offer.

Daniel Botts, 21, from Redding, was in awe of just how much water the lake held after more than five years of drought.

He pointed to where the lake meets the concrete dam. "It used to be you could look over the edge and it'd be a death drop," he said.

Now it's more of a high dive.

Alice Hightower, 91, remembers the last time Redding, downriver from the lake, flooded.

It was 1940 and there was no dam to prevent an onslaught from rain or snowmelt.

"We lost seven cows downriver," she said Thursday.

Her husband, Thomas, helped build the structure.

Back then, residents moved out of Redding, fearing the dam wouldn't last.

Now it's a tourist attraction.

"They say it'll last thousands of years because it's all cement," Hightower's daughter Darla Hoeft said.

The two came to gawk at the waterfall gushing from the dam, which draws regular visitors on rare sunny days.

"It's an amazing dam, you got to admit!" Redding resident Sally Batchelder said proudly. "We haven't had this much rain and snow since the '80s."

The gates have been used only twice in more than a generation, in 1983 and 1997, bureau officials said.

They might have to be used again later this year for snowmelt, Moore said.

The snowpack in the Sierra Nevada is at levels never seen before, and when it melts in the spring and summer, it will probably send a massive flow of water into the lake.

In Tehama, about 50 miles downstream from the dam, Mayor Robert Mitchell didn't sound too concerned about the releases from the reservoir flooding homes along the Sacramento River.

On Thursday, the river was full and moving fast, but well within its banks.

"In summertime it's a beautiful river with clean water. Right now it's kind of ugly, muddy and raging," the mayor said.

The influx of water from the reservoir hasn't been a concern because it has been controlled, Mitchell said. But the reservoir being so full and the dam gates having to be used at all suggest bigger problems could be on the horizon.

It hasn't flooded here since the 1997-98 El Niño, said Mitchell, a Tehama resident for the last 45 years.

"My biggest concern, and just about everyone agrees with it, is with all the snowpack in the Sierra. If we get a warm rain this spring we're going to be flooded. There's no getting around it," Mitchell said. "It'll be ugly down here, but there's nothing you can do to stop it. Nature will play its role and whatever happens happens."

joseph.serna@latimes.com

OUR VOICE, February 26, 2017

CVWD task force presses vital water work

Many who live in the eastern Coachella Valley have long suffered with water that is tainted with one contaminant or another. The Coachella Valley Water District is stepping up with a new effort to help bring safe drinking water to these communities.

Bravo.

CVWD officials announced earlier this month that a new Disadvantaged Communities Infrastructure Task Force will focus on improving safe water access for the estimated 10,000 area residents whose supplies are not up to state code.

It has long been known that toxins such as arsenic, chromium-6 and microbes from septic systems are present in dangerous levels in private wells that serve economically disadvantaged areas such as Mecca and Thermal.

CVWD Board Vice President Castulo R. Estrada, who is spearheading the task force, told The Desert Sun's Anna Rumer that this specific push has been a long time in coming.

"These communities have been here for 40 years, 30 years," he said. "They're not just popping up, they've been here."

CVWD officials have been working to expand the district's infrastructure to provide safe water to these areas as resources allow, but financial and legal impediments have prevented wholesale moves of this sort. Another huge hurdle is the enormity of the safe drinking water problem statewide: Of the 7,600-plus public water systems in California, nearly two thirds have fewer than 200 service connections, and this small size means they have extremely limited resources that can go to meeting water quality standards. The State Water Resources Control Board says 292 public systems are out of water quality standard compliance.

Nonprofits have been doing much of the heavy lifting locally when it comes to getting safe water to farflung neighborhoods, such as providing point-of-use filtration systems for individual residences and community-centered drinking water dispensers where residents can come fill up containers to take home.

Estrada wants to focus the efforts of the CVWD task force — which includes community members and representatives of the nonprofit world as well as from Assemblyman Eduard Garcia's office and the Riverside County Board of Supervisors, among others — on aggressively seeking grants to help fund such current solutions in addition to well cleanups and other safe water projects.

He also hopes to find ways to change district policy to ease the path for connecting disadvantaged communities without waiting for outside funds availability.

This focus on helping all in the Coachella Valley to be able to enjoy the Golden State's vaunted ideal of a "human right to safe, affordable, clean water in California" is welcomed and one we have championed for some time. We expect that this task force will bring even more "lift" to the great work that the nonprofits and community advocates have been doing all along for our less fortunate neighbors.

We also reiterate our calls for legislators and Gov. Jerry Brown to do their part to provide the resources needed to make this "human right" to safe water a reality for all residents, regardless of their economic status, here in the Coachella Valley and across California.

Recently introduced SB 623, which would establish in the state treasury a Safe and Affordable Drinking Water Fund that could be continuously accessed by the Water Resources Control Board to fund such work, could be a good vehicle, though we'll withhold judgment as we see how this legislation develops.



Ex-water district official criticizes system of rates, taxes

Ian James, February 26, 2017

For 12 years, Mark Johnson worked as the Coachella Valley Water District's director of engineering, overseeing projects such as the construction of a water pipeline, adding concrete lining to a canal and completing a \$44-million facility where water from the Colorado River pours into ponds to recharge the aquifer. During meetings, Johnson would provide dispassionate, fact-filled updates on the agency's infrastructure projects. Now that he's retired, though, Johnson has begun to speak out on his views and is forcefully criticizing some of the district's policies, saying its system of water rates and taxes should be overhauled.

He's calling for changes to the fees the district charges to well owners and to customers who receive water by canal from the Colorado River. Among other things, he argues the district is undercharging farmers and overcharging homeowners.

Johnson pointed out that if you look at all of the charges paid by a domestic water customer, including property tax assessments, a typical homeowner pays vastly more than an agricultural landowner on a per-acre basis.

"My feeling is that it is unfair," Johnson said in an interview. He said one of his goals is to "try to even it out so that the agricultural customer and the nonagricultural customer are sharing in these costs equally."

Johnson crunched the numbers for a 40-acre urban subdivision and a 40-acre farm. Using his own water bill and tax bill, he calculated that domestic water customers pay 17 times what agricultural customers pay on an acre-by-acre basis. While the domestic water system is more complex than the irrigation system, he said, the operational costs for household water deliveries are only about 3.5 times higher, not 17 times higher.

Johnson said one of the big problems with the various water-related property taxes, including a tax that pays for imported water, is that they're based on assessed land values and turn out to be significantly higher for subdivisions than for farmland.

He suggested the State Water Project tax, for instance, should be charged based on acreage. If that were done, he calculated, that portion of his own property tax bill would drop from \$437 a year to \$19 a year.

Johnson said he had raised some of his suggestions while he was working for CVWD, and "it really never went anywhere."

For example, he recalled that he had suggested shifting to a single rate for water delivered by canal rather than having a second, higher tier for non-agricultural customers. He said he had also raised the issue of the disparity between the taxes on agricultural lands and other properties.

He said that while he was heading the engineering department, he focused on doing his job and following the established policies set by the board. There was also, he said, "a culture in place at that higher level" within the agency that limited the ability of staff members to recommend these sorts of changes in policies.

Now that he's retired, Johnson said he feels freer to speak up about his concerns.

"I just feel an obligation to the customers of CVWD to make sure that they understand this stuff because it's complex," Johnson said. "One rate affects another rate. One tax affects another tax."

He detailed his critiques in two letters to the board this month, one of which he read aloud to board members during a Feb. 1 session.

"The current CVWD water economic system is inequitable," Johnson said in the Feb. 1 letter. He referred to his own property tax bill for his La Quinta home, pointing out that he's charged a tax for "Improvement District No. 1," which funded the construction of an irrigation system in the east valley that is nowhere near his home — and from which, he said, "I get no direct benefit."

"It is time that CVWD eliminate this disparity and move toward universal rates, charges and taxes across the entire Coachella Valley," Johnson said in the letter. He called for elimination of the Improvement District No. 1 — or "ID1" — tax.

To buttress his argument for a single rate for canal water, Johnson cited the language in the 1928 Boulder Canyon Project Act, which authorized the construction of the canal that brought water from the Colorado River, and pointed out that it referred to water for domestic use in addition to irrigation for farms.

The rate for farmers would go up slightly if the valley had a single rate for canal water, he said, "but at least it would be fair for everybody."

Johnson's criticisms parallel larger debates that have surfaced in parts of California over the pricing of water and disparities in policies between agricultural areas and urban areas.

Johnson also took issue with the "replenishment assessment charges" that the district collects from well owners across the Coachella Valley to cover costs associated with importing water to replenish the aquifer.

As it stands now, those rates vary in different parts of the Coachella Valley. In the West Whitewater area, which stretches from north of Palm Springs to Bermuda Dunes, well owners pay \$128.80 per acre-foot — approximately the amount of water it takes to fill up two Olympic swimming pools. In the adjacent Mission Creek sub-basin near Desert Hot Springs, the rate is similar at \$123.20 per acre-foot.

But in the East Whitewater area, which stretches from Bermuda Dunes to the Salton Sea, groundwater pumpers pay \$66 per acre-foot — roughly half the amount in the west valley.

"The east and west valley are really considered one aquifer, and they are interconnected," Johnson said. "It's one big unit. It should have one individual charge. And it would make it easier to administer."

On top of that, he said, merging the three different rates into one would "eliminate the constant parochial bickering."

At one point in 2015, the district's board considered making the groundwater replenishment rates the same across the valley. But the board rejected that proposal and instead decided to stick with the lower rate of \$66 per acre-foot for east valley well owners following a study by Hawksley Consulting, which concluded that those rates "reflect the cost of providing the associated service."

John Powell, Jr., the board's president, said last year that the rates are based on the cost of service in each area and that water reaching the east valley through the Coachella branch of the All-American Canal costs much less than water the district obtains in the west valley by trading its State Water Project allocation for equivalent amounts from the Colorado River Aqueduct.

"The west rate's higher because the cost of water's higher — by 10 times," Powell said at the time.

Powell said he doesn't intend to comment on Johnson's proposals, saying only that the CVWD retiree has a right to make comments at the district's meetings.

Board member Peter Nelson said all of Johnson's suggestions will be considered and "taken seriously as valuable public input."

"It is CVWD's responsibility to charge the beneficiaries of the water resources fairly for the benefits they receive," Nelson said in an email.

However, he said, Johnson's suggestion that domestic water customers unfairly pay 17 times more than agricultural customers appears not to take many factors into account and is something of an apples-and-oranges comparison.

"Domestic water users have clean, tested, pressurized, on demand, treated, stored, reliable water, through expensive underground, under street pipelines, at their fingertips whenever they turn on the tap," Nelson said. "Agricultural users are delivered bulk, sediment-laden, non-pressurized water, through cement pipes installed 60 years ago."

Johnson has offered various ideas for changing how the district manages water in farming areas in the eastern Coachella Valley, where Colorado River water and groundwater is pumped to fields of grapes, peppers and other crops. He pointed out that while domestic customers have cut water use dramatically, agricultural water use appears to have held steady.

In a Feb. 20 letter, he asked when the district will start a "comprehensive agricultural water conservation program."

Board member Patrick O'Dowd said he agrees with many of the concerns that Johnson raised, though he doesn't necessarily agree with all of his proposed solutions.

"The issue in my opinion is how we manage the aquifer for the benefit of everybody, and I think that's a continuing conversation," O'Dowd said. "I'm thankful for his input."

When he retired in December, Johnson left the water district on good terms. He described CVWD as an "amazing organization" and said he was pleased with the agency's efforts in completing big infrastructure projects and managing the area's water supplies.

In the past couple of months, Johnson said he has been doing part-time consulting work for developers while focusing on his hobbies: playing more golf and hiking in the mountains with the Koko-Nuts hiking club, which also includes other former employees of the water district.

At the same time, he has been dissecting the district's finances and policies. And ideas for changing the decision-making structure have also taken shape.

Johnson said he left CVWD convinced that the current system of five board members, each of whom is elected within a district, isn't working. In one of his letters, he proposed creating a seven-member board, with members elected at-large.

He said decisions about water "should be made by looking at the region as a whole — not disjointed parts."

Johnson said he thinks it has become increasingly difficult for board members to reach a consensus amid an "east versus west, ag versus non-ag" dynamic.

That divide was visible during the last election in November, when farmer Anthony Bianco defeated golf course manager Jim Schmid after running what was likely the most expensive campaign in the agency's history.

With Bianco's victory, three of the five board members work in agriculture. Powell is president and CEO of Peter Rabbit Farms, and Nelson is a division manager with the company Paramount Citrus. Powell and O'Dowd will be up for reelection in 2018, along with fellow board member Cástulo Estrada.

Might Johnson be considering a run for office?

"That's a possibility someday down the road," said Johnson, who also chairs La Quinta's Community Services Commission.

If he were to run for a seat on the board, he lives in District 3, which is Powell's district.

For now, though, Johnson said one of his main goals is to try to make water rates, taxes and charges "more uniform across all of the various classes of customers that CVWD has, to make it not so complex and make it fairer."

Ian James writes about water and the environment for The Desert Sun. Email: ian.james@desertsun.com. Twitter: @TDSIanJames.

"The current CVWD water economic system is inequitable. ... It is time that CVWD eliminate this disparity and move toward universal rates, charges and taxes across the entire Coachella Valley."

MARK JOHNSON

Former Coachella Valley Water District director of engineering, in a letter to the board

**DESERT WATER AGENCY
OUTREACH & CONSERVATION
ACTIVITIES**

February 2017

Activities:

2/02/17	Ashley Metzger was on a live segment with KESQ on drought tolerant trees.
2/02/17	Ashley Metzger was interviewed on the Joey English radio show.
2/06/17	DWA and CVWD hosted a tour for students from Washington University in St. Louis.
2/07/17	Steve Johnson, Ashley Metzger and Eddie Gonzalez attended emergency coordination training with the City of Palm Springs at the Palm Springs Convention Center.
2/09/17	Steve Johnson and Ashley Metzger attended emergency coordination training at the City of Palm Springs.
2/09/17	Ashley Metzger was on a live segment with KESQ about CV Water Counts.
2/09/17	Vicki Petek completed two turf buy back post-inspections.
2/10/17	Ashley Metzger gave a classroom presentation to the 2 nd grade class at St. Theresa School.
2/14/17	Mark Krause and Ashley Metzger attended meetings in Sacramento with Senator Jeff Stone, Assemblymember Chad Mayes and a staff member for Assemblymember Eduardo Garcia.
2/16/17	Steve Johnson, Ashley Metzger and Eddie Gonzalez met with Palm Springs Fire Department regarding emergency preparations and training.
2/16/17	Ashley Metzger was on a live segment with KESQ on infrastructure and emergencies.
2/16/17	DWA Board and staff hosted and attended ACWA's Meet the President.
2/17/17	Ashley Metzger gave a presentation at the Desert Sun to Leadership Coachella Valley on crisis communications.
2/21/17	Vicki Petek attended and judged the Palm Springs Unified School District Science Fair at Cathedral City High School.
2/21/17	DWA launched the new flexible smart controller program.
2/22/17	Ashley Metzger gave a presentation at Four Seasons annual meeting.
2/23/17	Ashley Metzger was on a live segment with KESQ on the new flexible smart controller program.
2/25/17	DWA provided the water trailer for the Running From the Law 5K Run/Walk benefiting the Palm Springs Police Department Officers' Association and families of fallen officers.

Public Information Releases/eBlasts:

February 15, 2017 – Nextdoor – DWA customers saved 29% in January.

February 23, 2017 – Media Release; Get Yard Smart with Desert Water Agency's New Flexible Smart Irrigation Controller Program.

February 27, 2017 – Nextdoor and email blast – Control your irrigation from your smartphone with a DWA rebate

Water Conservation Reviews:

Andreas Hills HOA

Bruce Cassirer

Canyon Estates HOA

Canyon South I Condos

Canyon Vista

Casa Sonora Condos

Cerritos Community Assoc.

Country Club Estates

Greenhouse East

Kings Point Condos

Palm Regency

Sunrise East Condos

Water Conservation Reviews are annual mailings sent to large water users. The Reviews include a 5-year consumption report, facility map, and information brochures. The purpose is to help customers save water by summarizing their consumption, and offering suggestions for reducing usage. Occasionally, after viewing, the recipient may contact DWA for assistance in the form of a Mobile Lab Evaluation.

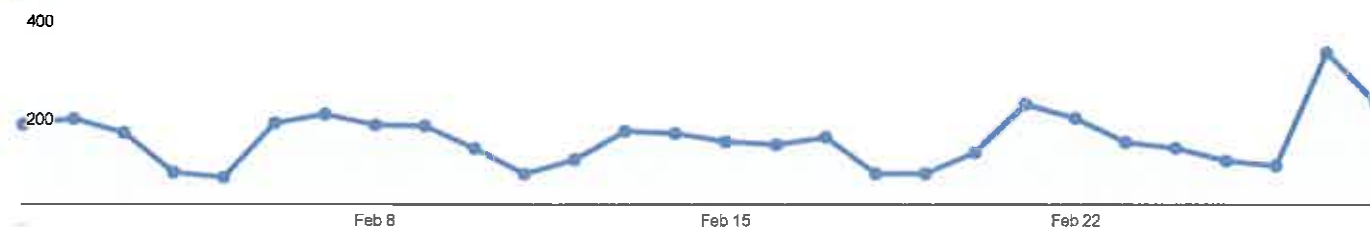
Audience Overview

Feb 1, 2017 - Feb 28, 2017

All Users
100.00% Sessions

Overview

Sessions



Sessions

3,791

Users

2,954

Pageviews

16,847

Pages / Session

4.44

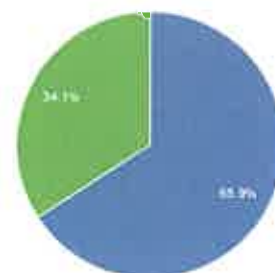
Avg. Session Duration

00:01:53

Bounce Rate

0.05%

New Visitor Returning Visitor



% New Sessions

65.84%

Language	Sessions	% Sessions
1. en-us	3,561	93.93%
2. en-gb	84	2.22%
3. en-ca	57	1.50%
4. en	14	0.37%
5. en-za	9	0.24%
6. c	7	0.18%
7. zh-cn	7	0.18%
8. fr	6	0.16%
9. pl	6	0.16%
10. es-419	5	0.13%



Desert Water Agency Facebook Analytics February 2017

Results from Feb 02, 2017 - Mar 01, 2017

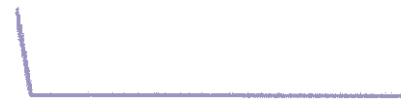
Organic Paid

Actions on Page

February 2 - March 1

2

Total Actions on Page ▲100%



Page Views

February 2 - March 1

30

Total Page Views ▼21%



Page Likes

February 2 - March 1

February 3
1 organic
0 from promotions
1 Page Likes



Reach

February 2 - March 1

2,674

People Reached ▲36%



Post Engagements

February 2 - March 1

338

Post Engagement ▲102%



Videos


























February 2 - March 1

11

Total Video Views ▼97%



Published	Post	Type	Targeting	Reach	Engagement	Promote
02/26/2017 11:54 am	DWA got to help judge the PSU SD science fair last week. We g			123	0 0	Boost Post
02/27/2017 8:14 am	Skip sprinklers, it's sprinkling!			243	0 1	Boost Post
02/24/2017 10:32 pm	Looking to make your yard as smart as your home? There's a r			740	8 12	View Results Boosted: \$14.00
02/23/2017 7:54 pm	What a difference!			30	1 1	Boost Post
02/21/2017 10:46 pm	Is your car dirty from the weeken nd rain? Take it in for a wash at			1.6K	88 37	View Results Boosted: \$14.00
02/20/2017 2:16 am	While our office is closed today in observance of Presidents Day			250	0 1	Boost Post
02/17/2017 10:11 am	Today is #RandomActsOfKindn essDay and we're showering our			250	0 1	Boost Post
02/16/2017 2:01 am	DWA met with Palm Springs Fir e Department today on emergen			84	1 5	Boost Post
02/16/2017 8:46 am	Groundwater sometimes gets fo rgotten in all of the drought talk.			42	2 0	Boost Post
02/15/2017 7:45 am	Desert Water Agency likes Chin o Basin Water Conservation Dis			0	0 0	Boost Post
02/15/2017 10:19 am	DWA customers saved 29% in January compared to 2013!			226	2 0	Boost Post
02/15/2017 12:01 pm	Desert Water Agency's cover ph oto!			33	0 1	Boost Post
02/14/2017 8:50 am	Happy Valentine's Day! From ou r hearts to yours.			312	1 4	Boost Post

02/09/2017 11:15 am		Do you have WaterSense? EPA WaterSense is a great way to			24		10		Boost Post
02/07/2017 11:28 am		You have through Sunday to enter our #H2OResolution contest			179		67		Boost Post
02/03/2017 10:12 am		Desertscape is a great way to modernize the look of your home			525		3122		View Results Sponsored \$14,000
02/02/2017 10:04 am		DWA is proud to be a member of CV Water Counts and is excited			35		00		Boost Post
02/01/2017 9:14 pm		New month, new chance on those goals! Set an #H2OResolution			244		11		Boost Post

Total Page Likes as of Today: 903



BENCHMARK

Compare your average performance over time

Total Page Likes



Desert Water Agency Twitter Analytics February 2017

28 day summary with change over previous period

Tweets	Tweet impressions	Profile visits	Mentions	Followers
34 ↓ 5.6%	8,303 ↓ 22.2%	309 ↓ 15.3%	6 ↓ 14.3%	903 ↑ 8

Feb 2017 • 28 days

TWEET HIGHLIGHTS

Top Tweet earned 755 impressions

Thanks to our customers (and the rain!) for strong conservation in January (23%)! pic.twitter.com/YetziLLVdz



34 1 0

View Tweet activity

View all Tweet activity

Top Follower followed by 2.56M people



Brian Hazard @brianhazard

Quincy, MA FOLLOWING YOU

smith, running, gaming, anime ♥

Added to @DwAGNDrDoo 2. I may not see your tweet, so it's important. Put me up at @DwAGNDrDoo!

View profile

View followers dashboard

Top mention earned 3 engagements



Ian James

@TDSianJames · Feb 6

@MrsHilton @MyDesert Here are the water use restrictions in effect in Palm Springs and statewide, from @DWAwater dwa.org/restrictions



View Tweet

Top media Tweet earned 714 impressions

Skip sprinklers. It's sprinkling.

pic.twitter.com/2XgRoGFxJn



27 1 0

View Tweet activity

View all Tweet activity

Get your Tweets in front of more people

Promoted Tweets and content open up your reach on Twitter to more people.

Get started

FEB 2017 SUMMARY

Tweets	Tweet impressions
34	8,303
Profile visits	Mentions
309	6
New followers	
8	