



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. January 6, 2017 (Special) CIOFFI
B. January 17, 2017
C. January 24, 2017 (Special)
- 3. GENERAL MANAGER'S REPORT** KRAUSE
- 4. COMMITTEE REPORTS –** A. Executive – February 1, 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. Request Adoption of Resolution No. 1148 Granting Retirement Status to Lee Lahtinen KRAUSE
 - B. Water Use Violation - Civil Penalty Hearing (s) METZGER
 - C. Request Adoption of Resolution No. 1149 Concurring in Nomination of Kathleen J. Tiegs on ACWA/JPIA Executive Committee KRAUSE
 - D. Request Authorization for General Manager to enter into MOU with Western Municipal Water District to Participate in the FreeSprinklerNozzles.com Program METZGER
 - E. Request Authorization to Enter into an Agreement with MWD & CVWD for Article 21 Water KRAUSE
 - F. Approve Proposed Second Amendment to General Manager's Employment Agreement
- 7. ITEMS FOR DISCUSSION**
 - A. Conservation Program Update (PPT) METZGER
 - B. State Water Contractors' Meeting – January 19, 2017 RIDDELL
- 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: Chris Thomsen, 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: Ayres Advisors

Under Negotiation: Price and terms

G. PUBLIC EMPLOYEE PERFORMANCE EVALUATION

Pursuant to Government Code Section 54957

Title: General Manager

11. RECONVENE INTO OPEN SESSION – REPORT FROM CLOSED SESSION

12. ADJOURN

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

January 6, 2017

- | | | |
|-------------|--|--|
| DWA Board: | James Cioffi, President) | Attendance |
| | Joseph K. Stuart, Vice President) | |
| | Kristin Bloomer, Secretary-Treasurer) | |
| | Craig A. Ewing, Director) | |
| Absent: | Patricia G. Oygar, Director) | |
| DWA Staff: | Mark S. Krause, General Manager) | |
| | Steve Johnson, Asst. General Manager) | |
| | Martin S. Krieger, Finance Director) | |
| | Ashley Metzger, Outreach & Conserv. Mgr.) | |
| Consultant: | Kris Polly, Water Strategies, LLC) | |
| | Caroline Polly, Water Strategies, LLC, Intern) | |
| 17684. | President Cioffi opened the meeting at 9:00 a.m. and asked everyone to join him in the Pledge of Allegiance. | Pledge of Allegiance |
| 17685. | Mr. Polly, the Agency's Federal Lobbyist with Water Strategies, LLC introduced his daughter Caroline who currently interns with his firm. | Introductions |
| 17686. | 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. | |
| 17687. | President Cioffi stated due to the upcoming changes in the federal legislature, he requested Mr. Polly provide an update for the Board. | Discussion Item:
Federal Legislative
Issues |
| | Mr. Polly discussed the following: Changes in Congress, Water Resources Development Act, Regulatory Reform, Tax exemption for water conservation rebates, and his 2017 Work Plan components. | |

17688. At 9:15 a.m., President Cioffi convened into Closed Session for the purpose of (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; and (C) Existing Litigation, pursuant to Government Code Section 54956.9 (d) (1), Desert Water Agency vs. U.S. Department of Interior.

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

Agency Counsel Riddell participated in Closed Session via teleconference.

17689. At 9:58 a.m., President Cioffi reconvened the meeting into open session and announced there was no reportable action taken.

Reconvene – No Reportable Action

17690. In the absence of any further business, President Cioffi adjourned the meeting at 10:00 a.m.

Adjournment

James Cioffi, President

ATTEST:

Kristin Bloomer, Secretary-Treasurer

MINUTES

OF THE REGULAR MEETING

OF THE

DESERT WATER AGENCY

BOARD OF DIRECTORS

January 17, 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)
	Eddie Gonzalez, Facilities & Safety Officer)

Consultant:	Michael T. Riddell, Best Best & Krieger)
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Public:	David Freedman, P.S. Sustainability Comm.)
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17691. President Cioffi opened the meeting at 8:00 a.m. and asked everyone to join Director Ewing in the Pledge of Allegiance. **Pledge of Allegiance**

17692. President Cioffi called for approval of the December 6, 2016 Regular Board meeting minutes. **Approval of 12/6/16
Regular Board Mtg.
Minutes**

Director Ewing moved for approval. After a second by Vice President Stuart, the minutes were approved as written (Secretary-Treasurer Bloomer abstained due to her absence).

President Cioffi called for approval of the December 15, 2016 Special Board meeting minutes. **Approval of 12/15/16
Special Board Mtg.
Minutes**

Director Ewing requested an amendment to these minutes, to add the meeting location.

Vice President Stuart made a motion to approve the minutes noting Director Ewing's amendment. After a second by Director Ewing, the minutes were approved with the amendment noted.

President Cioffi called for approval of the December 20, 2016 Regular Board meeting minutes.

Vice President Stuart noted a correction to section 17672; Vice President Stuart led the Pledge of Allegiance.

Director Ewing made a motion to approve the minutes noting Vice President Stuart's correction. After a second by Vice President Stuart, the minutes were approved with the correction noted.

17693. President Cioffi called upon General Manager Krause to provide an update on Agency operations.

**General Manager's
Report**

Mr. Krause stated on December 17 at approximately 2:30 a.m., stand-by responded to a hit six-inch fire service at 68945 Perez Rd. Contact was made with the owner and authorization was received to make the necessary repairs by DWA. There was damage on the customer side that the customer will need to repair. The water loss was through a fully open six-inch pipe, which ran for approximately 30 minutes. A police report was filed.

Hit Fire Service

Mr. Krause stated on December 30 at approximately 9:00 p.m., stand-by responded to a hit fire hydrant on Saturnino Rd. and Calle Encilia. Staff was unable to put the fire hydrant back in service due to the bury needing to be replaced. Staff made repairs and chlorinated the fire hydrant. They also placed concrete for the sidewalk. This was not a drunk driver, it happened to be an Uber driver. A police report was made. The water loss was from a fully open six inch fire hydrant bury which ran for approximately thirty-five minutes. The hydrant was put back in service on January 6.

Hit Fire Hydrant

Continuing his report, Mr. Krause stated On January 12 at approximately 6:00 p.m. stand-by responded to a hit fire hydrant on Arenas Dr. and Saturmino Dr. (this was a hit and run). Staff was unable to access the fire hydrant valve and had to shut down the main line. They were able to reinstall the fire hydrant and put it back in service. A police report was filed. The water loss was for approximately one hour through a fully open six-inch fire hydrant bury.

Hit Fire Hydrant

Mr. Krause reported that pursuant to the SWP Contractors Notice Number 16-10, the 2017 Table A allocation was increased from 20% to 45%, which equates to 87,345,000 acre-feet (assuming the 100,000 acre-foot transfer is not called back (45,000 acre-feet). The DWA/CVWD/MWD exchange accounts balance is 87,088 acre-feet. If MWD kept all of the Agency's Table A, this would essentially zero out the exchange account. Scheduled delivery of QSA water in 2017 is 35,000 acre-feet.

2017 Imported Water
Supply

Mr. Krause announced a Special Board meeting has been scheduled for January 24 at 2:00 p.m. to request approval of the Sites Reservoir Project (Phase 1) agreement.

General Manager's Report
(Cont.)
01/24/17 Special Board Meeting

Mr. Krause provided an SCE update for 2017; the average rate is estimated to increase 6%. He stated that SCE is re-assessing their current Time of Use (TOU) periods to determine the potential need to shift these periods for all customer classes to later in the day.

SCE Update

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

General Manager's Meetings & Activities

17694. President Cioffi noted the minutes for the December 29, 2016 and January 11, 2017 Executive Committee were provided in the Board's packet.

Committee Reports
Executive 12/29/16 & 01/11/17

President Cioffi noted the minutes for the January 5, 2017 Conservation and Public Affairs Committee were provided in the Board's packet.

Conservation & Public Affairs 01/05/17

17695. 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.

17696. President Cioffi called upon Secretary-Treasurer Bloomer to provide an overview of financial activities for the month of December 2016.

Secretary-Treasurer's Report (December 2016)

Secretary-Treasurer Bloomer reported that the Operating Fund received \$1,997,342 in Water Sales Revenue. \$109,665 was received in Reclamation Sales Revenue. Included in the Miscellaneous receipts is \$11,000 from Mission Springs Water District (their portion of CV Water Counts program). \$1,651,513 was paid out in Accounts Payable. Year-to-date Water Sales are 14% over budget, Year-to-date Total Revenues are 13% over budget, and Year-to-date Total Expenses are 16% under budget. There were 22,347 active services as of December 31, 2016, compared to 22,337 as of November 30, 2016 and compared to 21,846 as of December 31, 2013.

Operating Fund

Reporting on the General Fund, Ms. Bloomer stated that \$4,667,413 was received in Property Tax Revenue. \$1,544,511 was paid out in State Water Project charges (YTD SWP payments: July-Dec = \$8,951,919).

General Fund

Reporting on the Wastewater Fund, Ms. Bloomer stated that \$19,415 was received in Sewer Capacity Charges. There are a total of 68 contracts (47 Cathedral City Cove and 21 Dream Homes) with 24

Wastewater Fund

delinquent (35%). \$88,246 was paid out in Accounts Payable.

Items for Action:

17697. President Cioffi called upon General Manager Krause to present the civil penalty hearings for water use violations.

Water Use Violation –
Civil Penalty Hearings

Mr. Krause noted there have been more than 420 violations issued and that recipients have 7 days to request a hearing in writing. Staff has received two hearing requests for today. There are no appellants present for today's hearing.

Mr. Krause announced the first appellant is Anita McKinney. He then presented information and noted the violation: 1) Irrigating during restricted hours. It was noted that runoff was evident from photos and was discussed with the customer over the phone. The fine is \$50 and the reason for appeal is the customer was not aware of restrictions; she fixed the problem and other neighbors over water.

Anita McKinney

In response to Director Oygur, Ms. Metzger stated the appellant claims a neighbor helped fix the problem; there was no Agency staff follow up.

Director Oygur made a motion to uphold the appeal; violation occurred and waive the penalty. After a second by President Cioffi, the motion carried unanimously.

Uphold
Appeal/Violation
Occurred/Waive
Penalty

Mr. Krause stated the second appellant is K. Michael Exel. He presented information and noted the violations: 1) Irrigating during restricted hours, and 2) Runoff. The fine is \$50 and the reasons for appeal; property is occupied 10-12 days per month, watering days will be corrected on January 18, watering is important for trees, and there is no runoff.

K. Michael Exel

Director Ewing made a motion to uphold the appeal; violation occurred and waive the penalty. After a second by Director Oygur, the motion carried unanimously.

Uphold
Appeal/Violation
Occurred/Waive
Penalty

17698. President Cioffi asked General Manager Krause to present staff's request for authorization for Board attendance at the Urban Water Institute Spring Water Conference.

Request
Authorization/Board
Attendance Urban
Water Institute Spring
Water Conference

Mr. Krause stated this year's conference will be held on February 8-10, 2017 at the Hilton Palm Springs hotel. Staff recommends that the Board approve and authorize those Board Members who are interested in attending the conference in service to the Board.

Director Ewing made a motion to approve and authorize Board Members to attend the Urban Water Institute Spring Conference in service to the Board. Secretary-Treasurer Bloomer seconded the motion, which carried unanimously.

17699. President Cioffi asked General Manager Krause to report on the December Water Production Comparison.

Discussion Items:
December Water
Production

Mr. Krause reported that the Agency and its customers achieved a 14 percent reduction during December 2016 compared to December 2013. He noted the cumulative savings June 2015 through December 2016 is 24 percent. He also noted the amount of fresh water outflow to the ocean was 1,250,719.3-acre feet for December.

17700. Mr. Krause provided a PowerPoint presentation on the Agency's 2016 Capital Improvement projects, which included: (1) Palm Springs East reservoir fence; (2) Hermosa Drive pipeline relocation; (3) Communications towers; (4) Janis-Tuscany booster surge tank; (5) Potable water reservoir maintenance; (6) Confined space rescue trailer; (7) Desert Palisades transmission main; (8) Zone 1240 Hydro pneumatic booster station; (9) Backup chopper pump and motor; (10) Wells 30, 32 & 36 Chlorine pump; (11) Well 20 Electrical panel replacement; (12) Janis Booster pump electrical panel replacement; (13) Well 23 Electrical panel replacement; (14) Well 31 Electrical panel replacement; (15) Recycled water plant compressor; (16) Recycled water plant lab exhaust hood; (17) Unit 57; (18) Unit 47; (19) Unit 5; (20) Unit 3; and (21) Unit 25, new traffic control arrow board.

2016 Capital
Improvement Projects

17701. President Cioffi asked General Manager Krause to report on the Lake Perris Seismic Remediation Update.

Lake Perris Seismic
Remediation Update

Mr. Krause stated the update is the most recent. The highlights of the report are 81% of the work has been completed with 72% of the time elapsed. Recently completed work consists of the left abutment road and new toe drain. The contractor continues to work on the following: Processing and placement of compacting berm material, quarry excavation and rock processing; and placement and compacting of filter and drain material for blanket drain.

17702. President Cioffi asked Agency Counsel Riddell to provide a report on the December 15, 2016 meeting of the Board of Directors of the State Water Contractors, Inc.

State Water Contractors
Meeting – 12/15/16

Mr. Riddell provided a report on the following items: 1) Board Action Items, 2) Water Supply Report, 3) DWR Report on Draft Statewide Water Conservation Plan, 4) General Manager's Report and Legislative Report, and 5) Report on Business Process Objectives.

17703. President Cioffi asked Outreach & Conservation Manager Metzger to provide an update on the Agency's new website.

DWA Website Update

Mrs. Metzger stated the new website will go live today at 5:01 p.m. She then provided a PowerPoint presentation showing the various new

and updated pages.

Discussion Items:
(Cont.)

17704. President Cioffi noted that Board packets included Outreach & Conservation reports for December 2016.

**Outreach & Conservation –
December 2016**

Mrs. Metzger stated the smart control program is being updated to include in store advertising/placement at: Home Depot, Lowes and Ewing Irrigation and Landscape Supply.

Director Ewing announced that neither he nor family members are associated with Ewing Irrigation and Landscape Supply.

17705. At 9:43 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

17706. At 11:30 a.m., President Cioffi reconvened the meeting into open session and announced there was no reportable action.

**Reconvene –
Reportable Action**

17707. In the absence of any further business, President Cioffi adjourned the meeting at 11:31 a.m.

Adjournment

James Cioffi, President

ATTEST:

Kristin Bloomer, Secretary-Treasurer

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

January 24, 2017

DWA Board:	James Cioffi, President)	Attendance
	Joseph K. Stuart, Vice President)	
	Kristin Bloomer, Secretary-Treasurer)	
	Craig A. Ewing, Director)	
 Absent:	 Patricia G. Oygar, 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.)	
 Consultant:	 Michael T. Riddell, Best Best & Krieger)	
	Jim Watson, Sites Project Authority G.M.)	

17708. President Cioffi opened the meeting at 2:00 p.m. and asked everyone to join Secretary-Treasurer Bloomer in the Pledge of Allegiance. **Pledge of Allegiance**

17709. 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.

17710. President Cioffi asked General Manager Krause to present staff's request for approval of Phase 1 (Sites Reservoir Project) Funding Agreement. **Action Item:**
Request Approval of
Phase 1 (Sites Reservoir
Project) Funding
Agreement

Mr. Krause introduced Jim Watson, Sites Project Authority General Manager. Mr. Watson attended the recent ACWA conference and provided a presentation on this subject. Mr. Krause indicated that earlier this morning the CVWD Board of Directors approved this funding agreement.

Mr. Krause then presented a PowerPoint presentation, which provided a brief overview. He then asked Mr. Watson to continue the presentation.

Action Item:
(Cont.)
Request Approval of
Phase 1 (Sites Reservoir
Project) Funding
Agreement

Mr. Watson noted the reservoir location is in Maxwell, which is in California's Central Valley, Colusa County. This reservoir is the seventh largest in California.

In response to President Cioffi, Mr. Watson stated a draft Environmental Impact Report should be ready by June.

Mr. Krause stated on July 28, 2016 the Agency submitted its executed Sites Reservoir Project, Phase 1 Proposal to Participate form. This certified that the Agency was eligible to participate, elected to participate and agreed to be a member in good standing of the Reservoir Project Agreement Committee. At the time of application, the Agency applied for 6,500 acre-feet of Class 1 water at a not-to-exceed cost of \$60/acre-feet for Phase 1 funding; no Class 2 was requested. No Class 2 water will be available if Proposition 1 funds 50% of the reservoir. However, if for example, funding were only 30%, there would be an additional 20% of the reservoir capacity available for potable water supply (100,000 acre-feet). Class 2 water is at a not-to-exceed cost of \$30/acre-feet.

Continuing with his report, Mr. Krause explained the Agency submitted as part of the Proposal to Participate form, an exit clause stating if the Agency is unable to receive support from The Metropolitan Water District of Southern California (MWD) in activities to acquire additional water supply and to deliver said water in accordance with its current exchange agreement, the Agency will be able to exit out of the Sites agreement. Subsequently, MWD wrote a letter in support.

The estimated cost of work in Phase 1 is \$15,134,507. The cost of Class 1 and Class 2 water has been determined to be \$48.50 per acre-foot and \$24.25 per acre-foot. The Agency's total cost of Phase 1 participation is \$247,298.11. Staff requests authorization for the General Manager to execute the Sites Project Authority's Amended and Restated Phase 1 Reservoir Project Agreement, dated November 21, 2016 and to provide funding for Phase 1 in the amount of \$247,298.11.

Responding to Vice President Stuart, Mr. Krieger stated there is money in Reserves or this item can be placed in next year's budget.

Director Ewing made a motion to authorize the General Manager to execute the Sites Project Authority's Amended and Restated Phase 1 Reservoir Project Agreement dated November 21, 2016 and to provide funding for Phase 1 in the amount of \$247,298.11. After a second by Vice President Stuart, the motion carried unanimously (Director Oygar absent).

17711. At 3:12 p.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

At 3:50 p.m., President Cioffi left the meeting.

17712. At 4:04 p.m., Vice President Stuart reconvened the meeting into open session and announced there was no reportable action taken.

Reconvene – No Reportable Action

17713. In the absence of any further business, Vice President Stuart adjourned the meeting at 4:05 p.m.

Adjournment

James Cioffi, President

ATTEST:

Kristin Bloomer, Secretary-Treasurer

GENERAL MANAGER'S REPORT FEBRUARY 7, 2017

On January 30 at approximately 12:40 a.m., stand-by responded to a hit fire hydrant on Indian Canyon Drive north of Vista Chino. Staff replaced the hydrant and placed it back in service. A police report was filed. The water loss was from a fully open 6-inch fire hydrant bury which ran for approximately 30 minutes.



Water Delivery Update

Whitewater Basin Water Deliveries:

January 9th: 50 cfs

January 10th: increase to 100 cfs

January 11th: increase to 150 cfs

January 12th: increase to 200 cfs

January 16th: increased to 425 cfs

January 20th: stopped deliveries due to heavy storm runoff

January 25th: start at 50 cfs

January 26th: increased to 100 cfs

January 27th: increased to 150 cfs

January 30th: increased to 200 cfs

January 31st: increased to 255 cfs

A scheduled increase will occur on February 2nd to 300 cfs. Plan to continue until CRA scheduled maintenance which is scheduled to begin February 14th, 2017.

Water deliveries are scheduled off during maintenance which is scheduled to last 28 days.

MWD would like to start deliveries in March, after maintenance, at 500 cfs for the remainder of the year, for a total delivery of 300,000 acre-feet.

Whitewater Hydro was started on January 12th, and ran until the January 20th shut down. The hydro was started again on January 31st, and is scheduled to run until the maintenance shut down.

The hydro produced 220,049 kw during the month of January. We anticipate earning approximately \$20,000, to be shared with CVWD.

If the hydro is operational from March through December, we anticipate producing approximately 6,960 MW for 2017. This will generate approximately \$640,000 in earnings from SCE.

Current SWC Official Correspondence:

- SWC comments on the Delta Stewardship Councils development of the Delta Levee Investment Strategy
 - The DSC is making requirements rather than recommendations and thereby taking on a regulatory role rather than advisory. Also encourages the DSC to look at the “beneficiary pays” definition provided by the CALFED Bay-Delta Program Implementation Plan – July 2000.

(see attached letter)

DWA Offices Closed

DWA offices will be closed on Monday, February 20 for the President’s Day holiday.



General Manager's Meetings and Activities

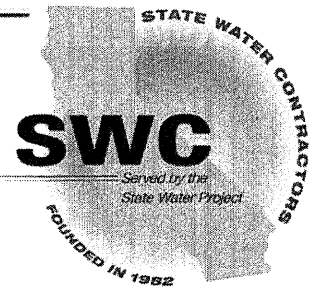
Meetings:

01/18/2017	SWC Operations Committee	Sacramento
01/18/2017	SWC Delta Committee	Sacramento
01/19/2017	SWC Monthly Board Meeting	Sacramento
01/20/2017	Sites Reservoir Committee Meeting	Sacramento
01/23/2017	SGMA Meeting Indio Sub-basin	Indio
01/24/2017	DWA Special Board Meeting	DWA
01/25/2017	Meeting with Reeb	Conf. Call
01/25/2017	SWC Operations Committee	Conf. Call
01/27/2017	DWA Annual Awards Breakfast	DWA
02/01/2017	DWA Executive Committee Meeting	DWA
02/02/2017	DWA/CVWD/MWD Article 21 Water Meeting	Conf. Call

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) Budget Augmentation
- 13) Replacement Pipelines 2016-2017
- 14) DWA Power Costs
- 15) DWA/CVWD/MWD Operations Coordination
- 16) DWA/CVWD/MWD Agreements Update
- 17) Recycled Water Effluent Reservoir Coating Failures
- 18) SGMA Alternative Plans and Bridge Documents
- 19) SWP 2017 Water Supply
- 20) DWA Credit Card Payment Costs
- 21) ACBCI Law Suits
- 22) Lake Perris Dam Remediation

January 25, 2017



Ms. Jessica Pearson-Roberts
Executive Officer
Delta Stewardship Council
980 Ninth Street, Suite 1500
Sacramento, CA 95814

Dear Ms. Pearson-Roberts:

The State Water Contractors have been following the Delta Stewardship Council's (DSC) development of the Delta Levee Investment Strategy and have provided input to its development. As background, the State Water Contractors (SWC) represent 27 of the 29 agencies that have contracted for water supplies from the State Water Project (SWP). Since the SWP relies, in part, on conveyance of water through the Sacramento-San Joaquin Delta, we are very interested in the reliability of Delta levees, considering rising sea levels, subsidence, seismic events, and other physical phenomena that can compromise levees or jeopardize timely emergency response in the wake of levee failures.

The State Water Contractors support the development of a Delta Levee Investment Strategy and recommended priorities for state investments in Delta levees as directed by California's Water Code: *"The Delta Plan shall attempt to reduce risks to people, property, and state interests in the Delta by promoting effective emergency preparedness, appropriate land uses, and strategic levee investments"* (section 85305), and *"the council, in consultation with the Central Valley Flood Protection Board, shall recommend in the Delta Plan priorities for state investments in levee operation, maintenance, and improvements in the Delta, including both levees that are a part of the State Plan of Flood Control and nonproject levees"* (section 85306).

The December 15, 2016 Discussion Draft states: *"The Department of Water Resources shall certify projects' consistency with this regulatory policy when its funding decisions are made and shall report annually to the Council about its decisions to award State funds for Delta levee improvements, including the location of each funded improvement, the priority of the affected islands or tracts, the improvements funded, including the relevant levee improvement type, habitat mitigation or enhancement features, estimated reduction in levee fragility, expected reduction in annual fatalities and damages, State funds awarded, and local or federal matching funds."*

DIRECTORS

Douglas Headrick
President
San Bernardino Valley
MWD

Mark Gilkey
Vice President
Tulare Lake Basin Water
Storage District

Stephen Arakawa
Secretary-Treasurer
Metropolitan Water District
of Southern California

Kirby Brill
Mojave Water Agency

Curtis Creel
Kern County Water Agency

Cindy Kao
Santa Clara Valley Water
District

Phillip Miller
Napa County FC&WCD

Ray Stokes
Central Coast Water
Authority

Matthew Stone
Castaic Lake Water Agency

General Manager
Terry L. Erlewine

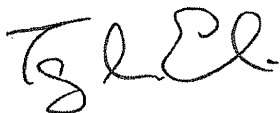
An annual report seems an appropriate policy for DSC and DWR to coordinate levee investments. However, the proposed requirement that DWR certify consistency with the Delta Levee Investment Strategy "policy" prior to approving funding for any levee project in the Delta suggests the Council will adopt a regulatory policy, not recommendations as mandated in California Water Code section 85306 "*the council, in consultation with the Central Valley Flood Protection Board, shall **recommend** in the Delta Plan priorities for state investments in levee operation, maintenance, and improvements in the Delta, including both levees that are a part of the State Plan of Flood Control and nonproject levees.*" (Emphasis added.) We encourage DSC to work with DWR to explore a mutually agreeable reporting process embodied in a memorandum of understanding or other interagency agreement to establish a long-term process for coordination between agencies on priorities for state's levee investments in the Delta.

With respect to future funding mechanisms for state investments, the discussion draft dated December 15, 2016, states "*The Council, DWR, CVFPB, and the DPC, in consultation with the Corps of Engineers and the Department of Finance, should cooperate to further develop levee finance mechanisms, including those studied by the DPC, that create opportunities for "beneficiary pays"-based funding approaches that supplement State-funding for levee maintenance and improvements. Because no single financial mechanism can meet the requirements of a beneficiary-pays approach to address the full range of beneficiaries and financing needs, a portfolio of mechanisms targeted to particular levee improvements should be evaluated. These mechanisms could include assessments, public funding, water use fees, water conveyance fees, and flood prevention fees.*"

As you continue to work with the Department of Water Resources, Central Valley Flood Protection Board and the Delta Protection Commission to develop mechanisms that meet the requirements of a beneficiary-pays approach, we encourage you to consider the definition of benefits and recommend the definition included in the CALFED Bay-Delta Program Implementation Plan (July 2000): *Economic benefits are a measure of the willingness of beneficiaries to pay for the flow of services from a program or project - either to obtain additional benefits (additional or more reliable water supplies) or to avoid damages (flood damages, higher treatment costs, or less reliable water supplies). Benefits are not measured simply by looking at the ongoing stream of benefits from existing activities- for example, the economic activity associated with Delta agriculture and recreation. Rather, benefits are measured as the difference between the benefits that would occur with the program compared to the benefits that would occur without the program.* Notably, an adequate beneficiary-pays principle does not look at ability to pay; it must reflect the willingness of beneficiaries to pay in light of the incremental benefits they will receive for their investment. Moreover, any recommendations for priorities for state investments in levee operation, maintenance and improvements in the Delta must recognize that SWC's members have already made significant investments through their SWP contract payments to DWR in Delta levee risk studies and emergency preparedness.

We recognize the efforts that DSC has made with the Delta Levee Investment Strategy and the importance of the levees in the Delta to the Delta's inhabitants, the Delta economy, and the state. We request that the comments that we have provided here are considered as you revise the Discussion Draft and move forward in your process to developing a Public Draft. We are interested in continuing to work with the DSC staff and consultants as the process goes forward. If you have any questions about our comments, please call me at (916) 447-7357.

Sincerely,



Terry Erlewine
General Manager

Minutes
Executive Committee Meeting
February 1, 2017

Directors Present: Jim Cioffi, Joe Stuart

Staff Present: Mark Krause, Steve Johnson, Martin Krieger

1. Discussion Items

A. Review Agenda for February 7, 2017 Regular Board Meeting

The proposed agenda for the February 7, 2017 regular board meeting was reviewed.

2. Other

A. ACWA/JPIA Executive Committee Nomination

Staff informed the Committee that Cucamonga Valley Water District is seeking support for Director Tiegs for the position of ACWA/JPIA Executive Committee. Staff was requested to place the item for Board action on the next agenda.

3. Adjourn

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

FEBRUARY 7, 2017

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1148, GRANTING
RETIREMENT STATUS TO LEE LAHTINEN WITH APPRECIATION**

Attached is a copy of Resolution No. 1148 officially granting retirement status to Controller, Lee Lahtinen.

Mr. Lahtinen will be presented a copy of Resolution No. 1148 acknowledging his 12 years of dedicated service and loyalty to Desert Water Agency.

RESOLUTION NO. 1148

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE DESERT WATER AGENCY
GRANTING RETIREMENT STATUS TO
LEE LAHTINEN**

WHEREAS, Lee Lahtinen, began his service with Desert Water Agency on February 1, 2005 as the Accounting Supervisor in the Accounting Department. On February 1, 2010, he was promoted to the position of Controller; and is concluding his career in that capacity; and

WHEREAS, over his 12 year career with Desert Water Agency, Lee has always sought ways in which he could improve upon the Accounting systems and procedures; and

WHEREAS, Lee has provided great leadership to the Accounting and Customer Service Departments and shared his knowledge and experience and provided cross-training for his staff to prepare them for advancement within the department; and

WHEREAS, Lee has been responsible for the agency's general ledgers, year-end audit, Whitewater Mutual Water Company acquisition, ACH and Check 21 programs, groundwater invoicing, wastewater sewer contract program, Mint Bills, Paymentus, i-Series upgrades, turf buy-back monitoring; and

WHEREAS, Lee has consistently provided excellent customer service to the community and fellow employees; and

WHEREAS, the Desert Water Agency is deeply appreciative of this employee's loyalty, honesty, integrity, competency and conscientious service in his duties, and his willingness to assist other departments, and

WHEREAS, Lee has served as an outstanding role model with respect to his work ethics and has consistently performed his duties meticulously and with commitment to the highest standards required in conjunction with the responsibilities he fulfilled, and has done so with the Agency's best interest in mind;

NOW, THEREFORE, BE IT RESOLVED by the Desert Water Agency Board of Directors that

LEE LAHTINEN

is, with infinite thanks and appreciation for his 12 years of service to the Desert Water Agency, and our community, hereby granted the status of retirement. It is the wish of the Board that Lee spends countless years enjoying a happy and healthy retirement, for he has earned it.

ADOPTED this 7th day of February, 2017, with retirement effective February 16, 2017.

James Cioffi, President
Board of Directors

ATTEST:

Kristin Bloomer, Secretary-Treasurer
Board of Directors

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

FEBRUARY 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 440 violations have been issued. Recipients of the violations have 7 days to request a hearing in writing. One violation 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 projected 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. Gordon Zentner, 2890 N De Anza Rd, Palm Springs

- a. On Monday, January 23 at 7:00 a.m. a Desert Water Agency representative observed water use violations at said address and reported them.
 - i. Watering during the rain (had rained over the weekend as well)
 - ii. Irrigating during restricted hours
- b. Fine amount \$50
 - i. Single-family home
 - ii. First violation
- c. Reason for petition
 - i. Customer aware of restrictions. Customer fixed timing of zones.
- d. Other information
 - i. Customer does not have smart irrigation controller
 - ii. Discussed controller program with customer. Customer agreed to apply.



January 24, 2017

Gordon Zentner
2890 N De Anza Rd
Palm Springs, CA 92262

RE: FINE ON ACCOUNT# [REDACTED]; 2890 N De Anza

Dear Valued Customer:

Due to a water use violation observed and documented by a Desert Water Agency representative on Monday, January 23, 2017 at 7:00 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.***
- ***Runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures is prohibited.***
- ***Irrigating up to 48 hours after measurable rainfall is prohibited.***

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

Desert Water

January 27, 2017

PO Box 1710

Palm Springs, CA

92263

I have received today a notice of a fine on our account for having our sprinklers on after 7:00 AM on January 23. This was an accident. We have been careful to only water on Monday, Wednesday and Friday. I thought we had all of our sprinkler circuits set to water only before 7:00 AM and after 7:00 PM. I don't know how this happened. I have had our gardener reset the sprinkler control today so that our sprinkler circuits will finish well before 7:00AM.

If you look at our usage you will see that our water usage is way under the Target since we were asked to conserve water. In view of this, I request that the civil penalty be waived for this violation.

I am sorry that this happened and I will take care to see that it does not happen again.

Gordon Zentner

RECEIVED

JAN 31 1017

DESERT WATER AGENCY
ENGINEERING

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

FEBRUARY 7, 2017

**RE: REQUEST ADOPTION OF RESOLUTION NO. 1149 SUPPORTING
THE NOMINATION OF KATHLEEN J. TIEGS TO THE OFFICE OF
ACWA/JPIA EXECUTIVE COMMITTEE**

Attached for the Board's consideration is Resolution No. 1149, which supports the nomination of Kathleen J. Tiegs, Director of the Cucamonga Valley Water District and current President of ACWA Region 9, to the office of ACWA/JPIA Executive Committee. Also attached is a copy Ms. Tieg's bio.

At the February 1, 2017 Executive Committee meeting, there was support of Ms. Tieg's nomination.

If the Board concurs in the nomination of Ms. Tiegs to the office of ACWA/JPIA Executive Committee, it may do so by adopting Resolution No. 1149. Following adoption, staff will forward a copy of the resolution to Cucamonga Valley Water District and ACWA/JPIA offices.

RESOLUTION NO. 1149

**RESOLUTION OF THE BOARD OF DIRECTORS OF
DESERT WATER AGENCY
CONCURRING IN NOMINATION OF KATHLEEN J. TIEGS
TO THE EXECUTIVE COMMITTEE OF THE
ASSOCIATION OF CALIFORNIA WATER AGENCIES
JOINT POWERS INSURANCE AUTHORITY (ACWA JPIA)**

WHEREAS, Desert Water Agency is a member of ACWA JPIA; and

WHEREAS, the Bylaws of the ACWA JPIA provide that in order for a nomination to be made to ACWA JPIA's Executive Committee, three member districts must concur with the nominating district; and

WHEREAS, another ACWA JPIA member district, the Cucamonga Valley Water District has requested that DWA concur in its nomination of its member of the ACWA JPIA Board of Directors to the Executive Committee of the ACWA JPIA;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Desert Water Agency that this agency concurs with the nomination of Kathleen J. Tiegs of Cucamonga Valley Water District to the Executive Committee of ACWA JPIA.

BE IT FURTHER RESOLVED that the Assistant Board Secretary is hereby requested to transmit a certified copy of this resolution to ACWA JPIA at P.O. Box 619082, Roseville, CA 95661-9082, forthwith.

ADOPTED this 7th day of February, 2017.

James Cioffi, President
Board of Directors

ATTEST:

Kristin Bloomer, Secretary-Treasurer
Board of Directors

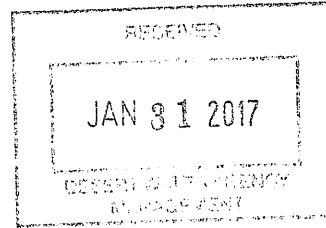


Cucamonga Valley Water District

Martin E. Zvirbulis
Secretary/General Manager/CEO

10440 Ashford Street • Rancho Cucamonga, CA 91730-2799
P.O. BOX 638 • Rancho Cucamonga, CA 91729-0638
(909) 987-2591 • Fax (909) 476-8032

January 25, 2017



Dear Fellow ACWA/JPIA Member:

On January 24, 2017 the Cucamonga Valley Water District Board of Directors adopted Resolution No. 2017-1-1 nominating Director Kathleen J. Tiegs for the position of ACWA/JPIA Executive Committee. We are formally requesting your support of Director Tiegs' nomination through the adoption of a concurring resolution from your agency.

Director Tiegs has been actively involved in ACWA/JPIA having served the past 10 years on the board, as well as having experience as the ex-officio member on the Executive Committee. Director Tiegs is committed to continuing the great work of providing quality insurance and employee benefit services that ensure our agencies and ratepayers are receiving the most cost-effective service possible.

I have attached a sample concurring resolution in support of Director Tiegs' nomination, as well as her candidate statement. The elections for ACWA/JPIA Executive Committee will be held May 8, 2017, should you desire to adopt a resolution or if you have questions please contact our Executive Assistant to the Board, Taya Victorino at 909.987.2591 or tayav@cvwdwater.com.

Thank you in advance for your consideration.

James V. Curatalo, Jr.
President

Attachments:
Sample Concurring Resolution
Candidate Statement – Director Tiegs

RESOLUTION NO. _____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE (NAME OF MEMBER DISTRICT)
CONCURRING IN NOMINATION TO THE EXECUTIVE COMMITTEE
OF THE ASSOCIATION OF CALIFORNIA WATER AGENCIES
JOINT POWERS INSURANCE AUTHORITY ("ACWA JPIA")

WHEREAS, this district is a member district of the ACWA JPIA; and

WHEREAS, the Bylaws of the ACWA JPIA provide that in order for a nomination to be made to ACWA JPIA's **Executive Committee**, three member districts must concur with the nominating district, and

WHEREAS, another ACWA JPIA member district, the Cucamonga Valley Water District has requested that this district concur in its nomination of its member of the ACWA JPIA Board of Directors to the **Executive Committee** of the ACWA JPIA;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the (NAME OF MEMBER DISTRICT) that this district concur with the nomination of Kathleen J. Tiegs of Cucamonga Valley Water District to the **Executive Committee** of the ACWA JPIA.

BE IT FURTHER RESOLVED that the District Secretary is hereby directed to transmit a certified copy of this resolution to the ACWA JPIA at P.O. Box 619082, Roseville, CA 95661-9082, forthwith.

ADOPTED this (DATE) day of (MONTH), 2017.

(SIGNATURE)
Board President

ATTEST:

(SIGNATURE)
Secretary

Kathleen J. Tiegs
Candidate Statement for
Association of California Water Agencies
Joint Powers Insurance Authority (ACWA/JPIA) Executive Committee

Dear ACWA/JPIA Board Members:

I am pleased to share with you my interest in serving on the Executive Committee for ACWA/JPIA. I believe I am prepared and ready for the challenge to help lead the organization as we continue to grapple with providing the best and most cost-effective insurance and employee benefit services to our members.



My experience with the ACWA/JPIA began over 10 years ago when I was appointed by the Cucamonga Valley Water District (CVWD) to serve as their ACWA/JPIA representative. I have also served as the ex-officio member of the Executive Committee in 2015-2016. As part of the Executive Committee I was able to provide the leadership and feedback to staff to ensure they were continuing to uphold the mission of the ACWA/JPIA: *"to consistently and cost effectively provide the broadest possible affordable insurance coverage and related services to its member agencies"*.

I have served on the CVWD board of directors for approximately 12 years, and have served in the role as both president and vice-president of the board of directors. I am currently a member of the Legislative/Outreach and the Human Resources/Risk Management committees. The Human Resources/Risk Management Committee is responsible for overseeing employee benefits, risk management and safety programs for the organization. At CVWD, we have taken full advantage of all the programs the ACWA/JPIA has to offer to ensure our employees are working in the safest environment possible. Our board of directors has also adopted the *Commitment to Excellence* Program pledge putting into place best management practices which bolsters our effectiveness for loss prevention and safety.

I currently serve as the President for the Association of California Agencies (ACWA). In my role as president I have focused on increasing my understanding of our members needs so that I may know how to better serve and lead the ACWA organization. I will use this same approach if elected to serve on the ACWA/JPIA Executive Committee.

The election for ACWA/JPIA is scheduled for May 8, 2017 at the conference. Thank you for allowing me to share my experience, leadership and knowledge. I look forward to the opportunity to represent you and your agency. Please feel free to contact me directly at (909) 635-4177 should you have questions or if you would like to support my candidacy.

Thank you in advance for your consideration,

A handwritten signature in black ink that reads "Kathy Tiegs". The signature is written in a cursive, flowing style.

STAFF REPORT TO DESERT WATER AGENCY BOARD OF DIRECTORS

FEBRUARY 7, 2017

RE: MOU WITH WESTERN MUNICIPAL WATER DISTRICT FOR FREESPRINKLERNOZZLES.COM PROGRAM

Background

To date, DWA has not offered a free sprinkler nozzle program.

Efficient sprinkler heads can save customers up to 1,400 gallons per head per year and can reduce runoff due to wind or slopes (thanks to larger droplet sizes and lower flow).

Program Overview

The FreeSprinklerNozzles.com Program is a web-administered voucher program for free high efficiency sprinkler nozzles created and offered by Western Municipal Water District (Western). Customers can receive:

- Up to 25 free nozzles for single-family customers
- Up to 100 free nozzles for commercial customers
- Special vouchers available for site needs as approved by agency

Customers of participating agencies sign on to the FreeSprinklerNozzles.com website and log in using their existing customer information.

Customers then watch a series of mandatory videos explaining 1) how the nozzles work 2) how to identify the appropriate nozzles for their irrigation system and 3) proper nozzle installation.

For customers that agree to program terms, a voucher is forwarded via email. In addition, each customer is provided with forms to assist them in sketching the layout of their irrigation system and conducting an inventory for nozzle replacements.

The customer (or their landscaper) then takes the voucher to a participating equipment distributor for redemption of the nozzles.

DWA Involvement

The Program is offered as a turn-key design. Western administers all program operations including: website development, updates, maintenance, and hosting, landscape contractor outreach, and marketing materials development. Western also conducts irrigation equipment distributor recruitment and training. Western secures purchase orders with participating distributors and pays these distributors. Western would invoice DWA and provides regular reporting.

DWA would need to promote the program to its customers, which could be done through:

- Bill insert
- DWA NewsStream eBlast
- Website
- KESQ segment/YouTube video
- Social media posts/advertising
- Penalty letter insert

Cost & Budget

The program currently offers five models of high efficiency nozzles at the below listed price:

Toro Precision Series Spray Nozzle: \$3.60 (residential or commercial)

Toro Precision Series Rotating Nozzle: \$5.00 (commercial only)

Hunter MP Rotator Nozzle: \$5.00 (commercial only)

Rain Bird Rotating Nozzle: \$4.00 (commercial only)

Rain Bird Rotating Variable Arc Nozzle: \$5.00 (commercial only)

These nozzles typically retail for \$4 - \$10. Price includes full turn-key program implementation.

Western requires a \$20,000 budget level for this program for the next 12 months. Staff budgeted sufficient funds in the 2016-17 budget under "Other Conservation Programs", but the FreeSprinklerNozzles.com costs could be covered by a contribution from CPV Sentinel and/or penalty fees collected to date.

Staff recommendation

Staff recommends that the Board of Directors authorize the General Manager to enter into a Memorandum of Understanding with Western for the next twelve months with a maximum budget of \$20,000. This 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.

Memorandum of Understanding

**Between the Western Municipal Water District (“WESTERN”),
Desert Water Agency (“PROGRAM PARTICIPANT”)**

Participation in Free Sprinkler Nozzles Program and Reimbursement Payments Associated Therewith

Background:

1. WESTERN and PROGRAM PARTICIPANT have previously entered into, or hereby enter into, a memorandum of understanding in order to partner for the sole purpose of extending Western’s FreeSprinklerNozzles.com Program to the residential, commercial and irrigation customers within the PROGRAM PARTICIPANT service area. In the event the parties have previously entered into such a memorandum of understanding, then this Amended and Restated Memorandum of Understanding (“MOU”) hereby supersedes, replaces, and otherwise controls over the memorandum of understanding which was in place prior to the effective date of this MOU. In the event the parties have not previously entered into a memorandum of understanding, then this MOU shall be deemed to be the contractual arrangement between the parties on the matters addressed herein.
2. In the event this MOU is replacing a memorandum of understanding that is already in effect, the purpose of this MOU is to provide for the distribution of additional types and models of water-efficient sprinkler nozzles from multiple manufacturers with a variety of unit costs. These additional types of nozzles are rotating nozzles and will be available to commercial/irrigation customers only (“Commercial/Irrigation Nozzles”). These Commercial/Irrigation Nozzles were not part of the FreeSprinklerNozzles.com Program at the time of some of the original memoranda of understanding. The fixed spray nozzles will continue to be available for residential and commercial/irrigation customers.
3. The FreeSprinklerNozzles.com Program budget within the PROGRAM PARTICIPANT service area, funded by the PROGRAM PARTICIPANT budget, will seek to incentivize the installation of water-efficient sprinkler nozzles for residential customers and Commercial/Irrigation customers (collectively referred to as “Nozzles”) during the program offering period of February 1, 2017 to January 31, 2018, within the PROGRAM PARTICIPANT service area, up to a maximum budget of \$20,000.

4. WESTERN and PROGRAM PARTICIPANT have agreed to work together and coordinate the implementation of the FreeSprinklerNozzles.com Program as set forth in this MOU and as further described at the FreeSprinklerNozzles.com website.
5. Nothing in this MOU shall be deemed to be the provision of any service or other activity outside of each party's respective service area, and to the extent the performance of any aspect of this MOU can be considered a "service," California Government Code Section 54981 permits a local agency to contract with another local agency for performance by the latter of municipal services or functions within the territory of the former. The purpose of this MOU is to facilitate implementation of the FreeSprinklerNozzles.com Program in order to further each party's conservation goals. In addition, WESTERN desires to enter into this MOU in order to obtain funding and other operational support toward the cost and requirements for implementation of the FreeSprinklerNozzles.com Program.

Understandings and Agreements:

1. WESTERN has developed and currently administers a customer self-service website, FreeSprinklerNozzles.com, for the dissemination of product vouchers within its service area. Under the FreeSprinklerNozzles.com Program, the Commercial/Irrigation customer is responsible for selecting the Nozzle type and manufacturer prior to being eligible to receive a voucher. Residential customers are offered a voucher for fixed spray Nozzles only. Neither WESTERN nor PROGRAM PARTICIPANT shall be responsible for making, or assisting in making, the selection of a Nozzle and shall not be liable in connection with the results, or lack thereof, from the use of such Nozzles.
2. WESTERN has agreed to extend the use of the FreeSprinklerNozzles.com website to the PROGRAM PARTICIPANT service area.
3. Customers, within the PROGRAM PARTICIPANT service area, will, when participating on the FreeSprinklerNozzles.com website, be issued a voucher that is redeemable at participating landscape irrigation equipment suppliers near or within PROGRAM PARTICIPANT service area.
4. For every water-efficient sprinkler Nozzle for which a voucher is redeemed at a local irrigation store within the PROGRAM PARTICIPANT service area, WESTERN will invoice PROGRAM PARTICIPANT, and PROGRAM PARTICIPANT shall pay the amounts shown below or any other amounts which may be in effect as of the date of the applicable invoice as determined by WESTERN under the FreeSprinklerNozzles.com Program, provided, however that the maximum amount payable by PROGRAM PARTICIPANT pursuant to this

MOU shall not exceed the Maximum Amount set forth in paragraph 7 of this Agreement. The Maximum Amount shall apply to all Nozzles regardless of whether Nozzles are for residential, commercial or irrigation customers. PROGRAM PARTICIPANT shall not be permitted to allocate a certain portion of the Maximum Amount for certain types of customers, Nozzles or manufacturers.

Unless different amounts are in effect as of the date of the applicable invoice, as determined by WESTERN, the per unit price for each Nozzle shall be as follows:

Toro Precision Series Spray Nozzle: \$3.60
Toro Precision Series Rotating Nozzle: \$5.00
Hunter MP Rotator Nozzle: \$5.00
Rain Bird Rotating Nozzle: \$4.00
Rain Bird Rotating Variable Arc Nozzle: \$5.00

_____ By initializing this paragraph, PROGRAM PARTICIPANT is hereby opting to allow and fund both the fixed spray and rotating Commercial/Irrigation Nozzles in connection with requests from Commercial/Irrigation customers. The refusal or failure to initial this paragraph shall indicate that PROGRAM PARTICIPANT will only allow and fund fixed spray Commercial/Irrigation Nozzles in connection with requests from Commercial/Irrigation customers.

5. Additionally, WESTERN will, on a monthly or quarterly basis, as determined by WESTERN, prepare a fully documented invoice, for the amounts due as set forth above stating the amount due for the number of water-efficient sprinkler Nozzles processed during the previous period, that were distributed by way of the voucher program within the PROGRAM PARTICIPANT service area. Each invoice shall be accompanied by back up documentation that shall include at least the following: participant account number, participant address and number of Nozzles distributed to each individual participant. PROGRAM PARTICIPANT shall pay each invoice within thirty (30) days from the date of PROGRAM PARTICIPANT's receipt of the applicable invoice.
6. PROGRAM PARTICIPANT, if it elects to do so, will have the responsibility to audit and verify the installation of the water-efficient sprinkler Nozzles distributed by the FreeSprinklerNozzles.com Program, within its respective service area, including for PROGRAM PARTICIPANT member agencies (local urban water suppliers), if applicable. PROGRAM PARTICIPANT shall be solely responsible, at its sole cost and expense, to enter into the applicable arrangements, if applicable, and take any action which may be required, in order to enforce the requirements of its member agencies as set forth herein.

7. PROGRAM PARTICIPANT has an approved budget, not-to-exceed \$20,000 to support the implementation of the FreeSprinklerNozzles.com Program within the PROGRAM PARTICIPANT service area ("Maximum Amount"). Notwithstanding anything to the contrary in this MOU, PROGRAM PARTICIPANT shall have no obligation to spend funds in excess of the Maximum Amount without further written authorization in the form of a written amendment to this MOU, signed by each party's authorized signatory.
8. PROGRAM PARTICIPANT will coordinate and participate in the overall administrative oversight of, and foster the multiple-agency participation in, the FreeSprinklerNozzles.com Program within the PROGRAM PARTICIPANT service area as applicable. Specifically, PROGRAM PARTICIPANT will be responsible for providing the customer information as requested.
9. The term of this MOU shall extend from the date of full execution until January 31, 2018. This Agreement shall remain in effect during the term unless earlier terminated under the following procedures:
 - (a) If either party to this MOU believes that the other party has failed to perform any obligation of that party in accordance with the terms of this MOU ("Default"), the party alleging the Default shall provide written notice ("Default Notice") to the other party, setting forth the nature of the alleged Default. Unless otherwise provided by a specific term of this MOU, the party claimed to be in Default shall have (i) with respect to a Default involving the payment of money, ten (10) days after its receipt of the Default Notice to completely cure such Default, and (ii) with respect to any other type of Default, thirty (30) days from the receipt of the Default Notice to completely cure such Default or, if such Default cannot reasonably be cured within such thirty (30) day period, to commence the cure of such Default within the thirty (30) day period and diligently prosecute the cure to completion thereafter. If the party claimed to be in Default does not cure such Default within the time periods and procedures as set forth herein, the party alleging Default may then pursue the applicable legal and equitable remedies.
 - (b) In the event either party determines it is not feasible or permissible to continue to perform this MOU due to issues regarding whether a service or activity is being performed outside of a party's service area, either party may terminate this agreement upon ten (10) days prior written notice to the other party. In the event of any such termination, the parties will remain obligated to perform and pay for any obligation incurred prior to the effective date of said termination unless otherwise prohibited by law or regulation.
 - (c) Either party may terminate this MOU for convenience at any time upon thirty (30) days written notice. In the event of any such termination, the parties

will remain obligated to perform and pay for any obligation incurred prior to the effective date of said termination unless otherwise prohibited by law or regulation.

(d) Upon termination of the Agreement, WESTERN shall immediately stop using any data (including the Confidential Data) provided by PROGRAM PARTICIPANT to WESTERN and shall, as directed by PROGRAM PARTICIPANT, return or destroy the Confidential Data and certify the destruction of the same.

(e) Surviving Obligations. Obligations with respect to confidentiality, use, and destruction of the Confidential Data, indemnification, and payment shall survive the termination of this Agreement.

10. Confidentiality and Usage of Data.

(a) PROGRAM PARTICIPANT agrees to provide WESTERN with PROGRAM PARTICIPANT customer names, addresses and account numbers ("Confidential Data") solely for the purpose of allowing PROGRAM PARTICIPANT customers to participate in the FreeSprinklerNozzles.com Program (the "Authorized Use"). The Confidential Data will remain the property of PROGRAM PARTICIPANT and its customers. WESTERN shall use the Confidential Data solely for the Authorized Use. WESTERN shall not use the Confidential Data for commercial purposes or for any other use other than the Authorized Use.

(b) The Confidential Data or any confidential information disclosed by the disclosing party to the receiving party shall be treated as confidential and maintained in confidence by the receiving party. The receiving party shall not disclose any confidential information of the disclosing party except to its own personnel who have a need to know. Without limiting the foregoing, the receiving party shall take at least the same steps and use the same methods to prevent the unauthorized use or disclosure of Confidential Data of the disclosing party as it takes to protect its own confidential or proprietary information.

(c) Public Records Act. In the event a public records request is made to either party ("Receiving Party") for information regarding customers or other information from the other party ("Subject Party"), the Receiving Party shall provide notice to the Subject Party in order to provide the Subject Party with the opportunity to pursue the applicable action for withholding any such records from disclosure.

(d) Data Security and Distribution. WESTERN will ensure that any Confidential Information included in the Data is stored on computers and storage media accessible only by those WESTERN personnel with a need to use those portions of the Data, and that only the minimum number of copies reasonably necessary to accomplish the Authorized Use will be made. Confidential Data stored in an electronic format will be stored using industry-standard encryption and security features. (e) WESTERN shall not, and will inform all users that they may not:

- (i) Disclose any portions of the Data that are individually identifiable or that otherwise identifies persons, directly or indirectly, except as permitted under this MOU;
- (ii) Use the Data to learn the identity of any person or entity included in the Data or to contact any such person or entity for any purpose, except as permitted under this MOU;
- (iii) Distribute or publish the Data to anyone other than as expressly permitted under this MOU;

11. General Provisions

(a) Indemnification Each party hereby agrees to defend, indemnify and hold free and harmless the other party from and against any and all liability, expense, including defense costs and legal fees, and claims for damages of any nature whatsoever, including, but not limited to, breaches of confidentiality or misuse of any data provided by PROGRAM PARTICIPANT or obtained by WESTERN in connection with this MOU; bodily injury, personal injury, death or property damage, arising from or connected with Indemnitor's activities under this MOU, including any Worker's Compensation suits, liability, or expense, arising from or connected with services performed on behalf of Indemnitor by any person pursuant to this MOU, whether such claims, damages, liabilities, costs and/or judgments are based upon alleged negligence, a dangerous condition of public property, or any other theory of liability. Indemnitor's duty to indemnify the Indemnitee shall survive the expiration or other termination of this MOU as to any injuries, occurrences or claims occurring or alleged to have occurred prior to its expiration or termination.

(b) Relationship of the Parties Nothing contained in this MOU shall be deemed or construed by the parties or by any third person to create the relationship of principal and agent, or partnership or joint venture, or any association between the parties, and none of the provisions contained in this MOU or any act of the parties shall be deemed to create any relationship other than as specified

herein, nor shall this MOU be construed, except as expressly provided herein, to authorize any of the parties to act as the agent for the other.

(c) Incorporation of Recitals The Recitals set forth above are incorporated herein and made an operative part of this MOU.

(d) Complete Agreement This MOU constitutes the entire agreement between the parties, both written and oral, with respect to the subject matter hereof. Any prior agreements respecting the subject matter hereof, written or oral, express or implied, between the Parties, are hereby canceled.

DESERT WATER AGENCY

WESTERN MUNICIPAL WATER DISTRICT

Mark Krause (Date)
General Manager-Chief Engineer

John V. Rossi (Date)
General Manager

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

FEBRUARY 7, 2017

**RE: REQUEST AUTHORIZATION TO ENTER INTO AN AGREEMENT
WITH METROPOLITAN WATER DISTRICT & COACHELLA
VALLEY WATER DISTRICT FOR ARTICLE 21 WATER**

On January 25, 2017, the Agency received a notice from the Department of Water Resources (DWR) regarding the 2017 Article 21 Water Program. The notice advised that DWR was offering interested Contractors who signed the Monterey Agreement the opportunity to participate in the purchase of Article 21 water which may become available later in 2017. Staff executed and returned the notice which indicated the Agency's acceptance of the criteria, procedures, and charges established for this program (see attached).

It is anticipated that DWR will be making Article 21 water available by February 10, 2017. Metropolitan Water District of Southern California (MWD) cannot take immediate delivery of Article 21 water but anticipates that it will be able to do so in Mid-March 2017 if Article 21 water is still available. MWD has indicated agreement to deliver Article 21 water to the Agency and CVWD's under certain conditions. The primary condition is that the delivery of Article 21 water to DWA/CVWD must not interfere with MWD's operations or delivery of Table A to its member agencies. The Article 21 delivery to DWA will most likely be between 0-2,500 acre-feet. The cost of the water will include only transportation costs (\$320/a.f.). This water will cost approximately 50% of a Table A delivery. A letter agreement defining the terms of delivery between the agencies is being prepared by MWD for execution. It is anticipated that the letter will be ready within a week. MWD may be able to take delivery of Article 21 water sooner than Mid-March, in which case the letter will need to be executed before our next regularly scheduled Board meeting.

Staff requests the Board's authorization to participate in the 2017 Article 21 Water Program. Staff also requests authorization for the General Manager to execute a letter Agreement with MWD for the exchange delivery of 2017 Article 21 Water.

NOTICE TO STATE WATER PROJECT CONTRACTORS**Date:** JAN 25 2017**Number:** 17-02**Subject:** 2017 Article 21 Water Program**From:**

A handwritten signature in black ink, reading "Mark E. Andersen", is written over a horizontal line.

Mark E. Andersen
Acting Deputy Director
Department of Water Resources

The Department of Water Resources (DWR) will administer a program during 2017 in accordance with Article 21 of the long-term Water Supply Contracts. The 2017 Article 21 Water Program (Program) is available to those State Water Project contractors who have signed the Monterey Amendment, and is subject to the attached criteria.

Due to the current water conditions and storage in San Luis Reservoir, it is likely that Article 21 water may become available south of the Sacramento-San Joaquin Delta during 2017. Should Article 21 water become available in 2017, the 2017 Program will be administered similarly to 2011 with minor modifications to facilitate communication of Article 21 availability and any related carryover spill accounting.

The Program participants have the responsibility to follow the intent of the Article 21 contract criteria and to not defer previously scheduled Table A deliveries for later in the year. Contractors are encouraged to regularly update and submit their delivery schedules to DWR.

To participate in the Program and be on the notification list, a contractor must sign and date the attachment to this Notice to State Water Project Contractors and return it to Mahmoud Mabrouk, State Water Project Analysis Office, Department of Water Resources, Post Office Box 942836, Sacramento, California 94236-0001.

If you have any questions or need additional information, please contact Pedro Villalobos, Chief, State Water Project Analysis Office, at (916) 653-5117.

Attachment

2017 ARTICLE 21 WATER PROGRAM

CRITERIA

1. Delivery of Article 21 water shall not impact allocation or delivery of approved Table A water to State Water Project (SWP) contractors in 2017.
2. Water under this Program shall be SWP water that is available to SWP contractors as determined by the Department of Water Resources (DWR). This water is limited to amounts not needed for fulfilling contractors' approved Table A deliveries, as set forth in their approved water delivery schedules furnished pursuant to Article 12, or for meeting SWP operational requirements, including reservoir storage goals for the current or following years.
3. Delivery to specific contractors may be limited by operational capacity in SWP facilities or as a result of changed operational conditions.
4. The delivery of Article 21 water is not intended in any way to adversely impact any SWP operations. If DWR determines there has been an adverse impact during the period when Article 21 water is being delivered to a contractor, Article 21 water may be reclassified as approved 2017 Table A water to keep the SWP whole.
5. Article 21 water shall be used within the service area of a requesting contractor, for the same reasonable and beneficial uses as Table A water. Article 21 water may be delivered outside the service area of a participating contractor for storage as long as it is later returned for use in the service area. A separate written agreement will be required for delivery outside of a contractor's service area.
6. Article 21 water shall not be stored by DWR in SWP reservoirs for later delivery to a requesting contractor.
7. This Program is not intended to allow a contractor to shift or defer delivery of allocated scheduled 2017 Table A water and substitute delivery of Article 21 water for scheduled 2017 Table A water in a way that would adversely impact allocation or delivery of Table A water to other contractors in 2017 or in any subsequent year, or adversely affect SWP storage of water.

SCHEDULING AND CHARGES

8. DWR will notify the contractors by email when Article 21 water is available. DWR will request that contractors periodically provide updated schedules of carryover, Table A and other non-Article 21 water demands and will use such schedules to determine Article 21 water availability.

9. Participating contractors shall email a schedule indicating Article 21 water requests to Mahmoud Mabrouk at mmabrouk@water.ca.gov of the State Water Project Analysis Office. The schedule shall include the amount of other SWP supplies requested in addition to Article 21 water.
10. Daily allocations of Article 21 will be provided to contractors, preferably on a weekly basis. DWR may discontinue availability of Article 21 water upon short notice.
11. If necessary, the supply of Article 21 water will be allocated among requesting contractors in proportion to the 2017 Table A amounts of those contractors.
12. A contractor taking delivery of Article 21 water may stop or suspend participation in the Program by notifying Mahmoud Mabrouk at (916) 653-4635.
13. Conveyance charges for Article 21 water delivered under this Program shall be the same as for Table A water and shall include transportation, variable operation, maintenance, power, and replacement (OMP&R) component charges, Off Aqueduct power facility charges, and any incremental OMP&R costs, as determined by DWR.
14. All contractors participating in the Program are responsible for coordinating delivery points and rates through their normal contacts at the various DWR field divisions.
15. The 2017 Article 21 Water Program shall not be a precedent for future programs.

In order to participate in the 2017 Article 21 Water Program, please sign below in the space provided and return all three pages of this attachment to the State Water Project Analysis Office. A contractor's signature indicates acceptance of the criteria, procedures, and charges established for this Program.

ACCEPTED:

Authorized Representative

Mark S. Krause

Signature

General Manager-Chief Engineer

Title

Desert Water Agency

Agency

01/26/17

Date

AGENCY CONTACT:

Authorized Representative

Mark S. Krause

Name

mkrause@dwa.org

Email

(760) 323-4971 ext. 110

Telephone

January 19, 2017

MEMORANDUM

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

FROM: BEST BEST & KRIEGER LLP

RE: JANUARY 19, 2017 MEETING OF THE BOARD OF DIRECTORS OF THE
STATE WATER CONTRACTORS, INC.

The January 19, 2017 meeting of the Board of Directors of the State Water Contractors, Inc., was conducted at the Tsakopoulos Library Galleria in downtown Sacramento.

1. Board Action Items.

The Board took action to approve an increase of \$124,000 for consulting work already underway on the Longfin Smelt. There is a documented correlation between outflows from the Delta and Longfin Smelt populations. However, there is insufficient information to explain why that correlation exists. Some believe that the Longfin Smelt spawn in tributaries to the Delta, and that population increases during periods of high flow really result from improved habitat conditions in those in tributaries, coinciding with improved precipitation. Thus, the release water from the reservoirs to increase outflows from the Delta during dry conditions may not produce a corresponding benefit to Longfin Smelt populations. This is a year in which monitoring of Longfin Smelt spawning in the tributary marshes would produce valuable information. The Board authorized the additional expenditure of \$124,000 to conduct additional survey work this year.

2. Water Supply Report.

DWR Deputy Director Mark Anderson was present for a DWA management report . He began by commenting on water supply conditions. As of the date of the meeting, the allocation for 2017 already had been increased to 60% for Contractors south of the Delta, and 85% for Contractors north of the Delta. Anderson reported that more storms were anticipated, and that the allocations could go up further. DWR has been operating to flood control

requirements at Oroville, and therefore has been releasing water from Oroville at a rate equal to the inflow, to keep from encroaching on flood control space. These releases from Oroville have produced a lot of hydro power generation at the Hyatt hydro facility. Anderson stated that DWR was on its way to filling the San Luis Reservoir as well. The Bureau of Reclamation has more of its storage space available, although it is anticipated that the Bureau's storage space will fill as well. Anderson stated that DWR would borrow that available storage space until the Bureau needs it for its own storage purposes.

Mark Anderson also reported that DWR is conducting budget conferences with a goal of having a fairly "flat" statement of charges for 2017. In other words, DWR is doing what it can to avoid spikes in the statement of charges to Contractors.

3. Water Supply Report.

John Leahigh of DWR was present to further report on SWP water operations. Needless to say, water supply conditions are excellent. January, 2017 has been great, with nearly 20 inches of precipitation having fallen in the Feather River watershed as of the date of the meeting, which was well above 200 percent of average. Leahigh stated that another six inches of rain were expected by the end of the week, and that the new storm was expected to also bring a lot of snow. He stated that all three major reservoirs were in flood control operations, including Shasta, Oroville and Folsom. As of the date of the meeting, total pumping from the Delta was at the rate of 14,000 cubic feet per second, with a little more than 10,000 cfs being pumped by DWR at the Clifton Court Forebay. He said that DWR would be filling the San Luis Reservoir rapidly. Contractor requests for deliveries had increased, as some Contractors were attempting to remove their carry over water from the San Luis Reservoir before it would spill. Leahigh anticipated that San Luis would begin to spill in early February. As of the end December, carry over water in the reservoir was at about 400,000 acre feet. Notwithstanding the abundant water supply, Leahigh stated that it would be difficult for DWR to get to a 100% allocation this year, due to export constraints imposed by the biological opinions, although he said that DWR could not rule out the possibility altogether. He said that a 100% allocation would depend largely on high flows in the San Joaquin River.

4. General Manager's Report.

SWC's Manager, Terry Erlewine, stated that the State Water Project Advisory Committee had met with newly appointed DWR Director Bill Croyle. He stated that revisions are being made in the biological opinion for OCAP, and for the Longfin Smelt. The Contractors are hopeful that the fish agencies will allow input from the Contractors on all aspects of the biological opinions, and not just on the early drafts.

5. Revisions to SWC Bylaws.

Erlewine also provided a report on proposed revisions to the SWC corporate bylaws. Revisions to the bylaws will require approval by two-thirds of the member Contractors. Most of the proposed revisions are non-substantive. One of the more substantive revisions will include a change in the methodology for allocating the cost of the FERC re-licensing. Currently, FERC costs are allocated among Contractors with one-half to the Energy Fund (calculated according to deliveries) and one-half to the Dues Fund (calculated according to Table A Amounts). This allocation had been approved in order to more fairly allocate the cost of relicensing the Hyatt power facility, and endeavor now completed. Other proposed revisions to the bylaws will provide that Roberts Rules of Order govern Board proceedings, and that it takes ten percent of the members, rather than five percent, to call a special meeting of the members.

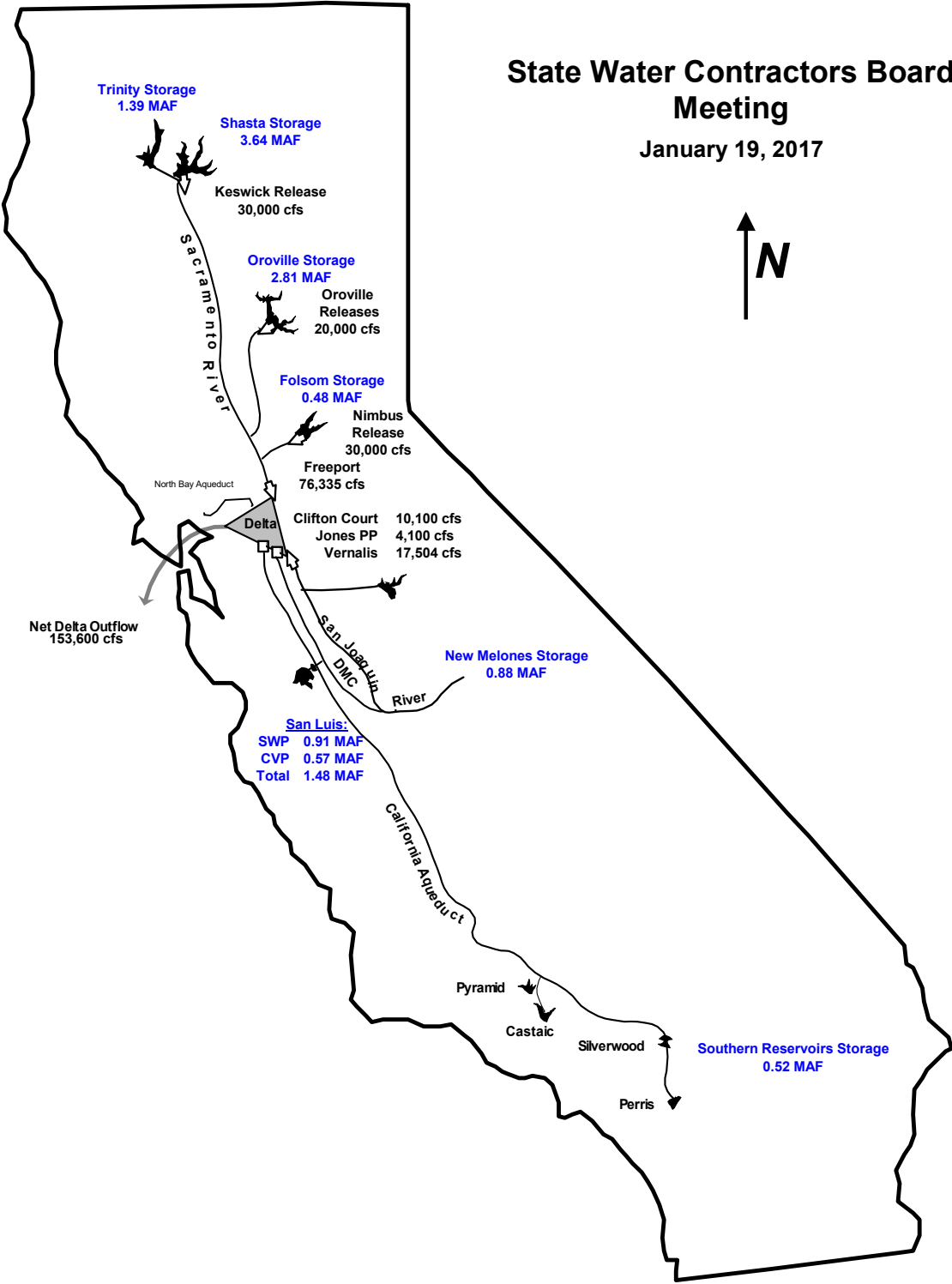
6. Report on Energy Objectives

SWC's Assistant General Manager Tim Haynes provided a report on progress in addressing energy objectives for the year. A copy of his PowerPoint presentation is enclosed with this memo. Tim reported on California's effort to "decarbonize" the California economy. He stated that the Air Resources Board has asked why the State Water Project is not "greener". However, the State Water Project is already one of the "greenest" electric utilities in the State. As the slides reveal, transmission costs have been increasing significantly, having gone up five hundred percent since 2001. Some of these increased costs result from increased capital costs in constructing transmission lines to locations where green energy is generated. Tim was happy to report that the National Marine Fisheries Service had issued its biological opinion for the

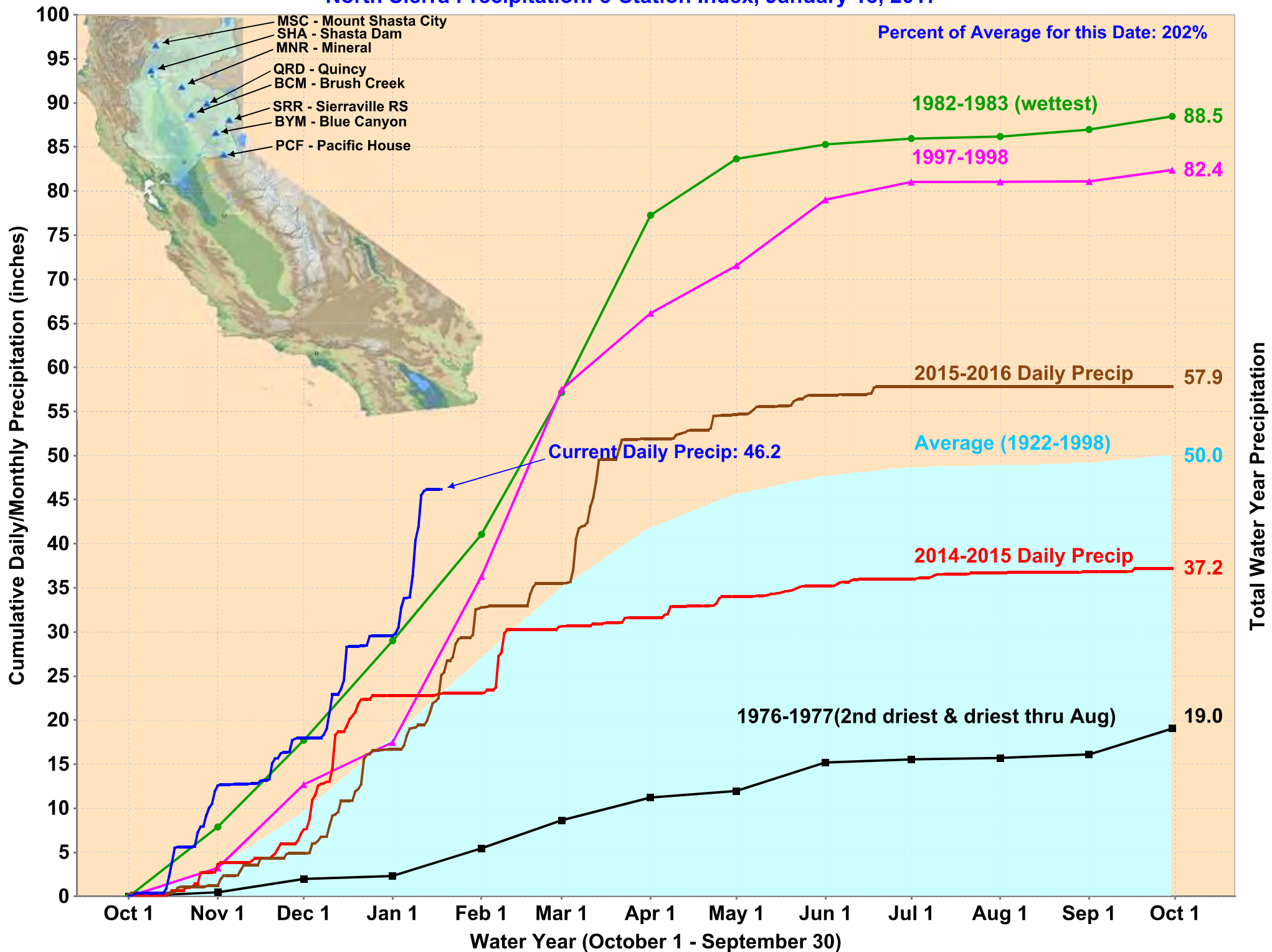
relicensing of the power facility at Oroville, and that the final biological opinion was better than an earlier draft. The biological opinion was the last major hurdle to getting a new license for that facility. Meanwhile, a study plan has been submitted for the relicensing of SWP facilities south of the Delta.

MICHAEL T. RIDDELL

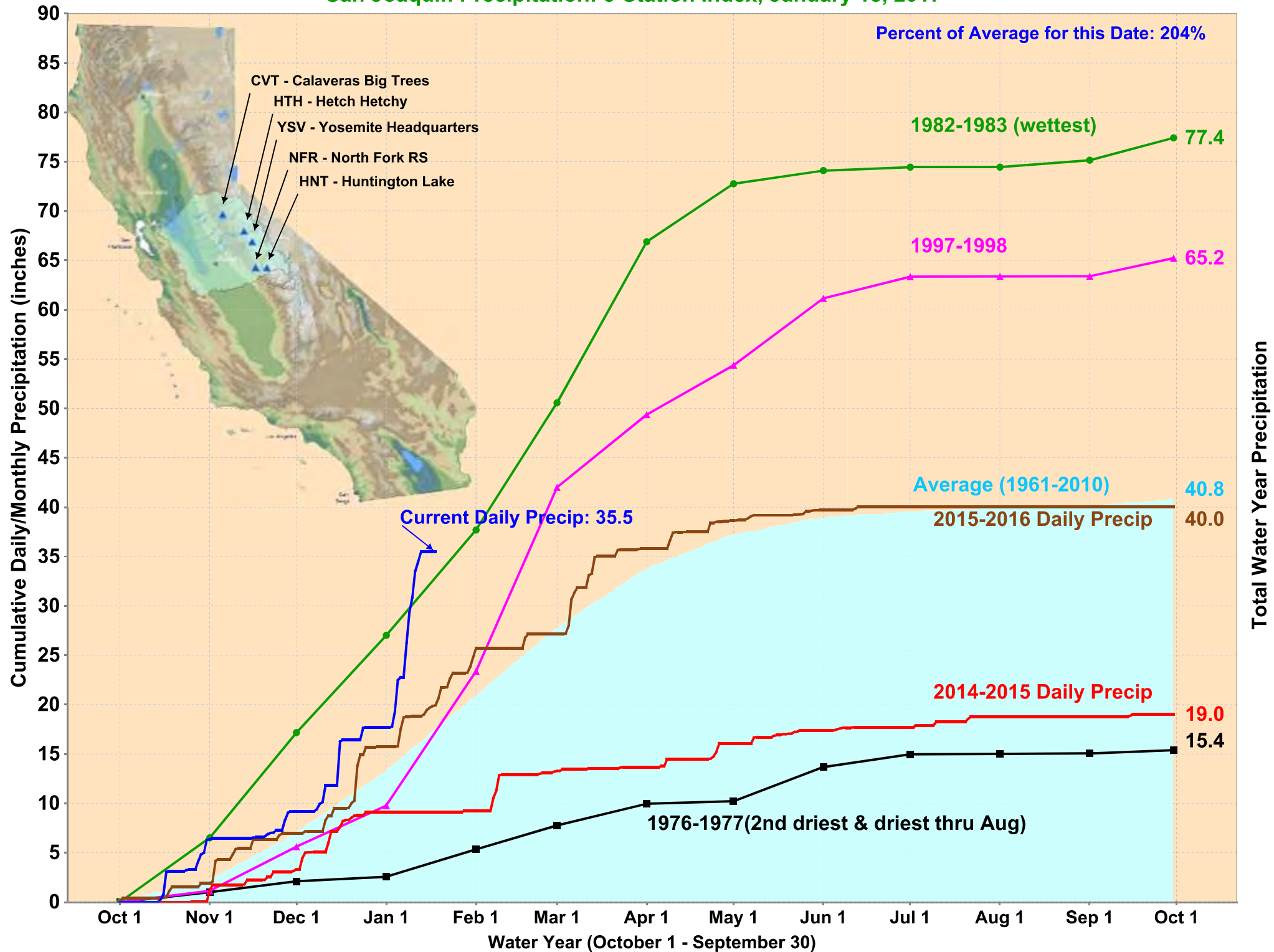
**State Water Contractors Board
Meeting**
January 19, 2017



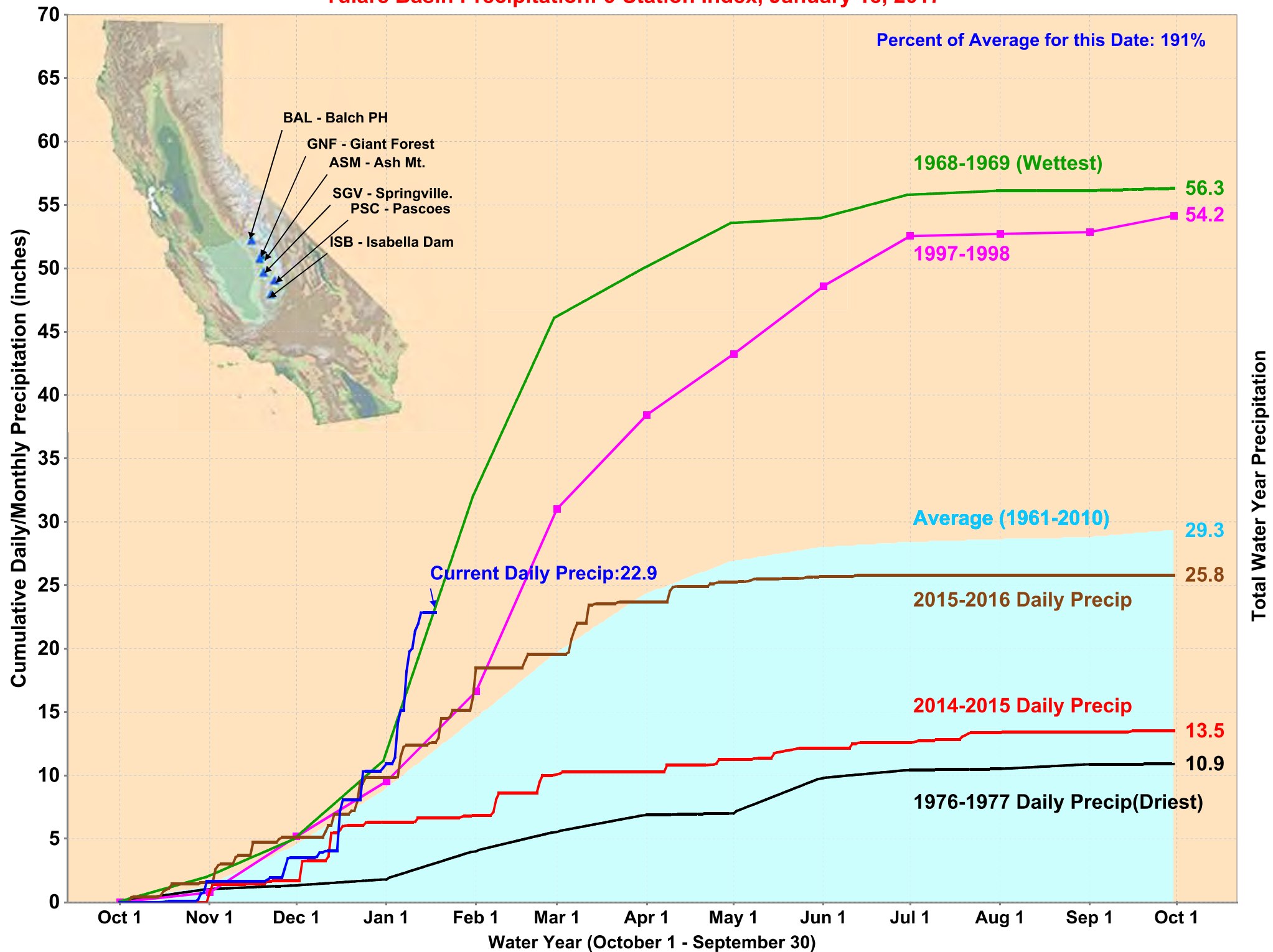
North Sierra Precipitation: 8-Station Index, January 18, 2017



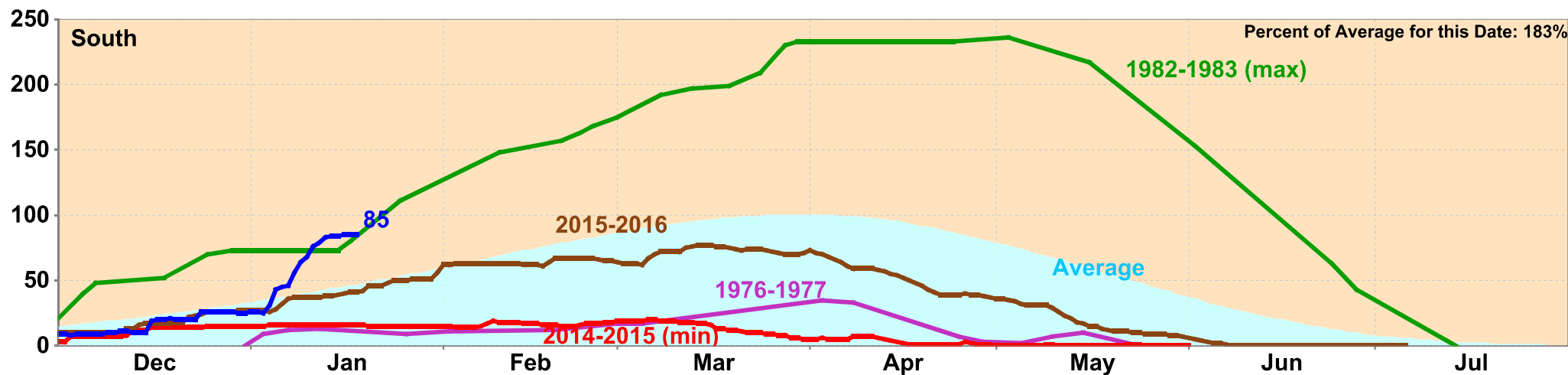
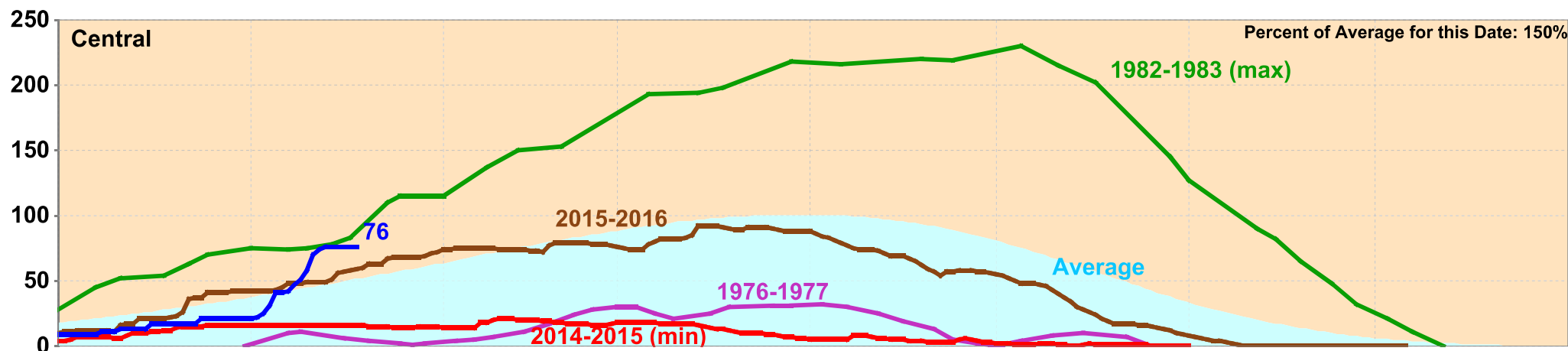
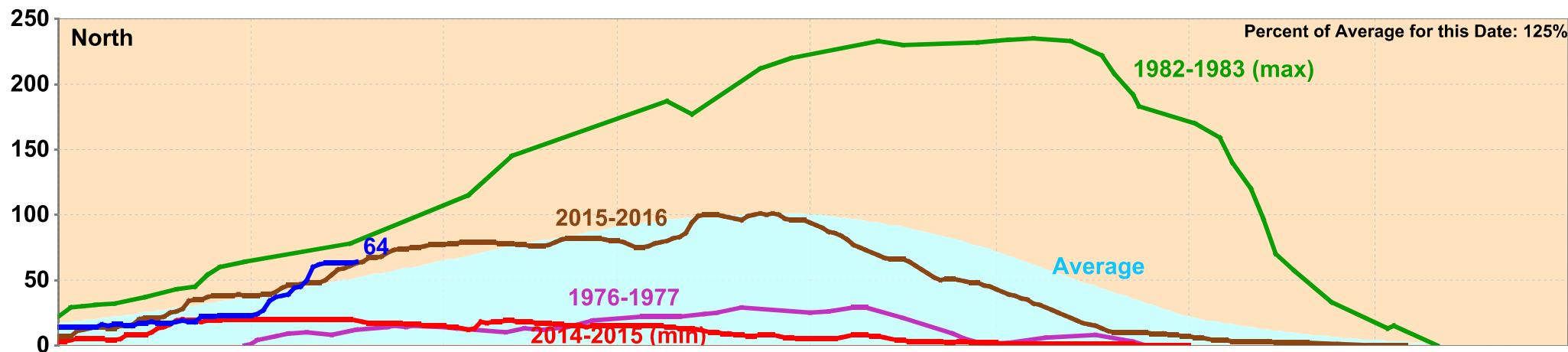
San Joaquin Precipitation: 5-Station Index, January 18, 2017



Tulare Basin Precipitation: 6-Station Index, January 18, 2017



California Snow Water Content, January 18, 2017, Percent of April 1 Average



Statewide Percent of April 1: 75%

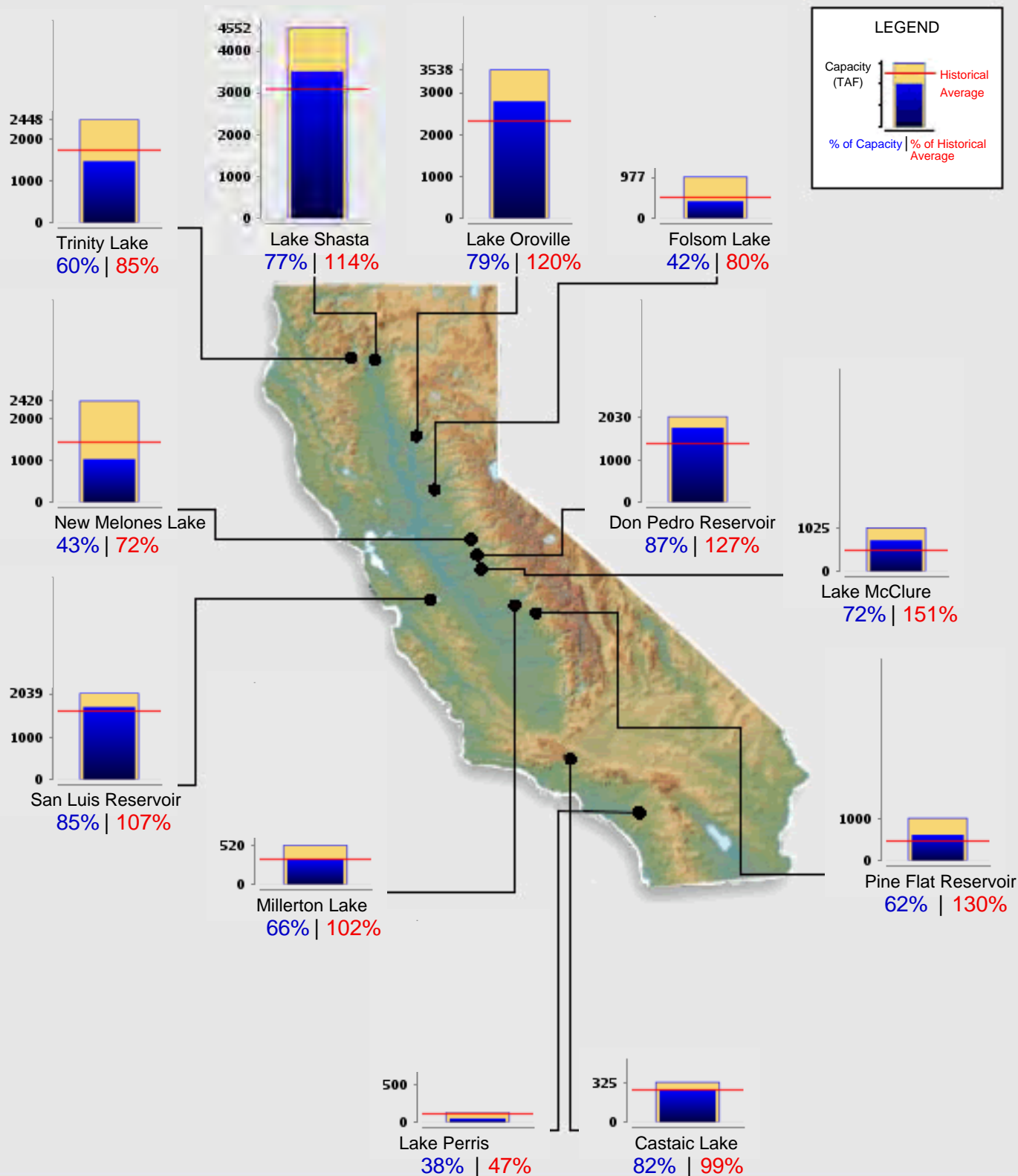
Statewide Percent of Average for Date: 151%



Reservoir Conditions

Ending At Midnight - February 2, 2017

CURRENT RESERVOIR CONDITIONS





Energy Objectives

1/19/2017

TIM HAINES

Energy Objectives

Objective	Description
Energy Reports	Develop New Board Report
Strategic Power and Transmission Plan	Regionalization (or not) of CAISO
Near-Term Risk Management	DWR Energy Hedging Program & Reid Gardner Decommissioning
GHG & Renewables	Cap-and-Trade and Renewable Acquisitions
Defend Against Liabilities and Claims	Utility Transmission Cases
FERC Relicensing	Oroville and SoCal Facilities

Proposal: Reporting Approach

Annual Report: Budget for the Variable Charge

- Statement of Charges (SOC) Budget (B1)
- Initial Invoice Rate Budget (B2)

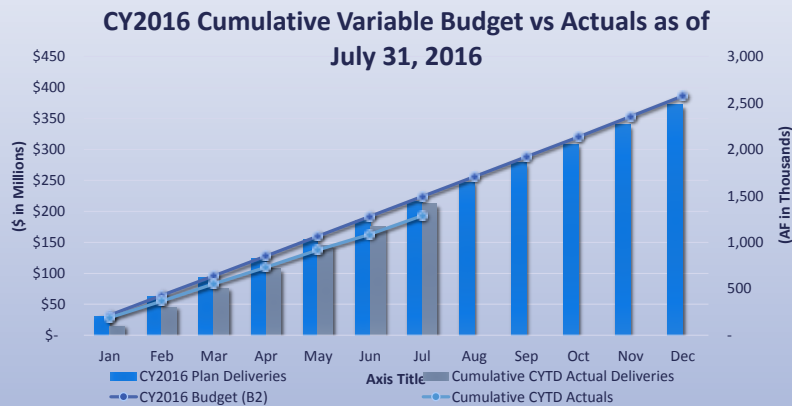
Quarterly Reporting: Actual Operations to Budget (B2) including Variance Analysis

Annual Reporting Calendar	Jan	Mar	April	June	Sept	Dec
SOC Budget (B1)		X				
Initial Invoice Rate Budget (B2)						
Budget (B2) vs Actual Variance Analysis, Market Impacts			1 st Qtr of Year	2 nd Qtr	3 rd Qtr	4 th Qtr

1/19/2017

3

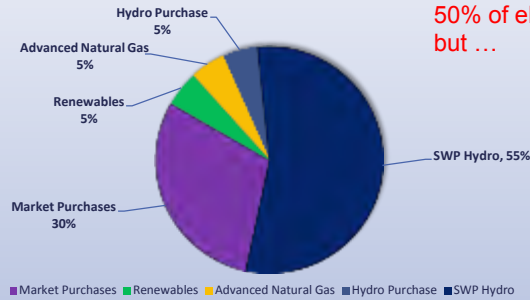
SWP Variable Budget vs Actuals



1/19/2017

4

What Is 100% Carbon Free

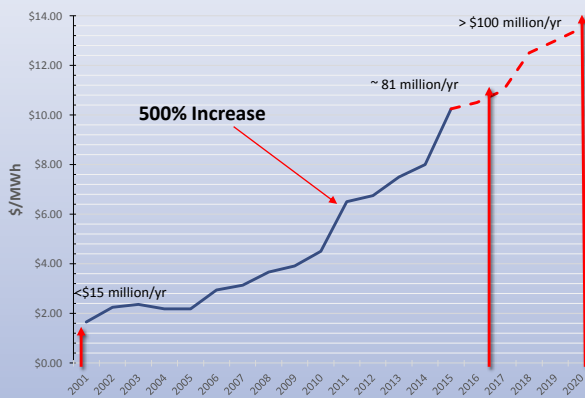


	2014	2016
SWP Water Delivery (% of SWC Entitlement)	5%	60%
SWP Pump Demand (GWh)	2,800	6,200
SWP and Other Carbon Free Power (GWh)	1,800	3,800
Market Power (GWh)	1,000	2,400

1/19/2017

5

High Voltage Transmission Cost

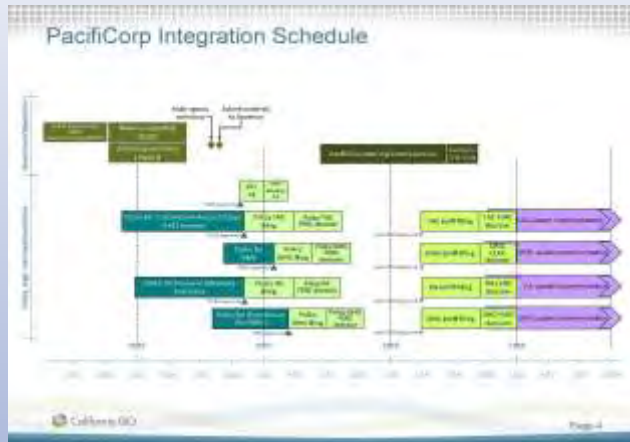


- CAISO operates the Cali transmission system
- PG&E, SCE and SDG&E continue to own transmission
- FERC authorizes recovery of costs
- PG&E's last rate case settled Sep 2016 (11% hike)
- Filed current rate proposal in Jul 2016 (30% more)

1/19/2017

6

CAISO Regionalization



Principals' meetings & follow-up

Our "ask" is feasible

Changes at state, regional and federal level

Extensive engagement

1/19/2017

7

Relicensing & Reid Gardner

Oroville

- NMFS – Issued Biological Opinion in December, 2016
- Habitat Expansion Plan – Emphasis of SWC Efforts

SoCal Facilities

- Study Plan Submitted

Reid Gardner

- Clean Up and Risk Assessment

1/19/2017

8

**DESERT WATER AGENCY
MEDIA INFORMATION
JANUARY 2017**

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
01/03/17	1	LOS ANGELES TIMES	State Water Officials Are Optimistic Despite 'Gloomy' California Snowpack Survey
01/03/17	2	LOS ANGELES TIMES	After Six Years Of Drought, This Is More Like It
01/04/17	3-4	THE DESERT SUN	California Snowpack Measures Low, But Big Storms Are Coming
01/04/17	5-6	LOS ANGELES TIMES	Could Sierra Snow End California's Drought?
01/05/17	7	THE DESERT SUN	City News Service: Water Districts' Savings Rise In November
01/05/17	8-9	PRESS ENTERPRISE	State Water Savings Fall Below 19 Percent
01/05/17	10	PRESS ENTERPRISE	Water Rates Could Rise In San Jacinto
01/11/17	11-12	LOS ANGELES TIMES	Revived By Weeks Of Rain
01/12/17	13-14	LOS ANGELES TIMES	Is The Great California Drought Finally Ending?
01/13/17	15-16	THE DESERT SUN	Five-Year Dry Spell Concludes
01/13/17	17-18	LOS ANGELES TIMES	State's Water Situation: Here's The Half Of It
01/13/17	19-20	PRESS ENTERPRISE	Storms Putting Dent In Drought
01/14/17	21-23	LOS ANGELES TIMES	Roaring To Life
01/17/17	24	CHICO ENTERPRISE	Letter: Much Work Being Done To Make Reservoir A Reality
01/18/17	25	THE DESERT SUN	Opinion: DWA Seeks Water Conservation
01/19/17	26	PRESS ENTERPRISE	Storms Deliver For The Region
01/19/17	27	CAPITAL PRESS	What Mother Nature Gives, She Can Take Away

DATE	PACKET PAGE	MEDIA SOURCE	ARTICLE
01/20/17	28	WATER & DROUGHT	Roseville, Placer To Join Sites Reservoir Effort. What It Means For Water Storage Plan
1/22/17	29-31	THE DESERT SUN	As Drought Eases, What's Next For California's Water Strategy?
01/23/17	32-33	PRESS ENTERPRISE	Recent Storms Are Making Big Dent In Drought
01/25/17	34	THE DESERT SUN	When Will Soggy California Drop Its Water Restrictions?
01/29/17	35	LOS ANGELES TIMES	January Storms Erase Part Of California's Snowpack Deficit
01/26/17	36	BAKERSFIELD.COM	Community Voices: Our Missed Water Storage Opportunity From Recent Storms
01/28/17	37	EAST BAY TIMES	More Dams Won't Do It, Time For A Fresh Approach On Water
02/01/17	38-39	EAST BAY TIMES	California Water Storage Is Not Zero-Sum Game
02/01/17	40	KCRA 3	Sites Reservoir Project Takes Step Forward

Los Angeles Times

State water officials are optimistic despite 'gloomy' California snowpack survey

Joseph Serna, January 3, 2017

Snowpack in the resort town of Phillips, Calif., measured just 53% of the seasonal average on Tuesday, but water officials said there was still reason for optimism as the state enters its sixth year of drought.

Standing in 3 feet of snow at the El Dorado County measuring station, Frank Gehrke of the California Department of Water Resources counseled hope as he announced the survey results.

"While that seems perhaps a little gloomy, keep in mind that we had pretty much bare ground here about a week ago," Gehrke said.

The statewide snowpack measurement is somewhat better — 70% of the seasonal average — but still nowhere near last year's measurement of 105% of average for this time of year.

Higher elevations of Northern California were hit by heavy snowfall overnight, prompting avalanche warnings, as the region braced for a week of intense weather.

The National Weather Service said it expected 4 to 5 feet of snow in some Sierra areas and encouraged drivers to avoid mountain roads....

A pair of Northern California storms — the first on Wednesday followed by another on Saturday — are expected to drench mountains and valleys through early next week.

Up to 4 feet of snow may drop at the highest elevations with the second storm, which is part of an atmospheric river, said National Weather Service meteorologist Zach Tolby. The storms could contribute to the snowpack at the highest elevations, he said.

Melted snow provides about a third of the state's water, and thanks to a snowy winter last year, a lot of the groundwater in Northern California has been replenished, relieving drought conditions there.

Another year like last year would make even greater gains in alleviating California's drought, Gehrke said.

A series of storms that washed across Northern California over the weekend dropped more than 20 inches of snow on the Sierra Nevada mountain range, which provides water for key state water projects.

"I think it's a very encouraging start to winter," he said.

That's because the precipitation hitting the state this year is mostly coming in the best way to help the drought — slow and steady.

Northern California had its wettest October in 30 years, followed by a dip in November, but then a resurgence of rain and snow in December.

According to the Department of Water Resources, the current water content in the northern Sierra Nevada is 68% of average for this time of year; the central Sierra clocked in at 65% and the southern Sierra at 73%.

Southern California may also see a turn in the tide when it comes to the drought.

After missing out on the gains from last year's El Niño, downtown Los Angeles has seen recent rainfall totals not experienced in years.

The average rainfall downtown between Oct. 1 and Jan. 2 is 4.24 inches, said National Weather Service meteorologist Scott Sukup. This year it has already rained 5.95 inches. Last year, it was a paltry 1.03, he said.

A set of storms heading to California over the weekend, dubbed the "pineapple express" could hit Central or Southern California by Saturday or Sunday, he said.

Los Angeles Times

After six years of drought, this is more like it

Rain and snow? That's the winter weather we should be getting, meteorologists say.

By Angel Jennings, January 3, 2017

The slow but steady improvement in California's drought picture should accelerate in the new year with a series of storms that are expected to dump rain and snow in Northern California.

The northern half of the state has already seen impressive rains this fall and winter, filling reservoirs and replenishing the Sierra snowpack, a key source of water for California cities and farmlands.

A storm system is expected to bring rain and snow throughout the week in Northern California, and a foot of snow is expected Tuesday in the Sierra Nevada and another foot or two is predicted for Wednesday, said Johnnie Powell, a weather forecaster with the National Weather Service.

"This is what we're supposed to be getting," Powell said. "After six years of a drought, I love saying that. This is normal rain and snow that we're supposed to be getting in December and January."

That same system might bring much-needed moisture to Southern California by the middle of the week. But that's just a precursor to a bigger storm, weather service meteorologist Joe Sirard said.

The main event, a stronger storm system, is expected to move into the Los Angeles County area late Saturday and continue until Monday.

"There is the potential that if the main moisture feed into Southern California lines up over Ventura and L.A. counties, we could be under the gun for many inches of rain," Sirard said.

Steady rain since the fall has pulled 15% of the state — all of it up north — out of drought conditions, according to the National Weather Service and the U.S. Drought Report.

But while Northern California has begun to rebound from the drought, Southern California remains dry.

Los Angeles marked a sober milestone last year, when the weather service announced that the last five years were the driest ever documented in downtown L.A. since official record keeping began almost 140 years ago. Precipitation during that period totaled just 38.79 inches — roughly half of the normal amount.

But December turned out to be a boon for Southern California, with a series of storms dumping decent amounts of rain and snow. It ended up being the wettest December since 2010.

State officials have said it's too early to declare the drought over, though they note the improvements in Northern California.

In late December, officials said the Sierra Nevada snowpack was at 72% of normal. They expect that number to increase in coming weeks.

Northern California's improving fortunes help Southern California's drought picture— but only to a point. Though Southern California still gets some water from the Sierra, about 50% of its supply comes from local sources such as groundwater and reservoirs.

December's conditions and cold temperatures across the state have provided a winter wonderland view in both Southern California and the Bay Area, with mountain peaks getting strong dustings of snow.

The Grapevine was closed in recent weeks because of heavy snowfall, and some motorists were temporarily stranded on mountain roads.

California snowpack measures low, but big storms are coming

By Rich Pedroncelli and Scott Smith, The Associated Press, January 4, 2017

PHILLIPS STATION- The first manual survey this year of California's snowpack revealed Tuesday that it holds about half as much water as normal, casting a shadow on the state that's hoping to dodge a sixth straight year of drought, officials said.

Surveyors, however, took the reading at 6,000 feet near Lake Tahoe in the Sierra Nevada as major cold and windy storms were expected to dump 4 to 5 feet of snow through Thursday in areas above 4,500 feet in Northern and Central California, while mountain areas below that could get 2 to 3 feet, forecasters said.

The storms should boost the snowpack that provides roughly a third of California's water in normal years for drinking, farming and wildlife when it melts in warm, dry months.

What surveyors find between now and April 1 will guide state water officials in managing the water supply of the nation's most populous, agriculture-rich state.

Electronic monitors at elevations throughout the Sierra in late December showed the overall snowpack had a water content of 72 percent.

At Tuesday's reading at Phillips Station, the water content measured at 53 percent of normal, said Frank Gehrke, chief snow surveyor at the state Department of Water Resources.

Gehrke said the level "seems a little gloomy" as the state tries to avoid another year of drought. But he also called it a good start because higher elevations were showing a deeper snowpack.

Gehrke also pointed out that the survey was taken at an elevation below the snow line for December's storms.

A year ago, the snowpack was slightly above normal levels, but Gehrke recalled that the rain and snow essentially stopped in February and March, leaving the state at a nearly average year for precipitation on April 1.

"This year, it looks like (storms are) lined up off the coast and will continue to increase the snowpack," he said as he stood on about 3 feet of snow.

Elsewhere, rain was falling Tuesday in the San Francisco Bay Area. Winter storm advisories will go into effect from 4 a.m. today until 4 a.m. Thursday, said Bob Benjamin, a National Weather Service forecaster.

Avalanche alerts were issued for high elevations and flooding was possible in the foothills.

A second, stronger storm system was expected to hit the region over the weekend, bringing the possibility of as much as 5 additional feet of snow in the Sierra Nevada.

"It looks like it's going to be wet all week, and possibly into next week," Benjamin said.

Southern California, which has remained relatively dry in recent months, was expected to see light showers this week, forecasters said.

At the height of the drought in 2015, snowpack surveyors stood on a dirt patch for the April 1 measurement at Phillips Station, finding the least snow since records had been taken in more than 50 years.

Gov. Jerry Brown responded by ordering residents statewide to use 25 percent less water, letting lawns turn brown — or tearing them out — and flushing toilets less often.

The drought eased last year and so did regulations.

In February, the State Water Resources Control Board will again consider the conditions and decide whether the state needs to take a stronger stand on conservation.

"If the skies dry up, we'll be looking at something different," board chair Felicia Marcus said. "We're playing this one moment to moment."

This winter started strong. More rain fell in October than in the same month over the past three decades, raising the state's major reservoirs in Northern California along with hopes that the drought would soon end.

Doug Carlson, a spokesman for the state's Department of Water Resources, said it is too early to predict if the wet weather will end the drought.

"It could change immediately and stop snowing and raining," he said.

Could Sierra snow end California's drought?

State's snowpack level is below average, but 2017 may be a turning point for dry spell if storms last into spring.

Joseph Serna and Paige St. John, January 4, 2017

The resort town of Phillips high in the Sierra Nevada has long been a barometer of California's drought.

Snow measuring station 3 in the El Dorado County town was where Gov. Jerry Brown came in April 2015 to announce major drought restrictions, using the dry, snow-less landscape as a stark backdrop.

On Tuesday, Frank Gehrke of the California Department of Water Resources performed the manual measurement at the same spot, this time covered in three feet of snow.

It measured just 53% of the seasonal average, but officials took that as further proof California's six-year drought was easing.

While that seems perhaps a little gloomy, keep in mind that we had pretty much bare ground here about a week ago," Gehrke said.

The measurement came as the latest in a series of storms dumped heavy rain and snow across Northern California. The region had its wettest October in 30 years in 2016, followed by above-average precipitation December. More than 20 inches of snow followed by above-average precipitation December. More than 20 inches of snow dropped across the northern Sierra Nevada last weekend and another set of storms could provide an additional four feet by early next week, said Zach Tolby of the National Weather Service.

Melted snow provides 30% of the state's water as it flows into streams, rivers and reservoirs over the spring and summer.

The conditions haven't added up to a drought-buster quite yet. But officials said that if the wet conditions extend into the spring, 2017 could prove a turning point for the epic dry spell.

"Generally speaking, to get out of the drought California would need to establish a trend of above-average snow-water content, above-average storage in reservoirs and above-average precipitation," said Doug Carlson, a spokesman for the Department of Water Resources. "We're on a great trend. We'd like to see it all year."

The statewide snowpack measurement was 70% of the seasonal average Tuesday. The current water content in the northern Sierra Nevada is 68% of average for this time of year; the central Sierra clocked in at 65% and the southern Sierra at 73%, according to the Department of Water Resources.

The reservoirs are closer to normal levels. According to Tuesday's data, Lake Shasta reservoir was at 118% of its historical average, while Lake Oroville, the biggest contributor to the State Water Project, was 91% of its historical average.

Water officials stressed that other parts of the state remain mired in serious drought.

In Tulare County, residents still receive rationed water. Southern California remains significantly dryer than in the north, despite a month of healthy rain in December. Moreover, warmer temperatures across the state are causing the snow to melt quick, and making the water more difficult to capture for use in cities and farmlands.

But in the Sierra, signs of drought conditions are getting harder to find.

Interstate 80 travelers trapped in Truckee below the infamous Donner Pass overnight Monday were able to leave Tuesday during a brief break in the snow storm.

After the break, said Marilyn Colquhoun at the California Welcome Center in Truckee as she read the week's weather forecast aloud, "it is snow, snow, snow showers, rain — that's not good — then snow, snow, snow."

Following three years of drought with minimal Sierra snowpack, Colquhoun was enthusiastic about the squall. "It will be a mess," she said. "It's a great storm!"

Transportation was already snarled again by early Tuesday afternoon, and requirements to install snow chains had created delays on Interstate 80 heading over the mountain passes. Colquhoun said Greyhound and Amtrak buses were delayed, "but still expected."

The nonprofit Avalanche Warning Center posted warnings Tuesday for increased danger in popular backcountry ski areas, elevating the warnings by the evening from "considerable" to "high," the greatest warning.

Drifting snow on high ridges and slopes already showed signs of wind slabs that could come crashing down. The combination of new heavy snow and a deep ice crust laid down by rain two weeks ago will increase the hazards. Avalanches triggered by people were reported Monday in Carson Pass and at Castle Peak at Donner Summit, where the state operates a popular Interstate 80 snow park.

"I would suggest people stay out of backcountry until it settles," said Mickey Kaiserman, president of the El Dorado Nordic Ski Patrol. The volunteer group maintains backcountry ski trail markers in the El Dorado National Forest south of Lake Tahoe and helps rescue sojourners who run into trouble.

"The backcountry use is increasing exponentially, and people get caught unprepared. It's dangerous out there," Kaiserman said.

Phone lines to the Sierra Club's Clair Tappaan Lodge in Norden were jammed with expected guests calling ahead to find out if they could still reach the 1930s mountain getaway. Others already there were planning on staying put and riding out the storm at 7,000 feet atop Donner Summit.

"I don't think we've seen a storm system like this for six years," said operations manager Brandon Smith, who was banking on the week of supplies brought in ahead of time.

Smith hadn't heard yet from anyone staying in one of the four backcountry huts the Sierra Club rents, reachable only by a half-day or so trek on foot. One group headed to a hut Monday sought to rent avalanche beacons for their trip, he said, "but I don't know if they found any."

He looked through the window outside.

"It is beautiful out there," Smith said. "Overall, it's a wonderful thing."



Report: Water districts' savings rise in November

City News Service, January 5, 2017

Riverside - A half-dozen water agencies in Riverside County conserved more in November compared to a year ago, according to figures released Wednesday.

Of 21 agencies reporting, the cities of Hemet, Indio, and Norco along with the Coachella Valley Water District, the Eastern Municipal Water District and the Lake Hemet Municipal Water District, achieved a higher rate of conservation compared to the same period in 2015.

The numbers represent how much was saved using November 2013 as the base period against which all measurements are compared under a formula established by the State Water Resources Control Board,

The majority of water agencies countywide were within 10 percentage points of their previous year-over-year savings. However, in a few cases, agencies were off by double digits.

The largest disparity was recorded by the city of Perris, which was nearly 18 percentage points below its year-ago savings. The Beaumont-Cherry Valley Water district was next, with a 14 percent gap.

The Temecula-based Mission Springs Water District's conservation rate was not even a whole number, but that figure, -8.1 percent, was close to what had been recorded at the same time in 2015.

The Idyllwild Water District, the Salton Community Services Water District and the San Geronio Pass Water Agency are not counted in the state's tally. Those agencies don't serve enough customers-fewer than 3,000 each – and hence are exempted by the state from consumption reports.

Drops in monthly water savings have been expected after hundreds of agencies statewide began resetting their conservation standards based on results of so-called "stress tests" in June. The tests gauged whether agencies could "bank" enough water to meet demand in the event of another three "dry years" with below-average precipitation during California's rainy season.

State Water Board Chairwoman Felicia Marcus said the latest results statewide revealed "Californians are continuing to conserve."

According to the State Water Resources Control Board, statewide water savings totaled 18.8 percent in November, compared to 19.6 percent in October and 20.2 percent in November 2015 – all of which was measured against consumption levels in the same months of 2013. The cumulative savings between June 2015 and November 2016 was 2.35 million acre-feet – 764.8 billion gallons of water.

In April 2015, Gov. Jerry Brown issued an executive order mandating a 25 percent reduction in state water use until Feb. 29 of this year. The statewide target fell just short, coming in at 23.9 percent. Brown issued a revised order toward the end of last winter.

The new self-determined targets came into being thanks to the stress tests and will remain in effect until February.

Ordinances enacted by the water board based on the governor's order are still valid, including restricting how some outdoor watering takes place, such as a prohibition against the hosing down of sidewalks, and limiting how some businesses use water.

State water savings fall below 19 percent

By Suzanne Hurt, January 5, 2017

As much of the state heads into a sixth year of drought, water officials on Wednesday cheered Californians' continued conservation while urging them to stay stingy with water after residential savings slipped below 19 percent in November.

Statewide, residential water users cut back by 18.8 percent that month compared with November 2013 water usage, according to figures released Wednesday by the State Water Resources Control Board.

The Sierra Nevada snowpack and its water content measure about 70 percent of the average for early January. Meanwhile, California's cumulative water savings from June 2015 through November 2016 were 22.6 percent.

At a Wednesday board meeting, State Water Resources Control Board Chairwoman Felicia Marcus applauded residents' water conservation, especially in Northern California, which got more rain than southern parts of the state from October through December.

"Californians are continuing to conserve, which is the way it should be given that we can't know what the future will bring. But we know that we can't take water for granted anymore," she said.

"It was especially good to see another month of impressive increases in conservation in Northern California."

Since state-mandated water conservation began in June 2015, Californians have saved 2.35 million acre-feet of water, or 765 billion gallons – equal to a year's worth of water for 11 million people, or 28 percent of the state's 2016 census-estimated population of 39,250,017.

The November 2016 savings are down from 19.6 percent in October and 20.2 percent in November 2015 under Gov. Jerry Brown's state-imposed conservation mandates, which ended June 1.

Suppliers then set their own savings targets under revised emergency water conservation regulations. Most were set at zero percent by suppliers who believe they'll have enough water to meet demand for the next three years.

In November, dozens of Northern California suppliers saved 30-62 percent, and 44 percent of suppliers, or 174, saved more than 20 percent compared with 2013 use that month.

Southern California's high performers were Lake Hemet Municipal Water District in Riverside County's San Jacinto Mountains at 33.5 percent, Orange County's Tustin at 32.8, Los Angeles County's Whittier at 29.3 and San Bernardino County's West Valley Water District at 27.2.

Beverly Hills, fined \$61,000 in October 2015 for not meeting savings mandates, saved 18.9 percent.

Out of the 35 largest inland water suppliers, only one saved more than 21 percent: Lake Hemet Municipal Water District in the San Jacinto Mountains, which saved 33.5 percent. Chino Hills saved 20.7 percent; Lake Arrowhead Community Services District, 20 percent; Rialto, 17.4 percent; Norco, 16.7 percent; and Rubidoux Community Services District, 16.5 percent.

Low performers included Big Bear Lake Department of Water and Power, which used 6.1 percent more than in November 2013; Perris, which used 0.1 percent more; Yucaipa Valley Water District, which saved 0.9 percent; Hesperia, at 2.2 percent; and Hemet at 2.6 percent.

Yucaipa Valley was the state's third-highest-ranked supplier in terms of missing its 20 percent cumulative conservation standard, which it did by 11.6 percent.

A public workshop on whether to extend emergency water conservation regulations is set for Jan. 18 in Sacramento. Water board staff expect to present a proposal to extend the regulations, based on water supply and savings, to the board in February.

Winter storms and conservation levels are being watched closely as water officials consider a return to state-imposed savings targets, which could be included in the proposal.

California faces worsening problems with water supply because of climate change and the state's growing population, Marcus said, adding that more efficient water use must be combined with recycling, stormwater capture, new water storage and other measures.

"We all need to become more efficient with our limited water supplies year in and year out," she said.

Water rates could rise in San Jacinto

The proposal would give each home an individual baseline and would charge more only for excessive use.

Story by Craig Shultz, January 5, 2017

San Jacinto water customers could see a change in their bill this year as the city is moving forward with a usage-based billing system.

Under the current system, every customer is charged a similar flat monthly fee and pays for the water the household uses. With the proposal, each home would be given an individual baseline based on the number of residents and size of property, paying higher fees only for excessive use.

The municipal water department serves about 4,000 customers, primarily homes in the older, downtown area of San Jacinto. Residents in other parts of the city are customers of Eastern Municipal Water District, which already establishes water budgets based on household size and landscaped area, or Lake Hemet Municipal Water District.

New fees could raise water bills about \$10 a month.

"This is not gospel at this point in time," consultant Lynn Merrill told the City Council on Tuesday. "This is to demonstrate the framework."

San Jacinto is part of a grant program through Santa Ana Watershed Project Authority, which is paying water companies up to \$215,000 each to cover the cost of switching to usage based charges.

Proponents say such rates are fairer to customers and help water companies maintain their revenue as they sell less water as customers have been cutting usage during the state's years long drought.

With such rates, a home of six will be allowed to use more water before facing penalties than a house with two residents. Same with a home with a swimming pool or garden versus home on a small lot.

A typical San Jacinto customer pays a flat \$15.36 monthly meter charge, \$1.53 per unit of water up to 15 units and \$2.12 per unit above that. A unit is about 748 gallons.

Proposed rates call for the same meter fee plus \$1.58 per unit for indoor water use – with a baseline of 55 gallons per person per day – and \$2.60 per unit for outdoor usage. Each unit above the baseline would cost \$3.20.

Customers will continue to be charged an additional \$1.07 per billing unit as part of a water rights settlement with the Soboba Band of Luiseño Indians and a \$2 monthly energy surcharge.

San Jacinto water customers currently pay an average of \$68 per month for water. Under the proposal, it could be \$79.

Proposed new rates are expected to come back to the City Council in February, with a public hearing in April and implementation to begin in September.

Revived by weeks of rain

Water levels at state's once-dwindling lakes have risen rapidly

By Louis Sahagun, Matt Stevens and Joseph Serna, January 11, 2017

MONO LAKE, Calif. — Leaning against a wooden rail, environmental activist Geoffrey McQuilkin took stock of a parched geological wonderland that had been altered by a weekend deluge.

The air was still thick with moisture, and this lake's tributaries were cascading down from surrounding mountains, swollen by cargoes of fresh snowmelt and rain. Frothy whitecaps and wavelets lapped over grass meadows that had been dry ground only a week ago. The lake's famous tufa formations — for so long a symbol of California's lack of water — were capped with snow.

Similar scenes were playing out at lakes and reservoirs across Northern California as weeks of heavy rain and snow brought them back to life. Throughout the course of California's nearly six-year drought, the declining water levels at these places became a stark symbol of the state's water shortage. Now they serve as barometers of the state's rapidly evolving drought picture.

Lake Tahoe has risen 12 inches in just the last two weeks as the storms have dumped 33.6 billion gallons of water into the massive landmark, which measures 72 miles around and has a capacity for 37 trillion gallons of water.

As of Tuesday morning, 154 of the largest reservoirs tracked by the California Department of Water Resources had filled to about 97% of their collective average for the day, said Maury Roos, a longtime state hydrologist. Just a year ago, many were at or below 50% of average.

The storms dumped a combined 1.3 million acre-feet of water in those reservoirs from Jan. 1 to Tuesday, Roos said. That's about 423 billion gallons of water — enough to serve more than 2.5 million families for a year.

The turnaround at the 1-million-year-old Mono Lake and its ecosystem has been particularly dramatic. Less than two years ago, it was within 2 feet of the level that state officials say threatens the alpine ecosystem at the base of the eastern Sierra Nevada. Officials worried that there would be so little water that coyotes would roam on the dry lake bed and go after the large gull colony there.

Less than two weeks ago, hydrologists had worried that it would take a wetter-than average winter to keep this drought-stricken body of saltwater at a level high enough to avoid having to halt diversions of its Sierra Nevada snowmelt to L.A.

If the level drops below 6,377 feet above sea level, the city cannot export water from here. The California State Water Resources Control Board established the limit in 1994 to resolve a dispute between environmentalists seeking to protect the lake's wildlife and the city 350 miles away defending its long-held water rights.

Prospects for averting the crisis brightened significantly over the weekend after another storm drenched the slopes surrounding this high desert lake east of Yosemite National Park with enough rain and snow to raise its level by at least 6 inches.

Now McQuilkin, executive director of the Mono Lake Committee, a nonprofit group organized to save and protect the bowl-shaped ecosystem, said, "The worst-case scenario is probably not going to happen.... These weather events have put us all on a different track. Who knows what the rest of the winter will bring?"

Many lakes and reservoirs have been slowly rising since October as Northern California saw increases in rain and snow. But January has been particularly wet thanks to "atmospheric river" storms.

Jana Frazier, a tour guide for the Department of Water Resources at Lake Oroville, has a view of the dam and the reservoir from her office.

The numbers tell part of the story: The lake has risen more than 90 feet since December, she said — 21 feet during the 24-hour span between Saturday and Sunday alone.

But seeing the change in person is even more striking. Prior to this weekend's storm, officials were launching boats from the bottom of one ramp. Water had risen to the top of the ramp by Tuesday morning, Frazier said.

When Frazier returns to the ramp Wednesday, she expects to find that the parking area with the boat launch will be underwater and officials will have to move to a different ramp on higher ground.

"It's really weird," Frazier said. "We've been so low in water for so long, it seems strange to drive across the dam and see it almost full."

Lake Oroville, Lake Shasta and other reservoirs in Northern California are key pieces of the state's water system, which moves the resource from the Sierra Nevada to cities and farmlands. Although the recent rains are making a dent, officials said it's still too early to say the drought is over.

Rain and snow are expected to continue through Thursday, with some higher elevations expected to see up to 20 inches of snow over the course of the week. Several key rivers have overflowed, and more flooding is expected.

In Sonoma County, about 3,000 residents were asked to evacuate as the Russian River swelled, damaging some homes. Along the Cosumnes River in the town of Wilton, about 2,000 people were told to move to higher ground.

The death toll from the storm also rose. A 20-year-old man was found dead Monday inside an overturned car submerged in a creek in Novato, authorities said. Three other deaths — including a woman who was killed by a fallen tree — are also believed to be tied to the storms.

For all the water that has flowed into Lake Tahoe, the National Weather Service said the lake was still below its long-term average for winter.

Which is why Chuck Self isn't batting an eye at the conditions. The 51-year Lake Tahoe resident, who runs Chuck's Charter Fishing, said "the lake has come up, no doubt." But historically, "this is absolutely nothing."

Is the great California drought finally ending?

By Bettina Bosall, January 12, 2017

The state's biggest reservoirs are swelling. As of this date, the Sierra Nevada have seen as much snow, sleet, hail and rain as during the wettest years on record. Rainy Los Angeles feels more like London than Southern California.

So is the great California drought finally calling it quits?

Yes. Or at least maybe. If the storm systems keep coming, state and regional water managers say, 2017 could be the end of a dry spell that has, for more than five years, caused crops to wither, reservoirs to run dry and homeowners to rip out their lawns and plant cactus.

"You've seen jumps in snowpack and precipitation amounts. You look at the charts, you see the line just pretty much go straight up," said state climatologist Michael Anderson. CALTRANS WORKER Wendy Payne removes debris after heavy rains, ice dams and mud led to flooding along Highway 89 south of Truckee, Calif., this week. (Gary Coronado Los Angeles Times) For most of the state, the end "is in the realm of possibility now, which is kind of a nice thing to think about."

But Anderson cautioned that the current "La Niña-ish" weather patterns, as he called them, make it tough to know what the rest of the winter will bring. "The funny thing about this weather pattern — it's about as unpredictable as you can get."

Nature could suddenly turn off the faucet, water officials warn.

"It could shut down," said Jeanine Jones, interstate resources manager in the Department of Water Resources. "We're about a third of the way into the wettest part of the season. We have to see what happens in the rest of the year."

Whether the drought is in its death throes also depends on what you look at. "In terms of surface water, most of California is no longer in drought," UC Davis water expert Jay Lund said in a Wednesday blog post.

But there is no set definition of drought, nor any legal criterion for declaring a beginning or end to it.

"We can't say that we're no longer feeling the impacts of the drought," said Deven Upadhyay, water resource manager for the Metropolitan Water District of Southern California. "Later this year, we may be able to say that we've really turned the tide and the drought's over," he said. "But we're not there yet."

Metropolitan imports water from the Colorado River and Northern California. Lake Oroville, the biggest reservoir in the state system that sends supplies to the Southland, is filling at a stunning rate. That is almost sure to mean the agency will get more water from the north than it has in years.

But Metropolitan's regional reserves are still far lower than they were at the beginning of the drought. And, Upadhyay says, 2017 could turn out to be a lone wet year followed by more dry years, as was the case in 2011.

"I sometimes talk about it as being more like a nine- or 10-year drought," he said. "Really the only wet year we had was 2010-11. That was a single wet year in what is really kind of a prolonged drought." For now, though, all but a few pockets of the state are wet and getting wetter. Weather gauges at Rocky Butte in San Luis Obispo County recorded 17 inches of rain in the first 10 days of this month.

"They've been absolutely hammered," said Joe Sirard, a National Weather Service meteorologist. "And up at Big Sur, tremendous amounts of rain. That atmospheric river ... just inundated that area."

Between Tuesday and Wednesday, the statewide snowpack jumped from 135% to 158% of normal for the date. In the drought-punished southern Sierra, the snowpack is 187% of the norm.

Since Oct. 1, total precipitation in the range has been soaring at rates similar to the wettest winters in the modern record: 1982-83 in the northern and central Sierra and 1968-69 in the southern Sierra.

Lake Shasta, the state's largest reservoir and a major source of water for San Joaquin Valley agriculture, is 81% full and releasing water to create more storage room. Oroville, which supplies the State Water Project, is nearly three-quarters full.

"We've had fantastic runoff up here in the Sacramento [River] Basin, Feather [River] Basin, some pretty jaw-dropping numbers," Anderson said.

In the first 10 days of this month, more water flowed into Oroville than the entire city of Los Angeles uses in a year.

In much of Southern California, the dry autumn has given way to above-average rainfall that is helping replenish local groundwater basins that typically provide roughly a third of the region's water supply.

December rains were "long and steady," good for seeping into the San Gabriel Valley aquifer, said Tony Zampello, executive officer of the Main San Gabriel Basin Watermaster, the agency that manages the groundwater basin.

Most of the aquifer's recharge comes from mountain runoff and rainfall on the valley floor, both of which have been in short supply in recent years. Water levels in a key well dropped 50 feet during the drought as local districts serving 1.3 million people pumped more out of the groundwater basin than nature was putting back in.

"We need to start bringing water back in the basin. We're obviously hoping this year will work out well," Zampello said.

But not all of California is awash. "If you're down around Santa Barbara County [or] the southern end of the Tulare Lake Bed region in Tulare County," the drought is still holding on, Anderson said.

A glaring exception to rebounding reservoir levels across the state is Santa Barbara County's Lake Cachuma, which is only 8% full.

"Boy, they managed to catch a whopping 1,200 acre-feet" the first week in January, Anderson said, sarcastically, of the meager runoff. "We have these areas hardest hit by the drought and they're not seeing relief."

As for what the rest of the winter holds, Anderson said La Niña-like conditions could help or hurt.

They could deliver more drenching atmospheric rivers, more cold storms from Alaska that dump snow on the Sierra, or high pressure systems that block storms and push precipitation north of the state.

Even if the state lucks out with the first two, the worst drought in modern history has left its mark on the state psyche.

Water conservation "will be basically a way of life for us," said Richard Harasick, a senior assistant general manager at the Los Angeles Department of Water and Power.

Five-year dry spell concludes

Northern California drought finally over

Doyle Rice, USA TODAY, January 13, 2017

The recent onslaught of rain and snow has ended the punishing five-year drought in Northern California, although much of Southern California is still extremely dry, federal officials said Thursday.

"The drought is over in Northern California," said meteorologist David Miskus of the National Oceanic and Atmospheric Administration.

For the first time since early 2013, less than 60 percent of the state is in a drought, according to the weekly U.S. Drought Monitor. At the same time a year ago, drought covered 97 percent of the state.

"With more than a foot of precipitation falling on the Sierra Nevada (locally 20.7 inches at Strawberry Valley, California), most major reservoirs were at or above average," wrote Miskus in this week's monitor.

The snowstorms doubled the snowpack in parts of the Sierras, runoff from which provides Californians across the state — including those in the Los Angeles area — with much of its year-round water supply, the Associated Press reported. Stations up and down the mountain chain were reporting twice the amount of normal rain and snow for this time of year.

The all important "snow water content," which measures the amount of water in the snow once it melts, was far above average in Northern California, the weather service said.

That snow should help the Coachella Valley, too. While the pumps and canals of the State Water Project don't reach the valley, local water agencies trade their allotments of Northern California water to a Los Angeles-area water wholesaler, in exchange for an equivalent amount of Colorado River water.

Last month, California officials said water agencies could expect 45 percent of their full allocations from the State Water Project.

In a statement Thursday, the Coachella Valley Water District said that number could rise if it keeps raining in Northern California deeper into the winter.

Still, the water district urged Coachella Valley residents to keep saving water. Groundwater is still the region's primary water source.

“California continues to be in a drought and water waste restrictions remain in place,” the district said in its statement. “It will likely take more than a month or two of significant rain to reverse more than five years of drought. Coachella Valley residents should continue their conservation efforts to help maintain a healthy aquifer that is our sole source of drinking water.”

SoCal conditions improve, but the drought remains

Nearly all of Southern California is still experiencing drought conditions, though not the worst category of “exceptional” drought. Just 2 percent of the state, most of it in Ventura County, is still in that category.

But nearly half the state remains mired in “severe drought,” the thirdworst category — including the vast majority of the Coachella Valley, which hasn’t changed in nearly three years.

Across Southern California, reservoirs and underground water supplies still lagged below normal, the Drought Monitor said.

California will remain in a drought emergency until Gov. Jerry Brown lifts or eases the declaration he issued in January 2014, the AP said. The governor will likely wait until the end of California’s winter snow and rain season to make a decision on revising the drought declaration.

Still, overall, Miskus called it a “great start to the water year” in the West. The “water year” in the West runs from Oct. 1 to Sept. 30.

And it wasn’t just California: major drought improvements were made in many areas of the West, including parts of Nevada, Utah, Oregon, Idaho, Montana, Wyoming, and Colorado.

Thursday morning, the weather service in Reno, Nevada, tweeted “Bye bye drought... Don’t let the door hit you on the way out.”

Nationwide, about 20 percent of the U.S. remains in a drought, primarily in parts of the southern Plains, the Southeast and the Northeast.

Los Angeles Times

State's water situation: Here's the half of it

Drought now mostly belongs to Southern California, with the Santa Barbara area still particularly dry.

By Joseph Serna and Matt Stevens, January 13, 2017

What was once a statewide drought this week became a Southern California drought.

A week of powerful storms has significantly eased the state's water shortage, pulling nearly all of Northern California out of drought conditions, according to the U.S. Drought Monitor.

The report underscores what experts have been saying for several months. As a series of storms have hit Northern California this winter, the drought picture there is improving, but water supply remains a concern in Southern California and the Central Valley.

More than 40% of the state is no longer in a drought, according to the data released Thursday.

Perhaps most striking, a giant swath of the state was declared to have no signs of abnormal dryness at all. The percentage of the state that fell into that category nearly doubled from 18% last week to almost 35% after the storm.

Still, the drought monitor's map and its array of colors — from white to dark red — provide a stark illustration of the disparity between hydrologic conditions in the north and south.

Storms drenched the San Francisco Bay Area and created blizzard conditions in parts of the Sierra Nevada over the last week. They dramatically boosted the Sierra snowpack — a key source of water for California — to 161% of normal and helped rectify the state's water shortage.

But the weather systems also carved a path of destruction. The storms probably caused at least four deaths.

Since Oct. 1, total precipitation in the Sierra Nevada has been soaring at rates similar to the wettest winters in the modern record: 1982-83 in the northern and central Sierra and 1968-69 in the southern Sierra.

Lake Shasta, the state's largest reservoir and a major source of water for San Joaquin Valley agriculture, is 82% full and releasing water to create more storage room. Oroville, which supplies the State Water Project, is 77% full and also making releases.

At present, conditions are considered normal in almost all of the state north of the Bay Area, according to the new federal drought report. (Authors use measurements of climatic, hydrologic and soil conditions and consider reported impacts and observations to create the map.)

Thursday's assessment was less rosy for Southern California.

Los Angeles and Orange counties, along with much of Central California, are locked in what officials classify as "extreme drought" — or worse.

Chunks of Ventura and Santa Barbara counties remain in "exceptional drought."

Lake Cachuma, a barometer of Santa Barbara's severe water shortage, has received relatively meager rainfall since the start of the month, and as of Thursday, it was filled to only about 11% of its historical average.

Officials said it held only a bit more than 8% of its capacity.

"The drought has not let up on the Central Coast," said David Matson, assistant general manager of the Goleta Water District.

Matson said Santa Barbara County has gotten about 130% of its normal rainfall, which has increased the moisture in the soil. The rains in the north will also feed the State Water Project, which the district now relies on for about half of its supply.

Still, he noted that Wednesday marked the first day this winter that Lake Cachuma received inflow — and even then, it was a meager 180 acre-feet.

“We’re optimistic, given that we’ve had more rain than normal and the ground is getting wet,” Matson said. “But until we see appreciable inflow into Lake Cachuma, the drought is going to continue as it has the last several years.”

Part of the problem is that the lake is wedged into a corner of a valley shielded by the Santa Ynez Mountains, said Scott Sukup of the National Weather Service’s Oxnard station.

Storms typically squeeze out the bulk of their moisture in the hills before crossing over and raining onto the lake, Sukup said.

The Santa Barbara County area would have been downgraded from “exceptional” drought to the less severe “extreme” category had the rain runoff been greater, said David Miskus, who wrote Thursday’s report.

Drought also continues to plague much of Central California.

For example, New Melones Lake, east of the San Joaquin Valley, has collected more than 180,000 additional acre-feet of water since Jan. 1, but it is filled to only about 60% of its average.

“Just because it’s raining doesn’t mean the drought is solved,” said Jenny Rempel, spokeswoman for the Community Water Center, which helps provide water for southern San Joaquin Valley residents in need. “In the Central Valley where we work, communities are still relying on bottled water for drinking and cooking.”

Skeptics need look no further than East Porterville, where Rempel said residents are still feeling the effects of a severe water shortage.

“Tulare County is still absolutely the epicenter of the drought,” she said. “Even if it’s pouring rain in the valley, that doesn’t mean it’s getting to the communities who need it most.”

Still, the drought monitor showed that this week’s storms did aid many parts of Central and Southern California. And Miskus, the author of the report, said the drought outlook should continue to improve because of this week’s rains and additional storms forecast for the next two weeks.

Only about 2% of the state remains in “exceptional drought,” compared with 18% last week, the drought monitor reported. A much smaller sliver of Los Angeles County, for example, is classified as such.

Deven Upadhyay, the Metropolitan Water District of Southern California’s water resource manager, echoed many state water officials when he told The Times that it was too early to say the drought is over.

“Later this year, we may be able to say that we’ve really turned the tide,” he said earlier this week. “But we’re not there yet.”

Richard Harasick, senior assistant general manager of water for DWP, said the city does not plan to relax its outdoor watering restrictions.

“We are still encouraging water conservation as a way of life,” he said.

Storms putting dent in drought

Snowpack is at 161%; reservoirs are near capacity.

By Steve Scauzillo, January 13, 2017

Rain-slicked freeways and homeowners ankle-deep in mudflows notwithstanding, most of Southern California remains in a drought, state and local water officials said Thursday. But recent storms chipped away at some of the worst of the drought across the rest of the state.

About 42 percent of the state is out of the drought, according to the U.S. Drought Monitor. That's a significant change from mid-October, when only 16 percent of the state was not in drought.

As of Tuesday, the agency reported 27.8 percent of the state remained in extreme or exceptional drought, down from 42 percent in October. Northern California is no longer in a drought; central and Southern California still are.

Still, recent storms improved conditions across the region – the snowpack in the Sierra thickened, building up future water supplies. And runoff further filled state reservoirs, seeping into local groundwater basins. But the Metropolitan Water District of Southern California, which supplies water to 19 million people, said five years of drought doesn't go away after a few months of rain.

Deven Upadhyay, the district's manager of water resources, said the land mass is addicted to dry weather and the state will need time to recover from abnormally low amounts of rain and snow, parched soil and sinking aquifers.

"In Southern California, we are still rebounding from the drought effect," he said.

But he said the state's rainy season is off to a promising start. MWD kept 2.7 million acre-feet in its Southern California reservoirs at the beginning of 2016. By the end of the year, the reserves dropped to 1.3 million acre-feet. An acre-foot of water equals 325,851 gallons, or the water used by a family of four for a year in Southern California.

This year, the district plans to scarf up more imported water to store in local reservoirs: Castaic, Silverwood, Skinner, Mathews, Perris and Diamond Valley.

Diamond Valley, the largest, is 70 percent full.

Possible drought busters would come from three sources: Northern California, the Colorado River and local groundwater basins.

More than 60 percent of SoCal's water is imported. That means rain elsewhere increases local supplies and replenishes over-drafted groundwater basins.

The State Water Project sends water to Los Angeles, San Bernardino, Orange, Riverside and San Diego counties, with MWD as a middleman. Upadhyay was hopeful after seeing Northern California's rainy season.

Lake Oroville, at 123 percent of historical average, is the major runoff-fed reservoir that supplies the State Water Project, a pipeline from the Sacramento-San Joaquin River Delta to Southern California.

Oroville received 180,000 acre-feet of water every day in the past week. That equaled all the water kept inside MWD's Lake Mathews in Riverside County.

"Imagine all of Lake Mathews dumping into Lake Oroville. It is remarkable the inflows they are getting," Upadhyay said.

The amount of water allocations allowed from the State Water Project is set at 60 percent, which would equal 900,000 acre-feet of water bought by MWD. Ted Thomas, DWR spokesman, said that allocation most likely will increase and could rise to its highest percentage in five years by April 1.

The water contained in the state's snowpack – which melts in the spring and supplies Southern California with potable water – is at 161 percent of normal. That figure nearly doubled in the past week. Mammoth Mountain is reporting the most snow in the country, with depths of 130 to 245 inches, according to information posted to its website Thursday.

The Colorado River basin, in drought for 16 years, also showed signs of life. The snowpack there was 125 percent of normal, Upadhyay said. It's a significant source of water for many Southern California retail agencies.

Los Angeles County has captured billions of gallons of runoff from the mountains. All told, runoff flowing into the Los Angeles, San Gabriel and Santa Ana rivers and into basins during recent storms provided 12 billion gallons of water. That's enough water for 300,000 residents, said Kerjon Lee, a spokesman for the Los Angeles County Public Works Department.

"As we've seen in this prolonged drought, groundwater levels have dropped significantly and there hasn't been much storm water to capture," Upadhyay said. He's hoping to see a turnaround in the next four months, assuming the rain keeps falling and residents keep conserving water, a message that can get lost during a rainy season.

"It isn't a drought emergency message: It is a standard stewardship focus ethic," he said. "You don't jump right out of a drought. You have to replenish reservoirs and groundwater levels."
Staff writer Jessica Kwong contributed to this article.

Los Angeles Times

Roaring to life

Rampaging American River casts drought out of mind

BY Joe Mozingo, January 14, 2017

DESOLATION WILDERNESS, Calif. — Torrents of meltwater coursed down the granite crevices below the moonscape here.

Just miles from its source in the High Sierra, the South Fork of the American River was already roaring down toward the oaken foothills, bursting over the spillways of dams that humans had erected to control it.

As it moved, it gathered streams and rivulets — pink and brown and orange from the minerals they leached. The heavy rain turned dusty creek beds into full-fledged tributaries. Running through narrowing clefts, they burst forth as from hydraulic jets.

Isidro Soberanes was preparing to jump into the maelstrom in a kayak.

He stood at the Chili Bar parking lot watching the South Fork as he had never seen it. Willow trees that had sprouted in drier times now found themselves bending in a 25-mph current, shredding the flow into roostertails of spray. He watched a big sodden log crash at speed into underwater rocks, splintering its lead end, and race on to the next collision.

“I’ll have to watch for those,” said Soberanes, a local professional kayaker originally from Veracruz, Mexico.

“I’ve been waiting for this.”

So had so many. The boom and bust of water has always been the arid West’s existential conundrum. The biggest water projects in the world were built to control it, to allow millions of people to live in places only thousands otherwise could survive. From the Mormon settlers’ first efforts to irrigate the Salt Lake Valley to the colossal dams along the Colorado River to the vastly complex Central Valley Project that transformed California — including this river — American engineers did everything they could to keep water from escaping to sea.

This week’s storm roaring out of a six-year drought provided an explosive reminder that, even with all that plumbing, we survive in a harsh and moody climate.

The 90-mile-long South Fork of the American River brought us to this point. When John Marshall discovered a gold flake at Sutter’s Mill in Coloma in 1848, he set off the original mass migration that would transform the West into one of the world’s great civilizations. Since then, only Herculean efforts by the mighty Bureau of Reclamation and the Army Corps of Engineers keep it from falling to ruin.

The three forks of the American River flow into Folsom Lake. Two years ago, the reservoir was at 14% capacity, so low that people could hike to the remains of a Gold Rush-era town that had been submerged when the dam was built in 1955. Last year’s El Niño storms swallowed the site back up.

The storms from Monday to Wednesday brought the lake up 17 feet, approaching the brim. Every second on Wednesday afternoon, 590,000 gallons flowed in and nearly 400,000 gallons roared out of five of its spillways at the other end, twisting into the Sacramento River on a race to the Pacific.

Water managers at the bureau and the Corps of Engineers had it calculated and under control, but a belt of storms like this makes even their efforts look fickle.

For the first time in a decade, water managers opened floodgates on the Sacramento River to turn the vast Yolo flood basin into a veritable inland sea.

"We haven't seen water like this for 10 years at least," said Bob Hunden, 82, standing in the rain at Chili Bar.

He stopped by just to take in the awesome power of the river. In the way the vastness of the stars on a clear mountain night elicits that expansive feeling of being infinitesimal in the grand scheme, so can the raw power of a weather system that crossed a big swath of the planet. The molecules in the drops falling on Hunden's shoulders had risen as vapor thousands of miles away in the tropical heat of the central Pacific.

Condensed into a warm storm system called a Pineapple Express, it hit California and was driven upward by the western slope of the Sierra and Cascade ranges. As the pressure dropped in the thinner atmosphere, the relative humidity climbed. The cold air — and high-altitude dust and microbes blown across the Pacific from deserts in Africa and China — created ice particles.

That ice started to congeal to more vapor and grow bigger and heavier and fall as snow, wringing the water out the sky.

Without that orographic lift of the high Sierra, the clouds might have just kept blowing east.

During the first storm Sunday, the snow melted before it hit the ground, except at the highest elevations, causing fears that it would melt the snowpack and cause a catastrophic flood.

The entire water system in California and the Southwest relies on snowpack — in the Sierra, the Cascades and the Rockies — slowly melting in spring, at rates the reservoirs can handle.

"We like winter storms that snow down to 2,000 feet, followed by a gentle spring," said Howard Penn, a local paddler and executive director of the Planning and Conservation League, which works to protect the state's water, air and natural areas.

But he notes that warm winter storms bring benefits. Decades of irrigation in the Central Valley leached out all manner of salts and heavy metals and pesticides from the soil, and those leachates flow out with the farm runoff to pollute the Sacramento Delta, a vital breeding area for fish.

"Now we got a huge volume of water coming down the Sacramento and San Joaquin, flushing the delta out, cleaning out those fish estuaries."

By Wednesday, the snow level had lowered in the mountains. The flakes fell heavy, not as dry Utah powder but a wet slurry dubbed "Sierra Cement" by skiers.

Avalanche danger closed ski resorts in Lake Tahoe and parts of the roads getting there from the valley. But big concerns of a ravaged snowpack diminished.

Down at Chili Bar, the mood was giddy. With a whole lot of rain hitting the mid- and lower slopes, the South Fork was heaving at about 150,000 gallons per second. A fun spring commercial trip would run on less than a sixth of that.

Soberanes put on a thermal shirt, then a fleece jacket, and sealed himself into a dry suit. He kissed his wife, Fernanda, and his 10-month-old daughter, Alondra, and paddled upstream through some trees in an eddy.

Fernanda got into their old red Ford F150 and headed down Highway 49 to his takeout spot.

In the kayak, Soberanes knew the biggest danger was getting stuck in one of those tree thickets — “strainers” in river-runner parlance — because they catch you like a colander while the fast current pulls you under.

He moved into the 45-degree current and was soon in a section of colliding waves that thrashed him from all directions. Cold whitewater smashed his face every other second.

He launched over massive teepees of brown water and torn-up weeds, then hit several beautiful nonbreaking waves at a stretch of rapids called Meat Grinder, one as high as high as 15 feet.

At this rate, he’d finish an eight-mile run that normally took an hour and a half in about 25 minutes.

Brian Kallen, a rafting guide, going down the fork with friends, kept his eye on a 10-foot log floating next to them for the first 15 minutes. If they got stuck in the trough of a stationary wave, that heavy beast could do a lot of damage, “breaching like a whale on your boat.”

Those deep stationary waves flipped many a boat, launching rafters into the roiling current without a chance to fill their lungs, then — eventually — popping them to the surface to dodge deadly strainers and hope they could scramble to shore before the onset of hypothermia.

The river Kallen knew had totally changed. Giant boulders he once passed by were now underwater and creating drops and waves he had never seen.

Soberanes moved more nimbly on a kayak, so he liked to flirt with such dangers.

Soon he was racing down a fast bumpy section, slaloming between trees, hooting along the way, like a powder skier billowing through the aspen.

He crossed under the old Coloma Bridge, then a rock monument — a good 10 feet into the river today — marking the very spot where John Marshall discovered gold. The sun shone for the first time in days.

At the takeout, Fernanda, 30, sat on a blanket under some mossy oaks, cooing to her baby. The sun lighted up big drops hanging from the tips of tree twigs like chandelier beads. It suddenly felt like a picnic day in the English countryside.

She pointed to her husband as he rounded the bend. “Papa viene,” she said. Daddy’s coming.

He pulled into a little eddy, still amped up on endorphins from the run, and pondered going to the next spot down the river.

“Nah, I got to get to work,” he ultimately decided. His day job is tree trimming.

He’d swap his kayak for his chainsaw. The wind had left him plenty of work.

Letter: Much work being done to make reservoir a reality

Tuesday, January 17, 2017

I share many of E-R's frustrations outlined in the editorial headlined, "Drought's over; so is window of opportunity." Despite our growing population, California hasn't built a major water project in decades.

However, the opportunity to build Sites has never been more within reach.

The Sites project has an organized board that has been working diligently and a sophisticated general manager in Jim Watson with experience bringing major projects online. Sites has secured more than 377,000 acre-feet in water commitments from more than 30 private entities, most in Northern California.

For the past two years, I've been working with the Sites board and other stakeholders to ensure that the California Water Commission kept its funding allocation timeline on track. Because of our collective efforts, the commission adopted final regulations last month that help ensure large above-ground storage projects like Sites will be funded.

Furthermore, I authored legislation signed into law (AB 2551) which allows Sites Reservoir to use alternative delivery methods, like design-build, which are proven to speed up construction timelines and reduce costs.

As stated the editorial, I recently hosted a bipartisan group of legislators to visit Sites. The swollen rivers showed these lawmakers the tremendous amount of water California could be capturing.

Like most north state residents, I too wish Sites was already operational and capturing water. But, I want readers to know that the window of opportunity remains open and that I am working tirelessly to fulfill the promises of Proposition 1 by making Sites a reality.

— *Assemblyman James Gallagher, Yuba City*

URL: <http://www.chicoer.com/opinion/20170117/letter-much-work-being-done-to-make-reservoir-a-reality>

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Opinion; January 18, 2017

DWA seeks water conservation

Re: Desert Sun drought stories and Desert Water Agency conservation efforts.

In June, Desert Water Agency passed the state's stress test with flying colors and could have set a zero percent target for water conservation. Instead, DWA asked customers to continue saving 10 to 13 percent to help achieve sustainability – a worthy cause benefitting future generations. Several of your stories have noted that DWA set a zero percent standard, merely because we earned one. It's not fair to DWA customers confused by the false message or to the DWA team working hard to help customers save.

The state may not be forcing DWA to save, but we have set a target and ask our customers to meet it. The target is on customers' bills and was reported to the state.

Since restrictions went into place, our customers have saved 24 percent – more than the statewide average.

Our community relies on The Desert Sun. DWA remains committed to promoting conservation. Your stories could make the difference between meeting and missing our target. Together, we can tell our community that saving water is the new normal and an essential part of life in our desert.

James Cioffi, board president, Desert Water Agency

Storms deliver for the region

WATER State will send more Northern California water down south.

By Suzanne Hurt, January 19, 2017

California water suppliers pleaded with state water officials on Wednesday to end a statewide emergency water conservation regulation.

Nearly half of the state is out of drought as much of Northern California has been socked with one of its wettest years in decades.

Late Wednesday afternoon, the Department of Water Resources announced plans to increase water deliveries from Northern California via the State Water Project from 45 percent to 60 percent of requests to 29 contractors from Plumas to San Diego counties.

The increase came following storms that flooded rivers, replenished some reservoirs and left the Sierra Nevada snowpack water content at 151 percent of normal for Jan. 18 and 75 percent of normal for April 1, according to data on the California Data Exchange Center.

Allocations may rise again this year following continued precipitation, Water Resources Department officials said in a news release.

Last fall, the Department of Water Resources estimated it would deliver 20 percent of the 4.1 million acrefeet of Northern California water requested this year.

Water suppliers from throughout the state traveled to Sacramento on Wednesday morning to address the State Water Resources Control Board at a public hearing on plans to extend the drinking water regulation through October.

Metropolitan Water District of Southern California's Deven Upadhyay and Dave Bolland with the Venturabased Association of California Water Agencies were among dozens asking the board to allow the regulation to expire Feb. 28.

"It needs to be sunsetted at this point," said Bolland, the water association's director of state regulatory relations. "We think if the skies do completely clear next week and we get no more rain, we still had one of the wettest years in California ... almost statewide."

Though severe to extreme drought still grips most of Southern California, areas like the north Sierra and Tulare Basin in the southern San Joaquin Valley are experiencing some of the wettest conditions in decades – approaching records from the 1980s or 1960s, said Diane Riddle, an environmental program manager for the water control board.

Most of more than 400 urban water suppliers have not been operating under a statemandated conservation target since June 1, after the state water agency allowed them to set their own targets based on whether they expect to meet demand for the next three years, even if drought continues – described as a "stress test."

The State Water Resources Control Board urges the board to extend the emergency conservation regulation on Feb. 7 while giving 68 suppliers still under statemandated savings targets a chance to update their stress tests to reflect current water supply conditions, said board Climate and Conservation Manager Max Gomberg.

Board members indicated they'd like to continue established prohibitions against wasteful water use and monthly water conservation data reports from suppliers.

"It's empowered all of us to see where we are," board member Steven Moore said, referring to conservation data.

The board took no action on the regulation Wednesday.

What Mother Nature gives, she can take away

Californians shouldn't let a wet winter distract them from the need for more water storage.

Published on January 19, 2017 8:28AM

California snow water equivalents

Percent of the historic average snow water equivalent for Jan. 11, measured in inches.



Big storms over the past few weeks have dumped enough snow and rain on California to end drought conditions in 40 percent of the state, according to U.S. Drought Monitor.

Mother Nature is fickle. What she takes away she can restore with a fury.

As of Jan. 13, California's snow-water content had vaulted to 163 percent of normal statewide after being just 70 percent of normal two weeks earlier

As of Jan. 13, the snow water equivalent in the Northern Sierra was 132 percent of normal, 163 percent in the Central Sierra and 197 in the South.

Many of California's reservoirs are well above historical averages for this time of year. Shasta Lake, the Central Valley Project's main reservoir, was at 81 percent of capacity as of Jan. 15 and 126 percent of average, while Lake Oroville, the chief reservoir for the State Water Project, was at 80 percent of capacity, or 126 percent of average according to the Department of Water Resources.

It's too early to entirely call an end to California's six years of drought. Winters can start wet and end dry. But in the short run its good news for just about everyone in a state what's been parched.

We're told that the recent intense storms are something of an anomaly, described as an atmospheric river.

Because you never know when it's going to rain and snow, it only makes sense to bank as much as you can – a little something for a non-rainy day.

In 2014 California voters approved Proposition 1, a \$7.5 billion water bond to pay for water infrastructure projects. The bond sets aside \$2.7 billion for large storage projects.

The \$3.6 billion Sites Reservoir project is one of several around the state that have been identified for potential funding under Proposition 1. Another project expected to seek funding is the \$2.5 billion Temperance Flat Reservoir near Fresno.

One way to manage our water resources is to make sure excess runoff during the wet winters is stored either in reservoirs or in aquifers. That's obvious when it's bone dry. While water appears now to be more plentiful, the exigency for more water storage still exists.

Roseville, Placer to join Sites Reservoir effort. What it means for water²⁸ storage plan.

BY DALE KASLER
dkasler@sacbee.com

In a boost for the proposed Sites Reservoir northwest of Sacramento, the city of Roseville and the Placer County Water Agency have agreed to invest in the \$4.4 billion project.

The agreements earlier this week show that the Placer agencies, despite having some of the healthiest water supplies in the state, continue to work to augment their portfolios.

The benefit to Placer and Roseville would be indirect. With a proposed capacity of up to 1.8 million acre-feet, Sites would provide another big reservoir that could feed water into the Sacramento-San Joaquin Delta to improve water quality and fish habitat. That would mean Folsom Lake - the primary water source for Placer and Roseville - wouldn't have to release as much water into the Delta for environmental purposes.

"Folsom Lake often acts as the first responder for environmental issues," said Maurice Chaney, spokesman for the city of Roseville. "Sites Reservoir can relieve some of the pressure off Folsom."

So far the financial commitments are fairly small: The two agencies agreed to contribute a combined \$140,000 toward planning of Sites, said Ross Branch, spokesman for the Placer water agency. If and when the project breaks ground, which isn't expected for several years, Roseville and Placer would have to decide whether to move forward with a heftier investment.

Located on 14,000 acres of ranchland straddling Glenn and Colusa counties, Sites would be largely controlled by agricultural districts in the Sacramento Valley. But project backers are asking the state to fund up to half the project's cost through voter-approved Proposition 1 bond money. If the state agrees to help fund Sites, a portion of the water stored in the reservoir must be dedicated to environmental use. The California Water Commission is expected to decide in 2018 whether Sites will get any Proposition 1 dollars.

Folsom, which is fed by the American River, was drawn down to record low levels in November 2015 to make more water available for endangered winter-run Chinook salmon. That made water agency officials in the region nervous, although municipal drinking supplies were never in danger. Roseville city staff, in a report to the City Council this week, said the existence of Sites in 2015 could have preserved an additional 37,000 acre-feet in Folsom that year.

Sites would get its water from the Sacramento River Basin and could store flows not currently being captured.

Sites backers applauded the involvement of Placer and Roseville.

"We are assembling a critical mass of water agencies who see the vision and need of creating another water supply asset that has lasting statewide benefits," said Jim Watson, general manager of the Sites Project Joint Powers Authority, in a prepared statement.

Sites would become California's seventh-largest reservoir. It would be the largest built since New Melones was completed on the Stanislaus River in 1979.

Dale Kasler: 916-321-1066, @dakasler

As drought eases, what's next for California's water strategy?

Ian James, January 22, 2017

With storms drenching much of California and snow blanketing the Sierra Nevada, the state's top water regulators are grappling with how to shift from conservation rules devised during more than five years of drought to a long-term strategy for using water more sustainably.

The State Water Resources Control Board plans to decide in February whether to extend the current drought regulations, which require local water districts to report on monthly water use and include measures such as prohibiting outdoor watering for 48 hours after rainstorms.

The emergency drought regulations for urban areas are set to expire at the end of February, and the state board's staff is proposing to stick with those temporary rules for now while simultaneously putting in place a long-term conservation plan ordered by Gov. Jerry Brown.

State officials said the idea of keeping the temporary drought rules in effect while storms are refilling reservoirs is geared toward taking a wait-and-see approach halfway through the winter, and also keeping in place a tracking system for water-saving performance in cities and towns across the state.

Wet weather has pushed Northern California out of drought conditions, and rains have been improving the water outlook in Southern California as well. As of this week, the U.S. Drought Monitor website shows severe drought conditions now cover 44 percent of the state – a swath stretching from the Central Valley across Southern California. That's down from nearly 62 percent of the state three months ago.

"The recovery overall is looking great," said Max Gomberg, climate and conservation manager for the state board. "But there are still regions of the state where there are still significant and lingering drought impacts."

He spoke Wednesday during a meeting in Sacramento, saying he and other water managers think it makes sense to leave the regulations in effect for now to keep encouraging conservation and avoid "that step where after the rain we go back to apathy."

Board member Steven Moore mentioned a famous and often-cited observation by John Steinbeck in the novel "East of Eden:" "And it never failed that during the dry years the people forgot about the rich years, and during the wet years they lost all memory of the dry years. It was always that way."

While conservation advocates have raised concerns about the possibility of backsliding on water-saving progress as the drought wanes, many water districts have called for the state to drop the emergency conservation regulations for urban areas. The drought rules were first adopted in May 2015 and were extended in February 2016, then amended in May 2016 to drop mandatory conservation targets.

The Association of California Water Agencies, which represents more than 430 agencies, said in a letter to the state board that the emergency regulation should be allowed to expire. The association said "there is no longer a statewide drought emergency to justify extending" the drought regulations.

At Wednesday's meeting, many representatives of water districts emphasized to the board that the public no longer sees a drought emergency.

"Certainly we would ask that the emergency regulations expire. Emergency regulations are for emergencies," Ashley Metzger, outreach and conservation manager for the Desert Water Agency. "Local water management decisions should be in local hands during times like this."

In this Wednesday, Jan. 11, 2017, photo, Briones Reservoir is seen near capacity in Orinda, Calif., following a series of storms. (Photo: (AP Photo/Ben Margot))

The Association of California Water Agencies suggested the state could continue using a "stress test" method of assessing the need for conservation measures in some communities where water supplies are calculated to be insufficient to meet normal demands.

Some officials from water districts said they wouldn't oppose continuing to submit monthly reports on water use. But they also pointed out that the huge storms in the past month have dramatically boosted the levels of major Northern California reservoirs. As a result, state officials this week increased their projection of how much water they'll be able to deliver this year through the canals and pipelines of the State Water Project. Water districts in Southern California now can count on receiving 60 percent of their full water deliveries, up from a previous estimate of 45 percent.

Still, a proposal drafted by the state board's staff points out that history has shown rains can stop suddenly partway through winter, and that years of drought have left significant water deficits, especially in aquifers depleted by excessive pumping. The document noted that "there's no rulebook for when a drought is declared or rescinded."

The state water board is scheduled to decide on Feb. 7 whether to extend the drought rules, and if so for how long.

"We have a lot to think about," Moore said. "Expiration of the regulation, from my standpoint, it's on the table. You know, it's one of the things that could happen."

Gomberg stressed it will be crucial to continue having data on water use available for transparency, public awareness and long-term planning.

Board Chair Felicia Marcus agreed: "The whole movement is towards having data available so that we can do the kind of analytics that are important for making good public policy decisions."

Coachella Valley water conservation

This chart shows the most recent monthly reductions in water use by customers of the Coachella Valley's water suppliers, as compared to the same months in 2013, which state officials are using as a baseline. Cumulative water-savings are shown since June 2015, when the state began monthly tracking.



Sources: Local water agencies and State Water Resources Control Board
Chart: Robert Hoodwood, The Desert Sun

Tracking monthly water use in cities and towns has enabled regulators to spot problem areas and also gauge statewide progress. The latest statewide data released this month showed cumulative water-savings of 22.6 percent between June 2015 and November 2016 as compared with the same months in 2013, which is being used as a baseline year.

Gomberg said the goal is to continue with a transparent account of water use and a basic level of prohibitions against water waste.

"We want to make sure that, drought or no drought, water is not being wasted in California because we have a growing population and economy, we're dealing with climate change, and we can no longer afford to be wasteful with our water," Gomberg said. "Californians have done a tremendous job responding during this drought, and over the long-term we need to be stingier with our water use than we have been in the past."

Seeking to pivot to larger water challenges that transcend a single drought, state officials are working on a long-term conservation plan. The draft plan, titled "Making Water Conservation a California Way of Life," was prepared in response to an executive order signed by Brown in May.

The plan calls for setting new community-specific conservation targets. It also includes a variety of broad goals such as improving water data, tracking water use by businesses, encouraging agencies to fix water leaks, requiring agricultural districts to submit more information about water use, and permanently banning practices such as hosing off driveways, among other things.

This week a group of 36 water and climate scientists voiced support for the plan in a letter to Brown. They said California has made dramatic progress in using water more efficiently in all sectors, from agriculture to homes, and that those efforts need to be accelerated.

"Business as usual is not an option; California simply does not have enough water to support our old ways," they said in the letter, noting that the state board over the past century has issued rights to about five times more water than the total amount of surface water runoff in an average year.

"We are on an unsustainable path," the scientists said. They pointed out that in many area of the San Joaquin Valley groundwater levels have plummeted to more than 100 feet below previous historic lows, and that "while some groundwater recharge occurs in wet years, it is more than offset by over-pumping in dry and even average years."

They said California has an opportunity to be a national leader in managing water smartly, and they recommended a list of steps, among them prioritizing conservation and efficiency, improving the collection of water data, and setting local targets that take into account local water supplies and the changing climate.

Ian James writes about water and environmental issues for The Desert Sun. Email: ian.james@desertsun.com Twitter: [@TDSIanJames](https://twitter.com/TDSIanJames)

Recent storms are making big dent in drought

Local reservoirs rising rapidly in response to the barrage of rain, but we still have a ways to go to overcome effects of drought.

By DAVID DOWNEY / STAFF WRITER *Published: Jan. 23, 2017*

You know the answer already.

No, the drought isn't over in Southern California – even with this burst of insane amounts of rain the last five days, Alex Tardy, a National Weather Service meteorologist in San Diego, said Monday, Jan. 23.

"It's not likely that this month or next month we'll erase the drought because our deficit is so large," Tardy said. "The one thing we have to keep in mind is that our deficits are still 20 to 24 inches of rain over the past six years."

At the same time, yes, absolutely, this winter's rain is making a big dent in the drought, Tardy said.

He said that will be made clear on Thursday, when the U.S. Drought Monitor, which works closely with the National Weather Service, will issue its next drought update. For areas covered by the San Diego office – which include Orange County and western Riverside and San Bernardino counties – the Weather Service will recommend a one-level improvement in drought status across the board, Tardy said.

In other words, he said, it will be recommended that areas declared to be in "extreme drought" be changed to "severe drought," and areas in "severe drought" be recast as "moderate drought."

Jayme Laber, a hydrologist with the National Weather Service in Oxnard, said he wasn't sure what his office will recommend for Los Angeles County.

"Across Southern California you'll probably see some sort of improvement," Laber said. "It's too early to tell exactly at this point."

But what a ride this has been.

"We're on an incredible roll right now," said Richard Minnich, an earth sciences professor at UC Riverside.

Minnich lives in Riverside and has a rain gauge in his back yard. He said he's already recorded 11 inches for the season to date – or roughly what the area receives in an average year.

Similar results are being reported around the region.

Seasonal rainfall totals are running close to 10 inches at many spots in Orange, Riverside and San Bernardino counties, Tardy said.

"So we're almost at our seasonal average here in mid-January," he said. "And, of course, our wettest month on average is February. And March is quite wet too."

To the north, where much of the state's water supply lies frozen in the form of snow draping the Sierra Nevada, conditions have improved dramatically.

As of Monday, the statewide snowpack average was 193 percent of what it is on average at this point in the season, the California Department of Water Resources reports.

"The reservoirs are all doing good," said Doug Carlson, a spokesman for the Department of Water Resources in Sacramento.

"We are cautiously optimistic that this will be a fantastic water year," Carlson said. "But it can change on a dime. And we've seen that all the time in Southern California."

Farther south, the reservoirs are responding, though they are not yet full, underscoring what is involved in recovering from a multi-year drought.

For example, Castaic Lake in Los Angeles County has twice as much water in it as it did this time last year, state water department statistics show. However, it is 71 percent full and holding less water than it historically does at this time of the season.

In the Inland region, Lake Hemet at 4,300 feet in the San Jacinto Mountains is 53 percent full, said Tom Wagoner, general manager for the Lake Hemet Municipal Water District, which operates the reservoir and provides water to rural agricultural customers in the Hemet area.

Lake Hemet stood at 45 percent capacity in the fall before it started raining, Wagoner said. The level has come up 4 feet since then, he said, but is still 15 feet below the top.

Numbers notwithstanding, it has been raining like crazy. And it could continue for several more hours.

"We're not out of the woods yet," Tardy said. "We're going to see waves of showers and thunderstorms all the way through Tuesday morning. Some places could pick up another inch of rain with those showers." Sunny skies are apparently on the way.

Minnich said the jet stream is going to veer away from Southern California and take with it storms for several days at least. But don't get too used to the blue skies.

Minnich said chances look good that the storm track will return.

"Sometime in February or March, we're going to get bashed again," he said. "We're drawing these incredible atmospheric rivers in and we're going to do that again."

As well, Carlson advises residents not to get too used to free water from the sky.

At some point, Mother Nature's spigot will switch off. And it will be important to continue to practice the conservation measures we've learned during the drought, he said.

"Conservation is a California way of life," Carlson said.

Contact the writer: 951-368-9699 or ddowney@scng.com Twitter: PE_DavidDowney

When will soggy California drop its water restrictions?

Scott Smith, Associated Press, January 25, 2017

FRESNO - Much of California has gone from withered to waterlogged this winter but the state's top water regulator is not ready to lift emergency conservation measures enacted during the height of the state's drought.

"It makes the most sense to continue steady as she goes," State Water Resources Control Board chairwoman Felicia Marcus told The Associated Press after the latest in a series of storms brought more snow to the mountains and record-breaking rainfall to parts of Southern California.

Marcus and the other four board members will decide Feb. 7 whether to extend measures requiring local water districts to enforce conservation rules, provide monthly reports on water usage and show they have a three-year water supply.

January typically is the wettest month in California. Marcus said in interviews this week that she is concerned that subsequent months could turn out dry and that California could again be forced to scramble to save water if the restrictions are not kept in place.

Water districts have been lobbying the board to back down. They say they are committed to conservation and better positioned than the state to ensure residents do not return to old habits.

"We do strongly object to doing this under the banner of a drought emergency that everybody sees no longer exists," said Tim Quinn, executive director of the Association of California Water Agencies, a group representing water districts serving 6 million of California's nearly 40 million residents.

Local water agencies plan for dry spells, he said, and many have invested many millions of dollars into shoring up reserve water supplies.

California has endured more than five years of drought. In January 2014, Gov. Jerry Brown declared an emergency, later ordering residents statewide to cut water use by 25 percent — the first mandate of its kind in the state's history. With more normal weather last year, drought conditions eased, prompting regulators to relax restrictions. But Quinn said maintaining the state's emergency declaration gives water regulators extraordinary authority to require cutbacks from districts even if they have ample supplies. Water districts fear losing the public's trust, he said.

This year has been wetter than usual for almost all of California.

The Sierra Nevada snowpack that supplies much of the state's water contains nearly double its average water content and Los Angeles already received a full year's worth of precipitation in a few rainy weeks.

But water experts say what's happening above ground does not provide a full water picture. California's underground supplies remain far below normal.

In some areas of California's vast agricultural heartland called the San Joaquin Valley, domestic wells have run dry and the land is sinking at an alarming pace as aquifers collapse.

January storms erase part of California's snowpack deficit

Bettina Boxall, January 29, 2017

The recent storms that have buried the Sierra Nevada in snow have taken a big bite out of the state's five-year snowpack deficit, according to researchers.

Using satellite data, computer models and snowpack measurements, University of Colorado at Boulder scientists estimated the water content of the snow that has fallen since late December. They then compared it with the total snowpack shortfall of the five-year drought.

In less than a month, California appears to have recovered roughly one-third of the water content that it lost during the succession of dreary winters that robbed the state of a critical water source, said the researchers, who released their estimates Friday.

In 2015, the April 1 snowpack was an abysmal 5% of average for the date, the lowest since 1950.

This winter, storms fueled by atmospheric rivers have sent snowpack levels soaring. As of Friday, the statewide snowpack had jumped slightly above the average for April 1, usually its peak date.

Statewide, the snowpack -- which represents the snow's water content -- is 186% of normal for the date. In the southern Sierra, it is a whopping 219% of average for this time of year.

Rain and snow levels up and down the Sierra have been climbing at rates similar to the wettest years on record.

The numbers are putting smiles on the face of water managers, who look to melting snow to help fill reservoirs in the spring. In normal years, the snowpack provides about a third of the state's water supply.

The team at the university's Center for Water, Earth Science and Technology estimated that January snowstorms dumped the equivalent of 17.5 million-acre feet of water. That figure amounts to about a third of what the researchers said was the drought's 54 million-acre feet shortfall in the snowpack. (One acre foot is enough to supply two average households for a year.)

Runoff from this winter's storms is swelling reservoirs. The two largest in the state, Shasta and Oroville, are both more than three-quarters full.

"The start to winter has been the best California has seen since 2011," said David Rizzardo, the state's snow surveys chief.

Community Voices: Our missed water storage opportunity from recent storms

By James Gallagher and Vince Fong, Jan 26, 2017

Imagine if California had not built a new school since 1979, even though the population has increased by more than 15.5 million. That's the approach our state has taken with our water infrastructure since the last new reservoir was built. The dams we do have are working overtime for flood control right now, but we need the ability to store the water too.

Water is life for California and its economy. In 2014, the drought cost the state more than \$2.2 billion and nearly 17,000 jobs. Even with the recent rains, we're still mired in a multi-year drought. California can't afford to ignore its water needs any longer.

Conservation has been the primary approach pushed by Sacramento leadership and there has been significant progress on that front — with some water districts cutting their consumption by as much as 35 percent.

But we know that is not a real solution because the water needs of this state are much more serious than Band-Aid remedies. Drought-tolerant landscaping and shorter showers are good things to pursue, but it does nothing to change the reality that we simply don't have enough room to store the water we have in our rivers and streams.

It's common sense to store as much water as possible to use when our state needs it.

With recent storms bringing record rainfall to the state, California once again missed an opportunity to capture billions of gallons of water to help ease the drought. As the rains flooded waterways, rivers and creeks in Northern California, a lack of storage meant much of that water flowed out to the ocean.

Now more than ever, we needed to capture that water to use once the rains stop. The lack of preparation and investment in water infrastructure will further hurt our vital agricultural industry.

In 2014, voters approved a \$7.5 billion bond to improve California's water infrastructure, with \$2.7 billion to new water storage projects. While it doesn't specify which projects will be funded, the Sites Reservoir north of Sacramento and Temperance Flat near Fresno are two prime candidates.

Led by Assemblyman Gallagher, we led 13 state lawmakers on a bipartisan tour of the Sites Reservoir project in order to build momentum for Sites and help educate our colleagues on the project benefits.

The Sites Reservoir project would add up to 500,000 acre-feet to the state's water system annually — enough to serve 1.2 million families for one year. Because Sites would store needed water off-stream, the project has broad support from the local community. Once built, Sites would hold enough water to produce nearly 80 million tons of tomatoes or 800 million boxes of lettuce.

If Sites had been in place to capture the rain from the most recent storms the last couple weeks, about 300,000 acre-feet could have been captured and stored.

We hope policymakers and stakeholders understand the importance of moving forward with these critical projects as quickly as possible in order to prevent more economic damage from these missed opportunities.

There are no guarantees that it will continue to rain this winter. Last year the weather was promising, but the pattern changed quickly, and we had to endure another dry year. California needs to invest in projects to store water for when the weather is not favorable for our significant.

Both Sites and Temperance Flat will protect our state's ability to irrigate our farms and supply our homes. We can't afford to wait any longer to get these projects underway.

Assemblyman James Gallagher of Yuba City represents the 3rd Assembly District, and Assemblyman Vince Fong of Bakersfield represents the 34th Assembly District.

Commentary: More dams won't do it, time for a fresh approach on water

By Eric Wesselman and Antonio Inserni, January 28, 2017

The headline of the East Bay Times Jan. 16 commentary, "End of drought is a wasted opportunity for California," was dead on. Attempting to solve the problem with dams, however, is expensive and ineffective.

As stated, one wet year won't solve all of the problems brought on by the five-year drought. California's agricultural sector achieved record levels of both employment and revenue by supplementing surface water with ground water. While invisible, this groundwater is a reservoir, and it will take years to recharge. Additionally, many surface reservoirs are still below capacity.

However, it's not all doom and gloom. Let's take a moment to recognize that Californians conserved more than 2.35 million acre-feet (MAF) between June 2015 and November 2016. That's roughly enough water for 4.7 million households in California! All while spending a negligible amount of taxpayer dollars.

Contrast this with the antiquated solution of building dams. The Public Policy Institute of California reported in 2015 that five of the most lauded surface storage proposals — including Sites reservoir — would cost roughly \$9 billion to increase average annual water yield by just 410,000 acre-feet. That represents about 1 percent of annual water use in California.

Since that report, the cost of Sites reservoir has ballooned from \$3.8 to \$6.3 billion, according to federal estimates, and that's before the cost overruns that we would undoubtedly find out about during construction.

Why "antiquated?" We already have more than 1,400 dams in California and a vast network of canals and pumps. Our forefathers have already done an excellent job of placing dams in the most efficient places. We understand it's comforting to think that repeating this previously effective solution will help, but diminishing returns dictates that damming already dammed rivers won't pay out. So we have to be smarter than that.

Better solutions? Dozens of positive solutions are available online at: www.friendsoftheriver.org. Here are just three that would yield more than 1.6 million acre-feet per year — four times what we'd get from those new dams.

Fix leaks. A 2010 study conducted for the California Public Utilities Commission estimated that 10% of urban water is lost to leaks and that 40 percent of that water — 350,000 acre-feet per year — could be cost-effectively recovered through pressure management, leak repair, and targeted pipe replacement.

Improve irrigation efficiency. Use local climate and soil information to more accurately determine crop water requirements and irrigation scheduling. A 2009 report from the Pacific Institute titled: "Sustaining California Agriculture in an Uncertain Future" found that improving irrigation scheduling in California can save nearly 3.4 million acre-feet each year. Just realizing 15 percent of that potential would yield over 500,000 acre-feet — more water than all of the proposed reservoirs combined.

Recycle water. We treat wastewater to be as clean as, or cleaner than, it was before we used it. More than 1.5 million acre-feet of this highly treated wastewater is dumped into the Pacific Ocean annually. A 2010 study by Heal the Ocean found that nearly 800,000 acre-feet of this can be safely recycled and re-used or stored in coastal aquifers. Orange County is already doing this along with a few other cities.

Droughts are a reality in California and they will become more severe and prolonged with global climate change. We need to better prepare for this future by pointing to positive water solutions that will ensure healthy waterways, vibrant communities and a healthy economy instead of wasting public funds to build a few more dams that won't end up addressing the challenges we face.

Eric Wesselman is executive director of Friends of the River. Antonio Inserni, an Alamo resident, is a volunteer river advocate for Friends of the River

BREAKING NEWS Live Bay Area storm tracker

Opinion > Commentary: Fixing **California water storage is not zero-sum game**

By JILL DUERIG | PUBLISHED: February 1, 2017

In their recent commentary, "More dams won't do it, time for a fresh approach on water," the writers are spot-on in referencing the need for multiple solutions to solving California's water challenges, especially in the face of anticipated climate change. However, they miss several important points about the value of new water storage in California.

Historically, California has used its snow pack as seasonal storage. With climate change, this immense natural water storage system will likely be significantly reduced or lost. Alternative water supply options are critical to maintaining a state that is economically and ecologically healthy.

Proposition 1, overwhelmingly approved by voters in 2014, was a clear signal that Californians support investing in new water storage, and for good reason. Prop. 1 will fund only the portion of storage projects that have a public environmental benefit. This funding mechanism creates a unique opportunity to use water to improve ecological conditions and water quality in important river channels and in the Sacramento-San Joaquin Delta (Delta), where the hub of our state's water supply is located.

Under Prop. 1, at 50 percent participation, the state could have more than 200,000 acre-feet of dedicated water to use for the environment. That's a significant public benefit.

Obviously, conservation, leak reduction, recycled water and groundwater management are all important parts of a diversified water supply portfolio for the state. Along with storage, they are all part of the California Water Action Plan. But it is misguided to pit water supply strategies against each other.

They are not "either/or," but intended to work together to improve reliability and resiliency. No single solution, alone, can fully meet the state's water supply needs. Creative, new storage projects could provide the additional public benefit of environmental flows, addressing not only reduced water storage with the loss of snow pack, but also providing water to improve ecosystems during anticipated climate change.

In particular, the Sites Reservoir Project is a modern, innovative storage project that would provide a needed boost in water supplies to cities across California, including those served by Zone 7, while balancing the environmental needs of the Delta.

Overwhelmingly supported by local, state, and federal agencies, the off-stream reservoir will not dam an existing river or block fish migration on the Sacramento River, and could be filled from just one or two major storm events, even during dry years.

The project would also help other Northern California reservoirs — Shasta, Trinity, Folsom and Oroville — by providing an additional 1.12 million acre-feet of critical water storage that could be stored later into the summer months, when it's needed most.

In fact, had Sites been operational during the most recent winter storms, an additional 585,000 acre-feet of water would have been available, as of Jan. 17, for California homes, farms and businesses.

Zone 7 Water Agency continues to proactively seek ways to enhance storage flexibility, diversify its water supply portfolio and improve long-term water supply reliability for the Livermore-Amador Valley. As one component of this effort, Zone 7 has decided to participate in Phase One of the Sites Reservoir Project after finding that the project provides both environmental and water supply benefits to the Valley.

At the same time, we are moving forward with many other components of a diversified local water supply portfolio.

The California Water Action Plan, Proposition 1 and the Sites Project all represent a forward-thinking strategy to creating efficient, flexible new water storage. It is precisely the “fresh approach on water” that the writers seek, and California needs. The people of California are looking for a smart way to protect the environment and guard against future drought conditions. The Sites Project is a viable project that does both.

Jill Duerig is general manager of Zone 7 Water Agency.



Sites Reservoir project takes step forward

Officials announce environmental review process

Updated: 7:31 AM PST Feb 1, 2017

MAXWELL, Calif. (KCRA) —

Efforts to create a new reservoir in Northern California took a step forward Tuesday.

The Sites Project Authority issued a "notice of preparation," which is the first step in the environmental review process.

"Californians made a bold and innovative decision to invest in new water storage when they overwhelmingly approved Proposition 1 in 2014," Authority board president Kim Dolbow Vann said in a statement. "The Sites Project makes sense for California — which is why it has strong, diverse and bipartisan support across the state — and why it is important to move this environmental review forward."

The more than \$4 billion project would use 14 miles of pipeline to funnel excess water from the Sacramento River into the Sites Reservoir in Colusa County.

The Sites Project Authority will host two open houses in February to get input from agencies, tribes and the public:

-- Wednesday, Feb. 15 at 3 p.m.

Sacramento Convention Center at 1400 J Street, Room # 202

-- Thursday, Feb. 16 at 6 p.m.

Sites Project Authority Office at 122 Old Highway 99, West Maxwell

DESERT WATER AGENCY OUTREACH & CONSERVATION ACTIVITIES

January 2017

Activities:

- | | |
|-----------------|--|
| 1/05/17 | Ashley Metzger was on a live segment with KESQ regarding the drought update. |
| 1/05/17 | Ashley Metzger was interviewed on the Joey English radio show regarding the drought update. |
| 1/12/17 | Ashley Metzger was on a live segment with KESQ regarding the smart meter pilot test. |
| 1/12/17 | Ashley Metzger was interviewed by KESQ regarding the drought. |
| 1/13/17 | Ashley Metzger was on a live segment with KMIR regarding the drought. |
| 1/17/17 | DWA launched the new website. |
| 1/17/17 | Ashley Metzger met with the Desert Horticultural Society regarding the upcoming Desert Garden Day. |
| 1/17/17-1/25/17 | Vicki Petek completed 31 Turf Buy Back post-inspections and 2 re-inspections. |
| 1/18/17 | Ashley Metzger attended the SWRCB hearing on extending the emergency regulations on urban water conservation. |
| 1/19/17 | Ashley Metzger was on a live segment with KESQ regarding the Turf Buy Back program. |
| 1/23/17 | Ashley Metzger and Vicki Petek attended a classroom presentation by CVWD at Palm Desert Charter Middle School. |
| 1/26/17 | Ashley Metzger was on a live segment with KESQ regarding the new DWA website. |
| 1/28/17 | DWA provided the water trailer for the Palm Springs Health Run & Fitness Expo at Ruth Hardy Park. |

Public Information Releases/eBlasts:

January 19, 2017 – Nextdoor – Imported water outlook improves. The Department of Water Resources increased the projected amount of water that State Water Contractors (like DWA) will receive this year from 45% to 60%.

Water Conservation Reviews:

City of Palm Springs – Irrigation	Canyon View Estates #5
Canyon Country Club Estates	Canyon View Estates #6
Canyon View Estates #1	Canyon View Estates #7
Canyon View Estates #2	Sahara Park
Canyon View Estates #3	Sunnyview Villas
Canyon View Estates #4	Sunshine Villas

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.

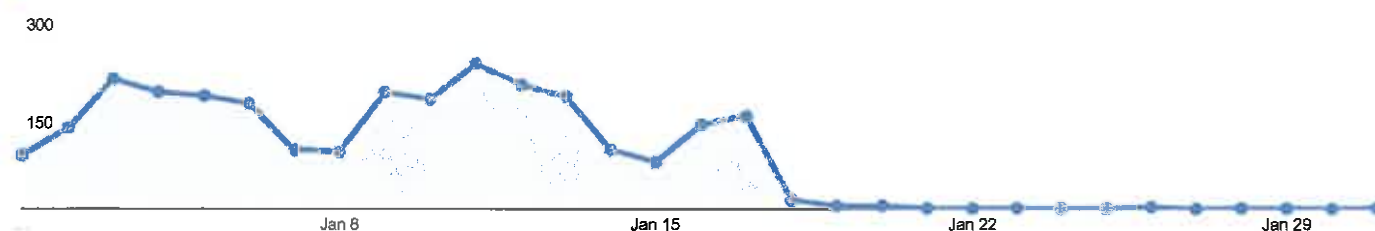
Audience Overview

Jan 1, 2017 - Jan 31, 2017

All Users
100.00% Sessions

Overview

Sessions



Sessions

2,497

Users

1,966

Pageviews

5,844

Pages / Session

2.34

Avg. Session Duration

00:02:34

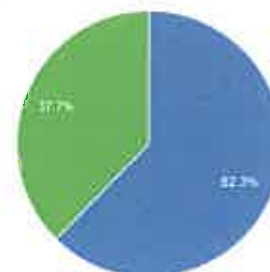
Bounce Rate

45.94%

% New Sessions

62.27%

New Visitor Returning Visitor



Language	Sessions	% Sessions
1. en-us	1,782	71.37%
2. (not set)	637	25.51%
3. en-ca	25	1.00%
4. en-gb	20	0.80%
5. de	5	0.20%
6. en-za	5	0.20%
7. ko-kr	4	0.16%
8. zh-cn	4	0.16%
9. es	3	0.12%
10. fr-fr	3	0.12%



Desert Water Agency Facebook Analytics January 2017

Page Summary Last 28 days

Export Data

Results from Jan 05, 2017 - Feb 01, 2017

Organic Paid

Actions on Page

January 5 - February 1



We don't have data to show you this week.

Page Views

January 5 - February 1

37

Total Page Views ▼42%



Page Likes

January 5 - February 1

6

Page Likes ▼65%



Reach

January 5 - February 1

1,953

People Reached ▼42%



Post Engagements

January 5 - February 1

165

Post Engagement ▼61%



Videos

January 5 - February 1

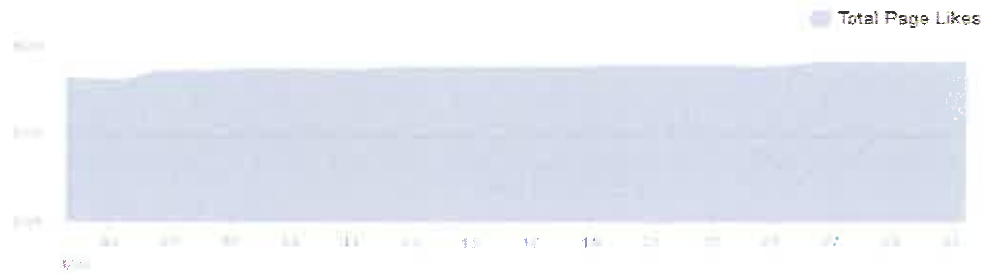
344

Total Video Views ▼77%



Published	Post	Type	Targeting	Reach	Engagement	Promote
01/30/2017 9:42 am	Check it out! This may be a good way to get inspiration for your			38	2 2	Boost Post
01/30/2017 8:16 am	Desert Water Agency likes CAM P at Modernism Week, Moderni			0	0 0	Boost Post
01/27/2017 8:00 am	Try this fun DIY water-friendly pr oject for the weekend. These ma			52	3 1	Boost Post
01/23/2017 8:29 am	Is your smart controller in tip top shape? Check out this list to be			60	3 2	Boost Post
01/20/2017 10:14 am	Desertscape looks good on you, Palm Springs! Conservation is a			52	6 5	Boost Post
01/19/2017 3:27 am	More rain!			499	8 17	Boost Post
01/17/2017 3:21 am	Desert Water Agency's cover ph oto			21	2 1	Boost Post
01/11/2017 5:00 am	Our customers saved 14% in De cember 2016 compared to the s			41	3 1	Boost Post
01/09/2017 2:05 pm	Monte Vista Water District			0	0 0	Boost Post
01/09/2017 9:37 am	RAIN ALERT! Free water falling f rom the sky - give your sprinkler			327	7 6	Boost Post

Total Page Likes as of Today: 893



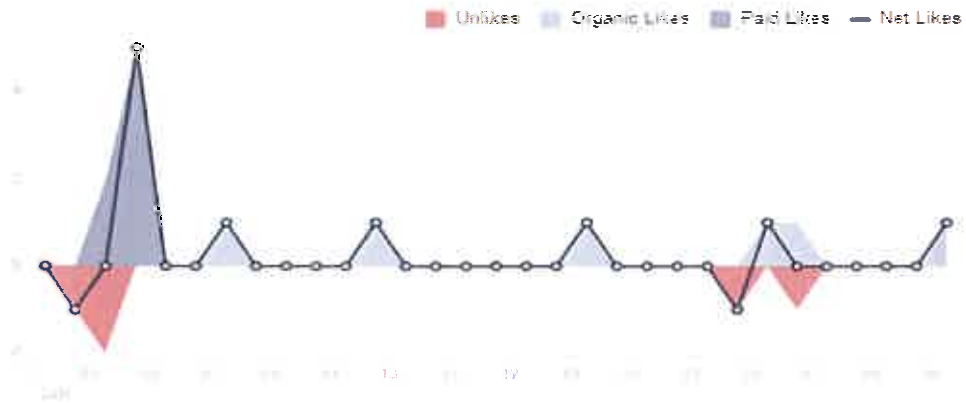
BENCHMARK

Compare your average performance over time.

Total Page Likes

Net Likes

Net likes shows the number of new likes minus the number of unlikes.



BENCHMARK

Compare your average performance over time.

Unlikes

Organic Likes

Paid Likes

Net Likes

WANT MORE LINES?

Create an ad to get more people to like your Page.

Promote Page



Desert Water Agency
Twitter Analytics
January 2017

Jan 2017 • 31 days

Tweet Highlights

Top Tweet

earned 1,422 impressions

Some of these tips can also help you
#savewater! [twitter.com/socalgas/statu](https://twitter.com/socalgas/status/808080808080808080)

👍 1 ❤️ 1

[View Tweet activity](#)

[View all Tweet activity](#)

Top mention

earned 4 engagements



Water-Use It Wisely

@WUIW Jan 1

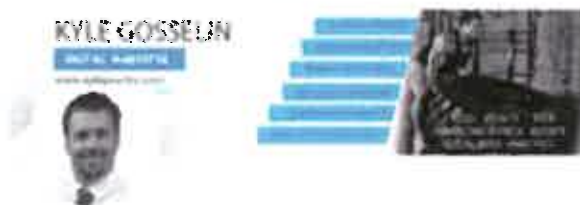
@DWAwater Thank you!

❤️ 2

[View Tweet](#)

Top Follower

followed by 154K people



Kyle Gosselin

@Vinedictor FOLLOWS YOU

#CEO @marketingapes #digital #Marketer 10+ Years Experience SEO SEM Affiliate & Social Father of 2 husband #consultant sports & life

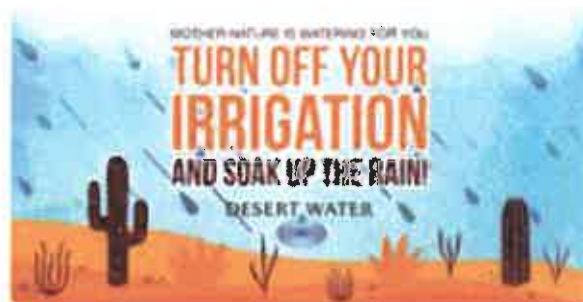
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[View followers dashboard](#)

Top media Tweet

earned 598 impressions

pic.twitter.com/dNrTnSBQJL



👍 1 ❤️ 5

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Enrich your Tweets with Twitter Cards

Using Twitter Cards gives you greater insight into your URL clicks, app installs, and Retweets.

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