



# S A W P A

SANTA ANA WATERSHED PROJECT AUTHORITY

11615 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

## REGULAR COMMISSION MEETING TUESDAY, DECEMBER 17, 2019 – 9:30 A.M.

### AGENDA

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE (Ronald W. Sullivan, Chair)

2. ROLL CALL

3. PUBLIC COMMENTS

Members of the public may address the Commission on items within the jurisdiction of the Commission; however, no action may be taken on an item not appearing on the agenda unless the action is otherwise authorized by Government Code §54954.2(b).

4. CONSENT CALENDAR

All matters listed on the Consent Calendar are considered routine and non-controversial and will be acted upon by the Commission by one motion as listed below.

- A. APPROVAL OF MEETING MINUTES: NOVEMBER 19, 2019.....7  
**Recommendation:** Approve as posted.
- B. TREASURER’S REPORT – NOVEMBER 2019.....11  
**Recommendation:** Approve as posted.

5. NEW BUSINESS

- A. EMERGING CONSTITUENTS AND PFAS SAMPLING RESULTS | AUGUST 2019 (CM#2019.123).....17  
**Presenter:** Mark Norton  
**Recommendation:** Receive and file.
- B. BASIN MONITORING PROGRAM TASK FORCE – SANTA ANA RIVER WASTELOAD ALLOCATION UPDATE | FINAL REPORT (CM#2019.124).....29  
**Presenter:** Mark Norton  
**Recommendation:** Receive and file.

- C. [SANTA ANA RIVER WATERSHED WEATHER MODIFICATION FOR WATER SUPPLY FEASIBILITY STUDY | AWARD OF CONTRACT \(CM#2019.125\)](#).....65  
**Presenter:** Mark Norton  
**Recommendation:** Authorize the General Manager to execute an Agreement for Services and Task Order No. NAWC370-01 with North American Weather Consultants Inc. to conduct a feasibility analyses for a weather modification for water supply program in the Santa Ana River Watershed in an amount to not to exceed \$75,000; and, authorize SAWPA invoice each Member Agency \$15,000 to cover the cost of conducting this work.
- D. [DISADVANTAGED COMMUNITY INVOLVEMENT \(DCI\) PROGRAM – TECHNICAL ASSISTANCE FUNDING RECOMMENDATIONS \(CM#2019.126\)](#).....137  
**Presenter:** Rick Whetsel  
**Recommendation:** Authorize the General Manager to execute sub-agreements for the portfolio of projects recommended for Proposition 1 Disadvantaged Community Involvement (DCI) Program Technical Assistance Grant Funding.
- E. [FISCAL YEAR 2018-19 REPORT ON AUDIT \(CM#2019.119\)](#) .....157  
**Presenter:** Karen Williams  
**Recommendation:** Review the Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended June 30, 2019, which includes the Report on Audit prepared by Teaman, Ramirez & Smith, Inc., then: (1) Accept the CAFR, including the Report on Audit as prepared by Teaman, Ramirez & Smith, Inc.; (2) Direct staff to file the Report with the respective government agencies as required by law; and, (3) Direct staff to submit the CAFR, with any necessary changes, for the Certificate of Achievement for Excellence in Financial Reporting Award.
- F. [CALPERS UNFUNDED LIABILITY PAYMENT OPTIONS \(CM#2019.120\)](#).....301  
**Presenter:** Karen Williams  
**Recommendation:** Receive a presentation on the CalPERS Unfunded Liability and payment options; and, approve Option 1, Pay off \$2,551,673 of the amortization bases listed below using General Fund Reserves of \$972,510 and Brine Line Operating Reserves of \$1,579,163.
- G. [STRATEGIC PLAN UPDATE \(CM#2019.127\)](#) .....325  
**Presenter:** Rich Haller  
**Recommendation:** Provide input on the process and format for an update to the Strategic Plan; and, direct staff to issue a Request for Proposals (RFP) for Strategic Plan Facilitator Consultant Services.
- 6. **INFORMATIONAL REPORTS**  
**Recommendation:** Receive for information.
- A. [CASH TRANSACTIONS REPORT – OCTOBER 2019 | NOVEMBER 2019](#).....379  
**Presenter:** Karen Williams
- B. [INTER-FUND BORROWING – OCTOBER 2019 \(CM#2019.121\)](#).....393  
**Presenter:** Karen Williams
- C. [PERFORMANCE INDICATORS/FINANCIAL REPORTING – OCTOBER 2019 \(CM#2019.122\)](#) .....399  
**Presenter:** Karen Williams
- D. [BUDGET VS ACTUAL VARIANCE REPORT – FYE 2020 FIRST QUARTER – ENDING SEPTEMBER 30, 2019 \(CM#2019.118\)](#).....421  
**Presenter:** Karen Williams

E. [FINANCIAL REPORT FOR THE FIRST QUARTER ENDING SEPTEMBER 30, 2019](#) .....429

- Inland Empire Brine Line
- SAWPA

**Presenter:** Karen Williams

F. [FIRST QUARTER FYE 2020 EXPENSE REPORTS](#) .....449

- General Manager
- Staff

**Presenter:** Karen Williams

G. [GENERAL MANAGER REPORT](#) .....453

H. [STATE LEGISLATIVE REPORT](#) .....473

**Presenter:** Rich Haller

I. [SAWPA GENERAL MANAGERS MEETING NOTES](#) .....479  
December 10, 2019

J. [CHAIR’S COMMENTS/REPORT](#)

K. [COMMISSIONERS’ COMMENTS](#)

L. [COMMISSIONERS’ REQUEST FOR FUTURE AGENDA ITEMS](#)

**7. CLOSED SESSION**

There were no Closed Session items anticipated at the time of the posting of this agenda.

**8. ADJOURNMENT**

Americans with Disabilities Act: If you require any special disability related accommodations to participate in this meeting, call (951) 354-4230 or email [kberry@sawpa.org](mailto:kberry@sawpa.org). 48-hour notification prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility for this meeting. Requests should specify the nature of the disability and the type of accommodation requested.

Materials related to an item on this agenda submitted to the Commission after distribution of the agenda packet are available for public inspection during normal business hours at the SAWPA office, 11615 Sterling Avenue, Riverside, and available at [www.sawpa.org](http://www.sawpa.org), subject to staff’s ability to post documents prior to the meeting.

**Declaration of Posting**

I, Kelly Berry, Clerk of the Board of the Santa Ana Watershed Project Authority declare that on Thursday, December 12, 2019, a copy of this agenda has been uploaded to the SAWPA website at [www.sawpa.org](http://www.sawpa.org) and posted at the SAWPA office, 11615 Sterling Avenue, Riverside, California.

/s/

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Kelly Berry, CMC

**2020 SAWPA Commission Meetings/Events**

First and Third Tuesday of the Month

(NOTE: Unless otherwise noticed, all Commission Workshops/Meetings begin at **9:30 a.m.** and are held at SAWPA.)

<b>January</b> 1/7/20 Commission Workshop 1/21/20 Regular Commission Meeting	<b>February</b> 2/4/20 Commission Workshop 2/18/20 Regular Commission Meeting
<b>March</b> 3/3/20 Commission Workshop 3/17/20 Regular Commission Meeting	<b>April</b> 4/7/20 Commission Workshop 4/21/20 Regular Commission Meeting
<b>May</b> 5/5/20 Commission Workshop 5/5 – 5/8/20 ACWA Spring Conference, Monterey 5/19/20 Regular Commission Meeting	<b>June</b> 6/2/20 Commission Workshop 6/16/20 Regular Commission Meeting
<b>July</b> 7/7/20 Commission Workshop 7/21/20 Regular Commission Meeting	<b>August</b> 8/4/20 Commission Workshop 8/18/20 Regular Commission Meeting
<b>September</b> 9/1/20 Commission Workshop 9/15/20 Regular Commission Meeting	<b>October</b> 10/6/20 Commission Workshop 10/20/20 Regular Commission Meeting
<b>November</b> 11/3/20 Commission Workshop 11/17/20 Regular Commission Meeting	<b>December</b> 12/1/20 Commission Workshop 12/1 – 12/4/20 ACWA Fall Conference, Indian Wells 12/15/20 Regular Commission Meeting



# SAWPA COMPENSABLE MEETINGS

Commissioners and Alternate Commissioners will receive compensation for attending the meetings listed below, pursuant to the Commission Compensation, Expense Reimbursement, and Ethics Training Policy.

**IMPORTANT NOTE:** These meetings are subject to change. Prior to attending any meetings listed below, please confirm meeting details by viewing the website calendar using the following link:

<https://sawpa.org/sawpa-calendar/>

## MONTH OF: December 2019

DATE	TIME	MEETING DESCRIPTION	LOCATION
12/3/19	8:30 AM	PA 23 Committee Mtg	CANCELLED
12/3/19	10:00 AM	PA 24 Committee Mtg	CANCELLED
12/9/19	1:30 PM	Basin Monitoring Program Task Force Mtg	SAWPA
12/17/19	8:30 AM	PA 23 Committee Mtg	SAWPA
12/19/19	4:00 PM	LESJWA Board of Directors Mtg	CANCELLED
12/26/19	8:00 AM	PA 22 Committee Mtg	CANCELLED

## MONTH OF: January 2020

DATE	TIME	MEETING DESCRIPTION	LOCATION
1/7/20	10:00 AM	PA 24 Committee Mtg	SAWPA
1/14/20	9:00 AM	MSAR TMDL Task Force Mtg	SAWPA
1/14/20	1:30 PM	Basin Monitoring Program Task Force Mtg	SAWPA
1/15/20	9:00 AM	Emerging Constituents Program Task Force Mtg	SAWPA
1/15/20	1:30 PM	Lake Elsinore/Canyon Lake TMDL Task Force Mtg	SAWPA
1/23/20	8:00 AM	PA 22 Committee Mtg	SAWPA
1/23/20	11:00 AM	OWOW Steering Committee Mtg	SAWPA

*Please Note:* We strive to ensure the list of Compensable Meetings set forth above is accurate and up-to-date; the list is compiled based on input from SAWPA staff and Department Managers regarding meeting purpose and content.

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**SAWPA COMMISSION  
REGULAR MEETING MINUTES  
NOVEMBER 19, 2019**

**COMMISSIONERS PRESENT**

Ronald W. Sullivan, Chair, Eastern Municipal Water District  
Kati Parker, Vice Chair, Inland Empire Utilities Agency  
Brenda Dennstedt, Western Municipal Water District  
Dina L. Nguyen, Alternate, Orange County Water District  
June D. Hayes, Alternate, San Bernardino Valley Municipal Water District

**COMMISSIONERS ABSENT**

T. Milford Harrison, San Bernardino Valley Municipal Water District  
Denis R. Bilodeau, Secretary-Treasurer, Orange County Water District

**ALTERNATE COMMISSIONERS  
PRESENT; NON-VOTING**

**STAFF PRESENT**

Rich Haller, Larry McKenney, Mark Norton, Dean Unger, David Ruhl,  
Carlos Quintero, Rick Whetsel, Alison Lewis, Kelly Berry, Katie Lucht

The Regular Commission Meeting of the Santa Ana Watershed Project Authority was called to order at 9:30 a.m. by Chair Sullivan at the Santa Ana Watershed Project Authority, 11615 Sterling Avenue, Riverside, California.

**1. CALL TO ORDER/PLEDGE OF ALLEGIANCE**

**2. ROLL CALL**

Roll call was duly noted and recorded by the Clerk of the Board.

**3. PUBLIC COMMENTS**

There were no public comments.

**4. CONSENT CALENDAR**

**A. APPROVAL OF MEETING MINUTES: NOVEMBER 5, 2019**

Recommendation: Approve as posted.

**B. SALARY SCHEDULE EFFECTIVE JULY 1, 2019 (CM#2019.114)**

Recommendation: Approve the current salary schedule effective July 1, 2019.

**C. TREASURER'S REPORT – OCTOBER 2019**

Recommendation: Approve as posted.

**MOVED**, approve the Consent Calendar.

Result:	<b>Adopted (Passed)</b>
Motion/Second:	Hayes/Parker
Ayes:	Dennstedt, Hayes, Parker, Sullivan
Nays:	None
Abstentions:	Nguyen (4.A., only)
Absent:	None

## 5. WORKSHOP DISCUSSION AGENDA

### A. LEGISLATIVE REPORT

West Coast Advisors President Michael Boccadoro provided a PowerPoint presentation with a recap of the 2019 legislative session and an overview of key issues for 2020 including the Water Resilience Portfolio, water rights for the environment (environmental water budget), elimination of ocean discharge, wildfire financial responsibility and energy shutoffs (Public Safety Power Shutoffs – PSPS), Constituents of Emerging Concern of PFAS/PFOA, and continued implementation of the 2012 Human Right to Water Act (AB 685).

Chair Sullivan noted from his recent trips to Texas, that Texas looks at the state needs for the next fifty years regarding their water infrastructure versus California being more focused on the next one to three years. Mr. Boccadoro anticipates his next update to the Commission will be in March 2020. Staff will meet with Mr. Boccadoro after today's Commission meeting to strategize SAWPA advocacy.

This item was for informational purposes; no action was taken on Agenda Item No. 5.A.

## 6. NEW BUSINESS

### A. DISADVANTAGED COMMUNITY INVOLVEMENT (DCI) PROGRAM – TECHNICAL ASSISTANCE FUNDING SUB-AGREEMENTS (CM#2019.113)

Rick Whetsel provided the PowerPoint presentation contained in the agenda packet on pages 47 – 52. There was no discussion and Chair Sullivan called for a motion on the item.

**MOVED**, direct the General Manager to execute Proposition 1 Disadvantaged Community Involvement Program Technical Assistance Funding Sub-agreements with the following:

1. Big Bear Area Regional Wastewater Agency (BBARWA) in the amount not to exceed \$500,000 to implement the Replenish Big Bear Project; and,
2. Soboba Band of Luiseno Indians in the amount not to exceed \$350,000 to implement the Residential Asbestos Cement Pipe Abandonment and Replacement Project.

Result:	<b>Adopted (Unanimously)</b>
Motion/Second:	Dennstedt/Parker
Ayes:	Dennstedt, Hayes, Nguyen, Parker, Sullivan
Nays:	None
Abstentions:	None
Absent:	None

### B. VENDOR SELECTION | VOIP PHONE AND CONFERENCE SERVICES (CM#2019.115)

Dean Unger provided the PowerPoint presentation contained in the agenda packet on pages 82 – 85. This item was for informational purposes; no action was taken on Agenda Item No. 6.B.

### C. COMMISSIONER COMPENSATION POLICY (CM#2019.116)

Rich Haller provided an oral report. There was no discussion and Chair Sullivan called for a motion on the item.

**MOVED**, approve the revised Commissioner Compensation, Expense Reimbursement, and Ethics Training Policy, effective October 1, 2019.

Result:	<b>Adopted (Unanimously)</b>
Motion/Second:	Dennstedt/Parker
Ayes:	Dennstedt, Hayes, Nguyen, Parker, Sullivan
Nays:	None
Abstentions:	None
Absent:	None

**7. INFORMATIONAL REPORTS**

The following oral/written reports/updates were received and filed.

- A. CASH TRANSACTIONS REPORT – SEPTEMBER 2019**
- B. INTER-FUND BORROWING – SEPTEMBER 2019 (CM#2019.111)**
- C. PERFORMANCE INDICATORS/FINANCIAL REPORTING – SEPTEMBER 2019 (CM#2019.112)**
- D. OWOW QUARTERLY STATUS REPORT: JULY 1, 2019 – SEPTEMBER 30, 2019**
- E. ROUNDTABLES QUARTERLY STATUS REPORT: JULY 1, 2019 – SEPTEMBER 30, 2019**
- F. GENERAL MANAGER REPORT**
- G. STATE LEGISLATIVE REPORT**
- H. SAWPA GENERAL MANAGERS MEETING NOTES**
  - November 12, 2019
- I. CHAIR'S COMMENTS/REPORT**

There were no comments/reports from the Chair.
- J. COMMISSIONERS' COMMENTS**

There were no comments from the Commissioners.
- K. COMMISSIONERS' REQUEST FOR FUTURE AGENDA ITEMS**

There were no Commissioners' request for future agenda items.

**8. CLOSED SESSION**

Chair Sullivan recessed the meeting to Closed Session at 10:17 a.m. General Manager Rich Haller was present during discussion of Agenda Item Nos. 8.A. and 8.B. General Manager Rich Haller left Closed Session at 10:20 a.m.

- A. PUBLIC EMPLOYEE ANNUAL PERFORMANCE EVALUATION – PURSUANT TO GOVERNMENT CODE SECTION 54957**

Title: General Manager
- B. PURSUANT TO GOVERNMENT CODE SECTION 54957.6 – CONFERENCE WITH LABOR NEGOTIATOR**

SAWPA-Designated Representative: Ronald W. Sullivan, Commission Chair  
Unrepresented Employee: Richard E. Haller

Chair Sullivan resumed Open Session at 10:44 a.m. The Commission took the following action on Agenda Item No. 8.B.

**MOVED**, approve an amendment to the Employment Agreement with General Manager Richard E. Haller, authorizing a one-time 401(a) plan contribution in an amount not to exceed \$6,500 to be signed by Chair Ronald W. Sullivan.

Result:	<b>Adopted (Unanimously)</b>
Motion/Second:	Dennstedt/Parker
Ayes	Dennstedt, Hayes, Nguyen, Parker, Sullivan
Nays:	None
Abstentions:	None
Absent:	None

**9. ADJOURNMENT**

There being no further business for review, Chair Sullivan adjourned the meeting at 10:47 a.m.

**Approved at a Regular Meeting of the Santa Ana Watershed Project Authority Commission on Tuesday, December 17, 2019.**

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Ronald W. Sullivan, Chair

Attest:

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Kelly Berry, CMC  
Clerk of the Board

*Santa Ana Watershed  
Project Authority*



**Finance Department**

Santa Ana Watershed Project Authority  
**TREASURER'S REPORT**

**November 2019**

During the month of November 2019, the Agency's actively managed temporary idle cash earned a return of 1.778%, representing interest earnings of \$18,195. Additionally, the Agency's position in overnight funds L.A.I.F. generated \$76,519 in interest, resulting in \$94,714 of interest income from all sources. Please note that this data represents monthly earnings only, and does not indicate actual interest received. There were zero (0) investment positions purchased, zero (0) positions sold, zero (0) positions matured, and zero (0) positions were called.

This Treasurer's Report is in compliance with SAWPA's Statement of Investment Policy. Based upon the liquidity of the Agency's investments, this report demonstrates the ability to meet customary expenditures during the next six months.

December 3, 2019

Prepared and  
Submitted by:

A handwritten signature in dark ink, appearing to read 'Karen L. Williams', is written over a horizontal line.

*Karen L. Williams*, Chief Financial Officer

*Santa Ana Watershed Project Authority*

**INVESTMENT PORTFOLIO - MARKED TO MARKET - UNREALIZED GAINS & LOSSES**

November 30, 2019

SAWPA primarily maintains a "Buy and Hold" investment philosophy, with all investments held by US Bank via a third-party safekeeping contract.

Investment	Security		Purchase	Maturity	Call Date		Yield To	Investment	Market Value	Unrealized	Coupon	Interest	
Type	Type	CUSIP	Dealer	Date	Date	(if appl)	Par Value	Maturity	Cost	Current Month	Gain / (Loss)	Rate	Earned
Agency	FHLMC	3137EAEC9	WMS	09-16-16	08-12-21	No Call	\$ 1,000,000.00	1.335%	\$ 990,060.00	\$ 990,881.00	\$ 821	1.125%	\$ 1,097.22
Agency	FHLMC	3137EADB2	WMS	04-17-17	01-13-22	No Call	\$ 500,000.00	2.375%	\$ 512,767.00	\$ 507,437.50	\$ (5,330)	2.375%	\$ 976.03
Agency	FHLB	313383HU8	WMS	06-16-16	06-12-20	No Call	\$ 1,000,000.00	1.080%	\$ 1,026,088.00	\$ 1,000,882.00	\$ (25,206)	1.750%	\$ 887.69
Agency	FHLB	313379Q69	WMS	12-14-17	06-10-22	No Call	\$ 1,000,000.00	2.150%	\$ 998,930.00	\$ 1,011,140.00	\$ 12,210	2.125%	\$ 1,767.21
Agency	FNMA	3135G0H55	WMS	12-28-15	12-28-20	No Call	\$ 1,000,000.00	1.830%	\$ 1,002,140.00	\$ 1,002,075.00	\$ (65)	1.875%	\$ 1,504.12
Agency	FNMA	3135G0F73	WMS	06-16-16	11-30-20	No Call	\$ 1,000,000.00	1.150%	\$ 1,015,157.00	\$ 998,368.00	\$ (16,789)	1.500%	\$ 945.21
Agency	USTN	912828WC	WMS	11-17-15	10-31-20	No Call	\$ 1,000,000.00	1.638%	\$ 1,005,312.50	\$ 1,000,547.00	\$ (4,766)	1.750%	\$ 1,346.17
Agency	USTN	912828G61	WMS	11-17-15	11-30-19	No Call	\$ 1,000,000.00	1.469%	\$ 1,001,210.94	\$ 1,000,000.00	\$ (1,211)	1.500%	\$ 1,207.35
Agency	USTN	912828L32	WMS	06-17-16	08-31-20	No Call	\$ 500,000.00	1.030%	\$ 507,070.31	\$ 498,867.00	\$ (8,203)	1.375%	\$ 423.42
Agency	USTN	912828L65	WMS	06-16-16	09-30-20	No Call	\$ 500,000.00	1.041%	\$ 506,992.19	\$ 498,769.50	\$ (8,223)	1.375%	\$ 427.69
Agency	USTN	912828L99	WMS	06-16-16	10-31-20	No Call	\$ 500,000.00	1.051%	\$ 506,914.06	\$ 498,535.00	\$ (8,379)	1.375%	\$ 431.71
Agency	USTN	912828S76	WMS	12-14-17	07-31-21	No Call	\$ 1,000,000.00	2.013%	\$ 969,062.50	\$ 991,055.00	\$ 21,993	1.125%	\$ 1,654.36
CORP	Apple Inc	037833AK6	WMS	10-15-18	05-03-23	No Call	\$ 500,000.00	3.360%	\$ 479,898.50	\$ 507,778.50	\$ 27,880	2.400%	\$ 1,380.83
CORP	Toyota Motor Corp Credit	89236TFNO	WMS	10-15-18	09-20-23	No Call	\$ 500,000.00	3.550%	\$ 497,747.50	\$ 526,066.50	\$ 28,319	3.450%	\$ 1,458.90
CD	Ally Bank	02006L2F9	WMS	01-13-15	04-20-20	No Call	\$ 248,000.00	1.800%	\$ 248,000.00	\$ 248,306.34	\$ 306	1.800%	\$ 366.90
CD	American Express	02587DP85	WMS	04-19-17	04-19-21	No Call	\$ 248,000.00	2.250%	\$ 248,000.00	\$ 248,000.00	\$ -	2.250%	\$ 458.63
CD	American Express BK FSB	AN4199708	WMS	05-10-17	05-10-21	No Call	\$ 248,000.00	2.200%	\$ 248,000.00	\$ 248,000.00	\$ -	2.200%	\$ 448.44
CD	Sallie Mae BK SLT Lake City	7954503Q6	MBS	07-01-19	06-27-22	No Call	\$ 247,000.00	2.250%	\$ 247,000.00	\$ 247,000.00	\$ -	2.250%	\$ 456.78
CD	Morgan Stanley Bank NA	6169OUHP8	MBS	07-05-19	07-05-22	No Call	\$ 247,000.00	2.200%	\$ 247,000.00	\$ 247,000.00	\$ -	2.200%	\$ 446.63
CD	Goldman Sachs Bank USA	38148PUV7	WMS	12-20-17	12-20-22	No Call	\$ 248,000.00	2.500%	\$ 248,000.00	\$ 248,000.00	\$ -	2.500%	\$ 509.59

<b>Total Actively Invested Funds</b>	<b>\$ 12,486,000.00</b>	<b>\$12,505,350.50</b>	<b>\$12,518,708.34</b>	<b>\$ 13,358</b>	<b>1.778%</b>	<b>\$ 18,194.88</b>
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<b>Total Local Agency Investment Fund</b>		<b>\$44,248,362.26</b>			<b>2.104%</b>	<b>\$ 76,519.36</b>
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<b>Total Invested Cash</b>	<b>\$ 12,486,000.00</b>	<b>\$56,753,712.76</b>			<b>2.032%</b>	<b>\$ 94,714.24</b>
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**Key to Security Type:**

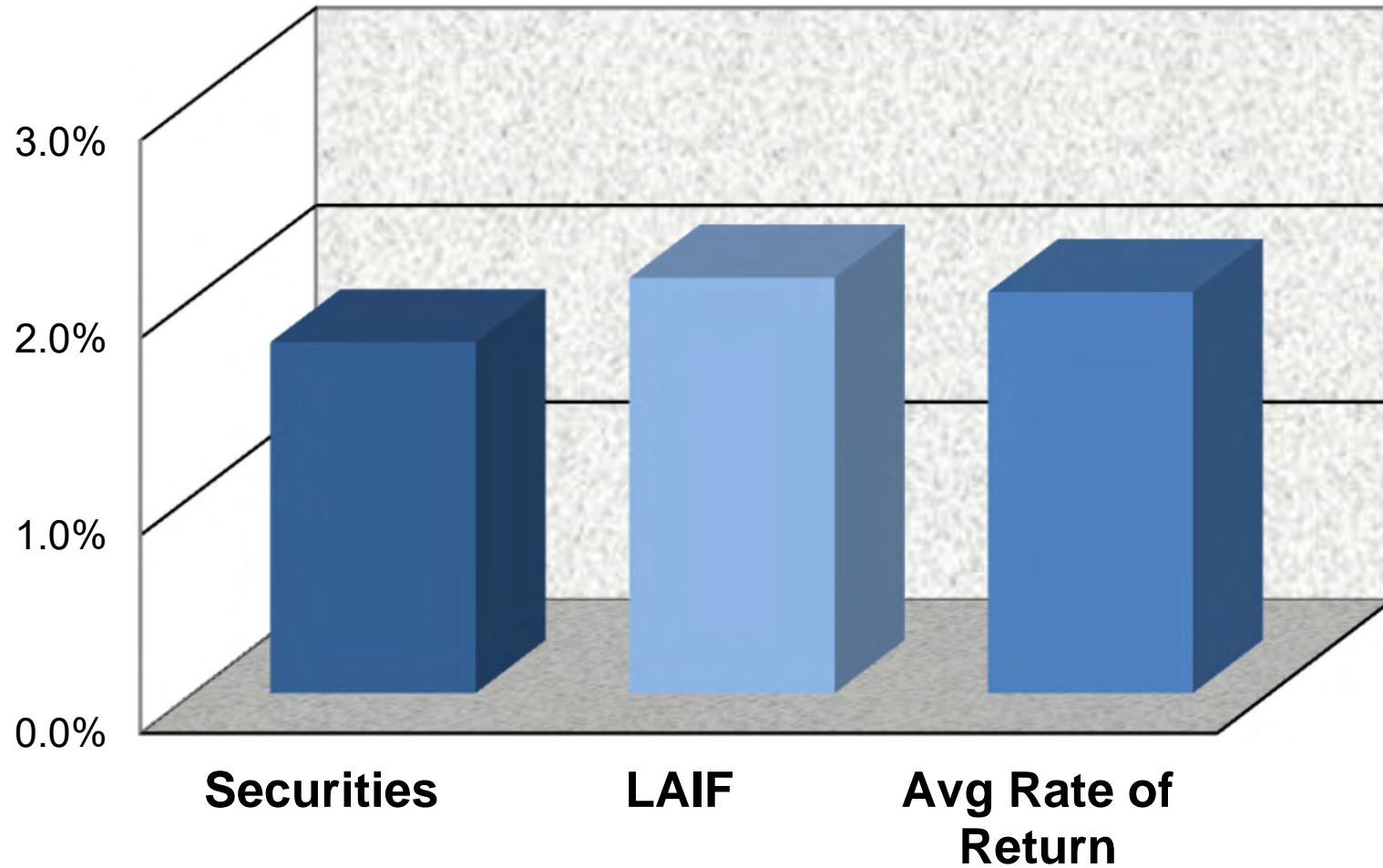
FHLB	= Federal Home Loan Bank
FHLMC	= Federal Home Loan Mortgage Corporation
FNMA	= Federal National Mortgage Association
USTN	= US Treasury Note
CORP	= Corporate Note
CD	= Certificate of Deposit
GDB	= Goldman Sachs Bank
AEC	= American Express Centurion

**Key to Dealers:**

FCS	= FinaCorp Securities
MBS	= Multi-Bank Securities
MS	= Mutual Securities
RCB	= RBC Dain Rauscher
SA	= Securities America
TVI	= Time Value Investments
WMS	= Wedbush Morgan Securities

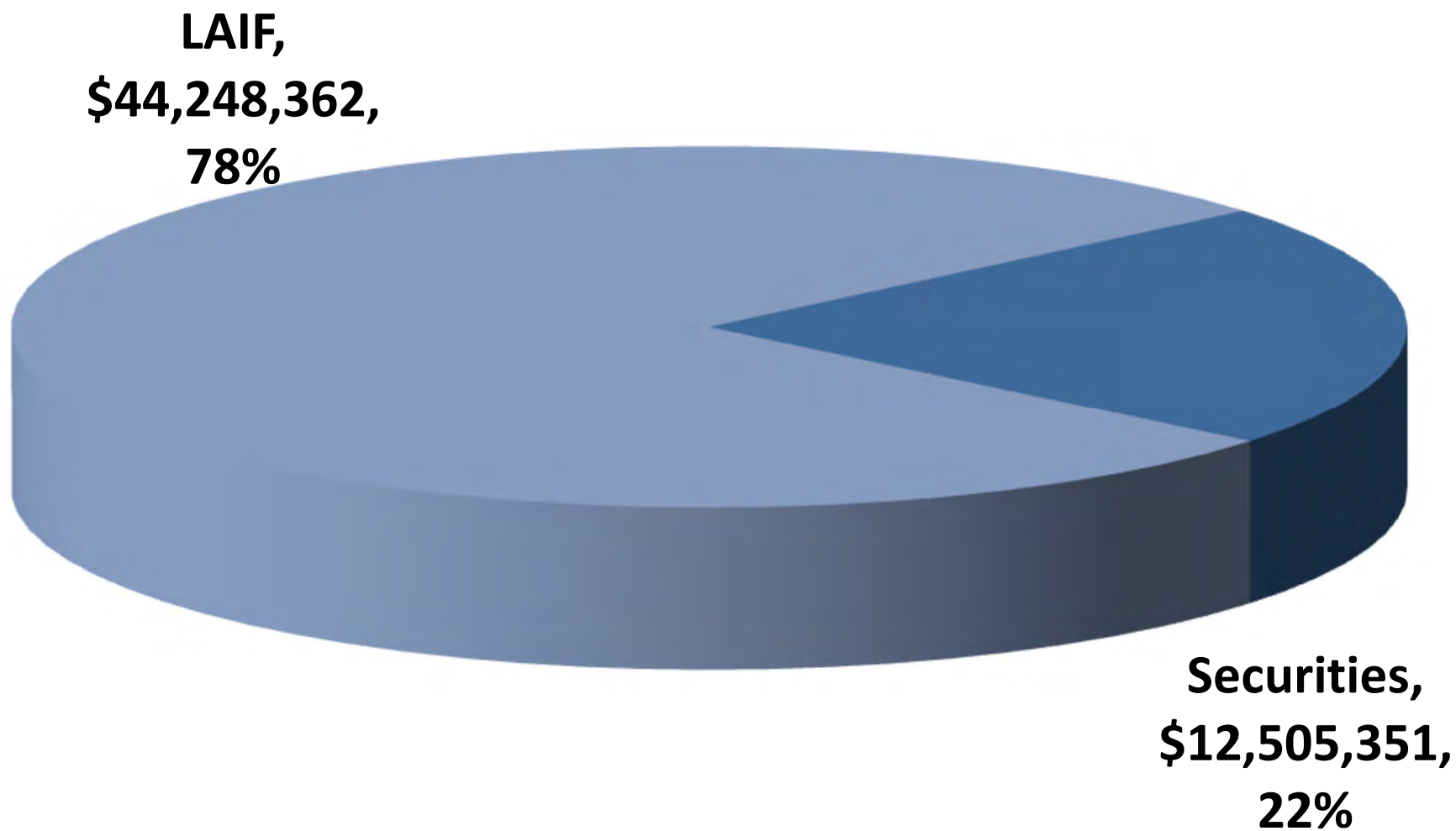


# Interest Rate Analysis



# Investments

**\$56,753,713**



**Interest**  
**\$94,714**

**LAIF,**  
**\$76,519,**  
**81%**



**Securities,**  
**\$18,195,**  
**19%**

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## COMMISSION MEMORANDUM NO. 2019.123

**DATE:** December 17, 2019

**TO:** SAWPA Commission

**SUBJECT:** Emerging Constituents and PFAS Sampling Results | August 2019

**PREPARED BY:** Mark Norton, Water Resources & Planning Manager

### RECOMMENDATION

That the Commission receive and file this status report about the Emerging Constituents Program Task Force voluntary ECs and PFAS sampling conducted in August 2019.

### DISCUSSION

In late November 2018, the Santa Ana River Dischargers Association (SARDA) along with Orange County Water District (OCWD) staff approached the Regional Board and SAWPA with an interest in possibly restarting a voluntary emerging constituents sampling program under SAWPA's Emerging Constituents Program Task Force that is administered by SAWPA. The meeting participants discussed constituents known as Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS), manmade fluorinated chemicals that are part of a larger group of emerging chemicals of concern referred to as per- and polyfluoroalkyl substances (PFAS) detected in groundwater wells, wastewater effluent and various other water sources. On July 13, 2018, the State Water Resources Control Board issued interim drinking water notification level (NL) of 14 nanograms per liter (ng/L or parts per trillion) for PFOA and a NL of 13 ng/L PFOS, as well as a response level (RL) of 70 ng/L for combined PFOA + PFOS.

Retail water agencies in California and across the country serving populations greater than 10,000 tested drinking water supplies for PFOA, PFOS, and PFAS from 2013-15 as required by US EPA under the Unregulated Contaminant Monitoring Rule (UCMR 3). The UCMR3 program documented detections of PFOA, PFOS, and other PFAS in groundwater in Orange County, Norco, and Corona. Subsequently, in 2016 the US EPA issued a non-enforceable Lifetime Health Advisory (LHA) for combined PFOA + PFOS of 70 ng/L. OCWD immediately increased its monitoring for PFOA and PFOS in their groundwater basin and replenishment water sources. PFAS were not detected in MWD imported water supplies, nor in purified recycled water produced by OCWD Groundwater Replenishment System (GWRS) project. However, PFAS detections, including PFOA and PFOS were found in SAR surface water used for replenishment and from five upper watershed recycled water treatment/discharge facilities, including some results in excess of the current state drinking water NLs. Interests was expressed by SARDA and OCWD in conducting a more extensive EC sampling program of wastewater/recycled water treatment plant discharges, imported water sources to the watershed, and other sources in the watershed. Data gathered as part of this new SAWPA EC sampling program could help assist the SWRCB with the best data available to determine in future regulations of PFOA and PFOS. A meeting with the EC Program Task Force to discuss the potential Santa Ana Watershed EC sampling program was held on Jan. 8<sup>th</sup> and on Feb. 20<sup>th</sup>. The Task Force agreed to proceed with a new EC update and PFAS sampling program for the upper Santa Ana River Watershed.

In early summer, OCWD laboratory staff working with commercial laboratories that can analyze for PFAS, as well as the Task Force consultant, Tim Moore of Risk Sciences, prepared a Sampling and Laboratory Analysis Plan for a proposed late summer sampling program. The ECs and PFAS voluntary sampling was conducted by OCWD staff, MWDSC staff and POTWs in the Santa Ana River Watershed during the week of Aug. 26-30, 2019 to coincide with the annual OCWD SAR

sampling program. Sampling results were collected from approximately four laboratories certified to conduct the necessary sampling. Due to the nature of this work and the extensive sampling being conducted on PFAS by various agencies, a backlog of sampling occurred resulting in delays in transmitting the results to SAWPA staff for compilation. In December, most of the available sampling results were received by SAWPA staff and shared with Risk Sciences. A draft sampling report will be prepared and shared with the EC Program Task Force in January 2020.

SAWPA staff will provide a presentation about these preliminary August 2019 sampling results with the SAWPA Commission. OCWD staff have also agreed to provide an update on the latest State and Federal regulations regarding PFAs as well as work conducted in the OCWD service area.

In addition to the EC sampling program, the task force conducts public outreach using social media tools to share information on the safety of the water supply with the public. This social media support to educate the public and media had been previously recommended by the SAWPA Commission after concerns arose by the media with the safety of groundwater sources. The social media tools consist of important articles and interview experts to help inform and ensure public understanding of the potable water safety.

## **BACKGROUND**

Since 2010 the Emerging Constituents (EC) Program Task Force, involving over 20 water and wastewater agencies in the watershed, have conducted an annual emerging constituents sampling program. This work has been conducted as a component of a cooperative agreement with the Santa Ana Regional Water Quality Control Board to avoid formal regulation of imported water recharge. The first annual sampling report was successfully submitted to the Regional Board in Dec. 2010 and every year through 2013. The last annual sampling report was submitted earlier this year for the 2013 sampling year. The task force has now transitioned their sampling program to reflect just the required EC sampling constituents required by the State Water Resources Control Board for planned recycled water projects and future sampling will be considered as further SWRCB recommendations unfold. SAWPA serves as the administrator for this EC Program Task Force since its formation and is a signatory to the EC Program Task Force Agreement.

## **CRITICAL SUCCESS FACTORS**

SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted facilitator, leader, and administrator of contracted activities

Goals, scope, costs, resources, timelines, and the contract term are approved by the Commission before executing an agreement to participate in a roundtable group

Report and use results of roundtable's work, leverage information and involvement for the benefit of SAWPA, its members, and other stakeholders.

Annual reviews of workplans and budgets for each task force activity.

## **RESOURCE IMPACTS**

Funding for staff time and consultant support has been included in the Emerging Constituents Program Task Force budget and is shown in the FYE 19/20 and FYE 20/21 SAWPA Budgets.

Attachments:

1. PowerPoint Presentation – SAWPA PPT



## Emerging Constituents and PFAs Sampling Results – Aug. 2019

Mark R. Norton PE  
Water Resources & Planning Mgr.  
Commission I December 17, 2019  
Item No. 5.A.



1

In 2008, a voluntary agreement was established between regulators and regulated community in place of a new regulation



2

## Development of Sampling Program for Emerging Constituents



3

## Consultant and Regulatory Support

- Tim Moore, Risk Sciences
  - Facilitation
  - Media Interaction
  - Regional Bd Presentations
- SAWPA
  - Workgroup administrator
  - Media Interaction
- Regional Board, State Board and USGS at table



4



## 21 Water & Wastewater Agencies and Regional Board Sign Agreement to Sample ECs

Who participates:

- Water Wholesalers
- Water Retailers
- Wastewater Treatment Operators
- Regional Board Staff
- DDW Staff
- USGS Staff
- Analytical Lab Staff
- NWRI Staff
- Environmental NGOs



5

## Emerging Constituents (EC) Program Task Force

SAWPA authorized TF agreement - 2012

### Description

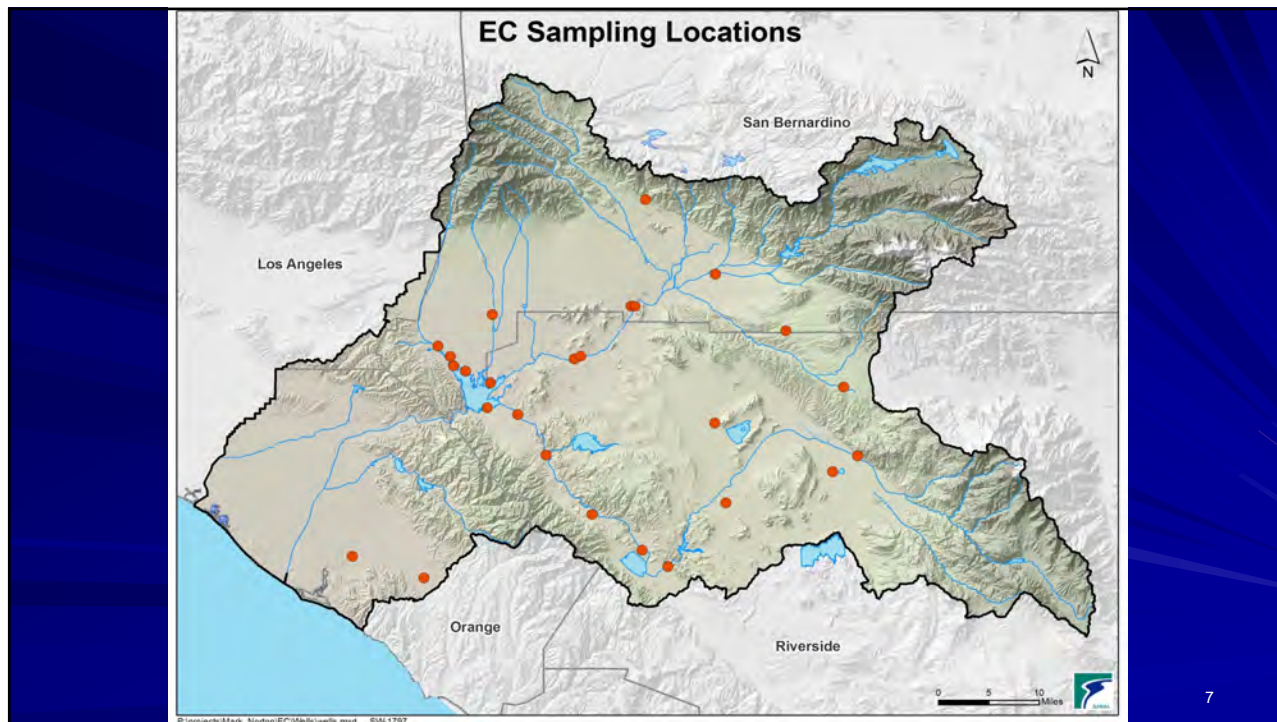
- Complies with Regional Board Resolution under Cooperative Agreement for Imported Water Recharge
- Completed 2010-2013 Voluntary Annual Sampling reports for emerging constituents
- Implements safe tap water public outreach program based on SAWPA commission direction to respond to Environmental Working Group misinformation

### Benefits

- Assisted state and federal agencies in determining most effective measuring and detection practices
- Avoided need to conduct long term EC monitoring costs on 100s of other ECs
- Watershed evaluation of ECs helped frame discussion on ECs at State level to our benefit
- Corrects misinformed media exposure through outreach



6



7

## EC Sampling Program conducted from 2010-2013

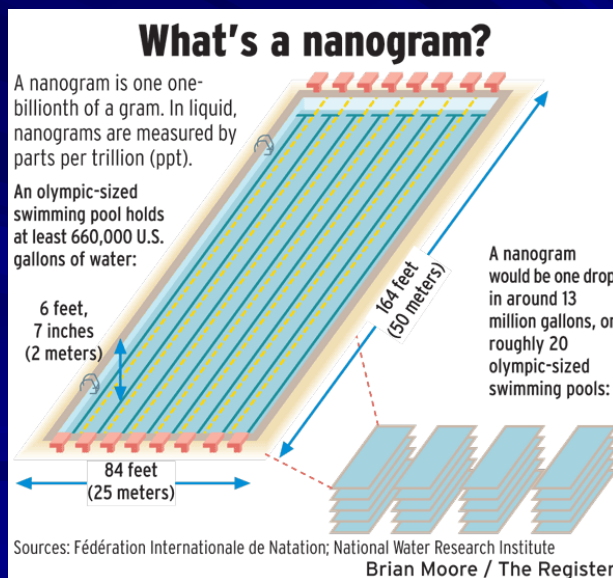
Table 1: Summary of Results for 26 Samples Analyzed in 2013

Compound	Primary Use	Frequency of Detection	Reported Range <sup>2</sup>	Common Dose
Caffeine	Food Additive	42% (11 of 26)	ND – 0.000407 mg/L	100 mg
DEET <sup>3</sup>	Insecticide	81% (21 of 26)	ND – 0.000270 mg/L	270 mg
17β Estradiol	Natural Hormone	0% (0 of 26)	Never Detected	1 mg
Gemfibrozil	Anti-cholesterol	31% (8 of 26)	ND – 0.002000 mg/L	600 mg
Iopromide	Xray Contrast Agent	58% (15 of 26)	ND – 0.000680 mg/L	500 mg
Sucralose	Artificial Sweetener	100% (26 of 26)	0.000670 - 0.100000 mg/L	5,000 mg
Triclosan	Antiseptic	58% (15 of 26)	ND – 0.001000 mg/L	1 mg

Note: "mg/L" = milligram per Liter; 1 mg/L is one part per million. "ND" = Not Detected.

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One part per trillion (ppt) = one single drop in about 20 Olympic sized swimming pools



9



*"The concentrations we're seeing are many, many times lower than the normal dosage of these particular drugs," said Kurt Berchtold, former executive officer of the Santa Ana Regional Water Quality Control Board. "So we certainly don't think there is any potential for human effects due to this."*

Kurt Berchtold, Executive Officer, 12/9/10  
Upon sharing EC Sampling Results with  
Santa Ana Regional Water Quality  
Control Board



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## New Emerging Constituents of Concern - PFOA and PFOS

- Per- and polyfluoroalkyl substances (PFAS) or alkyl acids (PFAAs)
  - **PFOA** = Perfluorooctanoic Acid ( $C_8HF_{15}O_2$ )
  - **PFOS** = Perfluorooctane Sulfonate ( $C_8HF_{17}O_3S$ )
- Key ingredients/byproducts in the production of:
  - Consumer Products: Teflon, Scotchgard, Stainmaster, Gore-Tex
  - Polymers for aircraft and electronics
  - Paper packaging and wrappers for food (e.g., microwave popcorn bags)
  - Fire fighting foams
- Initially developed in 1940s
- PFOA & PFOS phase out in USA began in 2000s



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## PFOA & PFOS Properties

- Very stable, resistant to degradation
- Resistant to water, grease, and stains (lipophobic)
- Newer & more sensitive laboratory technology has revealed widespread occurrence in environment
- Found in groundwater near manufacturing sites and military bases



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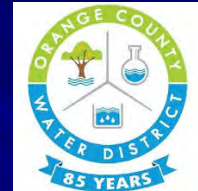
## Recent Regulations Regarding PFOA and PFOS

- Since 2016, US EPA has established a lifetime Health Advisory Level for PFOA + PFOS of 70ng/L.
- July 2018: State Board Division of Drinking Water (DDW) Releases Interim Drinking Water Notification Levels & Response Levels
  - Notification Levels (NL) → **PFOA = 14 ng/L; PFOS = 13 ng/L**
  - Response Level (RL) → **PFOA + PFOS = 70 ng/L (same as EPA HA)**
- Dec. 2018: State Board revised Recycled Water Policy to now require recycled water projects to analyze for PFOA & PFOS.
- Aug. 2019 State Board's DDW established notification levels at concentrations of 6.5 ppt for PFOS and 5.1 ppt for PFOA, consistent with OEHHA's recommendations



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## OCWD Conducted Initial Testing for PFOA & PFOS (2013-2015)



- Within Orange County Water District service area,
  - 135 drinking water sites tested (e.g., wells, reservoirs, blending points)
  - 5 of 19 retailers had detections related to drinking water wells
  - Three retailers had one or more results > 70 ng/L 2016 EPA Health Advisory
- OCWD did not detect in their imported water sources or GWRS flows
- However, consistent detections > Notification Levels in Santa Ana River
  - Main river
  - Multiple WWTPs (POTW) discharges
  - Tributaries (e.g. Temescal Creek, Chino Creek)

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## Additional EC and PFA Sampling Need Response

- OCWD made 10/11/18 presentation to Santa Ana River Dischargers Association (SARDA) about PFOA & PFOS detections
- OCWD and SARDA informed Basin Monitoring Program Task Force which includes Regional Board staff of possible new EC/PFA sampling program need
- Report of planned voluntary PFAs and EC sampling by EC Program Task Force shared with SAWPA Commission on Dec. 18, 2018



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## EC Program Task Force – Aug. 2019 Sampling

- Sampling was conducted week of Aug. 26-30
- Included 20+ PFAs and many past ECs sampled
- Sampling discharges from all upper watershed wastewater trmt facilities, river flows and imported water
- Paid for by sampling agencies, report paid for by past contributions of EC Program TF



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## Aug. 2019 Preliminary Sampling Results

Compound	Primary Use	Frequency of Detection					2019 Concen. (ng/L)	
		2010	2011	2012	2013	2019	MWD-Xing	Prado
Acetaminophen (Tylenol)	Over-the-Counter Analgesic	56%	26%	12%	n/a	9%	ND	ND
1,4 Dioxane	Cosmetics & Shampoo	n/a	n/a	n/a	n/a	96%	849	917
Gemfibrozil	Anti-cholesterol	30%	74%	77%	31%	17%	ND	ND
Ibuprofen (Advil)	Over-the-Counter Analgesic	44%	67%	46%	n/a	26%	ND	ND
Iohexol	Xray Contrast Agent	n/a	n/a	n/a	n/a	100%	338	2,020
Naproxen (Aleve)	Over-the-Counter Analgesic	n/a	n/a	23%	n/a	17%	ND	ND
NDMA	Disinfection Byproduct	n/a	n/a	n/a	n/a	88%	ND	ND
NMOR	Disinfection Byproduct	n/a	n/a	n/a	n/a	80%	ND	ND
PFOA	Industrial/Commercial Surfactant	n/a	n/a	n/a	n/a	96%	10.1	18.5
PFOS	Industrial/Commercial Surfactant	n/a	n/a	n/a	n/a	36%	26.6	17.9
Sucralose (Splenda)	Artificial Sweetener	n/a	n/a	n/a	100%	100%	26,300	43,400
Sulfamethoxazole	Prescription Antibiotic	52%	44%	69%	n/a	26%	36.4	121.7

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## Preliminary Conclusions



- Detection of common painkiller meds (Tylenol, Advil, Aleve) shows downward trend over time in all POTW effluents and no detection in the river at MWD Crossing or at Prado.
- Two prescription meds (Gemfibrozil and Sulfamethoxazole) show similar downward trend.
- Sucralose detected in 100% of samples in both 2013 and 2019. Indicator compound only.
- PFOA was in all but 1 sample tested. All of those detected values were above the state notification level for drinking water.
- PFOS detected in only 7 of the 21 effluents and only 1 of those 7 was above the state notification level for drinking water (6.5 ng/L).
- Concentration of PFOS detected in effluents was far less than the concentration of PFOS measured at MWD-Crossing or at Prado.
- PFOS & PFOA concentrations in the SAR and the POTW effluents were in the same range as OCWD has been observing for the last 3 years.
- None of the POTW effluents or river sites exceeded EPA's Health Advisory Level for the combined PFOS/PFOA concentrations (70 ng/L).
- NDMA and NMOR (disinfection byproducts) frequently detected in POTW effluent but were not detected in either of the SAR samples.
- 1,4 Dioxane also frequently detected in POTW effluents and all around the same level 600-1200 ng/L.

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## Sampling Results – Next Steps

- Sampling results are still being analyzed and compiled to produce an ECs and PFAS Sampling Report by Risk Sciences to be released by Jan. 2019.
- Review comments will be requested of the EC Program Task Force.
- Responses to comments will be addressed and discussed at the EC Program Task Force.
- Report will be shared with the Santa Ana Regional Board and the SWRCB as objective data to support appropriate and science-based regulations.





## COMMISSION MEMORANDUM NO. 2019.124

**DATE:** December 17, 2019

**TO:** SAWPA Commission

**SUBJECT:** Basin Monitoring Program Task Force – Santa Ana River Wasteload Allocation Update | Final Report

**PREPARED BY:** Mark R. Norton P.E, Water Resources & Planning Manager

### RECOMMENDATION

That the Commission receive and file this final report by Geoscience Support Services Inc. for the Santa Ana River Wasteload Allocation Update as developed for the Basin Monitoring Program Task Force.

### DISCUSSION

On January 12, 2017, SAWPA Commission approved a task order and agreement for services with Geoscience Support Services Inc. to perform updates to the SAR Wasteload Allocation Report and to work with the RWQCB staff and task force agencies on appropriate model runs and on appropriate plan language to be used for new RWQCB Basin Plan Amendments. This task order was awarded based on a competitive selection process.

The final report reflects the work of the consultant, multiple additional runs and model scenarios requested by the Basin Monitoring Program to ensure that most realistic and accurate predictions of wastewater discharges, recycling and its impacts on groundwater objectives is achieved for the next 20 years. The final report also reflects review comments by the Santa Ana Regional Water Quality Control Board staff. The next steps now will be to prepare a substitute environmental document and economic analysis based on the results of the wasteload allocations for the preparation of a Basin Plan Amendment.

Johnson Yeh, project manager from Geoscience Support Services Inc. will present the final results of this Santa Ana River Wasteload Allocation for the SAWPA Commission.

### CRITICAL SUCCESS FACTORS

- SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted facilitator, leader, and administrator of contracted activities.
- Goals, scope, costs, resources, timelines, and the contract term are approved by the Commission before executing an agreement to participate in a roundtable group.
- Report and use results of roundtable's work, leverage information and involvement for the benefit of SAWPA, its members, and other stakeholders.

- Annual reviews of workplans and budgets for each task force activity.
- Adequate professional staff and resources to effectively provide facilitation, management, administrative and technical support to collaborative work efforts.

**RESOURCE IMPACTS**

Sufficient funding was budgeted by SAWPA as part of the Basin Monitoring Program Task Force to conduct the Santa Ana River Wasteload Allocation.

Attachments:

1. Santa Ana River Wasteload Allocation Report Presentation

# Santa Ana River Wasteload Allocation Model Update

SAWPA Commission Meeting

December 17, 2019



12/17/2019



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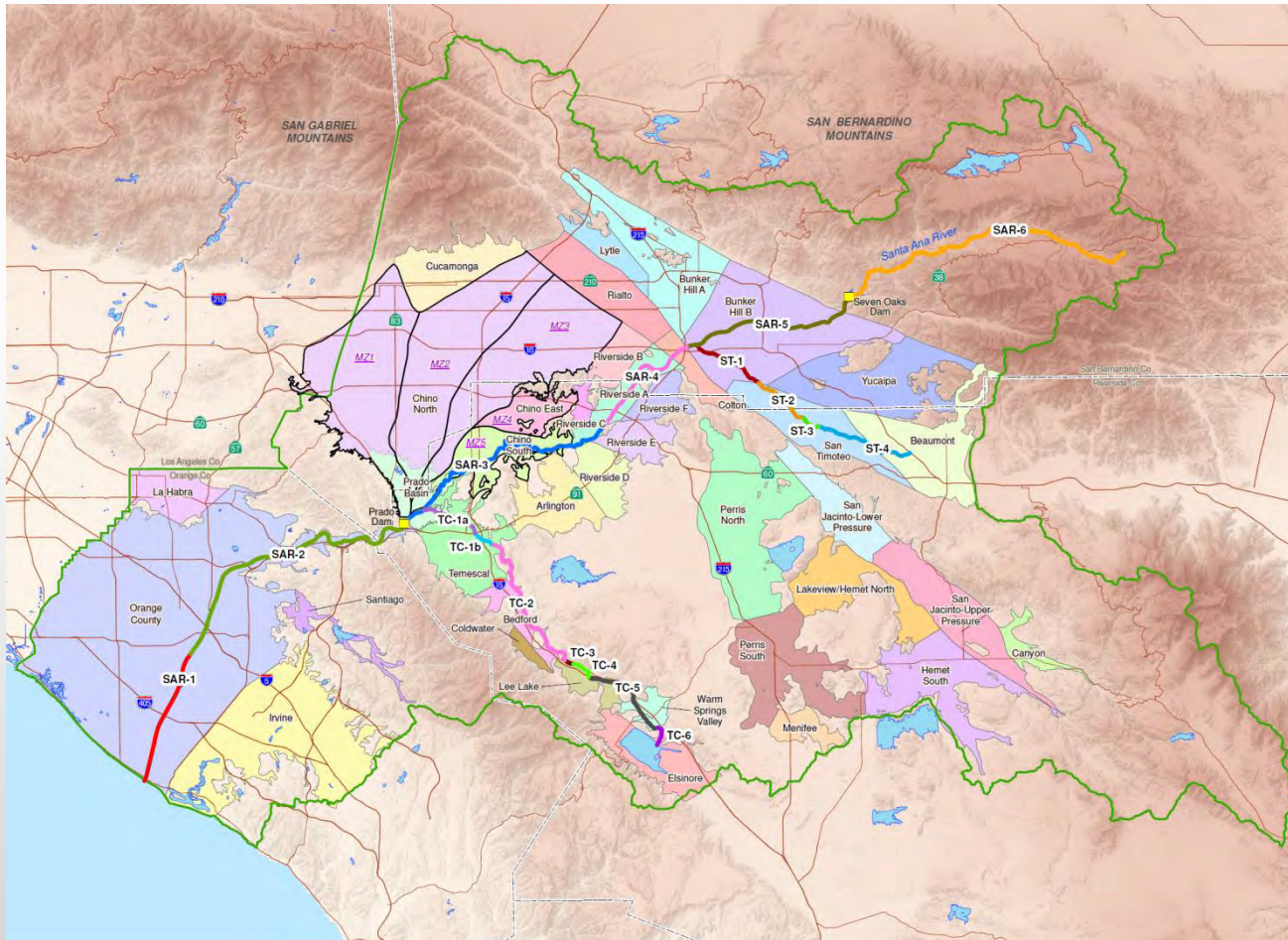
# Overview

- **Purpose**
- **WLAM Update**
- **Predictive Scenario Assumptions and Results**
- **Summary**

# Overview

- **Purpose**
- WLAM Update
- Predictive Scenario Assumptions and Results
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# Purpose



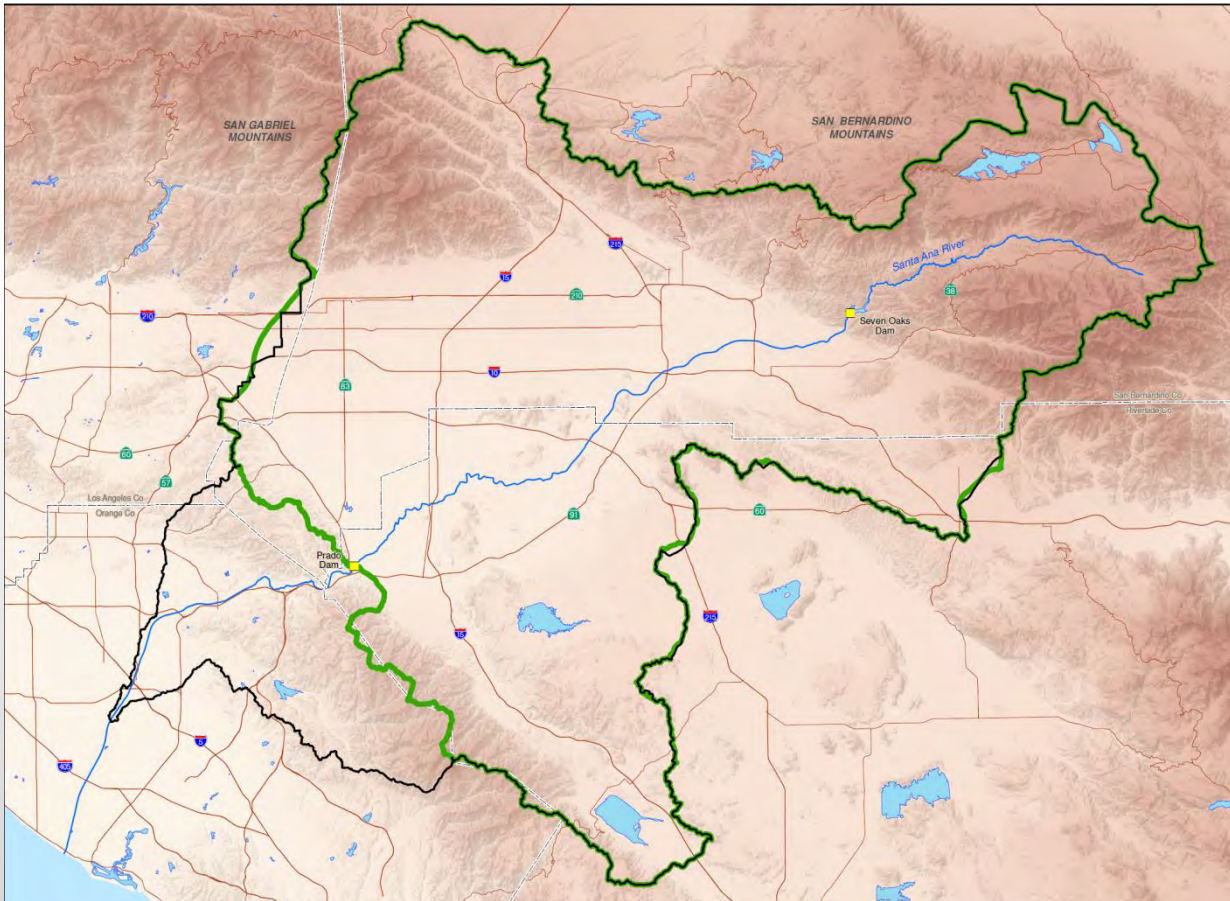
- Meet Basin Plan Requirements
- Update and Expand the 2008 WLAM
- Run TDS and TIN Projections

# Overview

- Purpose
- **WLAM Update**
- Predictive Scenario Assumptions and Results
- Summary



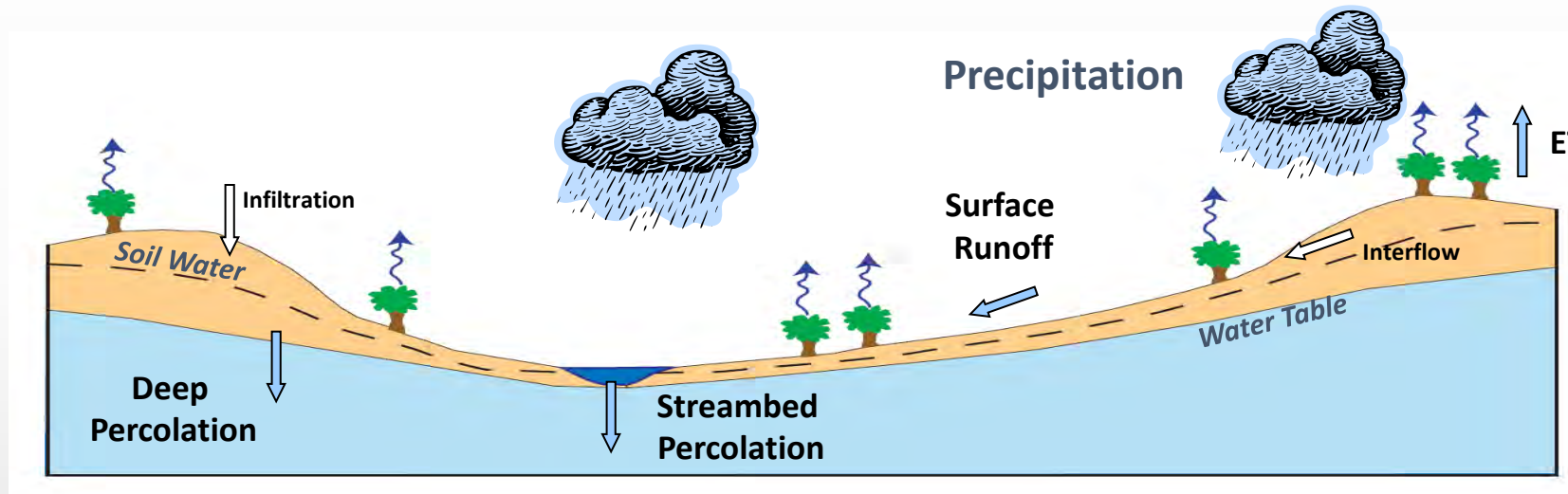
# WLAM Update



- **Calibrated for the period from 2007 to 2016**
- **Expanded to include a portion of Orange County**
- **Simulated using HSPF computer code**

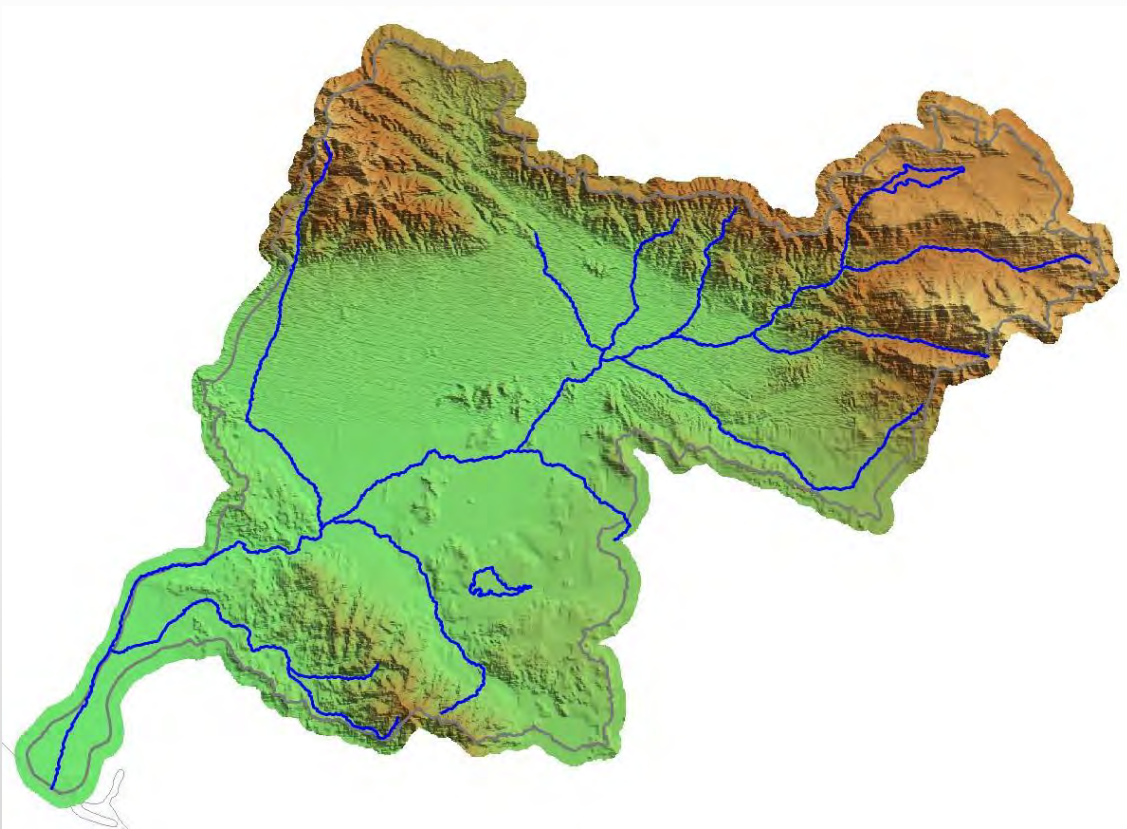


# Hydrologic Simulation Program – Fortran (HSPF)



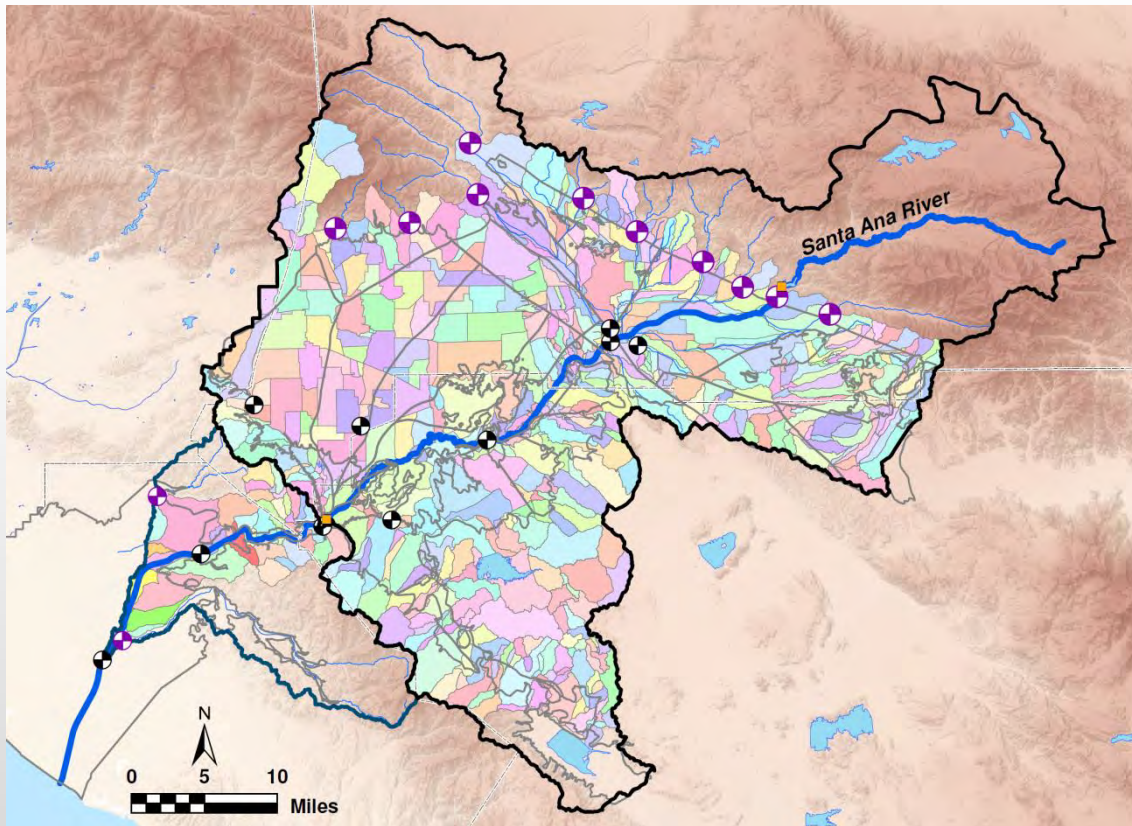
- **Comprehensive & Physically Based**
- **Simulates ALL Water Cycle Components & Water Quality**

# Hydrologic Simulation Program – Fortran (HSPF) (cont.)



- Supported by EPA & USGS
- Widespread usage established
- Standard guidelines for model construction and calibration
- Software is free with powerful pre- and post-processors

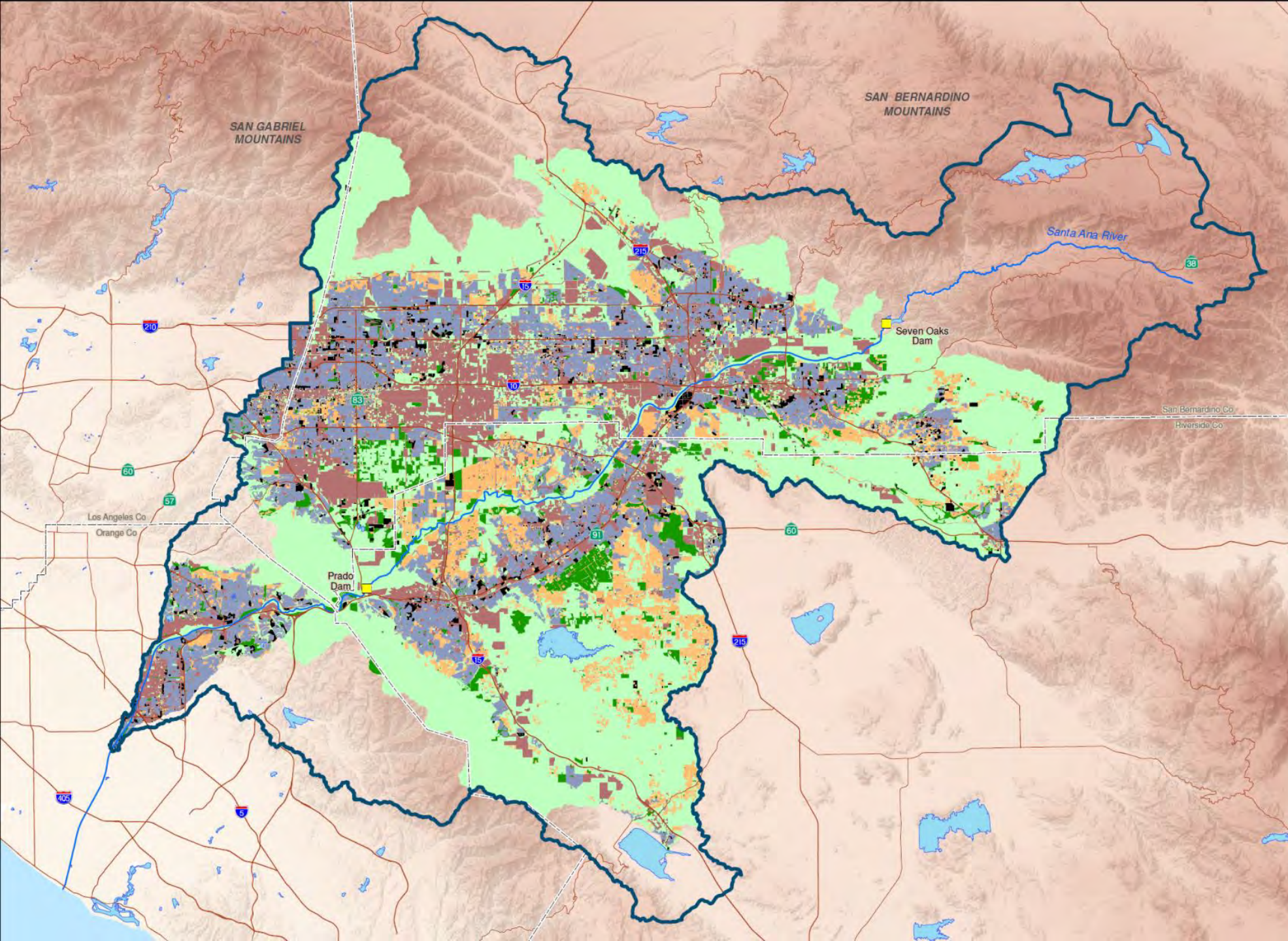
# Hydrologic Simulation Program – Fortran (HSPF) (cont.)



- **564 subareas were delineated**
- **Each subarea consists of :**
  - Stream segment,
  - Pervious land area, and
  - Impervious land area.
- **Subareas were delineated based on:**
  - Topography
  - Drainage patterns
  - Types of stream channels, and
  - Location of gaging stations and recharge basins



# 2012 Land Use Map



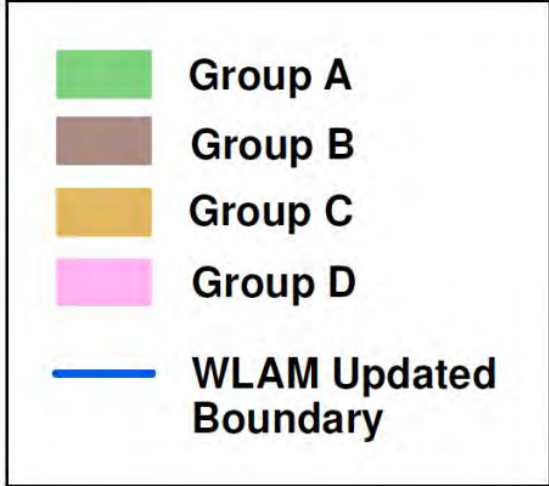
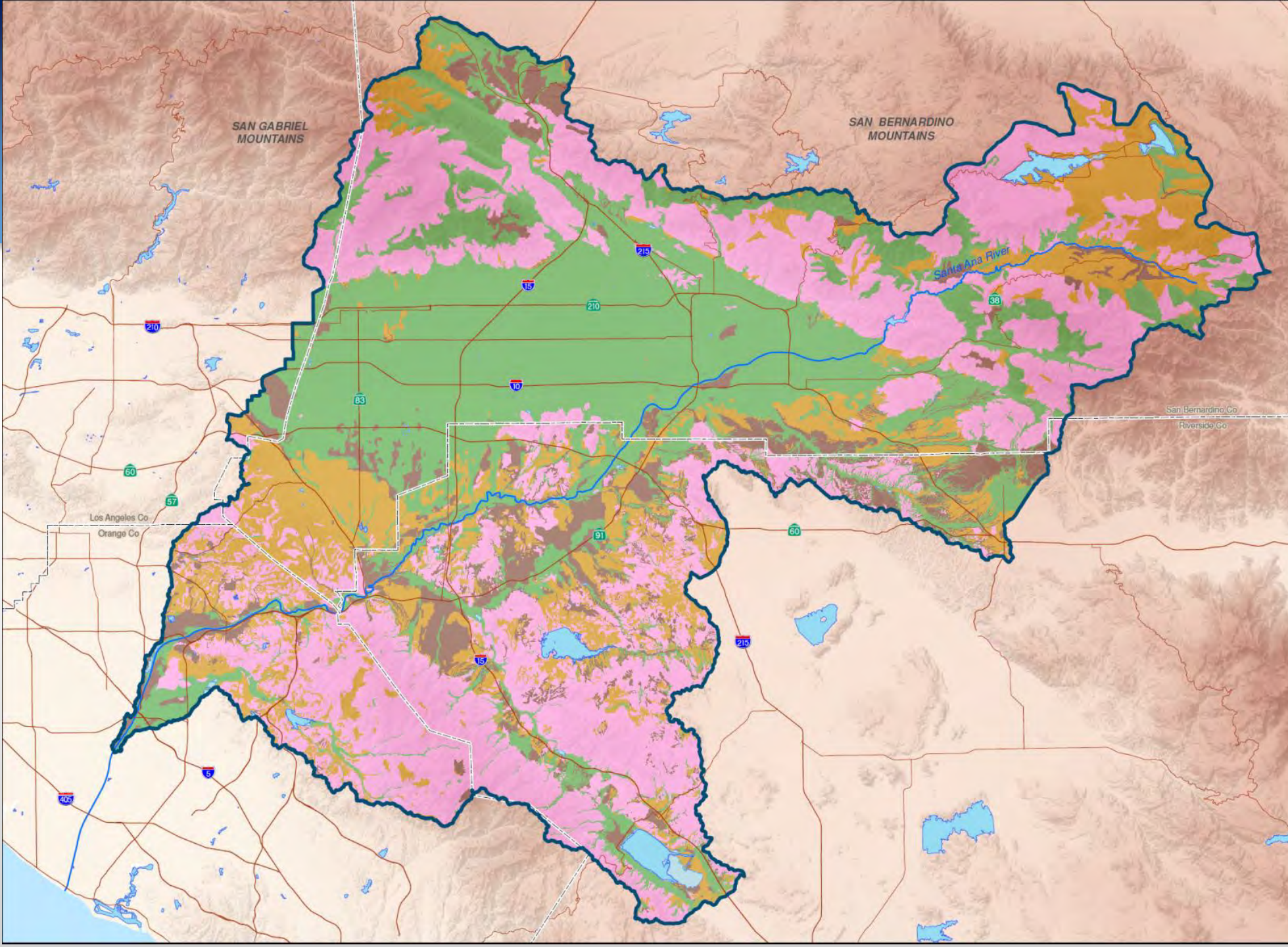
## Land Use Type

-  Agriculture
-  Commercial / Industrial / Public Facilities
-  Open Space
-  Residential - High Density
-  Residential - Medium Density
-  Residential - Low Density

Source:  
Southern California  
Association of  
Governments  
(SCAG)



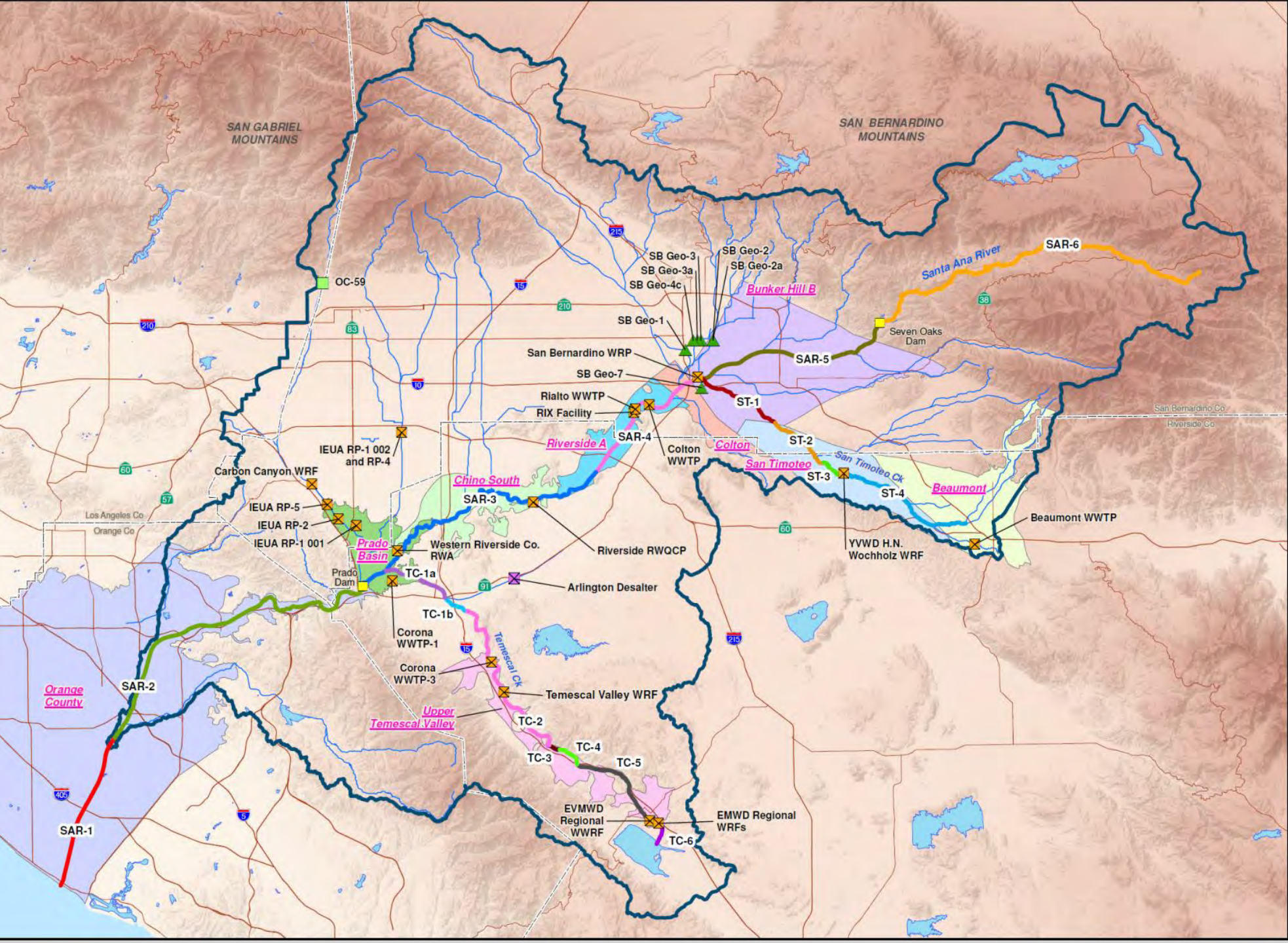
# Soil Type Map







Source:  
Soil Survey Geographic  
database  
(SSURGO)



# Discharge Point Locations

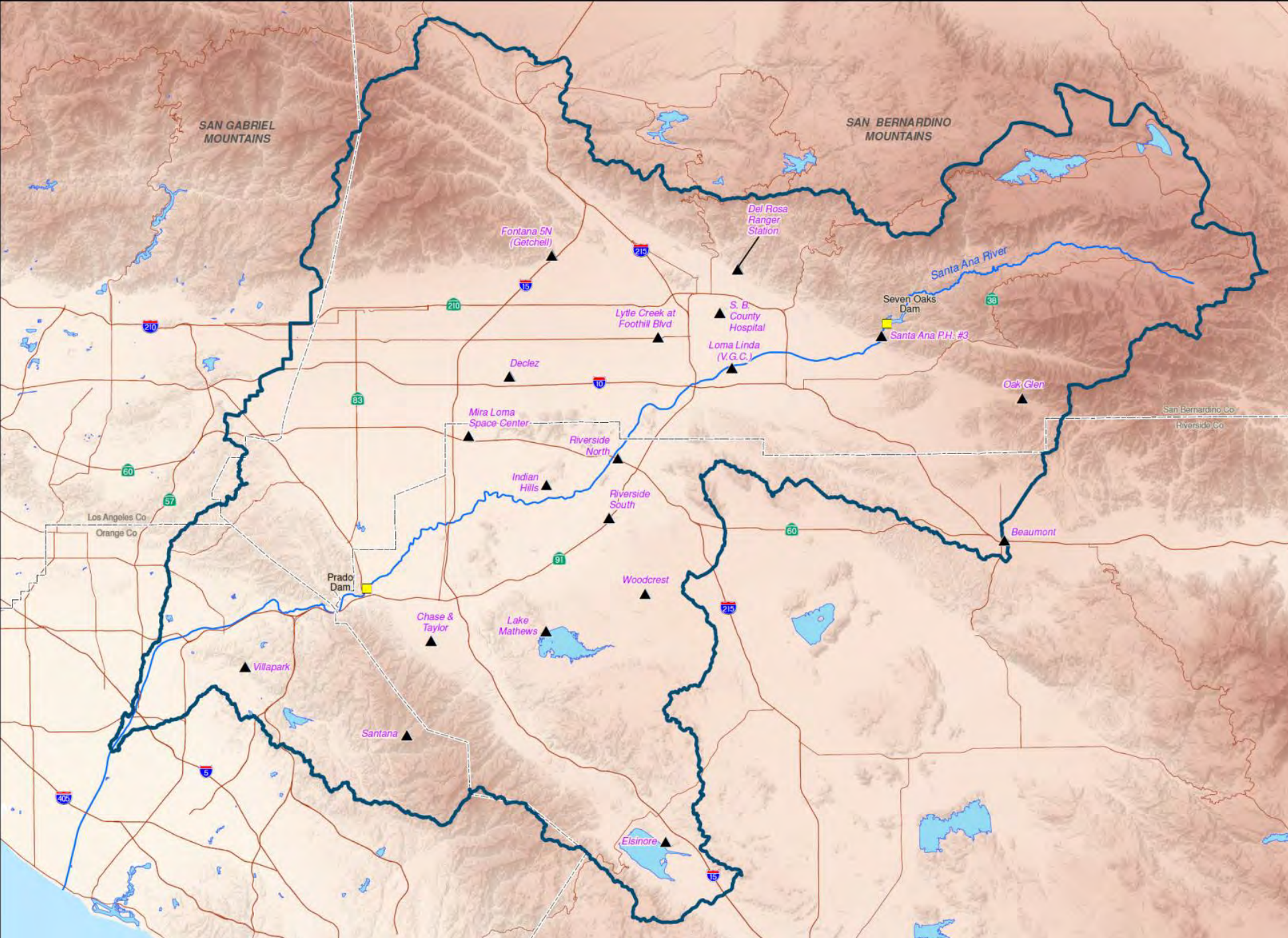


**EXPLANATION**

-  Recycled Water Discharge Point (<https://www.waterboards.ca.gov>)
-  OCWD State Water Project Turnout Point (Orange County Water District)
-  San Bernardino Geothermal Plant Discharge Point (City of San Bernardino)
-  Arlington Desalter Discharge Point (Western Municipal Water District)



# Precipitation Data



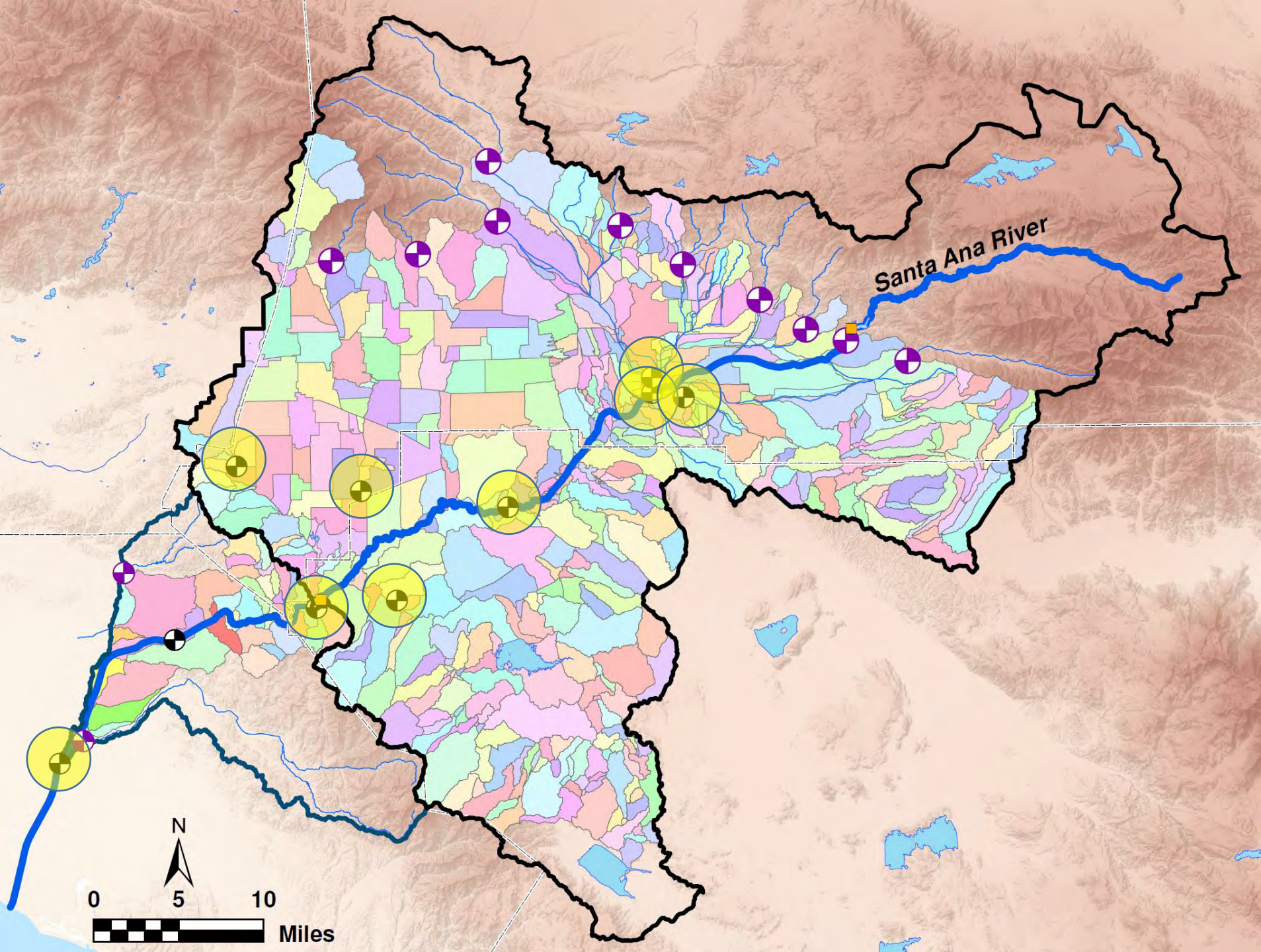
▲ Precipitation Station

## Sources:

- San Bernardino County Flood Control District
- Riverside County Flood Control and Water Conservation District
- County of Orange - OC Public Works
- National Climatic Data Center (NCDC)

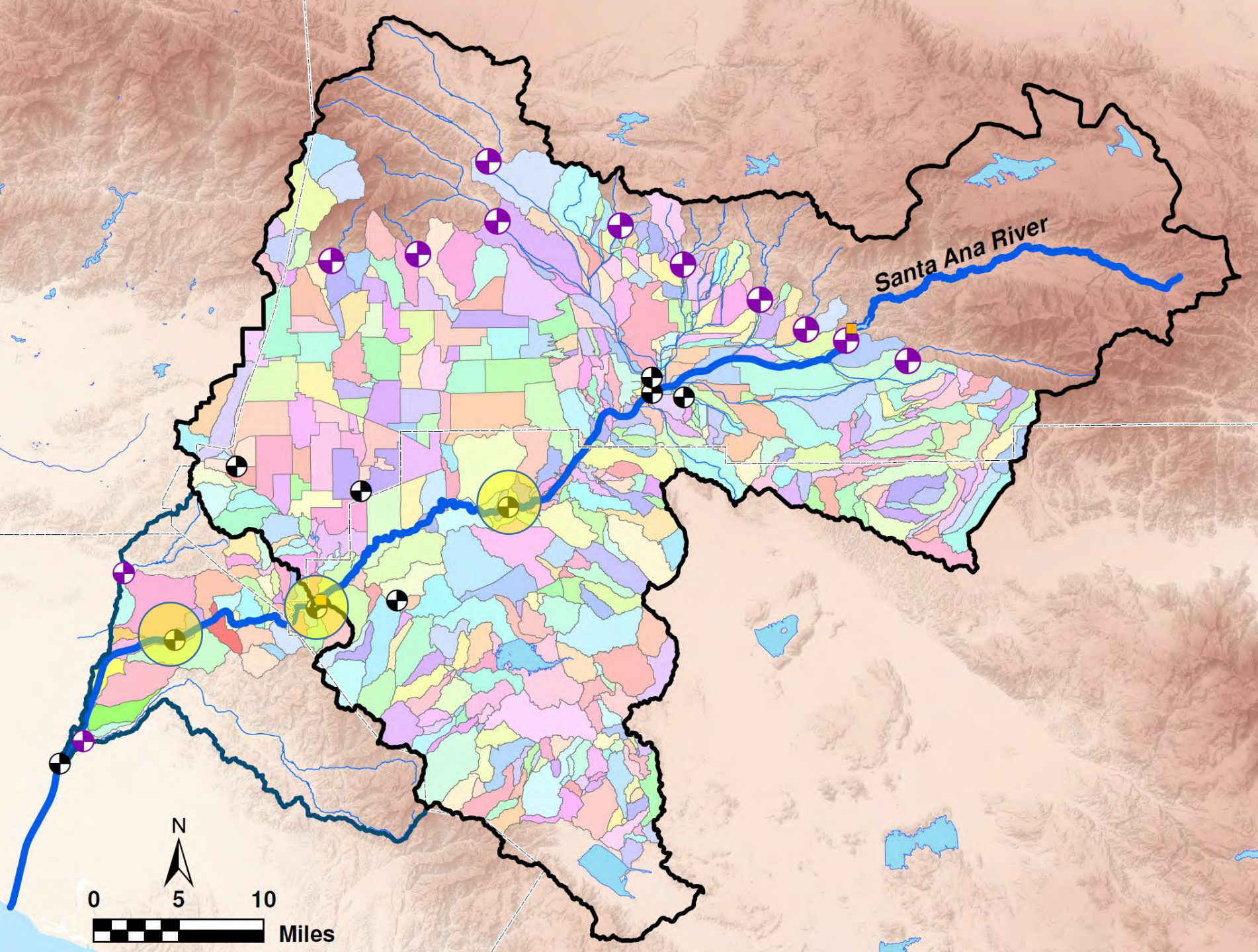


# Gaging Station Locations for Streamflow Calibration



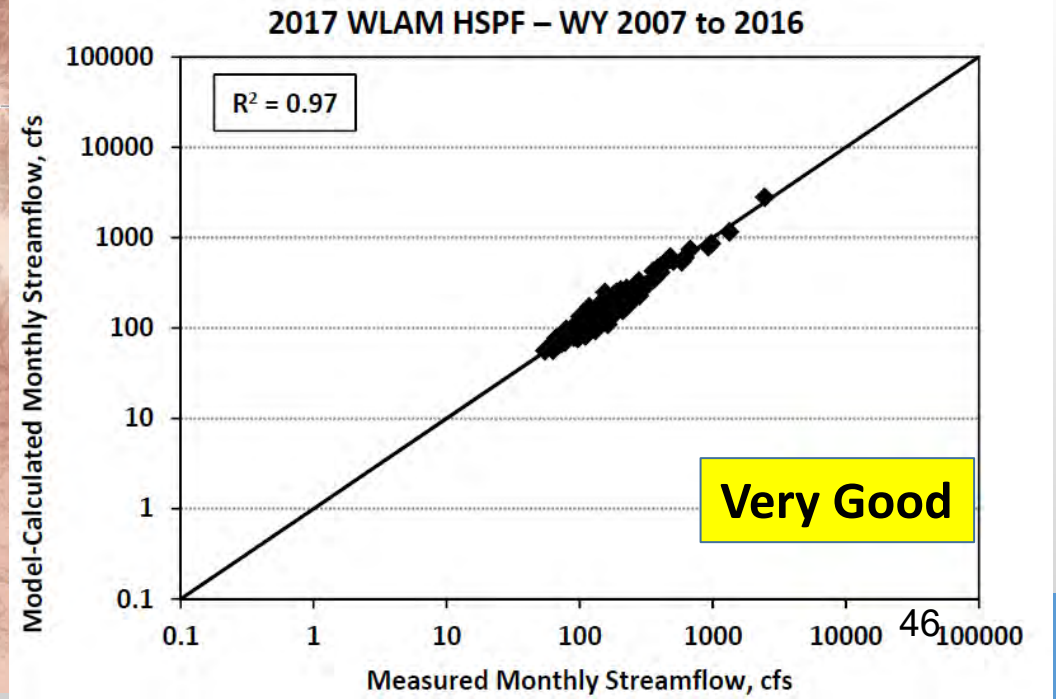
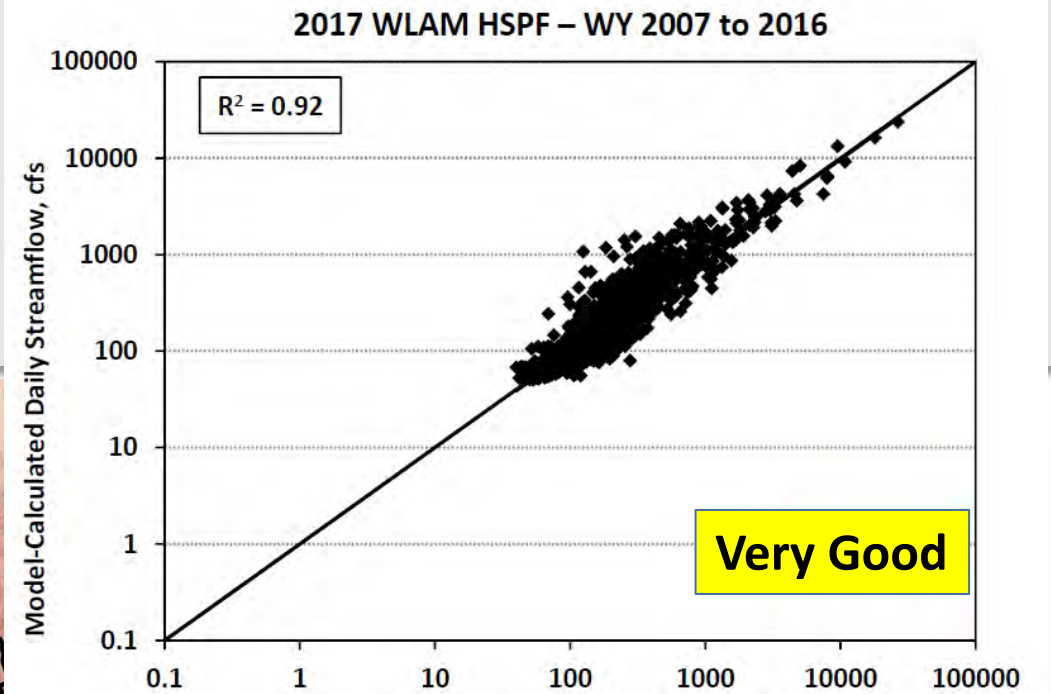
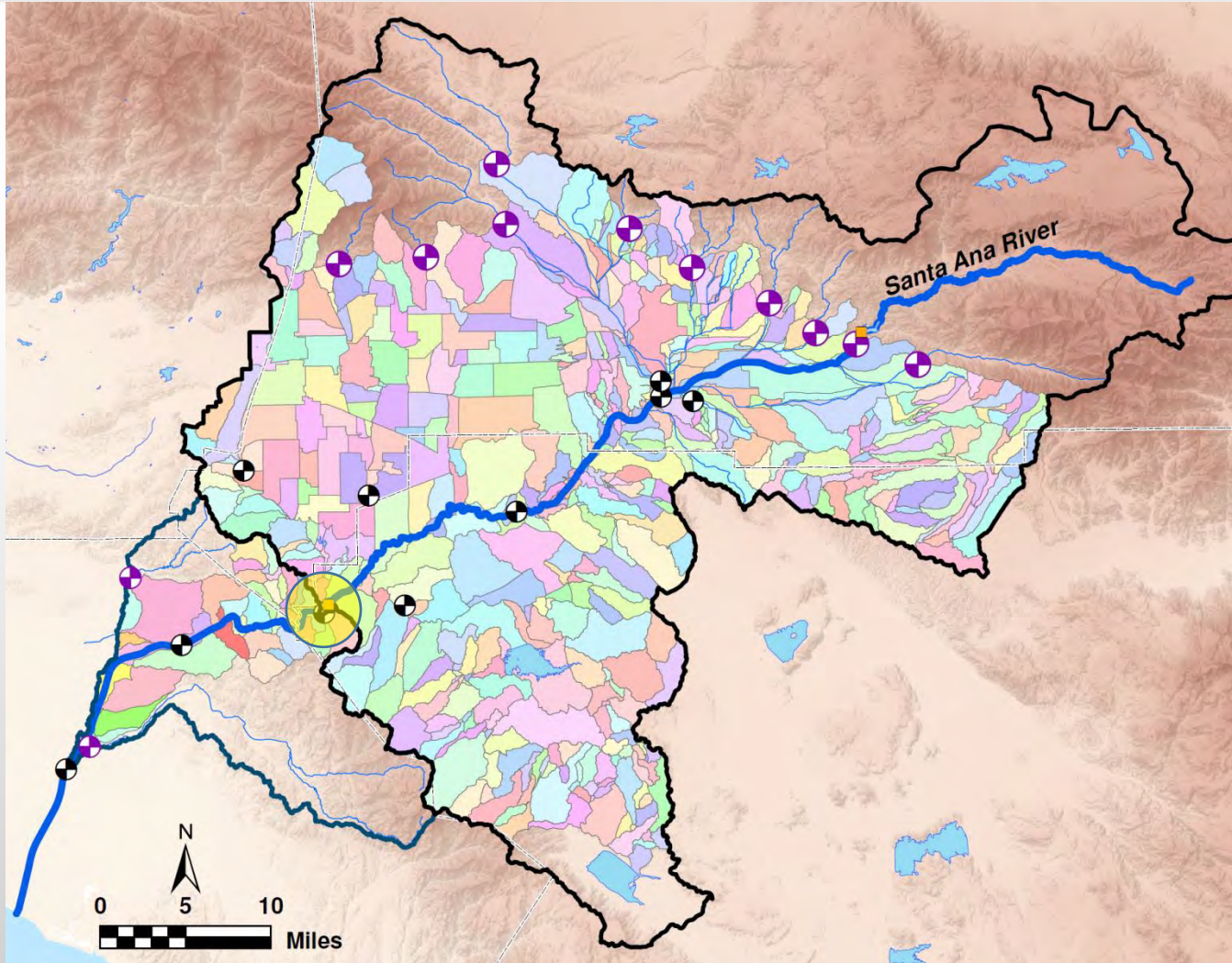


# Gaging Station Locations for TDS/TIN Calibration

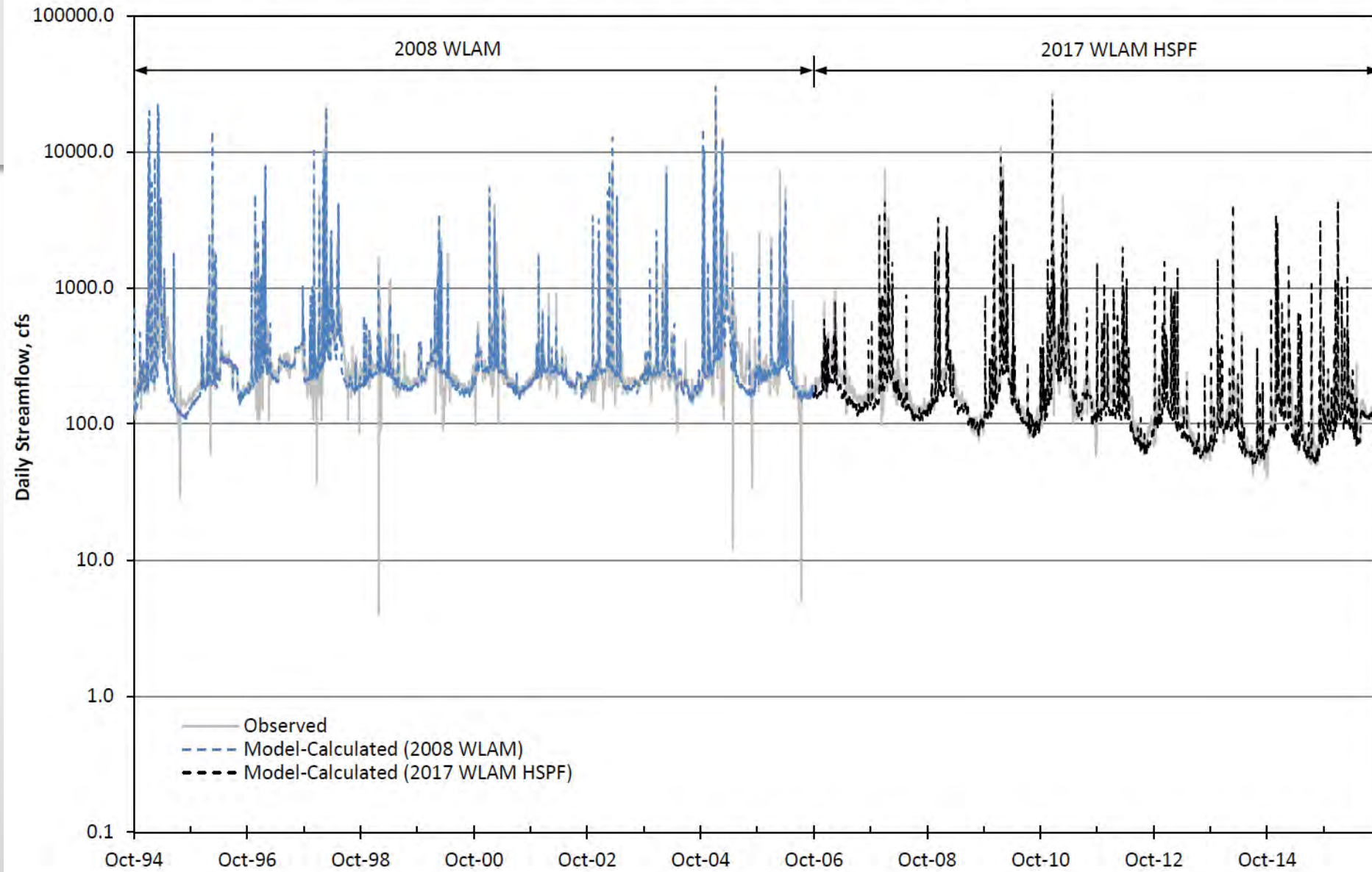




# Santa Ana River at Prado Streamflow Calibration 2007-2016

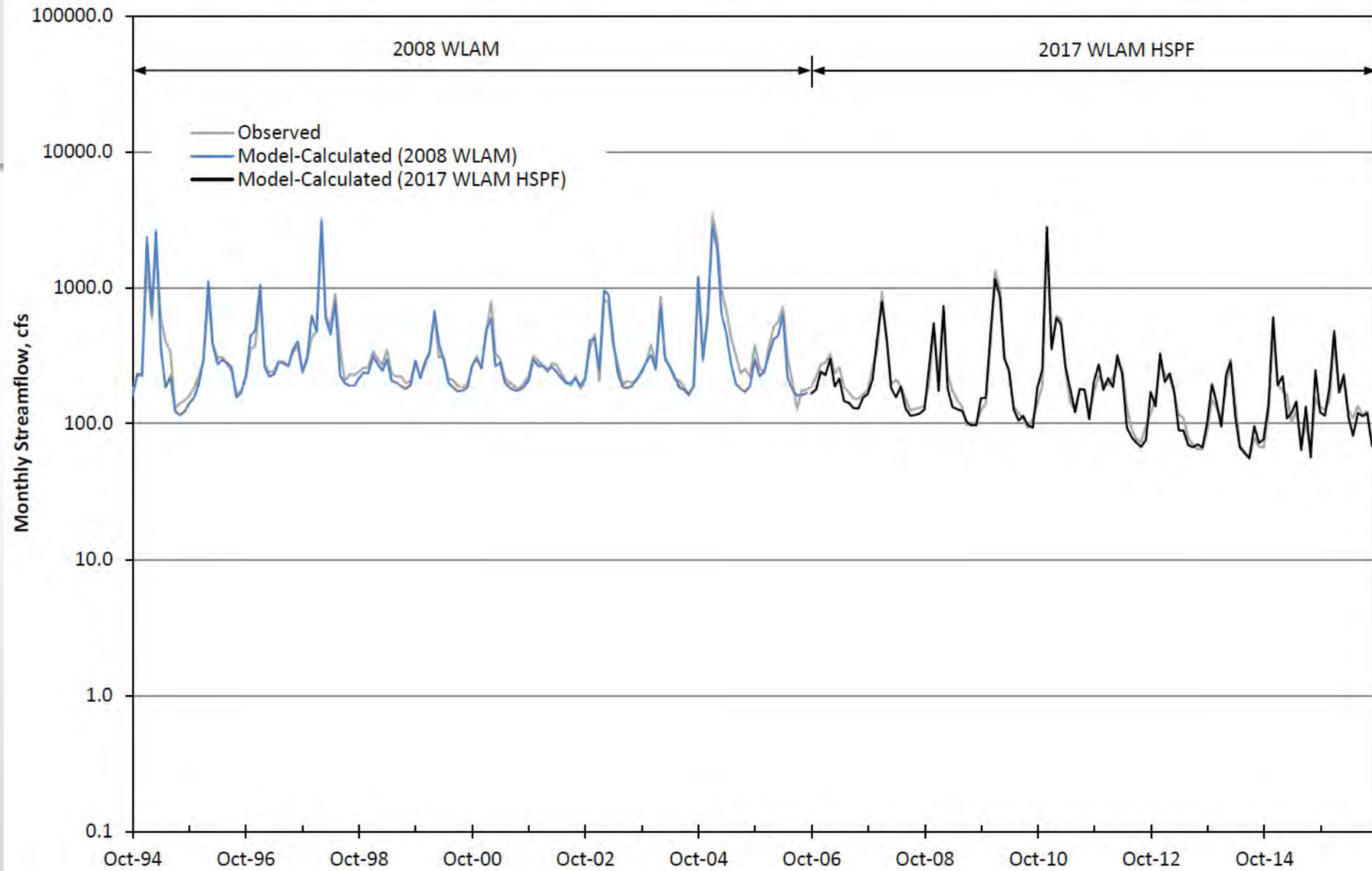


Hydrographs of Measured and Model-Simulated Daily Streamflow at the Santa Ana River Inflow to Prado  
Water Years 1995 to 2006 (2008 WLAM) and Water Years 2007 to 2016 (2017 WLAM HSPF)

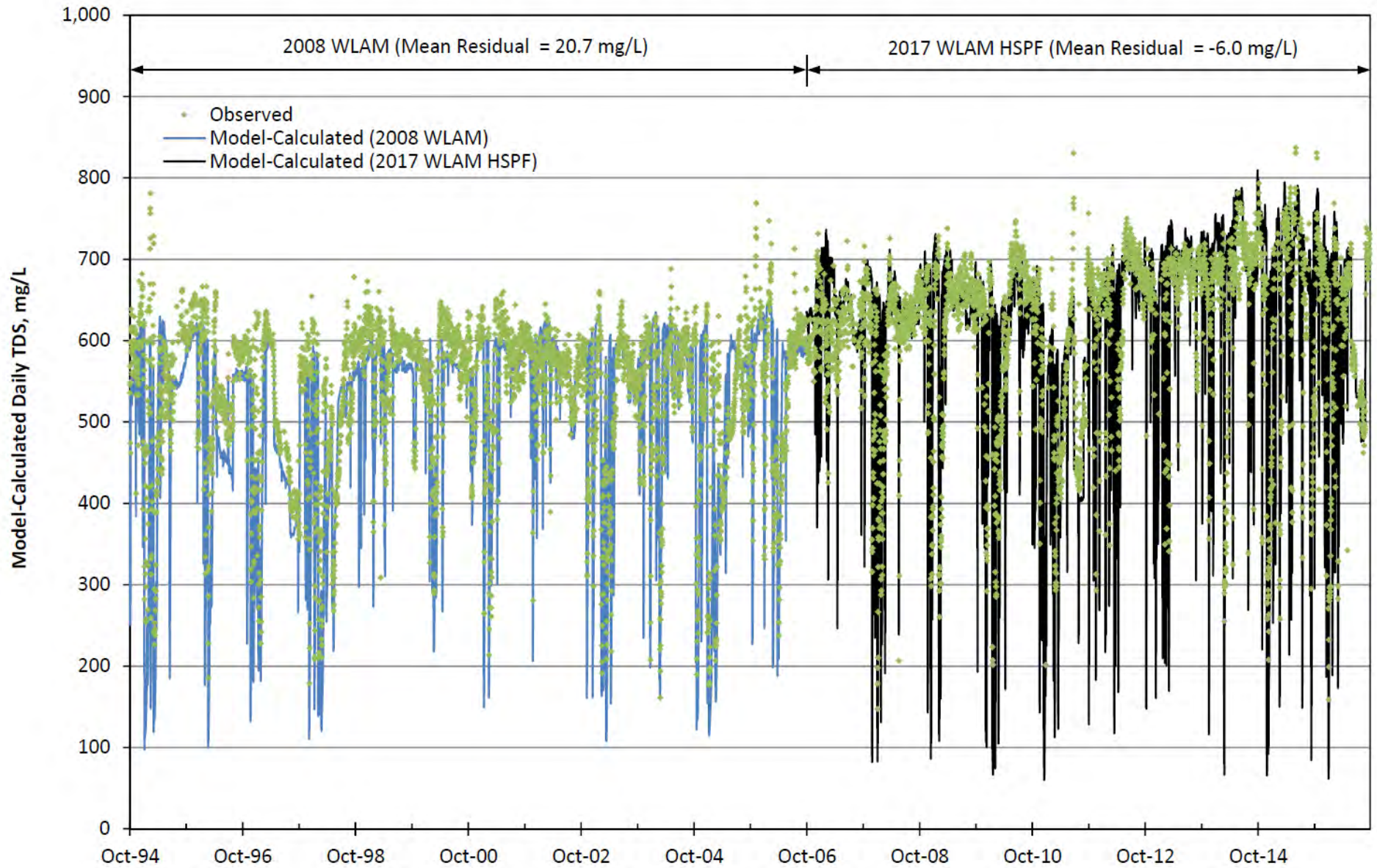




### Hydrographs of Measured and Model-Simulated Monthly Streamflow at the Santa Ana River Inflow to Prado – Water Years 1995 to 2006 (2008 WLAM) and Water Years 2007 to 2016 (2017 WLAM HSPF)

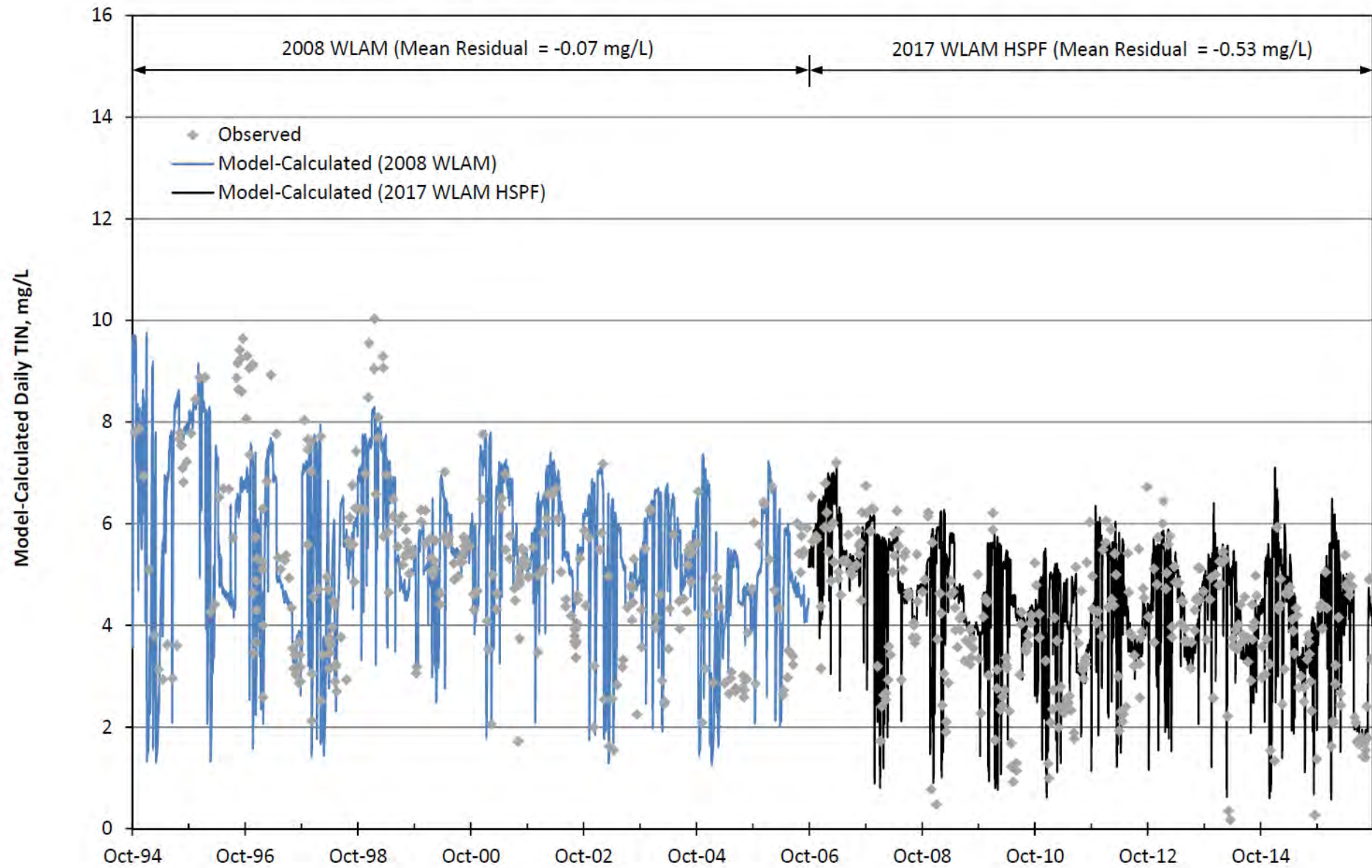


### Measured and Model-Simulated Daily TDS Concentrations at the Santa Ana River below Prado Dam Water Years 1995 to 2006 (2008 WLAM) and Water Years 2007 to 2016 (2017 WLAM HSPF)





Measured and Model-Simulated Daily TIN Concentrations at the Santa Ana River below Prado Dam  
Water Years 1995 to 2006 (2008 WLAM) and Water Years 2007 to 2016 (2017 WLAM HSPF)



# Overview

- Purpose
- WLAM Update
- **Predictive Scenario Assumptions and Results**
- Summary

# Major Assumptions for Predictive Scenarios

Model Scenario	Hydrologic Period	Model Conditions	Land Use	Recycled Water Discharge to Surface Water			TDS and TIN	
				Maximum Expected Discharge	Most Likely Discharge	Minimum Expected Discharge	Permit TDS	Permit TIN
A	WY 1950 - 2016	WY 2020	2012	X			X	X
B					X		X	X
C						X		X
D		WY 2040	General Plan (2040)	X			X	X
E					X		X	X
F						X		X



# Analysis of Model Results

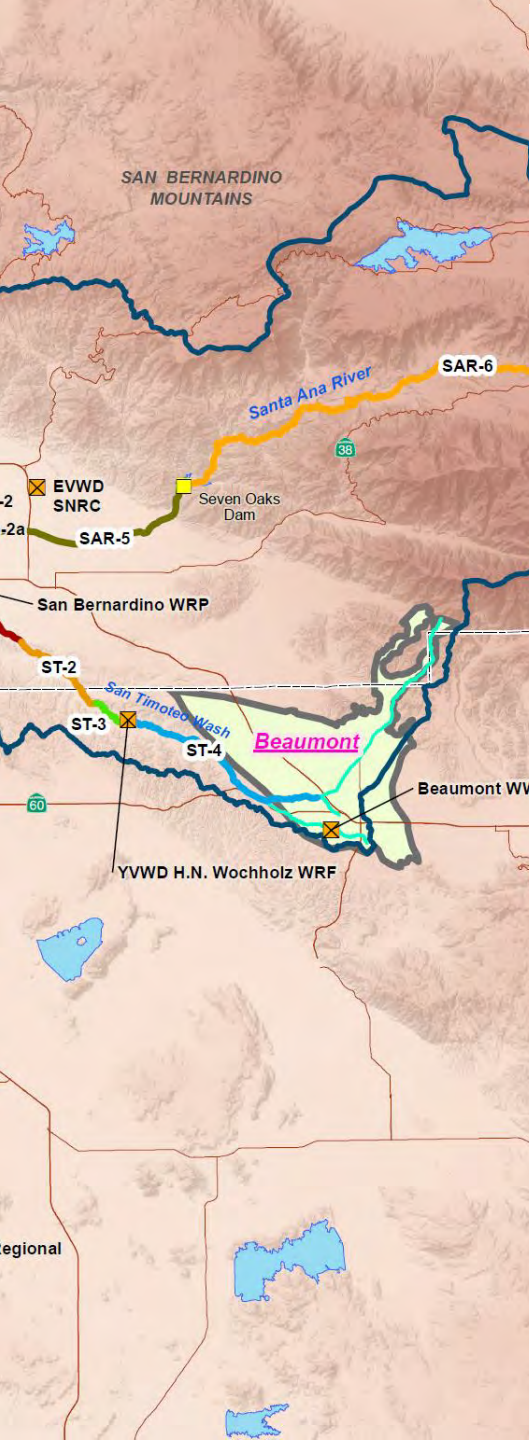
- **1-year averaging period : representative of the period of compliance for permits**
- **5-year averaging period : typically covers the duration of the permit**

## Analysis of Model Results (cont.)

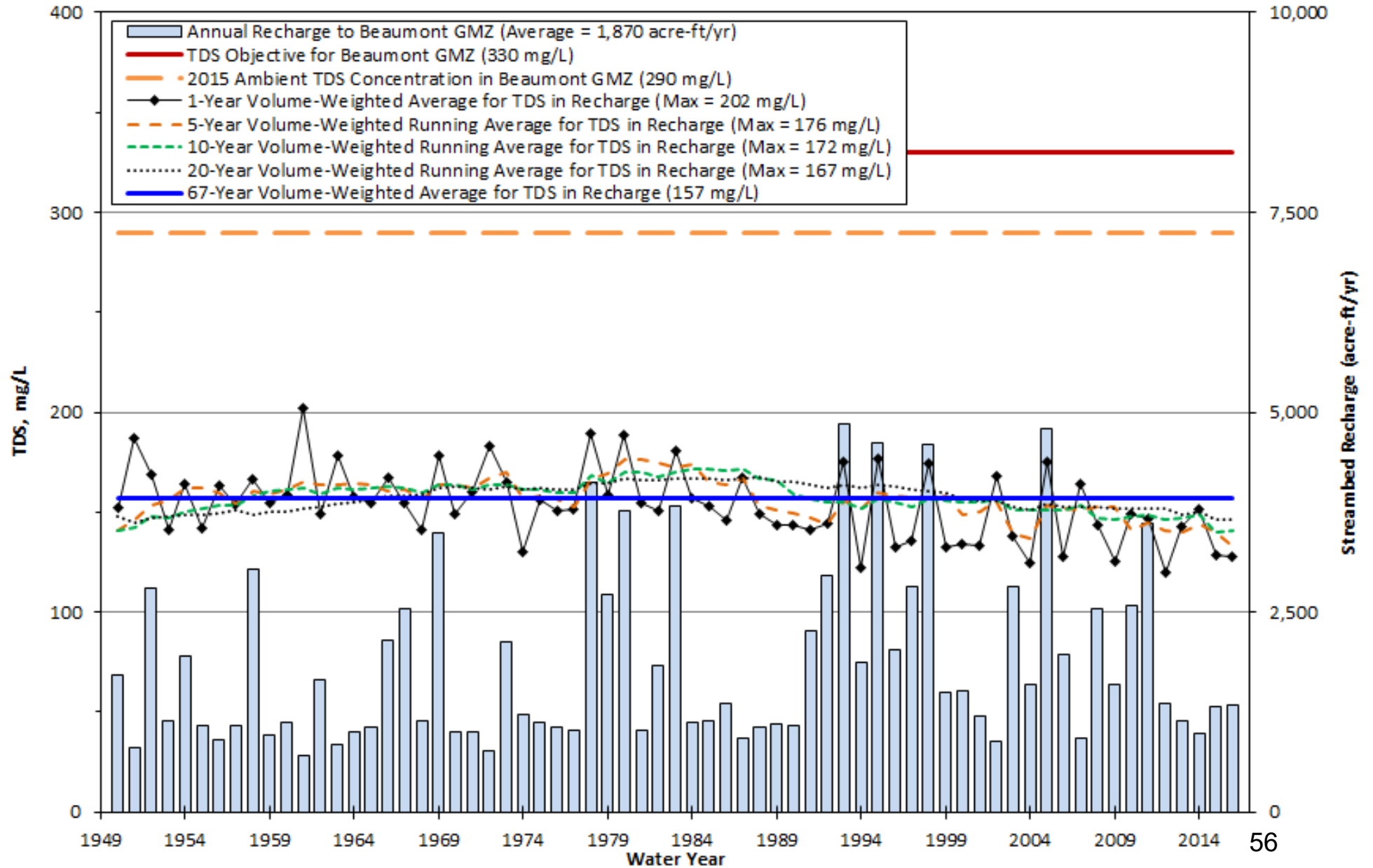
- **10-year averaging period** : useful for identifying possible future compliance issues and is intended to identify periods of prolonged drought and to provide a surrogate indication of what might be expected to occur in response to projected climate change in the region.

# Analysis of Model Results (cont.)

- **20-year averaging period** : represents the amount of time over which ambient groundwater concentrations are generally computed.
- **67-year averaging period** : covers the entire predictive scenario duration and is useful for long-term planning.



### Estimated Annual Streambed Recharge and Volume-Weighted TDS Concentration of San Timoteo Creek - Reach 4 and Tributaries<sup>1</sup> Overlying Beaumont GMZ Scenario A - 2020 Maximum Expected Discharge

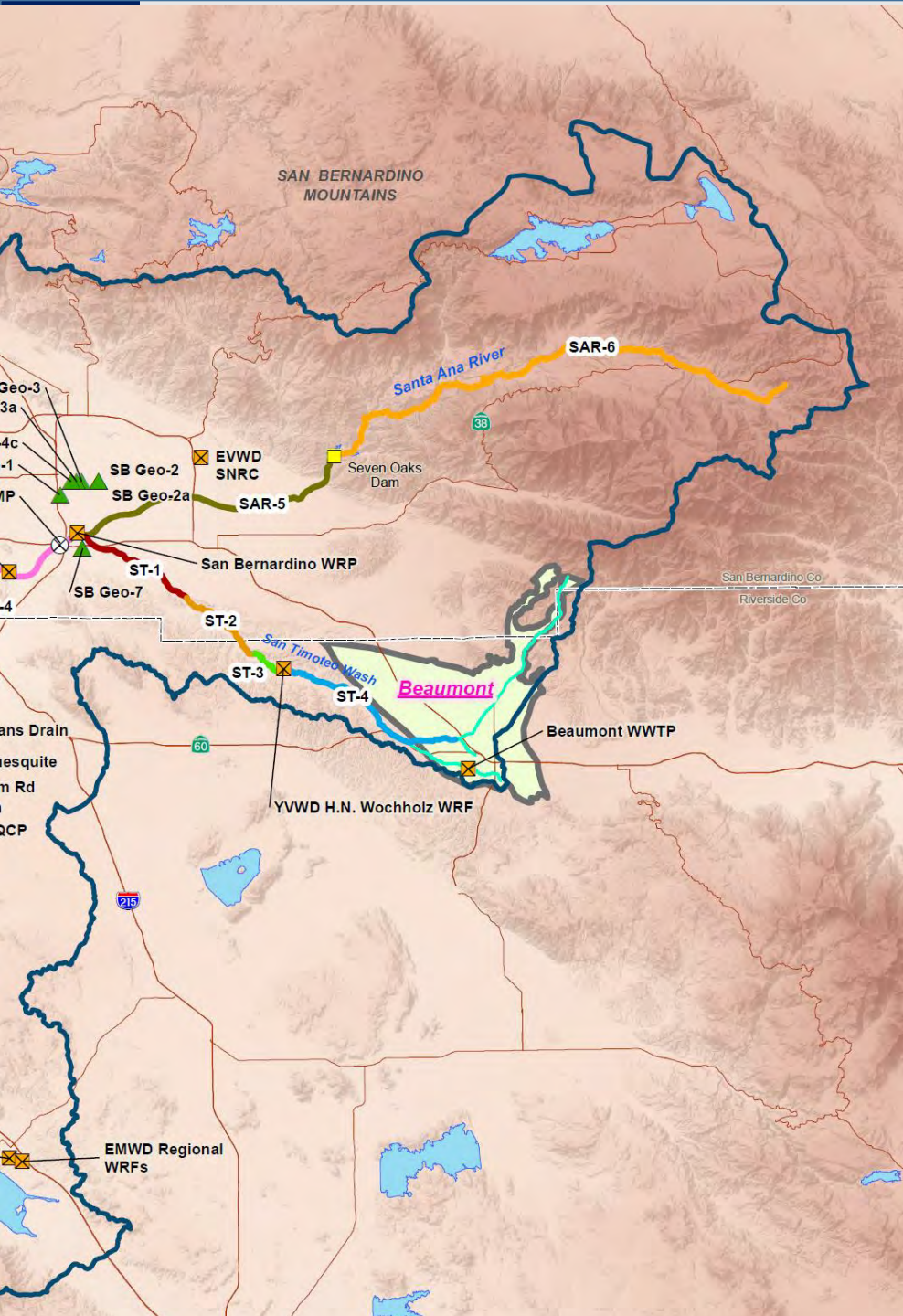


<sup>1</sup>Noble Creek: unnamed tributary to Marshall Creek below Beaumont DP 007; Cooper's Creek



# San Timoteo Creek – Reach 4 Overlying Beaumont GMZ

Maximum Value for the Volume-Weighted Recharge (units in mg/L)

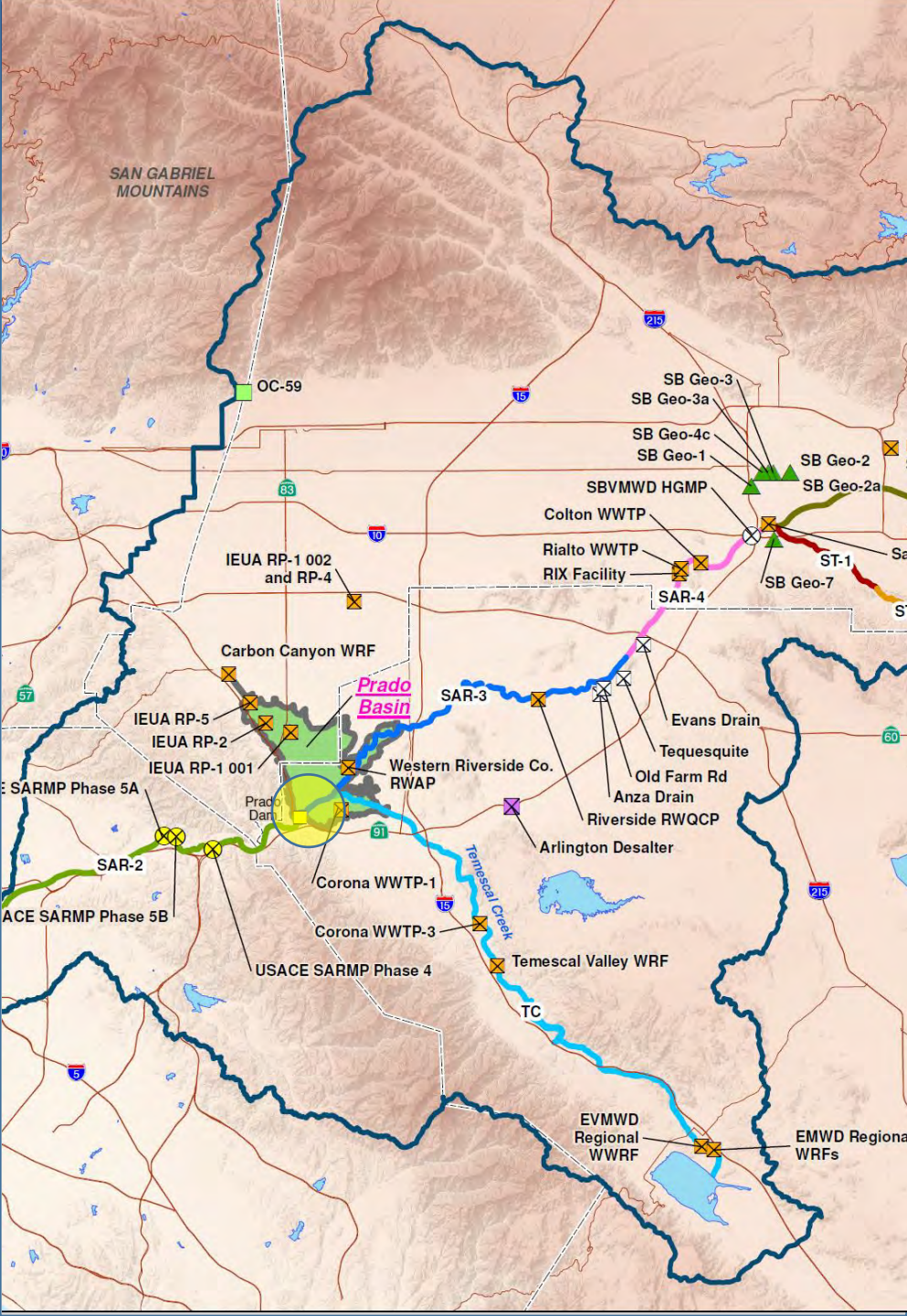


Objective	Ambient	Assimilative Capacity	Period	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	
				2020 Expected Discharge			2040 Expected Discharge			
				Max	Avg	Min	Max	Avg	Min	
TDS	330/230	290	40	1-year	202	204	206	177	177	177
				5-year	176	177	177	163	163	163
				10-year	172	172	173	157	157	157
				20-year	167	168	169	150	150	150
TIN	5.0/1.5	2.9	2.1	1-year	1.94	1.97	2.01	1.42	1.42	1.43
				5-year	1.46	1.49	1.51	1.19	1.19	1.19
				10-year	1.40	1.41	1.43	1.16	1.16	1.16
				20-year	1.36	1.37	1.39	1.13	1.13	1.14



# Santa Ana River Reach 3 Below Prado Dam

Maximum Value for the Volume-Weighted Stream Concentration (units in mg/L)

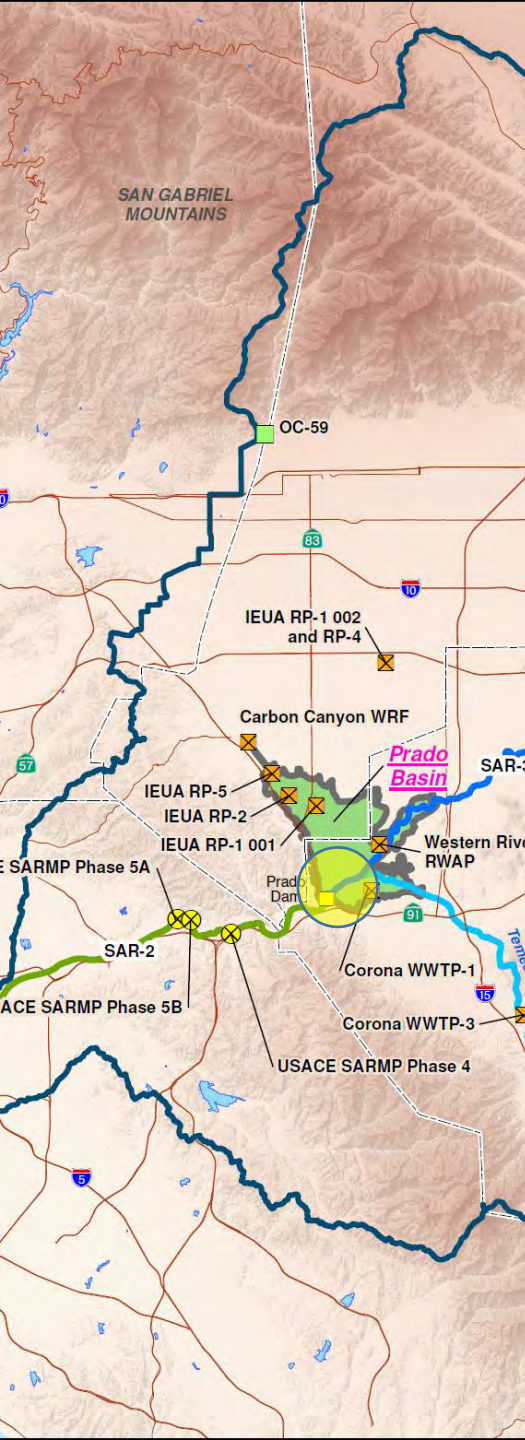


## Revised Calculation

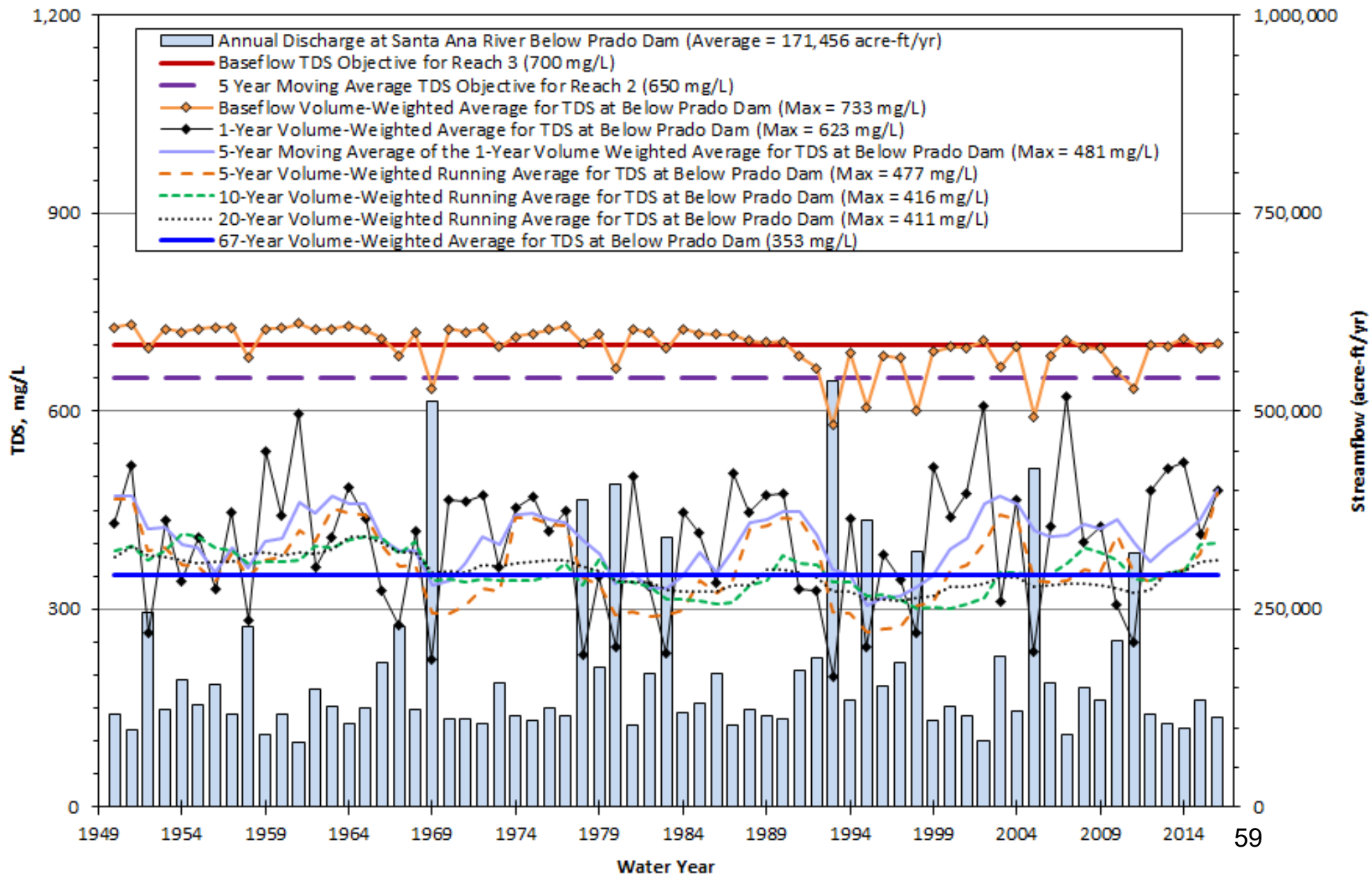
	Objective	Ambient	Assimila- tive Capacity	Period	Scenario	Scenario	Scenario	Scenario	Scenario	Scenario
					A	B	C	D	E	F
					2020 Expected Discharge			2040 Expected Discharge		
					Max	Avg	Min	Max	Avg	Min
TDS	700	na	na	Baseflow Average	619	<b>733</b>	<b>774</b>	617	<b>730</b>	<b>761</b>
TIN	10.0	na	na	Baseflow Average	7.04	5.95	5.34	6.98	6.25	5.28

Bold red values represent concentrations above basin objective.





### Estimated Annual Discharge and Volume-Weighted TDS Concentration at Santa Ana River Below Prado Dam Scenario B - 2020 Most Likely Discharge





# Overview

- Purpose
- WLAM Update
- Predictive Scenario Assumptions and Results
- **Summary**

# Summary

- **The 2017 WLAM HSPF was constructed using recent data and calibrated from October 1, 2006 through September 30, 2016.**
- **The calibration results show:**
  - **Similar temporal dynamics in model-simulated and measured daily and monthly streamflow and TDS/TIN concentrations.**
  - **Good to very good performance at the majority of the streamflow gages.**
  - **The results indicate a satisfactory model calibration.**

## Summary (cont.)

- **The calibrated 2017 WLAM HSPF was used to run predictive scenarios to evaluate water quality in major stream segments for maximum, most likely (average), and minimum expected discharges under 2020 and 2040 conditions.**
- **The scenario runs covered the 67-year hydrologic period from October 1949 (WY 1950) through September 2016 (WY 2016).**

## Summary (cont.)

- **Flow-weighted average TDS and TIN concentrations were evaluated over various time periods, including 1-yr, 5-yr, 10-yr, 20-yr, and 67-yr.**
- **Each of these time periods is useful for evaluating possible compliance, depending on the planning objective.**
- **The 10-year averaging period is particularly useful for identifying possible future compliance issues because it represents a period of time that is typically long enough to cover one meteorological cycle (i.e., contains both wet and dry periods).**

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## COMMISSION MEMORANDUM NO. 2019.125

**DATE:** December 17, 2019

**TO:** SAWPA Commission

**SUBJECT:** Santa Ana River Watershed Weather Modification for Water Supply Feasibility Study | Award of Contract

**PREPARED BY:** Mark Norton P.E., Water Resources & Planning Manager

### RECOMMENDATION

It is recommended that the SAWPA Commission authorize the General Manager to execute an Agreement for Services and Task Order No. NAWC370-01 with North American Weather Consultants Inc. to conduct a feasibility analyses for a weather modification for water supply program in the Santa Ana River Watershed in an amount to not to exceed \$75,000; and, authorize SAWPA invoice each Member Agency \$15,000 to cover the cost of conducting this work.

### DISCUSSION

On June 4, 2019, SAWPA staff in conjunction with Tom Ryan, Metropolitan Water District of Southern California (MWDSC and/or MWD), provided a presentation to the Commission about weather modification for water supply programs commonly known as cloud seeding programs. Cloud seeding is the process of adding a specific chemical agent into an already existing cloud mass that causes the cloud to thicken and/or water vapor to condense and fall as rain or snow. Cloud seeding programs have proven successful in many locations throughout Northern California and neighboring states; however, the program in Santa Barbara Water District is the only Southern California program in operation at this time. MWDSC has been financing water districts in Colorado and Northern California for several years to increase snowpack in the mountains using these methods. The project benefits MWD's customer water districts and neighboring states who also draw from the Colorado River, and who also contribute money to the project.

After the June 4, 2019, Commission meeting, SAWPA approached the SAWPA member agency GMs to determine if there was interest in conducting a feasibility study for potential weather modification for water supply in the Santa Ana River Watershed. The GMs were supportive and felt such a feasibility study could be a good first step for possible regional implementation and funding of such a program using DWR Proposition 1 Integrated Regional Water Management (IRWM) grant funding under Round 2 anticipated in the FY 20-21 timeframe. Further, the potential benefits of increased precipitation in the watershed, 5-15% on average, could have significant benefit to local ski resorts, forest fire suppression, downstream stormwater recharge, and replenishment of natural lakes like Lake Elsinore which is very dependent on storm flow.

On August 6, 2019, the SAWPA Commission supported SAWPA staff issuing a Request for Proposals (RFP) for a feasibility study to conduct the Santa Ana River Watershed Weather Augmentation Study. Tom Ryan of MWDSC was contacted by staff for a list of firms who provide such services and staff received a list of four firms who have expertise in conducting such studies. Additionally, SAWPA staff found four additional firms who also had expertise in conducting such

studies. The RFP was sent to each of these firms and posted on the SAWPA website. In response to the RFP, two proposals were received by SAWPA for consideration. They are listed as follows:

North American Weather Consultants Inc.	\$75,000
RHS Consulting LTD.	\$102,098

Based on feedback of Tom Ryan, MWDSC and a review committee composed of representatives from SBVMWD, WMWD and OCWD and SAWPA, the consultant firm, North American Weather Consultants Inc. is recommended to conduct this work based on their expertise, local experience and knowledge and lower costs.

Funding for the feasibility study was not budgeted since it was not considered at the time of the FYE 2019/2020 budget. Several potential local partners such as ski resorts, downstream lake operators, US Forest Service and groundwater recharging agencies were contacted to determine interest in this feasibility study. Feedback for this outreach is still ongoing and forthcoming. At this time in order to expedite the study work and avoid delays which may disqualify the quotes provided, it is recommended that each SAWPA member agency contribute \$15,000/each for their support of this work and a contract be executed with the recommended firm.

Another option for funding of the feasibility study is to pull funding from carryover reserves from Fund 370-01 Basin Planning General in which approximately \$163,000 remains. Staff believes that outside funding support is the preferred option to ensure the reserves under Fund 370-01 are set aside for more urgent regional water resource planning needs should they arise.

## **CRITICAL SUCCESS FACTORS**

### OWOW

- Data and information needed for decision-making is available to all.

## **RESOURCE IMPACTS**

The feasibility study is not included in the SAWPA FYE 2019/2020 Budget. If supported, each member agency would be invoiced \$15,000 to conduct this work.

### Attachments:

1. PowerPoint Presentation
2. August 6, 2019, Commission Memorandum No. 2019.84
3. Request for Proposals (RFP), issued October 1, 2019
4. Task Order No. NAWC370-01 (including submitted proposal)
5. General Services Agreement





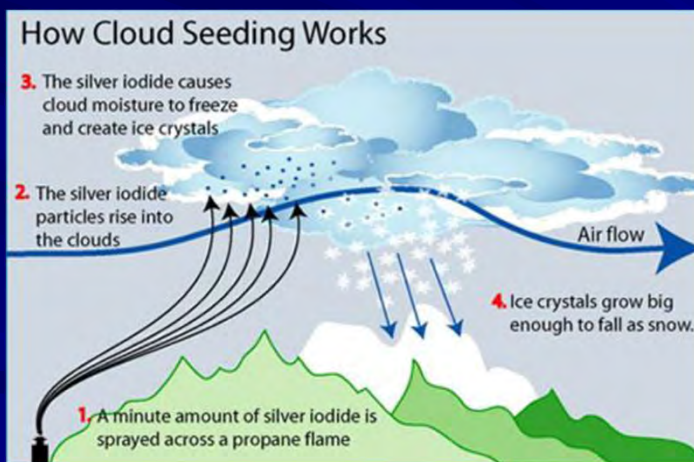
# SANTA ANA RIVER WATERSHED WEATHER MODIFICATION FOR WATER SUPPLY FEASIBILITY STUDY | AWARD OF CONTRACT

MARK NORTON, PE, WATER  
RESOURCES & PLANNING MANAGER  
COMMISSION | DECEMBER 17, 2019  
ITEM No. 5.C.



1

On June 4, Tom Ryan from MWDSC discussed ongoing weather augmentation for water supply – cloud seeding programs with SAWPA Commission



2

## Proven Technology

- Statistical, physical, and modeling analysis shows cloud seeding is a viable technology
- 5-15% increase in precipitation
- Cost-effective part of water operations portfolio
- No environmental or health effects
- Number of projects increasing
- Recent research have answered key questions



3

## SAWPA staff received positive comments about program after presentation

150 programs in 40 countries and 11 states. Benefit to:

- Ski areas, Power utilities
- Insurance companies
- Water resources agencies
- Conservation, and Irrigation districts
- Downstream Lakes

Costs

\$4-40/AF, including planning



4

## SAWPA Member Agency GMs feedback

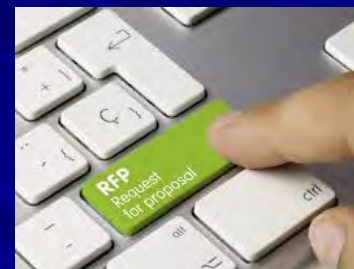
- SAWPA staff asked SAWPA Member Agency General Managers if weather augmentation in the Santa Ana River Watershed should be studied
- GMs felt feasibility study to possibly implement in the Santa Ana River Watershed may be worthwhile
- Could lead to possible request under DWR's Prop 1 IRWM Round 2 grant program in FY 2020-21 to implement by SAWPA



5

## RFP Response

- On Aug. 6<sup>th</sup> Commission authorizes staff to issue RFP for Santa Ana River Watershed Weather Augmentation Feasibility Study
- Two consultants responded to feasibility study RFP
  - North American Weather Consultants Inc. \$75,000
  - RHS Consulting, Ltd. \$102,098
- Proposal Review Team
  - SBVMWD, WMWD, OCWD, SAWPA, MWDSC
- - North American Weather Consultants Inc. recommended



6

## Funding

- Cost - \$75,000
- Partner agencies and companies who may benefit are being approached by SAWPA but no commitments made yet
- Source of funding for study and possible implementation is not budgeted
- \$15K contribution from each member agency suggested



7

## Recommendation

That the Commission authorize the General Manager to execute an Agreement for Services and Task Order No. NAWC370-01 with North American Weather Consultants Inc. to conduct a feasibility analyses for a weather modification for water supply program in the Santa Ana River Watershed in an amount to not to exceed \$75,000; and, authorize SAWPA invoice each Member Agency \$15,000 to cover the cost of conducting this work.

8



## COMMISSION MEMORANDUM NO. 2019.84

**DATE:** August 6, 2019

**TO:** SAWPA Commission

**SUBJECT:** Santa Ana River Watershed Weather Modification for Water Supply Feasibility Study Request for Proposals (RFP)

**PREPARED BY:** Mark Norton P.E., Water Resources & Planning Manager

### RECOMMENDATION

It is recommended that the SAWPA Commission support the issuance of a Request for Proposals (RFP) to conduct a feasibility analyses for a weather modification for water supply program in the Santa Ana River Watershed.

### DISCUSSION

On June 4, 2019, SAWPA staff in conjunction with MWDSC representative, Tom Ryan, provided a presentation to the Commission about weather modification for water supply programs commonly known as cloud seeding programs. Cloud seeding is the process of adding a specific chemical agent into an already existing cloud mass that causes the cloud to thicken and/or water vapor to condense and fall as rain or snow. Cloud seeding programs have proven successful in many locations throughout Northern California and neighboring states; however, the program in Santa Barbara Water District is the only Southern California program in operation at this time. MWDSC has been financing water districts in Colorado and Northern California for several years to increase snowpack in the mountains using these methods. The project benefits MWD's customer water districts and neighboring states who also draw from the Colorado River, and who also contribute money to the project.

After the June 4th Commission meeting, SAWPA approached the SAWPA member agency GMs to determine if there was interest in conducting a feasibility study for potential weather modification for water supply in the Santa Ana River Watershed. The GMs were supportive and felt such a feasibility study could be a good first step for possible regional implementation and funding of such a program using DWR Proposition 1 Integrated Regional Water Management (IRWM) grant funding under Round 2 anticipated in the FY 20-21 timeframe. Further, the potential benefits of increased precipitation in the watershed, 5-15% on average, could have significant benefit to local ski resorts, forest fire suppression, downstream stormwater recharge, and replenishment of natural lakes like Lake Elsinore which is very dependent on storm flow.

Tom Ryan of MWDSC was contacted by staff for a list of firms who provide such services and staff received a list of four firms who have expertise in conducting such studies. SAWPA staff therefore recommends that staff issue an RFP for a feasibility study and then encourage subsequent participation of SAWPA member agency staff and MWDSC staff in review and evaluation of proposals received.

## **CRITICAL SUCCESS FACTORS**

### OWOW

- Data and information needed for decision-making is available to all.

## **RESOURCE IMPACTS**

Though not specifically budgeted, sufficient funds are available in 370-01 Basin Planning for staff costs to administer the issuance of a request for proposals and evaluation of proposals.

### Attachments:

1. PowerPoint Presentation

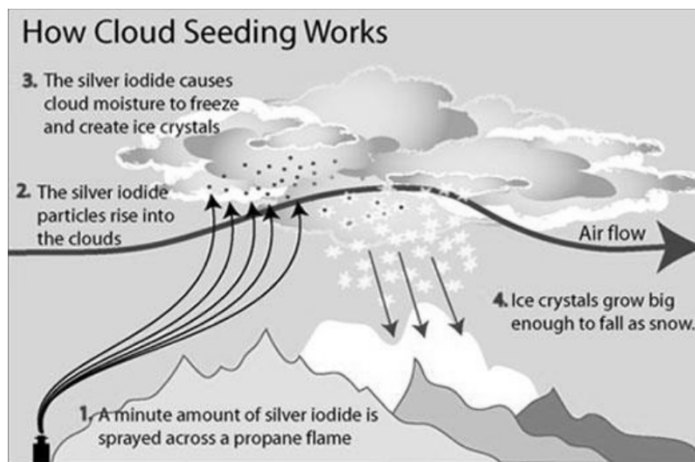
# WEATHER AUGMENTATION FOR WATER SUPPLY IN SANTA ANA RIVER WATERSHED

Presented by Mark Norton P.E.,  
Water Resources & Planning Manager

SAWPA Commission  
Aug. 6, 2019

1

On June 4, Tom Ryan from MWDSC  
discussed ongoing weather augmentation  
for water supply – cloud seeding programs



2

## SAWPA staff received positive comments about program after presentation

150 programs in 40 countries and 11 states

- Ski areas, Power utilities
- Insurance companies
- Water resources agencies
- Conservation, and Irrigation districts
- Research institutes

Costs

\$4-40/AF, including planning



3

## SAWPA Member Agency GMs feedback

- SAWPA staff asked SAWPA Member Agency General Managers if weather augmentation in the Santa Ana River Watershed should be studied
- GMs felt feasibility study to possibly implement in the Santa Ana River Watershed may be worthwhile
- Could lead to possible request under DWR's Prop 1 IRWM Round 2 grant program in FY 2020-21 to implement by SAWPA



4



## Recommendation

That the Commission support the issuance of a Request for Proposals to conduct a feasibility analyses for a weather modification for water supply program in the Santa Ana River Watershed.



**WEATHER MODIFICATION PROGRAM  
FOR THE SANTA ANA RIVER WATERSHED**  
*RESEARCH AND ANALYSES REQUIREMENTS*

**REQUEST FOR PROPOSAL**  
FOR  
**CONSULTING SERVICES**  
FOR  
**SANTA ANA RIVER WATERSHED WEATHER MODIFICATION**

**OCTOBER 1, 2019**

# **REQUEST FOR PROPOSAL FOR CONSULTING SERVICES**

## **FOR**

### **SANTA ANA RIVER WATERSHED WEATHER MODIFICATION**

#### **1. INTRODUCTION**

The Santa Ana Watershed Project Authority (SAWPA) requests proposals from qualified consultants to perform a feasibility study for a weather modification program for the Santa Ana River Watershed. In an effort increase the natural precipitation, this program is expected to produce benefits related to an increased water supply.

The work will be performed under the supervision of the SAWPA, a Joint Powers Authority that delivers regional water solutions supporting its member agencies. SAWPA plans and builds multi-benefit projects increasing water supply, protecting water quality, providing recreation opportunities and restoring the environment of the Santa Ana River Watershed. SAWPA is composed of five member agencies: Eastern Municipal Water District, Inland Empire Utilities Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District. SAWPA will serve as administrator of the project. Proposals are due to SAWPA by **5:00 pm on October 31, 2019.**

#### **2. BACKGROUND**

The Santa Ana River watershed is located in southern California and is approximately 2,840 square miles in size. The tributaries of the Santa Ana River begin in the San Bernardino, San Gabriel, San Jacinto, and Santa Ana Mountains. The tributaries merge with the Santa Ana River which flows to the Pacific Ocean. The watershed includes portions of San Bernardino County, Riverside County, Orange County, and a small portion of Los Angeles County.

As part of regional efforts to increase water supply and reliance, SAWPA has administered various projects receiving funding from agencies such as the California Department of Water Resources and Regional Water Quality Control Board. SAWPA has served as contractor for various projects increasing water supply within the region.

SAWPA has managed multiple regional water resource projects over its roughly 50 years. These include the watershed wide Santa Ana Conservation and Conjunctive Use Project, the Drought Response Water Use Efficiency programs, and the Water Energy Nexus program supporting drought tolerant landscaping for economically disadvantaged communities in the watershed. The largest regional project undertaken by SAWPA has been the Inland Empire Brine Line consisting of 93 miles of the 16 inch to 84 inch pipeline that remove non-reclaimable high saline waste flows from the watershed.

#### **3. OBJECTIVE**

The primary objective of this project is to determine the feasibility of a weather modification or cloud seeding program to increase precipitation and snowpack in the Santa Ana River Watershed.

#### **4. ANTICIPATED SCOPE OF WORK**

The consultant shall provide a detailed study/ design of a cloud seeding program to be implemented in the Santa Ana River Watershed during the wet season (October 15 through April 15). Consultant will prepare Memorandum regarding the feasibility of pursuing further project development, considering

meteorological and hydrological data, and subject to SAWPA approval, will then produce a draft Report and final Report, as described below.

### **Task 1 – Collection of Data**

- a. The Consultant shall search and evaluate potential weather modification generator locations in the watershed by considering factors such as ease of property access for permanent equipment, climate trends at the sub-watershed level, and location of existing water supply infrastructure such as groundwater banks and surface water reservoirs. The Consultant shall determine the appropriateness of cloud seeding locations and methodologies. The Consultant shall collect cost data from similar weather modification programs implemented in other watersheds.
- b. The Consultant shall consider different sources of meteorological and hydrological data and determine the most suitable database to be used for the study of cloud seeding program. The Consultant shall be responsible for all computer and internet access for obtaining the data.
- c. The Consultant shall provide a summary of its findings to SAWPA. Selected meteorological and hydrologic data to be used in the development of the weather modification program shall be provided in Task 1 Memorandum, draft and final report.
- d. The Consultant shall prepare Task 1 Memorandum that describes the climatology of the Santa Ana River Watershed and whether the weather modification to increase rainfall and/or snowfall appears feasible and deserves further analysis. After considering this Task 1 Memorandum, SAWPA will determine whether to proceed with further analysis and the following tasks.

### **Task 2 – Selection of Target Areas**

- a. The Consultant shall select the most suitable locations for implementation of a potential Cloud Seeding Program. Recommendations for a prioritized list of target areas based on storm direction shall be included in the report. Recommended locations shall be limited to areas within the Santa Ana River Watershed boundaries, identified in Exhibit A.
- b. The Consultant shall use the best available land use and hydrologic data to determine the most suitable weather modification target areas. The consultant shall use the judgement of an experienced climatologist to conduct and develop the study.
  - i. The Report is preferred to be developed by or under the supervision of a Weather Modification Association (WMA) certified manager, or a Certified Consulting Meteorologist from the American Meteorological Society, but this is not required.
- c. The Report shall show an area map indicating the designated target areas of the watershed to be covered by each cloud seeding generator under expected normal conditions of air movement during typical storm types, which Consultant will identify. For land-based seeding sites, the Consultant shall consider target location's parcel information such as parcel size, access roads and ownership as available. For aerial-based seeding sites, the Report shall evaluate any limitations for flight paths.

### **Task 3 – Development of Program Design and Seeding Increase Estimates**

- a. The Consultant shall calculate the basic seeding runoff yield potential from each target area and provide a detailed explanation of the methodology behind these estimates.



- b. The Report shall have a full description of the approximate location, and instrument type for each cloud seeding generator placement, and affiliated equipment, including diagrams of the sites and optional generator layout.
- c. The project may include land based, aircraft, or a combination of land based and aircraft cloud seeding generation sites for the success of the Cloud Seeding Program.
- d. The Report shall detail organizational approaches, and/or control center sites that will be used to operate the Cloud Seeding Program. Potential control sites should consider radar, satellite antenna, or other associated equipment for the reception of weather data and radio communication equipment for remote control land-based seeding devices.
- e. The report will describe the amount of additional potential precipitation increase and an estimate of the additional potential runoff (acre-feet at X locations to be identified) associated with this increase, with assumptions presented.

#### **Task 4 – Perform a Benefit/Cost Analysis**

- a. The Consultant shall perform a benefit/cost analysis according to the criteria established by the American Society of Civil Engineers (ASCE) to determine the feasibility of a cloud seeding program in the Santa Ana River Watershed. The Consultant may also provide a second benefit/cost analysis method for comparison.
  - i. **Technical feasibility.** In this criterion, scientific data is considered as a basis for determining whether the proposed work could yield the desired additional precipitation.
  - ii. **Economic feasibility.** This criterion considers a combination of available financial resources and the expected return in additional water. The dollar amount to be used for estimating benefits resulting from additional runoff will be determined based on consultation with wholesale water agencies in the watershed and with SAWPA. Additionally, this criterion should consider all costs related to materials (such as cell service, silver, propane, operational equipment, instrumentation and personnel needed for construction and operation of the Cloud Seeding Program).
- b. The Consultant shall determine if a cloud seeding program is feasible at the recommended target locations within the Santa Ana River Watershed.

#### **Task 5 – Delivery of Final Report**

- a. A draft version of the Report shall be provided to SAWPA, allowing four weeks to review the draft and return comments. All comments shall be incorporated, finalized, and delivered to SAWPA within three weeks for approval. Approval of the updated Report is required prior to its implementation.

## Key Project Deliverables

<b>Task</b>	<b>Task Deliverables</b>	<b>Format</b>
1	Collection of Data – TM #1 Report	Excel
2	Selection of Target Areas	GIS Shape File
3	Program Development	Word or PDF
4	Benefit/Cost analysis	Word or PDF
5	Feasibility Study Draft Report*	Word or PDF
6	Feasibility Study Final Report*	Word or PDF
	Present study at SAWPA meeting	Powerpoint

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\*Reported results must be submitted in multiple formats corresponding to the original component files. At a minimum, this includes the Word and Excel files used to prepare are text, tables, figures and graphs as well as the final PDF version of the fully assembled report.

## PROPOSAL REQUIREMENTS

Responses to this RFP must be made according to the requirements set forth in this section for content and sequence. Failure to adhere to these requirements or to include conditions, limitations, or misrepresentations may be cause for rejection of the proposal. Any correction and resubmission by the proposer will not extend the time for evaluation of the proposal. Responses to this RFP will be prepared as concise as possible. The proposal will be 25 pages or less in length, not including resumes and project descriptions that may be included in an appendix. Submittal of boilerplate marketing materials is discouraged.

All proposals must include the following information:

1. Cover letter, including name, telephone number, fax number and address of the firm.
2. Background information about the proposer, including technical qualifications, size of firm and licenses. Description of the proposer's business (*i.e.*, individual, partnership, joint venture, *etc.*), and background information of subconsultants to be used.
3. Description of the proposer's experience. A list of similar services and project descriptions undertaken by the proposer (preferably with proposed project personnel), with beginning and ending dates, name, address, phone number, fax number, and e-mail address of a contact person for each reference.
4. Organization chart showing proposed management and project team.
5. Complete list of personnel, including subconsultants that will be dedicated to this project.
6. The names and qualifications of staff who will participate in the project.
7. A detailed description of the project approach. The project approach should describe the tools and methods that the Consultant will use to execute the work. The project approach need not repeat the Scope of Work, but should address each task, sub-task, and deliverable as well as optional tasks.
8. The fee proposal will include a breakdown of labor hours by employee billing classification, and an expense reimbursement schedule that includes the cost of non-labor and sub-consultant services. The fee proposal will be broken down by task and sub-task. All columns and rows will have totals.
9. Hourly billing rates for personnel to be assigned to the project.
10. Project schedule.
11. Miscellaneous/Exceptions. Respondents will thoroughly review the contents of this RFP and will submit all supplemental information required in this section of miscellaneous information. A draft contract agreement is enclosed within this RFP (Appendix A) that the consultant/firm will be required to sign. The respondent must identify any exceptions to that draft agreement as an element of the proposal submitted for review and consideration.

## 5. PROPOSED SCHEDULE

RFP Published	October 1, 2019
Proposals Due	October 31, 2019 at 5pm
SAWPA Staff with MWDSC staff Proposal Review	November 11, 2019
SAWPA Commission Approves Agreement and Task Order	November 19, 2019
Sign Contract and Begin Work	January 2, 2020
Anticipated Completion Time	Fall 2020

## 6. SUBMITTALS

Please submit three (3) hard copies of the proposal and one electronic copy (PDF file delivered via email) to Mark Norton, Water Resources & Planning Manager, at:

Santa Ana Watershed Project Authority  
11615 Sterling Avenue  
Riverside, CA 92503  
[mnorton@sawpa.org](mailto:mnorton@sawpa.org)

All proposals must be received by **5:00 p.m. on Thursday, October 31, 2019**. Proposals received after the stated time will not be considered. Thereafter, a review panel, composed of members of SAWPA staff and its member agencies, will conduct question and answer interviews. If additional information is needed, contact Mark Norton at (951) 354-4221 or [mnorton@sawpa.org](mailto:mnorton@sawpa.org).

## **7. EVALUATION CRITERIA**

Evaluation of qualifications will be conducted on the following (in order of importance):

- Responsiveness to the RFP (pass/fail)
- Experience and qualifications of the assigned individuals/firm
- Project approach and understanding of needs
- Anticipated value and quality of services received
- Appropriateness of proposed fee structure
- Project schedule

SAWPA reserves the sole right to evaluate and select the successful proposal. The selection process is anticipated to include an evaluation of the proposal and an interview.

## **8. GENERAL REQUIREMENTS**

- 9.1 All proposers are hereby advised that this RFP is an informal solicitation and is not a commitment or offer to enter into an agreement or engage into any competitive bidding or negotiation pursuant to any statute, ordinance, rule, or regulation. SAWPA reserves the right to negotiate with any qualified source. SAWPA reserves the right to reject any or all proposals for any reason or for no reason at all.
- 9.2 SAWPA reserves the right to request further information from the proposer either in writing or orally. Such request will be addressed to that person or persons authorized by the proposer to represent the proposer.
- 9.3 SAWPA reserves the sole right to judge the proposers' representations, either written or oral.
- 9.4 Proposers understand and agree that submission of a proposal constitutes acknowledgement and acceptance of, and a willingness to comply with, all of the terms, conditions, and criteria contained in this RFP.
- 9.5 False, incomplete, or unresponsive statements in connection with a proposal may be sufficient cause for the rejection of the proposal. The valuation and determination of the fulfillment of the above requirement will be SAWPA's responsibility and its decision will be final.
- 9.6 SAWPA reserves the right to interpret or change any provisions of this RFP at any time prior to the proposal submission date. Such interpretations or changes will be in the form of addenda to this RFP. Such addenda will become part of this RFP and may become part of any resultant contract. Such addenda will be made available to each person or organization that has received an RFP. Should such addenda require additional information not previously requested, a proposer's failure to address the requirements of such addenda might result in the proposal not being considered.
- 9.7 All proposals submitted in response to this RFP will become the exclusive property of SAWPA. At such time as SAWPA's recommendation to the SAWPA Board relative to proposal selection

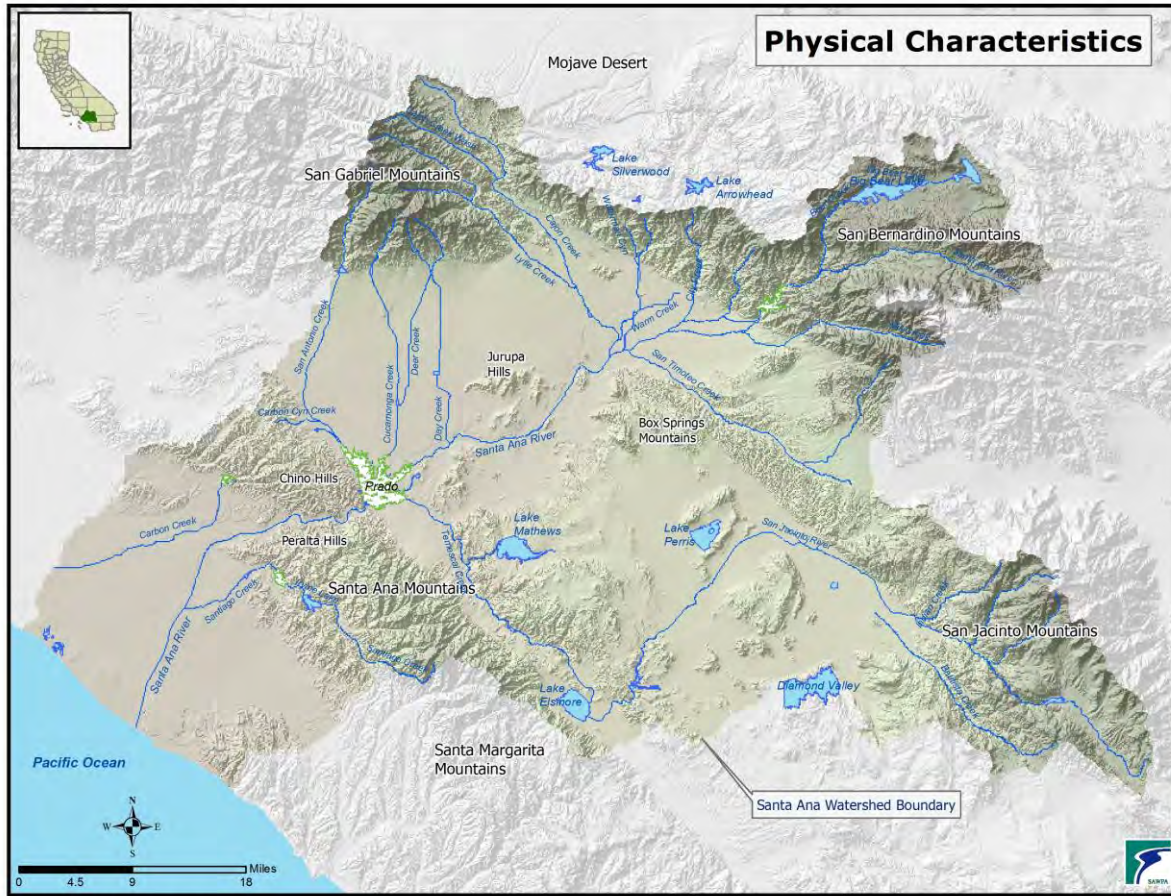


appears on the Board Agenda, all such proposals become a matter of public record, and will be regarded as public records, with the exception of those parts of each proposal which are defined by the proposer as business or trade secrets, and so marked, as “confidential” or “proprietary.” SAWPA will not in any way be liable or responsible for the disclosure of any such proposals or any part thereof if disclosure of any such proposals or any part thereof if disclosure is required under the Public Records Act.

- 9.8 SAWPA will not in any way be liable for any costs incurred in connection with the preparation of any proposal submitted in response to this RFP.

# Exhibit A

## Santa Ana River Watershed



P:\projects\OWOW2\PhysicalMap.mxd SW-2197

## **Appendix A**

### **SANTA ANA WATERSHED PROJECT AUTHORITY** **AGREEMENT FOR SERVICES BY INDEPENDENT CONSULTANT**

This Agreement is made this \_\_\_ day of \_\_\_\_\_, 2019 by and between the Santa Ana Watershed Project Authority ("SAWPA") located at 11615 Sterling Ave., Riverside, California, 92503 and \_\_\_\_\_ ("Consultant") whose address is \_\_\_\_\_.

#### **RECITALS**

This Agreement is entered into on the basis of the following facts, understandings, and intentions of the parties to this Agreement:

- SAWPA desires to engage the professional services of Consultant to perform such professional consulting services as may be assigned, from time to time, by SAWPA in writing;
- Consultant agrees to provide such services pursuant to, and in accordance with, the terms and conditions of this Agreement and has represented and warrants to SAWPA that Consultant possesses the necessary skills, qualifications, personnel, and equipment to provide such services; and
- The services to be performed by Consultant shall be specifically described in one or more written Task Orders issued by SAWPA to Consultant pursuant to this Agreement.

#### **AGREEMENT**

Now, therefore, in consideration of the foregoing Recitals and mutual covenants contained herein, SAWPA and Consultant agree to the following:

#### **ARTICLE I**

##### **TERM OF AGREEMENT**

**1.01** This agreement shall become effective on the date first above written and shall continue until **December 31, 20\_\_**, unless extended or sooner terminated as provided for herein.

#### **ARTICLE II**

## **SERVICES TO BE PERFORMED**

- 2.01** Consultant agrees to provide such professional consulting services as may be assigned, from time to time, in writing by the Commission and the General Manager of SAWPA. Each assignment shall be made in the form of a written Task Order. Each such Task Order shall include, but shall not be limited to, a description of the nature and scope of the services to be performed by Consultant, the amount of compensation to be paid, and the expected time of completion.
- 2.02** Consultant may at Consultant's sole cost and expense, employ such competent and qualified independent professional associates, subcontractors, and consultants as Consultant deems necessary to perform each assignment; provided that Consultant shall not subcontract any work to be performed without the prior written consent of SAWPA.

## **ARTICLE III**

### **COMPENSATION**

- 3.01** In consideration for the services to be performed by Consultant, SAWPA agrees to pay Consultant as provided for in each Task Order.
- 3.02** Each Task Order shall specify a total not-to-exceed sum of money and shall be based upon the regular hourly rates customarily charged by Consultant to its clients.
- 3.03** Consultant shall not be compensated for any services rendered nor reimbursed for any expenses incurred in excess of those authorized in any Task Order unless approved in advance by the Commission and General Manager of SAWPA, in writing.



**3.04** Unless otherwise provided for in any Task Order issued pursuant to this Agreement, payment of compensation earned shall be made in monthly installments after receipt from Consultant of a timely, detailed, corrected, written invoice by SAWPA's Project Manager, describing, without limitation, the services performed, when such services were performed, the time spent performing such services, the hourly rate charged therefore, and the identity of individuals performing such services for the benefit of SAWPA. Such invoices shall also include a detailed itemization of expenses incurred. Upon approval by an authorized SAWPA employee, SAWPA will pay within 30 days after receipt of a valid invoice from Consultant.

## **ARTICLE IV**

### **CONSULTANT OBLIGATIONS**

**4.01** Consultant agrees to perform all assigned services in accordance with the terms and conditions of this Agreement including those specified in each Task Order. In performing the services required by this Agreement and any related Task Order Consultant shall comply with all local, state and federal laws, rules and regulations. Consultant shall also obtain and pay for any permits required for the services it performs under this Agreement and any related Task Order.

**4.02** Except as otherwise provided for in each Task Order, Consultant will supply all personnel and equipment required to perform the assigned services.

**4.03** Consultant shall be solely responsible for the health and safety of its employees, agents and subcontractors in performing the services assigned by SAWPA. Consultant hereby covenants and agrees to:

**4.03a** Obtain a Commercial General Liability and an Automobile Liability insurance policy, including contractual coverage, with limits for bodily injury and property damage in an amount of not less than \$2,000,000.00 per occurrence for each such policy. Such policy shall name SAWPA, its officers, employees, agents and volunteers, as an additional insured, with any right to subrogation waived as to SAWPA, its officers, employees, agents and volunteers. If Commercial General Liability Insurance or other form with an aggregate limit is used, either the general aggregate limit shall apply separately to the work assigned by SAWPA under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. The coverage shall be at least as broad as Insurance Services Office Commercial General Liability Coverage (occurrence Form CG 00 01) and Insurance Services Office Form CA 00 01 covering Automobile Liability, Code 1 (any auto). The Commercial Liability Insurance shall include operations, products and completed operations, as applicable;

- 4.03b** Obtain a policy of Professional Liability (errors and omissions) insurance appropriate to the Consultant's profession in a minimum amount of \$2,000,000.00 per claim or occurrence to cover any negligent acts or omissions or willful misconduct committed by Consultant, its employees, agents and subcontractors in the performance of any services for SAWPA. Architects' and engineers' coverage shall include contractual liability;
- 4.03c** Obtain a policy of Employer's Liability insurance in a minimum amount of \$1,000,000.00 per accident for bodily injury and property damage.
- 4.03d** Provide worker's compensation insurance or a California Department of Insurance-approved self-insurance program in an amount and form required by the State of California and the Employer's Liability Insurance that meets all applicable Labor Code requirements, covering all persons or entities providing services on behalf of the Consultant and all risks to such persons or entities;
- 4.03e** Consultant shall require any subcontractor that Consultant uses for work performed for SAWPA under this Agreement or related Task Order to obtain the insurance coverages specified above.
- 4.03f** Consultant hereby agrees to waive subrogation which any insurer of Consultant may seek to require from Consultant by virtue of the payment of any loss. Consultant shall obtain an endorsement that may be necessary to give effect to this waiver of subrogation. In addition, the Workers Compensation policy shall be endorsed with a waiver of subrogation in favor of SAWPA for all work performed by Consultant, and its employees, agents and subcontractors.

All such insurance policy or policies shall be issued by a responsible insurance company with a minimum A. M. Best Rating of "A-" Financial Category "X", and authorized and admitted to do business in, and regulated by, the State of California. If the insurance company is not admitted in the State of California, it must be on the List of Eligible Surplus Line Insurers (LESLI), shall have a minimum A.M. Best Rating of "A", Financial Category "X", and shall be domiciled in the United States, unless otherwise approved by SAWPA in writing. Each such policy of insurance shall expressly provide that it shall be primary and noncontributory with any policies carried by SAWPA and, to the extent obtainable, such coverage shall be payable notwithstanding any act of negligence of SAWPA that might otherwise result in forfeiture of coverage. Evidence of all insurance coverage shall be provided to SAWPA prior to issuance of the first Task Order. Such policies shall provide that they shall not be canceled or amended without 30 day prior written notice to SAWPA. Consultant acknowledges and agrees that such insurance is in addition to Consultant's obligation to fully

indemnify and hold SAWPA free and harmless from and against any and all claims arising out of an injury or damage to property or persons caused by the negligence, recklessness, or willful misconduct of Consultant in performing services assigned by SAWPA.

**4.04** Consultant hereby covenants and agrees that SAWPA, its officers, employees, and agents shall not be liable for any claims, liabilities, penalties, fines or any damage to property, whether real or personal, nor for any personal injury or death caused by, or resulting from, or claimed to have been caused by or resulting from, any negligence, recklessness, or willful misconduct of Consultant. Consultant shall hold harmless, defend and indemnify SAWPA and its officers, employees, agents and volunteers from and against any and all liability, loss, damage, fines, penalties, expense and costs, including, without limitation, attorneys' fees and litigation expenses and costs, of every nature arising out of or related to Consultant's negligence, recklessness, or willful misconduct related to or arising from the performance of the work required under this Agreement and any related Task Order or Consultant's failure to comply with any of its obligations contained in this Agreement and any related Task Order, except as to such loss or damage which was caused by the active negligence or willful misconduct of SAWPA.

**4.05** In the event that SAWPA requests that specific employees or agents of Consultant supervise or otherwise perform the services specified in each Task Order, Consultant shall ensure that such individual(s) shall be appointed and assigned the responsibility of performing the services.

**4.06** In the event Consultant is required to prepare plans, drawings, specifications and/or estimates, the same shall be furnished with a registered professional engineer's number and shall conform to local, state and federal laws, rules and regulations. Consultant shall obtain all necessary permits and approvals in connection with this Agreement, any Task Order or Change Order. However, in the event SAWPA is required to obtain such an approval or permit from another governmental entity, Consultant shall provide all necessary supporting documents to be filed with such entity, and shall facilitate the acquisition of such approval or permit.

## ARTICLE V

### SAWPA OBLIGATIONS

**5.01** SAWPA shall:

**5.01a** Furnish all existing studies, reports and other available data pertinent to each Task Order that are in SAWPA's possession;

**5.01b** Designate a person to act as liaison between Consultant and the General Manager and Commission of SAWPA.

## **ARTICLE VI**

### **ADDITIONAL SERVICES, CHANGES AND DELETIONS**

**6.01** During the term of this Agreement, the Commission of SAWPA may, from time to time and without affecting the validity of this Agreement or any Task Order issued pursuant thereto, order changes, deletions, and additional services by the issuance of written Change Orders authorized and approved by the Commission of SAWPA.

**6.02** In the event Consultant performs additional or different services than those described in any Task Order or authorized Change Order without the prior written approval of the Commission of SAWPA, Consultant shall not be compensated for such services.

**6.03** Consultant shall promptly advise SAWPA as soon as reasonably practicable upon gaining knowledge of a condition, event, or accumulation of events, which may affect the scope and/or cost of services to be provided pursuant to this Agreement. All proposed changes, modifications, deletions, and/or requests for additional services shall be reduced to writing for review and approval or rejection by the Commission of SAWPA.

**6.04** In the event that SAWPA orders services deleted or reduced, compensation shall be deleted or reduced by a comparable amount as determined by SAWPA and Consultant shall only be compensated for services actually performed. In the event additional services are properly authorized, payment for the same shall be made as provided in Article III above.

## **ARTICLE VII**

### **CONSTRUCTION PROJECTS: CONSULTANT CHANGE ORDERS**

**7.01** In the event SAWPA authorizes Consultant to perform construction management services for SAWPA, Consultant may determine, in the course of providing such services, that a Change Order should be issued to the construction contractor, or Consultant may receive a request for a Change Order from the construction

contractor. Consultant shall, upon receipt of any requested Change Order or upon gaining knowledge of any condition, event, or accumulation of events, which may necessitate issuing a Change Order to the construction contractor, promptly consult with the liaison, General

Manager and Commission of SAWPA. No Change Order shall be issued or executed without the prior approval of the Commission of SAWPA.

## **ARTICLE VIII**

### **TERMINATION OF AGREEMENT**

- 8.01** In the event the time specified for completion of an assigned task in a Task Order exceeds the term of this Agreement, the term of this Agreement shall be automatically extended for such additional time as is necessary to complete such Task Order and thereupon this Agreement shall automatically terminate without further notice.
- 8.02** Notwithstanding any other provision of this Agreement, SAWPA, at its sole option, may terminate this Agreement at any time by giving 10 day written notice to Consultant, whether or not a Task Order has been issued to Consultant.
- 8.03** In the event of termination, the payment of monies due Consultant for work performed prior to the effective date of such termination shall be paid after receipt of an invoice as provided in this Agreement.

## **ARTICLE IX**

### **CONSULTANT STATUS**

- 9.01** Consultant shall perform the services assigned by SAWPA in Consultant's own way as an independent contractor, in pursuit of Consultant's independent calling and not as an employee of SAWPA. Consultant shall be under the control of SAWPA only as to the result to be accomplished and the personnel assigned to perform services. However, Consultant shall regularly confer with SAWPA's liaison, General Manager, and Commission as provided for in this Agreement.
- 9.02** Consultant hereby specifically represents and warrants to SAWPA that the services to be rendered pursuant to this Agreement shall be performed in accordance with the standards customarily applicable to an experienced and competent professional consulting organization rendering the same or similar services. Furthermore, Consultant represents and warrants that the individual signing this Agreement on behalf of Consultant has the full authority to bind Consultant to this Agreement.



## ARTICLE X

### AUDIT AND OWNERSHIP OF DOCUMENTS

- 10.01** All draft and final reports, plans, drawings, specifications, data, notes, and all other documents of any kind or nature prepared or developed by Consultant in connection with the performance of services assigned to it by SAWPA are the sole property of SAWPA, and Consultant shall promptly deliver all such materials to SAWPA. Consultant may retain copies of the original documents, at its option and expense. Use of such documents by SAWPA for project(s) not the subject of this Agreement shall be at SAWPA's sole risk without legal liability or exposure to Consultant. SAWPA agrees to not release any software "code" without prior written approval from the Consultant.
- 10.02** Consultant shall retain and maintain, for a period not less than four years following termination of this Agreement, all time records, accounting records, and vouchers and all other records with respect to all matters concerning services performed, compensation paid and expenses reimbursed. At any time during normal business hours and as often as SAWPA may deem necessary, Consultant shall make available to SAWPA's agents for examination of all such records and will permit SAWPA's agents to audit, examine and reproduce such records.

## ARTICLE XI

### MISCELLANEOUS PROVISIONS

- 11.01** This Agreement supersedes any and all previous agreements, either oral or written, between the parties hereto with respect to the rendering of services by Consultant for SAWPA and contains all of the covenants and agreements between the parties with respect to the rendering of such services in any manner whatsoever. Any modification of this Agreement will be effective only if it is in writing signed by both parties.
- 11.02** Consultant shall not assign or otherwise transfer any rights or interest in this Agreement without the prior written consent of SAWPA. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- 11.03** In the event Consultant is an individual person and dies prior to completion of this Agreement or any Task Order issued hereunder, any monies earned that may be due Consultant from SAWPA as of the date of death will be paid to Consultant's estate.

- 11.04** Time is of the essence in the performance of services required hereunder. Extensions of time within which to perform services may be granted by SAWPA if requested by Consultant and agreed to in writing by SAWPA. All such requests must be documented and substantiated and will only be granted as the result of unforeseeable and unavoidable delays not caused by the lack of foresight on the part of Consultant.
- 11.05** Consultant shall comply with all local, state and federal laws, rules and regulations including those regarding nondiscrimination and the payment of prevailing wages.
- 11.06** SAWPA expects that Consultant will devote its full energies, interest, abilities and productive time to the performance of its duties and obligations under this Agreement, and shall not engage in any other consulting activity that would interfere with the performance of Consultant's duties under this Agreement or create any conflicts of interest. If required by law, Consultant shall file a Conflict of Interest Statement with SAWPA.
- 11.07** Any dispute which may arise by and between SAWPA and the Consultant, including the Consultants, its employees, agents and subcontractors, shall be submitted to binding arbitration. Arbitration shall be conducted by a neutral, impartial arbitration service that the parties mutually agree upon, in accordance with its rules and procedures. The arbitrator must decide each and every dispute in accordance with the laws of the State of California, and all other applicable laws. Unless the parties stipulate to the contrary prior to the appointment of the arbitrator, all disputes shall first be submitted to non-binding mediation conducted by a neutral, impartial mediation service that the parties mutually agree upon, in accordance with its rules and procedures.
- 11.08** During the performance of the Agreement, Consultant and its subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (cancer), age (over 40), marital status and denial of family care leave. Consultant and its subcontractors shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12290 et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 et seq., set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Consultant and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other

agreement. Consultant shall include the non-discrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

**In witness whereof**, the parties hereby have made and executed this Agreement as of the day and year first above-written.

**SANTA ANA WATERSHED PROJECT AUTHORITY**

---

Richard E. Haller, P.E., General Manager

Date

**(CONSULTANT NAME)**

---

(Signature)

Date

Typed/Printed Name



# SANTA ANA WATERSHED PROJECT AUTHORITY

TASK ORDER NO. \_\_\_\_\_

CONSULTANT:

VENDOR NO.

VALUE:

PAYMENT: Upon Proper Invoice

REQUESTED BY: \_\_\_\_\_ (date)

FINANCE: \_\_\_\_\_  
Karen Williams, CFO Date

FINANCING SOURCE: Acct. Coding XX  
Acct. Description: General Consulting

COMMISSION AUTHORIZATION REQUIRED: YES ( ) NO ( )  
Commission Memo # \_\_\_\_\_.

This Task Order is issued by the Santa Ana Watershed Project Authority (hereafter "SAWPA") to \_\_\_\_\_ (hereafter "Consultant") pursuant to the Agreement between SAWPA and Consultant entitled *Agreement for Services*, dated \_\_\_\_\_ (*expires* ).

## I. PROJECT NAME OR DESCRIPTION

## II. SCOPE OF WORK / TASKS TO BE PERFORMED

Consultant shall provide all labor, materials and equipment for the Project to perform the specific tasks of \_\_\_\_\_, and as more thoroughly described in Attachment A (or describe full tasks here).

*Please refer to Appendix X for acceptable formats, also found at [www.sawpa.org/html/e\\_req.htm](http://www.sawpa.org/html/e_req.htm)*

## III. PERFORMANCE TIME FRAME

Consultant shall begin work within five days of the date this Task Order is signed by the Authorized Officer and shall complete performance of such services by or before \_\_\_\_\_, 20\_\_.

## IV. SAWPA LIAISON

\_\_\_\_\_ shall serve as liaison between SAWPA and Consultant.

## V. COMPENSATION

For all services rendered by Consultant pursuant to this Task Order, Consultant shall receive a total not-to-exceed sum of \$ \_\_\_\_\_ in accordance with the schedule of rates. Payment for such services shall be made within 30 days upon receipt of timely and proper invoices from





## Electronic Deliverables

### X.1 PRODUCTS

All products identified as deliverables under this Contract/Task Order/Work Order (including, but not limited to documents, data analyses, databases, maps, graphics, images, design drawings, and Geographic Information System [GIS] data) will be provided to SAWPA in electronic format in accordance with the project delivery schedule.

Unless specified elsewhere in the Contract/Task Order/Work Order, SAWPA will have no license restrictions, and may use the electronic files/data for purposes it deems appropriate.

### X.2 FORMATS

All deliveries will be provided in native (editable) formats. Additional non-native formats (e.g., Adobe Acrobat) will also be provided as described below.

SAWPA's standard data file formats are:

- Documents (including Desktop Publishing)
  - Microsoft Word 2010 or later
- Tables/Spreadsheets
  - Microsoft Excel 2010 or later
- Presentations
  - Microsoft PowerPoint 2010 or later
- Databases
  - Microsoft Access 2010 or later
  - Microsoft SQL Server 2008 or later
- Project Schedules
  - Microsoft Project 2010 or later
- Computer Aided Drafting (CAD) - Design Drawings, etc.
  - AutoDesk AutoCAD 2016 or later
- Graphics/Images
  - Adobe Illustrator CS5 or later
  - Adobe Photoshop CS5
  - Microsoft Visio 2010 or later
  - Standard JPG format

- TIF 4 format
- Web Information
  - HTML
  - Adobe Acrobat XI or later Portable Document Format (PDF)
- GIS Data
  - File Geodatabase
  - GIS Shapefiles
  - Data in ODBC-compatible format, preferably one of the following
    - Microsoft Access (for relational data)
    - Microsoft SQL Server (for more complex relational data)
  - GIS Applications to be fully compatible with ArcGIS 10.x or later
  - See Section X.3 for specifications
- Field mapping (GPS data)
  - Mapping formats to be one of the following
    - Trimble Pathfinder-compatible files
    - GIS format files listed above
- Analytical Data Formats
  - Standard Electronic Data Deliverable (EDD) formats as used by certified laboratories
- Applications
  - Specifications to any applications (specialized software, scripts, code, Plug-Ins, etc.) required as part of the Contract/Task Order/Work Order will be detailed in the body of Statement of Work.

### **X.3 SPECIFICATIONS (GIS AND RELATED DATA)**

In general, data provided to SAWPA for use in SAWPA's GIS will be fully compatible with SAWPA's GIS. Therefore, the following specifications will be followed:

- All data will be provided in Universal Transverse Mercator (UTM), Zone 11 meters, North American Datum (NAD) of 1983
- All vector data will be provided in shape file or file geodatabase format
- All rrid data will be provided in ESRI GRID, ESRI TIN, or US Geological Survey DEM format
- All image data (e.g., satellite imagery/aerial photos) will be provided in formats that are fully compatible with ESRI ArcGIS 10.X at no cost for plug-ins, Extensions, or other software tools

- All database information tied to the GIS will be fully compatible/functional with SAWPA's GIS with no additional software requirements
- All data will have sufficient metadata to identify as a minimum
  - Data description
  - Data sources
  - Data creator
  - Data creation date
  - Data accuracy.
- Metadata formats will be in ESRI Catalog format, based on accepted metadata standards (e.g., the Federal Geographic Data Committee, the CADD/GIS Technology Center's Spatial Data Standards, or other recognized standards format). Documents associated with metadata will identify the format/standards being used.

#### **X.4 DELIVERY OF ELECTRONIC FILES**

For each delivery specified, and for each version specified (e.g., Draft and Final Reports; 35%, 60%, 90%, 100%, and As-Built Design Drawings), the Consultant will provide electronic copies of the files in addition to any specified hard copies on the same schedule, unless otherwise specified in the schedule of deliverables. Delivery of electronic files does not substitute for required delivery of hard copies, unless approved in writing by SAWPA's Project Manager.

**Review Files.** In addition to native file format deliveries, Contractor will provide ALL report, map, graphic, and drawing deliverables in Adobe Acrobat PDF files. The PDF files will faithfully represent the completed hard copy document in terms of color pages, page sizes, etc. These files will be fully integrated files in proper page order, with graphics, tables, attachments, etc. inserted in their proper location in the document (or connected using the Link function). PDF files exceeding 10 pages in length will use internal hyperlinks (in Table of Contents) and/or use Acrobat's Bookmark features to enable easy navigation throughout the file. PDF files will be ready for posting to SAWPA's web site (if deemed appropriate) or distributed for review as part of a technical/peer/management review process.

**Media.** Delivery method for formal contract deliverables will be specified and approved by SAWPA's Project Manager, but will be one of the following (in general order of preference):

- Via email to SAWPA's Project Manager (for deliverables less than 15 MB, or time critical)
- USB Flash Drive
- Posted to Consultant's FTP or Dropbox

## **X.5 EXCEPTIONS**

Exceptions to these formats may be allowed in some cases. All exceptions will be approved within the body of the Contract/Task Order/Work Order or in writing by the Project Manager AND the Information Systems/Data Management Manager.



**SANTA ANA WATERSHED PROJECT AUTHORITY  
TASK ORDER NO. NAWC370-01**

**CONSULTANT:** North American Weather Consultants, Inc. **VENDOR NO.** 2260  
8180 S. Highland Drive, Suite B-2  
Sandy, UT 84093

**COST:** \$75,000.00

**PAYMENT:** Upon Proper Invoice

**REQUESTED BY:** Mark Norton, Water Resources & Planning Manager **December 17, 2019**

**FINANCE:** \_\_\_\_\_  
Karen Williams, CFO Date

**FINANCING SOURCE:** Acct. Coding 370-01-60121-01  
Acct. Description General Consulting

**COMMISSION AUTHORIZATION REQUIRED FOR THIS TASK ORDER:** YES ( X ) NO ( )  
Authorization: December 17, 2019; CM#2019.125

This Task Order is issued upon approval and acceptance by the Santa Ana Watershed Project Authority (SAWPA) and North American Weather Consultant, Inc. (Consultant) pursuant to the Agreement for Services between SAWPA and Consultant, entered into on December 17, 2019, and expiring December 31, 2020.

**I. PROJECT NAME OR DESCRIPTION**

Weather Modification Feasibility Study for the Santa Ana River Watershed

**II. SCOPE OF WORK / TASKS TO BE PERFORMED**

Consultant shall provide all labor, materials, and equipment for conducting a feasibility/design study of a weather modification or cloud seeding program to increase precipitation and snowpack in the Santa Ana River Watershed, as thoroughly described in Attachment A.

**III. PERFORMANCE TIME FRAME**

Consultant shall begin work January 1, 2020 and shall complete performance of such services by **December 31, 2020.**

**IV. SAWPA LIAISON**

Mark Norton shall serve as liaison between SAWPA and Consultant.

**V. COMPENSATION**

For all services rendered by Consultant pursuant to this Task Order, Consultant shall receive a total not-to-exceed sum of **\$75,000.00**. Payment for such services shall be made monthly upon receipt of timely and proper invoices from Consultant, as required by the above-mentioned Agreement. Each such invoice shall be provided to SAWPA by Consultant within 15 days after the end of the month in which the services were performed.





**Answers to Questions on North American Weather Consultants (NAWC) Proposal #19-447  
entitled “Proposal to Conduct a Cloud Seeding Feasibility/Design Study  
for the Santa Ana River Watershed, California”**

**Work Schedule**

There are five tasks to be completed contained in the Request For Proposals (RFP):

1. Collection of Data
2. Selection of Target Areas
3. Development of Program Design and Seeding Increase Estimates
4. Perform a Benefit/Cost Analysis
5. Delivery of Final Report

The RFP indicates an estimated start date of contractor work on January 2, 2019 and a completion date in the fall of 2020. The completion of Tasks 2 through 5 are dependent upon the acceptance of a Memorandum prepared in Task 1 leading the SAWPA to decide to whether to proceed with Tasks 2-5.

An approximate schedule for completion of these Tasks is as follows (all 2020 dates):

- Task 1: January 2nd to February 15th
- Task 2: March 1st to April 15th (note, this March 1st date allows the SAWPA 2 weeks to determine whether to proceed with Tasks 2-5)
- Task 3: Apr. 15th to Jun. 15th
- Task 4: Jun. 15th to Aug. 1st
- Task 5: Aug. 1st to Oct. 31st (note allows 4 weeks for SAWPA to review draft report then have NAWC incorporate comments into the final report)

**Costs**

The following explanation is contained in our proposal, which was an exception taken regarding the language in the RFP:

“NAWC requests a fixed cost instead of a cost reimbursable contract. A fixed cost would be established for each of the five tasks. **All previous NAWC feasibility/design contracts, including those in California, have been conducted on a fixed cost basis.** NAWC does not require our employees to submit time cards. We expend whatever personnel time is needed in order to deliver an acceptable product. We use this same fixed price approach in the conduct of all of our operational cloud seeding programs, with the exception of a

Attachment A

cost reimbursable section in our contracts that is used to charge our clients for seeding material usage and flight hours, which are entirely a function of the weather conditions”. So unfortunately the answer is no to your request for detailed costs per staff and hourly rates.

Yes, the \$75,000 is an all-inclusive number. There are no upfront costs. The proposed payment schedule, as contained in our proposal, is as follows:

**Fixed Costs**

• Task 1, Collection of Data.	\$15,000
• Task 2, Selection of Target Areas.	\$15,000
• Task 3, Development of Program Design and Seeding Increase Estimates.	\$20,000
• Task 4, Perform a Benefit/Cost Analysis.	\$15,000
• Task 5, Delivery of Final Report	<u>\$10,000</u>
Total	\$75,000

These costs would be invoiced after the completion of each task.

Note: NAWC assumes that if chosen to conduct this feasibility/design study that this would not preclude NAWC from being able to bid on any follow on work (e.g., preparation of a Mitigated Negative Declaration or implementation of an operational cloud seeding program).

Don Griffith, North American Weather Consultants  
November 22, 2019

**PROPOSAL TO CONDUCT A CLOUD SEEDING FEASIBILITY AND DESIGN STUDY FOR  
THE SANTA ANA RIVER WATERSHED**

SUBMITTED TO

**SANTA ANA RIVER WATERSHED PROJECT AUTHORITY**



SUBMITTED BY

**RHS CONSULTING, LTD**  
PO BOX 17096  
RENO, NV 89511

OCTOBER 31, 2019

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## INTRODUCTION

RHS Consulting, Ltd (RHS) is pleased to provide the Santa Ana Watershed Project Authority (SAWPA) with a proposal to perform a feasibility and design study for a weather modification program targeting the Santa Ana River Watershed. The purpose of the study is to determine the feasibility of cloud seeding to increase precipitation and water supply in the Santa Ana River Basin (SARB). SAWPA has two goals including increasing the reliability of the regional water supply and decreasing the areas dependence on imported water and has identified cloud seeding as a possible method for easing water shortages. This proposal includes a discussion of the scope of work and several tasks that RHS considers appropriate for a brief design study. The team we have proposed has the knowledge and capability to develop and recommend a superior project design because of our extensive experience conducting many years of both atmospheric research and cloud seeding operations.

Cloud seeding to enhance snowfall in mountainous regions is common in the western United States. California, Utah, Colorado and, Idaho all maintain active operational cloud seeding programs. Climate change issues and current drought conditions have raised the public awareness of the ever-increasing gaps between water demands and clean sustainable water supplies. Ever increasing agricultural, municipal, industrial and environmental demands and conflicts continue to increase in California. Cloud seeding is a long-term management tool and applied on a continuing basis, cloud seeding can provide incremental amounts of relatively inexpensive water. Cloud seeding also has other intangible benefits such as improving water quality and providing additional water for fisheries management, recreation and the environment.

The proposed work will be performed under the supervision of the SAWPA. SAWPA plans and builds multi-benefit projects increasing water supply, protecting water quality, providing recreation opportunities and restoring the environment of the Santa Ana River Watershed. SAWPA is composed of five member agencies: Eastern Municipal Water District, Inland Empire Utilities Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District. SAWPA will serve as administrator of the project.

## BACKGROUND

The Santa Ana River watershed is located in southern California and is approximately 2,840 square miles in size. The tributaries of the Santa Ana River begin in the San Bernardino, San Gabriel, San Jacinto, and Santa Ana Mountains. The tributaries merge with the Santa Ana River which flows to the Pacific Ocean. The watershed includes portions of San Bernardino County, Riverside County, Orange County, and a small portion of Los Angeles County. Figure 1 shows the watershed boundaries and summarizes the physical characteristics of the watershed. The eastern side of the watershed includes the San Bernardino Mountains, with terrain exceeding 11,000'.

# SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

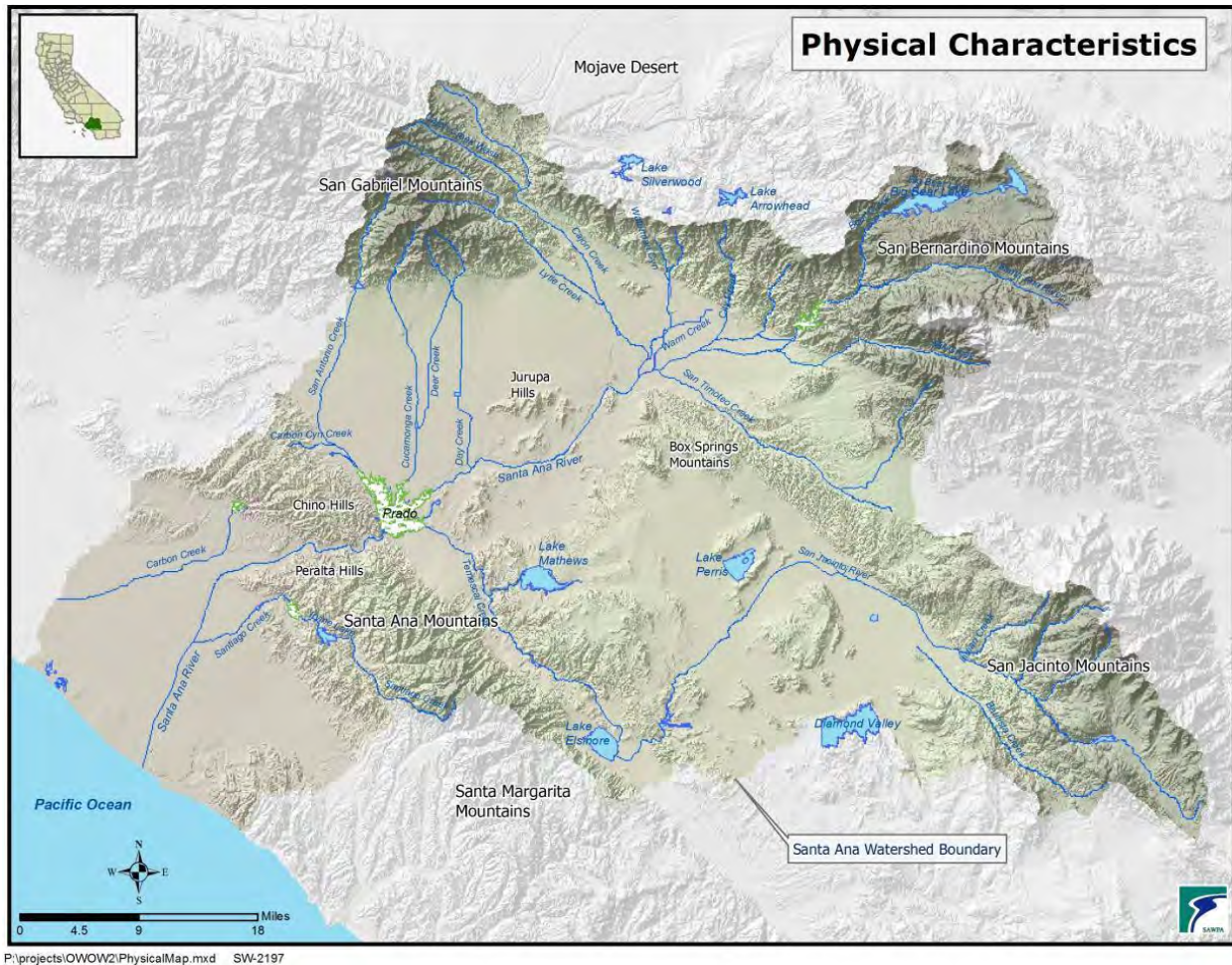


Figure 1. Santa Ana River Watershed Map

## OBJECTIVES

The primary objective of this project is to determine the feasibility of weather modification to increase precipitation and snowpack in the Santa Ana River Watershed.

The proposed feasibility study has the following objectives:

1. Describe the physiography, precipitation, climatology and hydrology of the SARW.
2. Identify sub-basins of the watershed where precipitation enhancement may be greatest and prioritize specific target areas for precipitation enhancement by considering climate trends, locations of water supply infrastructure, surface reservoirs, recharge zones and groundwater banks.
3. Estimate run-off increases that may result from precipitation enhancement and describe how such run-off increases may be evaluated.
4. Recommend procedures for operationally conducting a cloud seeding program, including seeding criteria, types of seeding agents, seeding mode and delivery systems.
5. Make a preliminary assessment of the environmental and societal impacts of a precipitation enhancement program and describe the legal and institutional constraints of such a program.

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6. Provide an overall feasibility assessment of such a precipitation enhancement program and include a statement as to additional design studies required and recommendations for further assessment of environmental impacts.

The next several sections of this proposal describe the scope, methodology, and schedule of the work necessary to reach these objectives. It should be noted that the work will in part be based on a review of California Cloud Seeding including both aircraft and ground-based seeding programs conducted in the Southern California Coastal Mountains and the Central and Southern Sierra Nevada. This review with other pertinent findings will be incorporated into the feasibility and preliminary design of a precipitation enhancement program targeting the Santa Ana watershed.

### SCIENTIFIC BASIS FOR CLOUD SEEDING

Clouds form when temperatures in the atmosphere reach saturation with respect to water or a relative humidity of 100%. This saturated condition causes water vapor to condense around a nucleus forming a cloud droplet. These nuclei are known as “cloud condensation nuclei.” Clouds can be composed of water droplets, ice crystals or a combination of the two. Clouds that are entirely warmer than freezing are sometimes referred to as “warm clouds.” Likewise, clouds that are colder than freezing are sometimes referred to as “cold clouds.” Cold clouds may have cloud bases that are warmer than freezing. Precipitation can occur naturally from both types of clouds.

In warm clouds, cloud droplets that survive long enough may collide and grow to raindrop sizes, subsequently falling to the ground as rain. This process is known as “collision/coalescence.” This process is especially important in tropical clouds but can also occur in more temperate climates.

In cold regions ( $T < 0\text{ }^{\circ}\text{C}$ ) of clouds, cloud water droplets may not freeze. The reason for this is the purity of the cloud water droplets. In a laboratory environment, pure water droplets can remain unfrozen down to a temperature of  $-39.4\text{ }^{\circ}\text{C}$ . Liquid water at these temperatures is thermodynamically unstable and is referred to as Supercooled Liquid Water (SLW). Natural impurities in the atmosphere can cause cloud droplets that are colder than freezing to freeze. Supercooled cloud droplets are what cause icing to occur on aircraft. The natural impurities often consist of tiny clay particles or bacteria. These impurities are referred to as “ice nuclei” and are rare in the atmosphere. When a supercooled cloud droplet collides with an ice nuclei it can freeze and form an ice crystal. This process is known as “contact nucleation.” A water droplet may also be formed on a freezing nucleus, which has a hygroscopic (water attracting) component. These composite nuclei will cause the water droplet when the ice nucleating component reaches its activation temperature which freezes the water droplet and forms an ice crystal. This process is known as “condensation/freezing.” Once an ice crystal is formed within a cloud it will continue to grow as cloud droplets around it evaporate and add their mass to the ice crystal, eventually forming a snowflake (diffusional growth). Ice crystals continue to gain mass as they fall and contact, then freeze, other supercooled cloud droplets (a process known as “riming”). These snowflakes may reach the ground as snow if temperatures at the surface remain colder than freezing. If they fall below the freezing into warmer air they can melt and fall to the surface as raindrops.

The scientific basis for modern cloud seeding programs evolved from a fundamental discovery in July 1946 at the General Electric Research Laboratory, Schenectady, New York. Dr. Vincent J. Schaefer discovered that, by placing a few pieces of dry ice in a refrigerated box in which his breath had formed a supercooled liquid fog, ice crystals could be produced. The droplets quickly changed to ice crystals, some of which grew large enough to fall and coat the bottom of the box. Experiments were quickly developed into actual field tests to confirm that these effects could be reproduced in real clouds. In 1947 Dr. Bernard Vonnegut, a colleague of Dr. Schaefer’s and the head of the General Electric Laboratory, and Nobel Laureate Dr. Irving Langmuir, discovered that silver iodide (AgI) could be produced as

an aerosol particle and serve as an effective ice nucleant. These fundamental discoveries provided the physical basis and technology of what is now recognized as the modern science of cloud seeding.

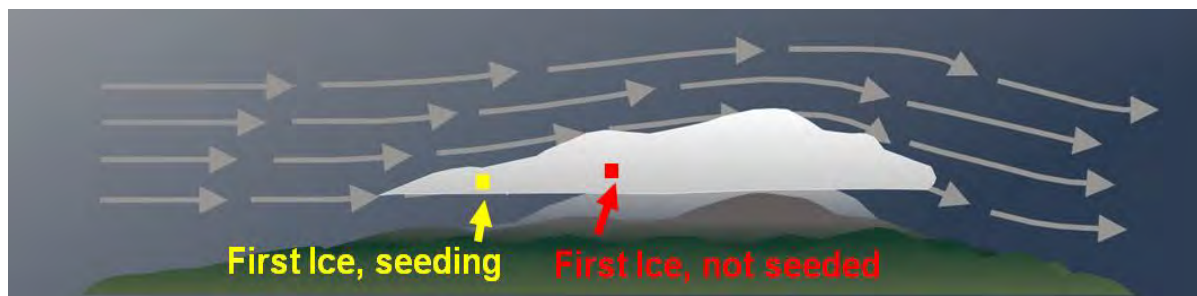
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### CLOUD SEEDING DESIGN HYPOTHESIS

Winter storms which pass over the project area contain clouds which do not produce precipitation efficiently because of a natural lack of ice nuclei (IN) or excessive amount of cloud condensation nuclei (CCN) in clouds with temperatures warmer than  $-20^{\circ}\text{C}$ . Ice nucleating agents (e.g. AgI type seeding materials containing hygroscopic complexes, etc.) released into clouds between the  $-4^{\circ}\text{C}$  and  $-10^{\circ}\text{C}$  level, at appropriate distances from the mountain crests allowing for sufficient ice crystal growth and particle fallout times (advection times) for the given wind profiles will produce additional seeded precipitation. In the case of seeding aerosols released from the ground additional time is required for seeding materials to rise to nucleation temperatures, create new seeded ice crystal and fallout with the target areas boundaries.

The seeding agents will cause the ice process to initiate sooner. Ice crystal growth rate will be greater than that of water droplet resulting in larger ice crystals with fall velocities that are greater than that of completing water droplets. As the ice crystals fall, they accrete additional cloud droplets through a riming process. Therefore, precipitation will form faster and deplete more cloud liquid water. Both research and theory suggest more precipitation will fall in the time frames available in the intended target area as precipitation efficiency increases. This additional precipitation will result in an increased runoff from the basin.

SLW in sufficient quantities is considered a sufficient condition for initiating cloud seeding activities that can significantly affect precipitation. Reynolds (1988) and others have shown that SLW is highly variable in both space and time in wintertime storms. He also showed that the concentrations of SLW are not well correlated with other specific meteorological variables and consequently quantitative SLW forecasts are difficult to make. Delivering cloud seeding material to the appropriate places and times in a target clouds requires diligent observation, available resources (both equipment and personnel) and rapid response. Aircraft seeding programs also greatly benefit from additional equipment such as dedicated radars/radiometers and require more coordination and staff expertise to be successful when compared with their ground-based counterparts.



**Figure 2. Winter seeding conceptual model (graphic courtesy of WMI)**

The selection of optimum seeding strategy (aircraft or ground-based) is critically dependent on the frequency, location and temperature that SLW occurs in a target area during winter storms. Other factors include the type of personnel and resources, the reliability of the equipment, how difficult the program is to operate, public relations and perception issues, and lastly the liability and risk involved in applying a specific strategy. The altitude and



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frequency SLW develops and the duration it exists is very dependent on barrier location, orientation and the stage a given storm is in as it passes over the barrier. These basic concepts are summarized in Figure 2.

- Natural clouds often lack sufficient ice nuclei to precipitate efficiently.
- Seeding provides additional ice nuclei that function at warmer temperatures allowing the ice process to begin sooner.
- Seeding materials begin to create new ice crystals at temperatures as warm as  $-4\text{ }^{\circ}\text{C}$  ( $+25\text{ }^{\circ}\text{F}$ ) although they become much more efficient between  $-6\text{ }^{\circ}\text{C}$  to  $-8\text{ }^{\circ}\text{C}$  ( $+17\text{ }^{\circ}\text{F}$  to  $21\text{ }^{\circ}\text{F}$ ) or colder.
- Most natural ice nuclei become effective between  $-15\text{ }^{\circ}\text{C}$  to  $-20\text{ }^{\circ}\text{C}$  ( $+5\text{ }^{\circ}\text{F}$  to  $-4\text{ }^{\circ}\text{F}$ ).

### DATA COLLECTION AND ANALYSIS

The physiography, precipitation climate and hydrology of the Santa Ana watershed will be described in terms from a cloud seeding perspective A description of the characteristics of the terrain and how specific aspects of the watershed make it suitable or not for cloud seeding.

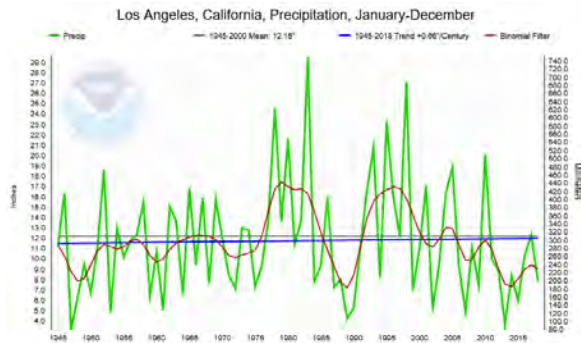


Figure 3. Los Angeles, CA precipitation record, 1945-2018

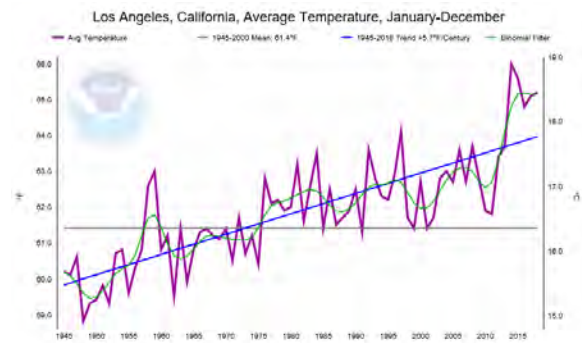


Figure 4. Los Angeles Temperature Record, 1945-2018

Climatological data for the Santa Ana watershed will be summarized. This will include monthly, seasonal and annual amounts of rain and snow falling at various gauges in the Santa Ana watershed and in groupings of the gauges that are representative of selected sub-basins of the watershed. The entire historical record as well as the mean and standard deviation will be presented and interpreted. In addition, the hydrology of the Santa Ana watershed will be summarized as it relates to target area selection, infrastructure, river and ground water recharge zones. The impact of climatological changes in freezing level and precipitation amount will be discussed in relation to cloud seeding strategies. These changes are important in view of the recent declines in precipitation and increasing temperatures (see Figure 1 and 2).

The precipitation climate is dominated by a maximum of rain and snowfall amounts during the winter period (December through March). Precipitation is largely associated with synoptic systems with moist, maritime air moving into the watershed from the Pacific Ocean. Precipitation events associated with synoptic systems may last 1 - 2 days or longer, during which time the types of cloud producing precipitation change. The changes in cloud type occur because of changes in the lifting. There may be general gradual ascent produced by widespread convergence ahead of a front and then more intense and localized ascent in frontal zones. There will also be shallow orographic clouds formed in post frontal air lifted by the windward slopes when the flow is toward the mountains. Potential (convective) instability may be released at this time. Post frontally, there



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may be isolated convection. These changes will be analyzed using combinations of weather model analyses and forecasts, satellite-based data, upper air soundings, NEXRAD radar and microwave radiometer data. The amount of SLW varies with cloud type leading to the expectation that the seedability of the clouds will also vary. To address these questions the vertical structure, magnitudes and distributions of SLW, vapor and temperature, both temporal and spatial, need to be analyzed in detail. These data sets will be combined with wind flow data (from gridded model output or upper air soundings) to determine the overall seedability of the clouds and allow selection of the best combination of seeding strategies.

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### RADIOMETER STUDIES OF CLOUD SEEDING POTENTIAL

Winter cloud seeding involves the conversion of SLW into ice particles. Ice crystals grow rapidly in a supercooled water droplet environment because ice has a lower equilibrium vapor pressure than a liquid surface at the same temperature. Unlike cloud droplets, which are essentially suspended in the air stream, the much larger ice particles can settle to the mountain surface provided their growth and fallout are sufficient prior to reaching the back edge of a target area. Thus, successful cloud seeding often involves a "race" between the time required for ice crystals to form, grow, and fall to the surface, and the advection time available to reach the back edge of the target area. A detailed discussion of all physical processes involved is given by Dennis (1980).

The main point of this discussion is that the availability of SLW is a necessary condition for the existence of practical precipitation augmentation potential (seedability). Potential also exists in some clouds when conditions range between ice and water saturation. However, this situation will be ignored here other than to note that seeding effects in these conditions can be significant (Vonnegut, 1952). The amount of SLW that can be converted to snow on the ground will also not be considered in this section. Here, the concern is with the frequency of occurrence of SLW and its magnitude and duration. Also, the flow or "flux" of SLW passing over a target area will be considered as it represents the absolute upper limit for precipitation augmentation potential. It would be impractical for any cloud seeding program to convert all the seasonal SLW flux to snowfall because of physical constraints. These include the timely delivery of seeding agents to desired cloud regions and the limited time available for ice crystal growth and fallout, suspension criteria imposed during abnormally wet periods, ability to fill the cloud volume, etc. In practice, operational seeding programs are successful when they can achieve operational efficiencies of 65-75%.

If observations show the seasonal SLW flux is only a very small percentage of natural annual streamflow from a region, the potential of seeding to augment the streamflow through increased snowfall would likewise be very limited on a percentage basis. Admittedly, even a small percentage increase in streamflow might represent a significant volume of water in some drainages. However, small percentage increases are difficult to measure. On the other hand, there is large potential for cloud seeding when the SLW flux is found to be a large percentage of annual streamflow. For a cloud seeding program to be viable it is clearly a very important step to estimate the actual potential using SLW observations on a seasonal basis. The development of profiling microwave radiometers has made it possible to make continuous measurements of the vertical temperature, liquid and vapor profiles independent of cloud ice.

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### LAX MICROWAVE RADIOMETER OBSERVATIONS

A 35 channel profiling microwave radiometer located at LAX has been operating since 2011. The radiometer is owned by Southern California Edison Co and operated by the South Coast Air Quality District (K. Durkee, private communication). The instrument was operated in an off-zenith mode (15 deg) to minimize contamination of the liquid channel and all data has been archived. An example of radiometer data is shown in Figure 5. The data in Figure 5 shows a two-day winter storm (atmospheric river) that occurred February 10-11, 2017. The three panels in the

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Figure 5 shows temperature ( $^{\circ}\text{C}$ ), relative humidity (%), and liquid water ( $\text{g}/\text{m}^3$ ) from the surface to 500 mb ( $\sim 18,000'$ ). For reference, vertical height in meters is also given on the right Y axis. This is a classic example of a winter storm. Temperature at the beginning of the storm is warm with the freezing level starting near 12,000' dropping and cooling as the storm moved through the area to 8,000'. Similarly, the  $-5^{\circ}\text{C}$  level starts near 14,500' and drops to 12,000' at the end of the storm. The height of the  $-5^{\circ}\text{C}$  level is important because the effectiveness of AgI seeding materials are strongly dependent on the temperature and do not begin to nucleate ice until temperatures are colder than  $-5^{\circ}\text{C}$ . For seeding to be effective in this case, they need to reach and be dispersed at heights greater than 12,000'.

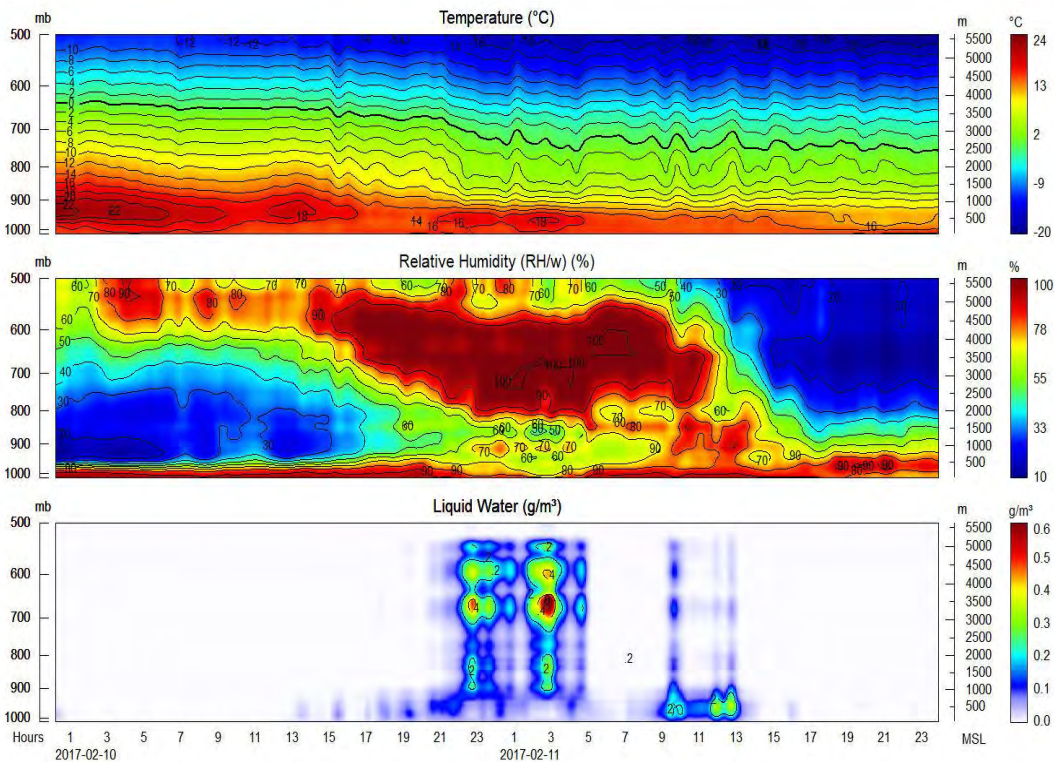


Figure 5. LAX Time-Height Radiometer Data, Feb 10-11, 2017

The second panel shows relative humidity with height. Moisture at the beginning of the storm is located above 13,000' and as the front approaches fills in the lower layers. By 1300Z the cloud begins to fill in the lower layers and light drizzle begins to fall as evidenced by the liquid observe at the lowest level warmer layer in the bottom panel. The main bands pass through the area between 2100Z-0500Z. Two smaller post frontal bands pass through, between 0900Z and 1300Z, when the back edge passes through the area. After the back edge passes through the upper level moisture moves out of the area and only the lowest 4000' are cloudy.

The lowest panel shows liquid water content. The highest liquid water contents detected during this event occurred as the main bands pass through the area between 2200Z and 03300Z. Maximum values reaching  $0.6 \text{ g}/\text{m}^3$  are observed between 11,000-13,000' (3500-4000m) at temperatures of  $-4^{\circ}\text{C}$  to  $-6^{\circ}\text{C}$  with another layer at 4500m reaching  $0.2\text{-}0.4 \text{ g}/\text{m}^3$ . These are the times that cloud seeding can be most effective provided seeding aerosols can be successfully delivered to these areas of the clouds.

Figure 6 gives the integrated liquid water, vapor and cloud base height for the same storm displayed in Figure 5. Integrated liquid water values average 1.25 mm during the time the two bands pass over the radiometer between

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2200Z and 0330Z and about 0.3-0.4 mm for the later bands. LAX upper air sounding shows that wind speeds above the freezing level were greater than 30 m/s. This translates to a flux of water passing across a 50km (30mi) section of the mountains of 27,360 acre-feet (AF) or about 5,000 AF/hr. This represents the upper limit of water production from this type of storm.

We propose analyzing the LAX radiometer data set from a range of seasons representing dry years to wet years to determine the magnitudes and frequencies that SLW occurs in storms passing over the area. These analyses will be coupled with Upper Air data to determine overall seeding potential. Temporal Cross Sections of these combined data sets will be used to determine the overall seeding potential of the area and feasibility of conducting an operational program

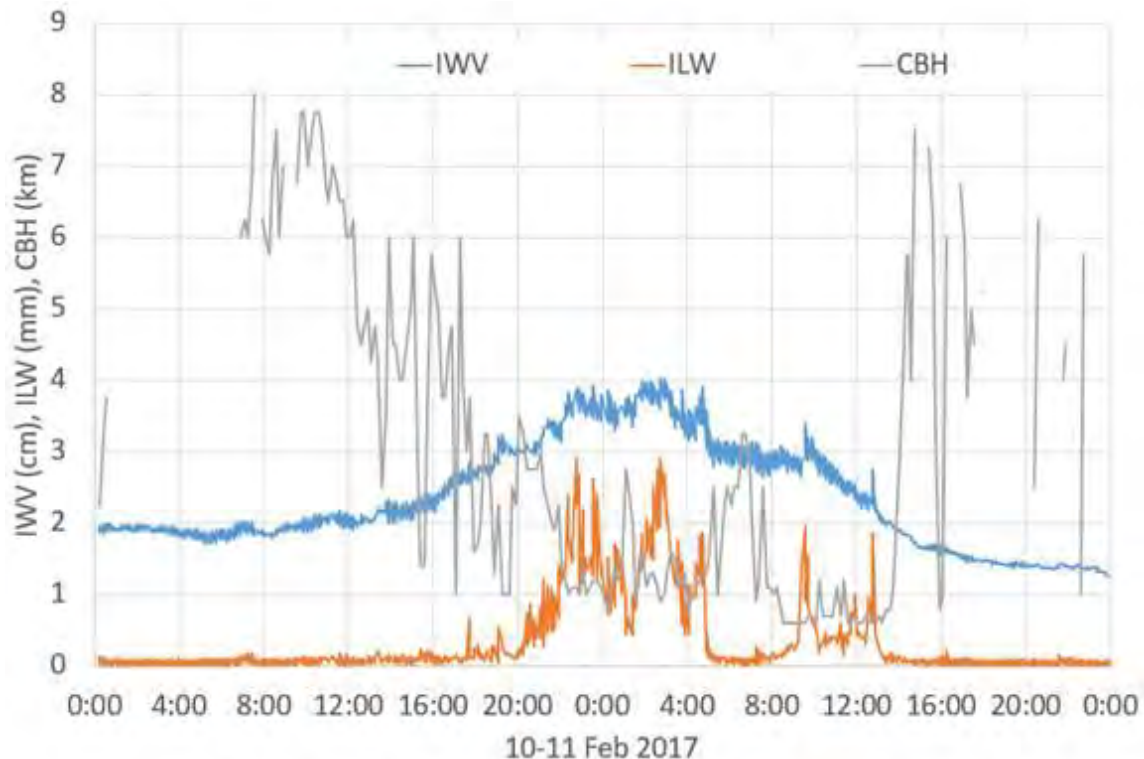


Figure 6. LAX Integrated Water Vapor, Integrated Liquid Water and Cloud Base Height for February 10-11, 2017

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### ARCHIVE DATA MODELING AND ANALYSIS

We propose using a modified version of WRF to develop estimates of seedability over the entire basin using archived weather model data from a coarser resolution National Weather Service Model as input into a high-resolution version of WRF adapted to the basin. We have been running WRF operationally since 2010 (Stone, 2011) to provide high resolution weather forecasts to plan and analyze our cloud seeding operations. The HydroWRF modeling system produces automated quantitative precipitation forecasts and maps of all the standard weather products at a number of atmospheric levels important for cloud seeding. It also produces specialized analyses and forecasts of supercooled liquid water (SLW), ice crystal concentrations (NICE), a cloud seeding index (CSI), and gridded data for use in a local targeting model. The CSI is the most important parameter produced and a forecast is played in a loop it allow rapid identification of the best times to seed clouds.



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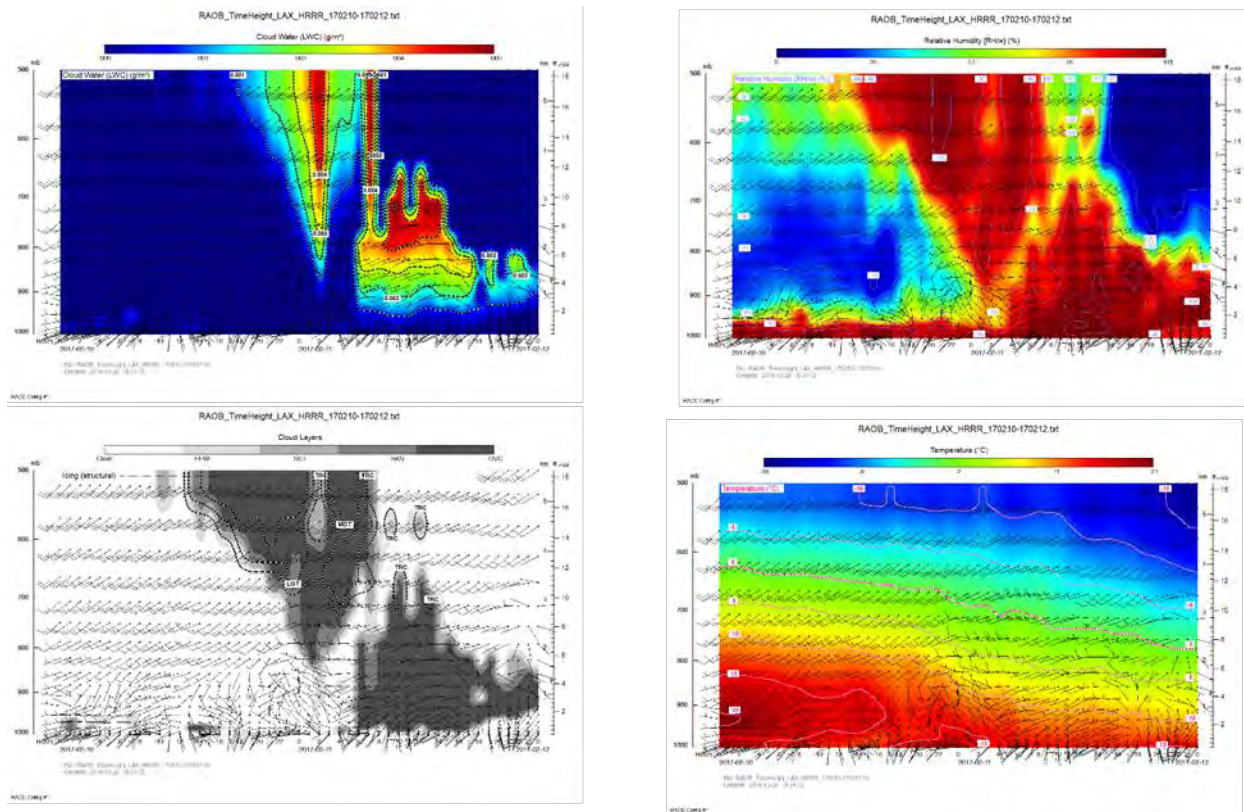


Figure 7. Four panel depiction of HRRR model data for the LAX site for Feb 10-11, 2017

We propose analyzing several seasons using archived HRRR data to initialize a local 1km version of the WRF model. These analyses will be combined with the LAX radiometer data to produce cross sections and associated seedability statistics over the basin. The radiometer data will be used to calibrate the moisture fields since model estimates are known to have scaling problems (also known as a “bias”). The frequency of storms, magnitudes and duration and SLW and its spatial distribution over the project area will be the focus of these analysis. Estimates of the amounts of precipitation by target area will also be developed. Finally, seeding criteria will be developed from these analyses. Figure 7 shows a four panel an example of raw HRRR data for the same times as the radiometer data displayed in Figures 5 and 6. The overall patterns of temperature, relative humidity and cloud agree well with the radiometer observations displayed in Figures 5 and 6. However, cloud liquid magnitudes need to be calibrated using the radiometer data. Overall this example gives confidence that the model estimates will agree with the unmeasured true values over the entire basin. The radiometer data will provide some level of the validation that can be tested with other aircraft data sets. These examples show why the radiometer data is so important for determining seeding potential and why this unique data set is needed for model calibration. Radiometers are specialized meteorological instruments and not routinely used for cloud seeding operations. To have such a complete set of radiometer data available to help design the Santa Ana program is very fortunate for the SAWPA.

## ESTIMATES OF INCREASED IN RUN-OFF

In order properly to evaluate the potential worth of precipitation enhancement to SAWPA it will be necessary to develop an accurate measure of the watershed response to varying precipitation amounts. Before discussing how this will be done, we note that there is no accurate estimate of the increase in precipitation that can be

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induced in clouds over the Santa Ana watershed by cloud seeding. Best estimates will come from analyzing SLW fluxes and modern operational program seeding efficiencies. At this point it is fair to state that seeding effects will likely range between 5-15% annual increases in runoff<sup>1</sup>. The analyses will be conducted on estimates of increased run-off will employ a range of precipitation increases.

In the past several approaches have been taken to evaluate watershed response to different precipitation inputs different with the complexity and refinement of the approach being a function of available data and time to develop such a hydrologic predictive tool. These approaches range from application of sophisticated data and time intensive hydrologic watershed models such as MIKE-SHE, APEX, SWAT or hybrids to application of a fairly simple transfer function relating precipitation directly to run-off with no attempt to model the intermediate physical processes.

The most desirable approach would be to apply an already existing, calibrated and verified hydrologic model where responses to fixed levels of precipitation have been determined. Use of such a model permits evaluation of the direct run-off response to precipitation increases. It also allows indirect responses to soil moisture and ground water increases, which have a delayed response to precipitation increases, and exhibit substantial carryover effect from season-to-season. If such a model is available which performs short-time increment water accounting for defined sub-areas within a watershed it is then possible to modify precipitation inputs to reflect "best" estimates of enhanced precipitation based on analysis of individual storms. The model then accumulates and depletes precipitation to reflect the soil, vegetation and other properties of each sub-area and yields an outflow hydrograph. It also preserves the carryover effects related to soil moisture amounts. Development of such a model, if one does not now exist, would require considerable effort beyond the scope of this proposed study but may be the approach to be taken for final design of an operational program or could be taken after inception of an operational program to yield an evaluation tool.

In lieu of such a sophisticated, data-intensive model, it should be possible by means of statistical analysis to make preliminary but meaningful estimates of probable increases in streamflow. The approach would be to develop predictive relationships between annual or seasonal streamflow and precipitation. These relationships, similar to those already used to forecast basin wide run-off, would be developed on a sub-basin basis using historic streamflow and precipitation data available from the USGS. These relationships are dependent upon being able to demonstrate a high correlation between run-off and precipitation measurement over a sub basin. The relationships derived by such a methodology exhibit certain limitations which must be recognized.

They are best applied to situations which do not represent extreme run-off values since the uncertainty of the predictive equation increases with departure from mean variable values. Accordingly, analysis of run-off augmentation will be more reliable when considering departures from the mean, both wet and dry, which are not at the extremes of the observed record. Nevertheless, a range of wet and dry as well as normal seasons can be considered. The division of the entire watershed into sub-basins will be based on a review of the hydrologic, climatic and physiographic characteristics. These together with locations of reliable historic flow and precipitation data will define the sub-basin boundaries. For each sub-basin an analysis of precipitation vs. yield

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<sup>1</sup> Experience has shown that ground-based generator programs can yield water production rates ranging from 6-20 AF/unit hour in the Sierra. A typical generator plume will provide about 45 square miles of target area coverage so seasonal water yields depend on number of units that can be operated in seedable storm periods. Aircraft water production rates are significantly higher. In the Southern Sierra one aircraft seeding 25-30 mile long tracks can fill the cloud volume and produce seeded precipitation rates of 1000 – 2500 AF/hr depending on temperature and cloud condensate supply rates.



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will be made using standard statistical techniques with precipitation from different locations being the independent variables and streamflow the dependent variable.

Several sets of these will be performed on a seasonal basis that consider a range of seeding strategies. It is anticipated that in order to achieve predictive equations with acceptable levels of accuracy some measure of antecedent conditions will have to be incorporated. This measure could be the previous season(s) precipitation or streamflow which provide some measure of watershed conditions at the beginning of the time period for which a prediction is being made.

Benefit cost analyses will be conducted for four seeding strategies including: ground-based flare trees, ground-based solution generators, aircraft only and a combination of aircraft and ground-based seeding. These will be based on the frequency, magnitude and temperature of supercooled liquid water that pass over the watershed during dry years, average and wet seasons that are developed in Task 1. Water production rates will be based on the physical characteristics of the seeding delivery system (e.g., particle sizes, ice nucleation yields, mass release rates, area of effect and the percentage volume of cloud that can be seeded per hour) and the number of hours that each type. The total amount of water for each type of seeding strategy will be compared with its cost to operate to develop estimates of the total net value and the benefit cost ratio. This will allow SAWPA to understand the tradeoffs involved between various seeding strategies. For example, a low cost program using manual ground generators or flare trees will cost far less than an aircraft seeding program. The two approaches may yield similar benefit cost ratios, but the amount and net value of water produced using an aircraft may exceed the ground program by an order of magnitude or more. This will allow SAWPA to put various approaches to be put in perspective and the use of cloud seeding can provide a partial solution to the water needs to the area.

### TARGET AREA RECOMMENDATIONS

A target area recommendation will be made on the basis of several selection criteria. Most importantly, the selected target area must provide substantial run-off to the Santa Ana storage system. Supporting run-off information will thus be required.

The target area must also satisfy the requirement that increases in precipitation within it and run-off from it can be estimated with sufficient accuracy for evaluation of the effectiveness of the program. Special attention will be given to existing precipitation gauges and streamflow measurements in the target area and control areas and to the possible installation of additional precipitation gauges.

Also important in target area selection are the relative amounts of snow and rain that comprise the total precipitation amount. Snow serves to reduce the threat of flooding, soil erosion and mudslides induced or perceived to be induced by seeding and extends the period of run-off beyond the precipitation season. A target area located at higher elevations in the Santa Ana watershed. would also tend to reduce the population that would be affected by snowfall increases. The 2015 Upper Santa Ana Integrated Water Resources Management Plan (IWRMP) identifies specific basins that can be identified as primary target areas without a lot of detailed analyses. A possible program configuration is shown in Figure 3. The watershed boundary is displayed in red, target area sub basins in gray, control basins are given in blue, fault lines in black and aircraft seed tracks in yellow. This figure is presented to demonstrate the level of detail this study will address. A combination of these sub basins can be used to develop historical relationships between the target and control areas.



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Project suspension criteria as related operations and the threat of flooding will be recommended. The suspension criteria are of particular importance since the Santa Ana watershed is subjected to warm maritime air masses during the winter season that can serious localized flooding, particularly during strong El Nino years. Recommendations will be in the form of hydrologic investigations to determine, based upon the historic record, which water-related parameters included. The parameters to be examined include antecedent conditions such as precipitation accumulated to date, snow pack condition, reservoir storage, river stage and forecast conditions of storm precipitable water and temperature. These parameters may also be valuable in deciding if and when in the season to terminate the seeding program.

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### ASSESSMENT

The evaluation of any cloud seeding program is an important task that provides estimates of the effectiveness of the program and accountability to the program sponsors. However, the evaluation of cloud seeding programs is a challenging task because of the inherent natural variability of precipitation. Precipitation rates within and amounts from storm to storm vary by two orders of magnitude or more. This combined with the fact that only portions of “seeded” storms are actually seeded makes detecting small incremental amounts of seeded precipitation embedded within larger noisy precipitation totals difficult. Both physical and statistical methods can be used to help isolate the seeding signal. Traditional statistical approaches involved comparisons of seeded and non seeded precipitation or streamflow amounts. Analyses of annual streamflow measurements can take years to reach statistical significance. Physical studies using radar, or the trace chemistry of precipitation can be used successfully, however, they are extremely expensive, often costing as much or more than the operational program. We will include details in the program design about how to conduct these types of analyses in the Santa Ana basin.

We would also propose a new assessment method that can be used to produce near time assessments of the program. The Santa Ana basin has a huge advantage over most target areas because the NWS NEXRAD (KSOX) radar is in an ideal location to produce quantitative precipitation estimate at the sub basin level. Over the past ten years high resolution weather models have improved significantly and can now produce reasonably accurate forecasts of sub basin precipitation amounts. These forecasts can be used as control or non seeded precipitation estimates.

To evaluate seeding effects, we propose to design an assessment system that can be used to compare observed sub basin precipitation amounts with quantitative precipitation forecasts near real time and/or other durations. The experimental unit would be 3 to 6-hour precipitation amounts determined from radar and forecast. Double ratio or other forms of ratio statistics would be used to determine the seeding effects by sub basin and over the entire basin. To account for natural variability control area sub basin located upwind of the target area would be used to compare precipitation amounts. For example, the double ratio,  $DR = QPE_{target}/QPF_{target}/QPE_{control}/QPF_{control}$  could be used to detect seeding effects and account for bias in precipitation amounts across the area. Double ratios greater than one indicate a positive seeding effect with target area precipitation amounts greater than that observed in control areas. Conversely the same comparisons can be made during non-seeded periods where the ratio should approach one. In practice a large sample set can be developed that will allow formal statistical estimates of how cloud seeding effects precipitation distributions in the basin. This approach has the advantage that seeding effects could be displayed near real time. A display showing color coded maps to show the current seeding effect ratio and precipitation amounts by sub basin as operations proceed could be developed. It would useful for both operations and analysis of the program. We propose using model sub basin precipitation amounts from the archived model analysis to determine the variability and bias in this statistic. The results will form the basis of a recommendation of a practical assessment method for the project.



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## ENVIRONMENTAL IMPACTS

SAWPA needs to be responsible for work concerned with the initial environmental assessment. Several projects in California have made negative declaration statements found acceptable to local authorities that comply with the California Environmental Quality Act (CEQA). Others have made mitigated declarations that have required trace chemical monitoring of precipitation and streamflow to ensure seeding materials remain at background levels. RHS has extensive experience with these matters and will be able to provide additional information.

Project designs need to minimize negative environmental impacts. The program design needs to discuss how the combination of experience with advanced forecasting and remote sensing can be used identify the clouds with the highest seeding potential. Conversely, it can also be used to identify clouds with low or no potential already naturally efficient that will not respond to seeding. These methodologies can combined in well-designed operational seeding criteria to allow more efficient use of seeding materials. This will allow clouds to be seeded more efficiently, maximize precipitation increases, reduce the number of unnecessary operationally seeded hours, and minimize environmental impacts.

Monitoring the program by conducting monthly and annual statistical assessments of streamflow and snow water equivalent is recommended. The information from these assessments can be used to refine program seeding criteria, improve seeding strategies and water yields and reduce chemical footprints and environmental impacts. When possible, advanced trace chemical assessments can be conducted to determine program targeting effectiveness, precipitation increases and monitor silver and overall trace chemical levels in project area precipitation.

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and, to a certain extent, water vapor.

The effects of increasing global temperature are far reaching and extremely difficult to quantify. The scientific community continues to study the effects of global climate change. In general, increases in the ambient global temperature as a result of increased GHGs is anticipated to result in rising sea levels which could threaten coastal areas through accelerated coastal erosion, threats to levees and inland water systems and disruption to coastal wetlands and habitat.

If the temperature of the ocean warms, it is anticipated that the winter snow season would be shortened. This phenomenon could lead to significant challenges securing an adequate water supply for a growing state population. Further, the increased ocean temperature could result in increased moisture flux into the area; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential and severity of flood events, placing more on local levee/flood control systems. Sea level has risen approximately seven inches during the last century and, according to a CEC report, it is predicted to rise as much as an additional 35 inches by 2100, depending on the future GHG emissions levels (CEC 2009). If this occurs, resultant effects could include increased coastal flooding, saltwater intrusion and disruption of wetlands (CEC 2009). As the existing climate throughout the world changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the perturbations in climate, could also result.

## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

Cloud Seeding Projects can have a beneficial impact on climate change and an ameliorative effect on the impacts of climate change. First, the Project is specifically designed to remove an atmospheric GHG, water vapor, from the atmosphere. Second, the water vapor that the Project does remove from the atmosphere will contribute to snow pack and be stored in existing reservoirs, thereby potentially aiding the need to obtain and store water. Third, some of the additional water will contribute to enhanced vegetation growth, removing carbon dioxide from the atmosphere and offsetting carbon loads. For these reasons a cloud seeding program can provide beneficial environmental effects.

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### EXTENDED AREA EFFECTS

Information will be provided on the possibility that seeding of clouds over the Santa Ana watershed will also affect precipitation in areas beyond the watershed. This possibility must be considered inasmuch as a number of cloud seeding programs elsewhere indicate noticeable effects outside the target area, usually downwind and positive but in some cases upwind (Brier, et al., (1974), Neyman(1977)).

Without a satisfactory investigation of extended area effects cloud seeding activities on the western slopes of the target area may become a subject of controversy especially to the residents on the leeward eastern slopes. It is desirable then that a focused investigation on extended area effects be made using physical and chemical methods. Part of the work proposed here would thus be aimed at summarizing recent findings on extended area effects.

### OVERALL FEASIBILITY ASSESSMENT

An overall feasibility assessment will be made of the precipitation enhancement program. This assessment will focus on the increases in run-off that may result from expected increases in precipitation, the methods to be used to detect increases, the seeding-decision methodology to employ, and the seeding material and delivery systems to use. Strengths and weaknesses of the program, as presently envisioned, will be addressed. Finally the net value and benefit cost of various seeding techniques and materials will be considered given the area need for a more dependable water supply.

Methods for strengthening the program and the questions that should be answered through design studies will be discussed. Recommendations will also be made as to any environmental impact studies still needed.

### SCOPE OF WORK

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#### TASK 1 – COLLECTION OF DATA

- a. RHS shall consider different sources of meteorological and hydrological data and determine the most suitable database to be used for the study of cloud seeding program. RHS shall be responsible for all computer and internet access for obtaining the data.
- b. RHS shall provide a summary of its findings to SAWPA. Selected meteorological and hydrologic data will be used in the design of the weather modification program and provided in Task 1 Memorandum, draft and final report.
- c. RHS shall prepare Task 1 Memorandum that describes the climatology of the Santa Ana River Watershed and whether the weather modification to increase rainfall and/or snowfall appears feasible and deserves further analysis. After considering this Task 1 Memorandum, SAWPA will determine whether to proceed with further analysis and the following tasks.



TASK 2 – SELECTION OF TARGET AREAS

- a. RHS shall select the most suitable locations for implementation of a potential Cloud Seeding Program. Recommendations for a prioritized list of target areas based on storm direction shall be included in the report. Recommended locations shall be limited to areas within the Santa Ana River Watershed boundaries, identified in Exhibit A.
- b. RHS shall use the best available land use and hydrologic data to determine the most suitable weather modification target areas. RHS shall use the judgement of an experienced climatologist to conduct and develop the study.
- c. RHS shall search and evaluate potential weather modification generator locations in the watershed by considering factors such as ease of property access for permanent equipment, climate trends at the sub-watershed level, and location of existing water supply infrastructure such as groundwater banks and surface water reservoirs. RHS shall determine the appropriateness of cloud seeding locations and methodologies. RHS shall collect cost data from similar weather modification programs implemented in other watersheds.
- d. The Report shall show an area map indicating the designated target areas of the watershed to be covered by each cloud seeding generator under expected normal conditions of air movement during typical storm types, which Consultant will identify. For land-based seeding sites, RHS shall consider target location’s parcel information such as parcel size, access roads and ownership as available. For aerial-based seeding sites, the Report shall evaluate any limitations for flight paths.

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TASK 3 – DEVELOPMENT OF PROGRAM DESIGN AND SEEDING INCREASE ESTIMATES

- a. RHS shall calculate the basic seeding runoff yield potential from each target area and provide a detailed explanation of the methodology behind these estimates.
- b. The Report shall have a full description of the approximate location, and instrument type for each cloud seeding generator placement, and affiliated equipment, including diagrams of the sites and optional generator layout. RHS will provide a complete description, discussion of the advantages and disadvantages of each aspect of a program including recommendations. The report will provide a full description of the types of instrumentation or equipment, locations, including figures, diagrams and flow charts. An example outline of the format of the report is shown below:

- Introduction
  - Description
  - Purpose and Need
- Project Location
  - Project Area
    - Target Areas
    - Control Areas
    - Downwind Areas
- Seeding Materials
  - Seeding Solutions
  - End Burning Flares
  - Ejectable Flares
  - Tracers
- Seeding Methods and Delivery Systems
  - Aircraft
    - Seeding Equipment and Sensors
    - Telemetry
  - Ground-Based

# SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

- Flare trees
- Ground-based Generators
- Seeding Criteria
- Personnel
- Instrumentation
- Equipment Locations
  - Sites and Ownership
- Suspension Criteria
- Evaluation
  - Realtime QPF/QPE Assessments
  - Streamflow Assessments
  - Trace Chemistry Assessments
- Reporting and Management

c. The project may include land based, aircraft, or a combination of land based and aircraft cloud seeding generation sites for the success of the Cloud Seeding Program.

d. The Report shall detail organizational approaches, and/or control center sites that will be used to operate the Cloud Seeding Program. Potential control sites should consider radar, satellite antenna, or other associated equipment for the reception of weather data and radio communication equipment for remote control land-based seeding devices.

e. The report will describe the amount of additional potential precipitation increase and an estimate of the additional potential runoff (acre-feet at X locations to be identified) associated with this increase, with assumptions presented.

f. RHS will include details of how to assess and evaluate the results of the project. Well-designed assessments provide accountability and the basis for refinements and improvements in the program design. Physical and Statistical assessments of precipitation, streamflow and/or the trace chemistry of precipitation can be used to determine the results of the project. Assessments are difficult because of the natural variability of precipitation, both year to year and on a storm to storm basis.

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## TASK 4 – PERFORM A BENEFIT/COST ANALYSIS

a. RHS shall perform a benefit/cost analysis according to the criteria established by the American Society of Civil Engineers (ASCE) to determine the feasibility of a cloud seeding program in the Santa Ana River Watershed. RHS will also provide a second benefit/cost analysis method for comparison. This method will focus on net value and total water production, not just benefit cost. This important because a very low cost-low tech program using simple manual generators may have the same benefit cost as a high tech aircraft program, but can be order of magnitude differences in total yield. Since the area needs more water total yield becomes an important consideration on its own independent of cost.

**Technical feasibility.** In this criterion, scientific data is considered as a basis for determining whether the proposed work could yield the desired additional precipitation.

**Economic feasibility.** This criterion considers a combination of available financial resources and the expected return in additional water. The dollar amount to be used for estimating benefits resulting from additional runoff will be determined based on consultation with wholesale water agencies in the watershed

## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

and with SAWPA. Additionally, this criterion should consider all costs related to materials (such as cell service, silver, propane, operational equipment, instrumentation and personnel needed for construction and operation of the Cloud Seeding Program.

b. RHS shall determine if a cloud seeding program is feasible at the recommended target locations within the Santa Ana River Watershed.

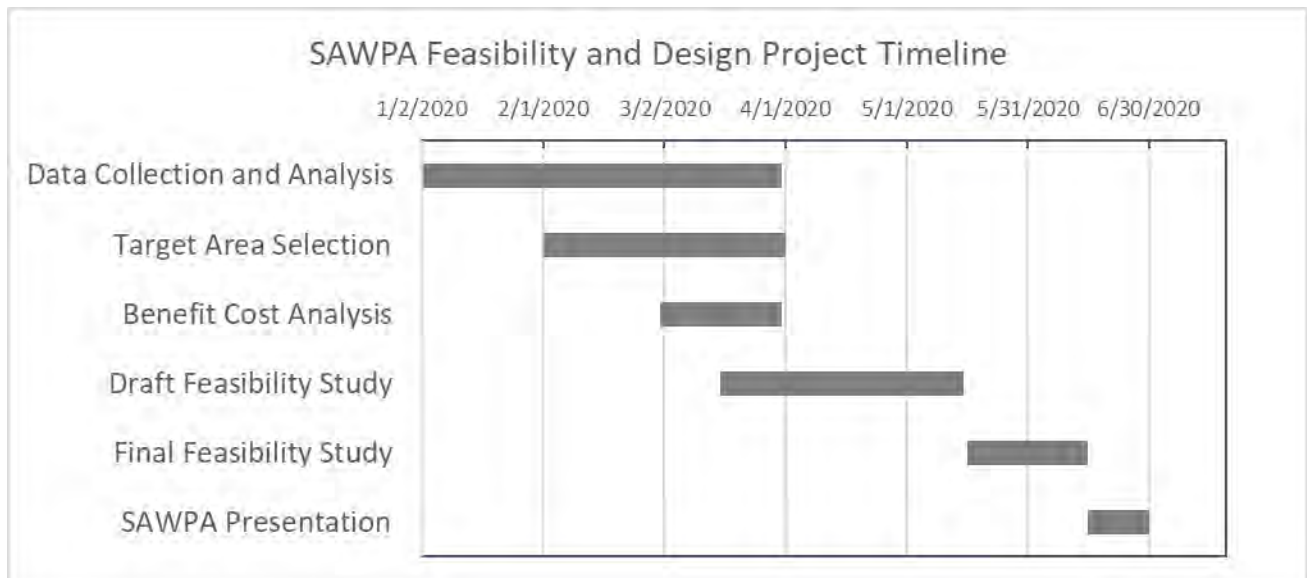
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### TASK 5 – DELIVERY OF FINAL REPORT

- a. A draft version of the Report shall be provided to SAWPA, allowing four weeks to review the draft and return comments. All comments shall be incorporated, finalized, and delivered to SAWPA within three weeks for approval. Approval of the updated Report is required prior to its implementation.

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### KEY PROJECT DELIVERABLES



## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

<b>Key Deliverables</b>					
Task	Description	Format	Start Date	End Date	Duration
Task 1	Data Collection and Analysis	Excel/Word	1-Jan-2020	31-Mar-2020	90
Task 2	Target Area Selection	GIS Shape File/KML/PDF	1-Feb-2020	15-Mar-2020	43
Task 3	Benefit Cost Analysis	Excel/Word/PDF	15-Feb-2020	31-Mar-2020	45
Task 4	Draft Feasibility Study	Word/PDF	16-Mar-2020	15-May-2020	60
Task 5	Final Feasibility Study	Word/PDF	16-May-2020	15-Jun-2020	30
Task 6	SAWPA Presentation	PPTX/PDF	15-Jun-2020	30-Jun-2020	15

The following sections relate to the overall design of the program.

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### LICENSING

All federal, state and local statutes need to be identified and followed.

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### INSURANCE

Cloud seeding insurance will be specified along with minimums. Risk management issues as related to winter cloud seeding will be provided to the SAWPA, however, many of these details would not appear in the final design document.

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### INTERACTION WITH THE SAWPA TEAM

We have participated in many projects of this nature in the past. Diligent prompt communications is one of the more important keys to success. Another important issue will be helping the SAWPA understand the various approaches and options and then recommending the best one but in a way that everyone understands the reason a particular choice was made. This is important in the event that it becomes necessary to defend a choice at some point in the future everyone understands why a choice was made. Public relations will also be an important component of this project and recommendations will be made to the SAWPA regarding the most important issues to be included in the design. It will be important to make sure that a list of frequently asked questions (FAQS) are developed for the program so that questions from the public can be addressed promptly.

## COMPANY BACKGROUND

RHS Consulting, Ltd. is a small company that prides itself on implementing the latest technology to winter weather modification applications. This section describes the company's philosophy, experience and corporate structure.

RHS Consulting, Ltd. (RHS) was founded by Rick Stone in 1999 as a sole proprietorship. Mr. Stone is an internationally recognized authority in the field of winter cloud seeding operations and research. Historically the company has focused on the design and evaluation of winter cloud seeding programs for utility companies and other public and private entities both nationally and internationally. During 2006, the company was expanded from a sole proprietorship to a limited liability company (LLC) and became involved in the manufacture of custom state-of-the-art ground-based remotely controlled generators, pyrotechnics and cloud seeding operations.

RHS is headquartered in Minden, Nevada where hangar and shop facilities are located at KMEV and one seeding aircraft is based. An operations office is located at the Fresno Yosemite International Airport. Seeding aircraft are based in Fresno and Visalia Airport as needed to serve Sierra Nevada winter seeding programs. Currently the company employs four core staff, three subcontractors with additional pilots and project personnel being added as needed during the winter season. The company currently operates three winter programs, two in the Southern Sierra Nevada and one in the Central Sierra. Project budgets range in scale from a few \$100,000 to \$500,000 annually.

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## WINTER CLOUD SEEDING EXPERIENCE

We have been working in the field of weather modification operations and research for more than thirty-five years both nationally and internationally. A partial list of domestic cloud seeding operations and research projects follows that demonstrate our ability to work and experience with utilities and public agencies:

1992-2018: Southern California Edison Company: "Upper San Joaquin Weather Modification Research Program", San Joaquin Weather Modification Program, Vista Quantitative Precipitation Forecast."

1984-2007: Pacific Gas and Electric Company: "Atmospheric Modeling and Cloud Seeding Services", "Design of the Pit River Basin Cloud Seeding Program", "Mokelumne Watershed Lake and Sediment Chemistry Study", "Ground-based Generator Calibration Study", "Stanislaus Meadow Ground Generator Trace Chemistry Assessment", "Pit River Generator Fabrication Program", "Lake Almanor Trace Chemistry Program", "Ground-based Generator Modernization Program", "Mokelumne Watershed Technology Improvements Program", "Mokelumne Watershed Lake and Sediment Sampling Program", "Cloud seeding design studies for the Upper Stanislaus"

2010-Present: Kaweah Delta Water Conservation District: "Kaweah River Basin Cloud Seeding Program".

2008-Present: North Kern Water Storage District: "Kern River Basin Cloud Seeding Program (sponsors include the NKWSD, Buena Vista Water Storage District, City of Bakersfield, Kern Delta Water Storage District)

1995-1998, 2001-2005: Idaho Power Company: "Payette Basin Cloud Seeding Program". "Weather Modification Research in the Payette River Basin".

2001-2002: Yuba County Water Agency: "Design considerations and targeting studies in the Yuba River watershed".



## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

2001-2003, 2019: Northern California Power Agency: "Stanislaus Cloud Seeding Program".

1990 to 2001: Washoe County Airport Authority: "Supercooled Fog Dispersal Program",

1980-2001,2019: State of Nevada: "Trace Chemical Monitoring of Cloud Seeding Effects", "Ground-based Generator Calibration Studies", "Carson-Walker Aircraft Seeding Program"

1996-1999: U. S. Army Cold Regions Research and Engineering Laboratory, "Mt. Washington Drizzle Measurement Program".

1983-1997: NOAA "NV/NOAA Federal-State Atmospheric Modification Program"

1984-1987: Bureau of Reclamation: "Sierra Cooperative Pilot Project, Project Skywater"

1982-1983: State of Utah Department of Water Resources "Utah/NOAA Snowpack Program"

A few of the programs that RHS has worked internationally include operational and research programs in British Columbia, Alberta, Canada, Mendoza, Argentina, Snowy Mountains, Australia, Costa Rica, India and Indonesia.

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### RHS EXPERIENCE STARTING NEW CLOUD SEEDING PROGRAMS

Several new programs located in the Sierra Nevada and Nevada including projects in the Ruby Mountains, Snowy Mountains in New South Wales, AU, Hail Suppression using Aircraft in Mendoza, Argentina (historically the operational program used Soviet Rockets). Helped design and establish the Payette River Basin program for Idaho Power Company, Boise, ID including conducting basic research and obtaining PUC approval to conduct the initial operational seeding program.

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### REFERENCES

Below we have listed six people RHS has recently contracted with to operate or evaluate large scale winter cloud seeding programs. SAWPA is encouraged to contact any of these people as references for our work.

Mr. Richard Diamond  
General Manager  
North Kern Water Storage District  
33380 Cawello Ave.  
Bakersfield, CA 93308  
(661) 393-2696

Mr. Dana Munn  
Kern River Watermaster  
North Kern Water Storage District  
33380 Cawello Ave.  
Bakersfield, CA 93308  
(661) 393-2696

Mr. Mark Larsen  
General Manager  
Kaweah Delta Water Conservation District  
2975 Farmersville Blvd.

## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

Farmersville, CA  
(559) 906-1403

Mr. Andrew McMillan  
Hydro Generation Manager  
Southern California Edison  
P.O. Box 100  
Big Creek, CA 93605  
(559) 893-9330

Mr. Brian McGurty  
Chief Hydrographer (retired)  
Southern California Edison  
300 Lone Hill Ave  
San Dimas, CA 91773  
(909) 533-9012

Mr. Frank McDonough  
Nevada State Cloud Seeding Program Director  
Division of Atmospheric Sciences  
Desert Research Institute  
2215 Raggio Parkway  
Reno, NV 89512  
(775) 674-7140

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### KEY PERSONNEL AND PROJECT ORGANIZATION

RHS will ensure to the extent within its control, the personnel proposed to work on used on this project shall remain available to the project for the full term of the contract. The work described in this proposal requires personnel who are highly competent, enthusiastic, dedicated, with broad are of expertise. It requires the personnel to be capable of multitasking, competent in more than one specific field that can act and work together as a strong team.

Mr. Richard Stone will act as the project manager and be responsible for the overall operation of the program. He is a WMA certified operator and has over thirty-five years of experience conducting winter cloud seeding operations and research around the world. He also has a twenty-year background working as a Research Scientist. He has conducted design and feasibility studies for several large-scale winter cloud seeding programs including the Snowy Mountains Program, NSW, AU and the Idaho Power Payette Basin Program. He is familiar with all aspects of winter cloud seeding programs. Mr. Stone has served as the WMA President twice. His WMA certified manager application is currently in process.

Dr. Robert Farber will be responsible for integrating the data sets from the various analyses. Dr. Farber has extensive knowledge of the local meteorology and is in the area, Dr. Farber gained valuable cloud physics and weather modification experience while working on his dissertation under Dr. Peter Hobbs at the University of Washington. He served as a Senior Scientist at the Southern California Edison Co directing numerous large scale air quality and meteorology programs.

## SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

Mr. Dave Newsom will provide support for the logistical aspects of the operational program design. Mr. Newsom has over thirty-five years of experience seeding winter clouds and is a WMA certified operator (#47). Mr. Newsom is thoroughly familiar with operating winter cloud seeding programs including siting and maintaining equipment. Mr. Newsom will help with overall layout of the program and identify and establish contacts with supply vendors

Dr. Randolph Ware, Founder and Chief Scientist, Radiometrics will be responsible for the analysis of LAX radiometer data. Dr. Ware's company designed the MP3000A located at LAX and has broad experience with all aspects of passive remote sensing. He has an extensive knowledge of the scientific and operational issues with this radiometer and access to all of the software needed for this task.

Dr. John Zack will be conducting a high resolution reanalysis of HRRR archived gridded model data using a modified version of the WRF. Modifications to WRF will be based on RHS operational versions of WRF that produce explicit forecasts analyses of Supercooled Liquid Water, Ice and a Seedability Index. Dr. Zack has broad experience in all aspects of numerical weather prediction and is a member of several company boards and scientific organizations.

An organization chart is shown below. Resumes of the key personnel are attached to this proposal.

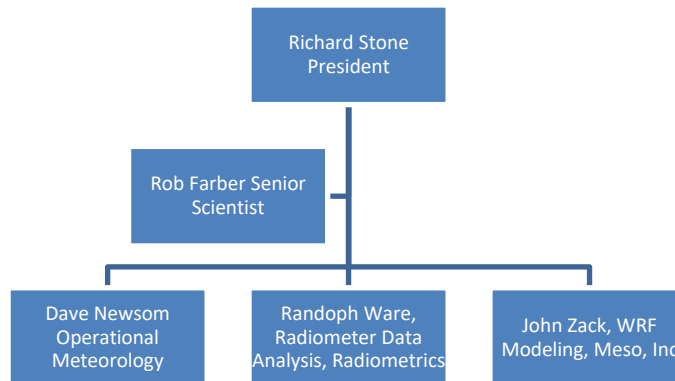


Figure 9. Project Organization Chart

SANTA ANA WATERSHED WEATHER MODIFICATION FEASIBILITY AND DESIGN STUDY

BUDGET

The budget estimate for our proposal is \$102,098 and valid for a period of sixty days. Indirect costs are included at 69%. RHS does not have any exceptions to the terms and conditions listed in the example task order/contract shown in the RFP. We are open to discussion of all aspects of this proposal.

2020 SAWPA Program Budget Estimate							
(January 1, 2020 through September 30, 2020)							
Cost Factor	1						
This cost proposal is valid for 60 days							
Program Duration (months)	9						
	Units	Rate	Cost Factor	Months	Direct Costs	SubContract Costs	Totals
<b>Salaries</b>							
R. Stone, Project Manger	40	\$150	1.000	1	\$6,000		
R. Ware, Remote Sensing Scientist	60	\$150	1.000	1	\$9,000		
D. Newsom, Meterologist	80	\$150	1.000	1	\$12,000		
R. Farber, Senior Scientist	60	\$150	1.000	1	\$9,000		
<b>Total Salaries</b>					\$36,000		\$36,000
<b>Operating Costs</b>							
Travel - Airfare	2	\$800	1.000	2	\$3,200		
Per Diem	6	\$150	1.000	3	\$2,700		
Vehicle Mileage	3000	\$1	1.000	1	\$3,000		
Computer Use Fee	240	\$3	1.000	1	\$720		
<b>Total Operating</b>					\$9,620		\$9,620
<b>Subtotal Base Program Costs</b>					\$45,620		\$45,620
<b>Subcontract</b>							
J. Zack, Modeling Sub-basin QPE/QPF Analysis	1	\$25,000	1.000	1		\$25,000	\$25,000
<b>Indirect Costs</b>	69.0%				\$31,478		
<b>Total Program Cost</b>					\$77,098	\$25,000	\$102,098

Physical Address:  
 RHS Consulting, Ltd  
 2227 Bellanca St., Hangar A  
 Minden-Tahoe Airport  
 Minden, NV 89423  
 775.338.9323

Mailing Address:  
 RHS Consulting, Ltd  
 PO Box 17096  
 Reno, NV 88951-2872  
[4rstone@gmail.com](mailto:4rstone@gmail.com)  
 TIN: 41-2232792  
 DUNS: 78-988-8380



**SANTA ANA WATERSHED PROJECT AUTHORITY**  
**AGREEMENT FOR SERVICES BY INDEPENDENT CONSULTANT**

This Agreement is made this 17<sup>th</sup> day of December, 2019 by and between the Santa Ana Watershed Project Authority ("SAWPA") located at 11615 Sterling Avenue, Riverside, CA 92503 and North American Weather Consultants ("Consultant") whose address is 8180 S. Highland Drive, Suite B-2, Sandy, UT 84093.

**RECITALS**

This Agreement is entered into on the basis of the following facts, understandings, and intentions of the parties to this Agreement:

- SAWPA desires to engage the professional services of Consultant to perform such professional consulting services as may be assigned, from time to time, by SAWPA in writing;
- Consultant agrees to provide such services pursuant to, and in accordance with, the terms and conditions of this Agreement and has represented and warrants to SAWPA that Consultant possesses the necessary skills, qualifications, personnel, and equipment to provide such services; and
- The services to be performed by Consultant shall be specifically described in one or more written Task Orders issued by SAWPA to Consultant pursuant to this Agreement.

**AGREEMENT**

Now, therefore, in consideration of the foregoing Recitals and mutual covenants contained herein, SAWPA and Consultant agree to the following:

**ARTICLE I**

**TERM OF AGREEMENT**

**1.01** This agreement shall become effective on the date first above written and shall continue until December 31, 2020, unless extended or sooner terminated as provided for herein.

**ARTICLE II**

**SERVICES TO BE PERFORMED**

**2.01** Consultant agrees to provide such professional consulting services as may be assigned, from time to time, in writing by the Commission and the General Manager of SAWPA. Each assignment shall be made in the form of a written Task Order. Each such Task Order shall include, but shall not be limited to, a description of the nature and scope of the services to be performed by Consultant, the amount of compensation to be paid, and the expected time of completion.

**2.02** Consultant may at Consultant's sole cost and expense, employ such competent and qualified independent professional associates, subcontractors, and consultants as Consultant deems necessary to perform each assignment; provided that Consultant shall not subcontract any work to be performed without the prior written consent of SAWPA.

**ARTICLE III**

**COMPENSATION**

**3.01** In consideration for the services to be performed by Consultant, SAWPA agrees to pay Consultant as provided for in each Task Order.

**3.02** Each Task Order shall specify a total not-to-exceed sum of money and shall be based upon the regular hourly rates customarily charged by Consultant to its clients.

**3.03** Consultant shall not be compensated for any services rendered nor reimbursed for any expenses incurred in excess of those authorized in any Task Order unless approved in advance by the Commission and General Manager of SAWPA, in writing.



**3.04** Unless otherwise provided for in any Task Order issued pursuant to this Agreement, payment of compensation earned shall be made in monthly installments after receipt from Consultant of a timely, detailed, corrected, written invoice by SAWPA's Project Manager, describing, without limitation, the services performed, when such services were performed, the time spent performing such services, the hourly rate charged therefore, and the identity of individuals performing such services for the benefit of SAWPA. Such invoices shall also include a detailed itemization of expenses incurred. Upon approval by an authorized SAWPA employee, SAWPA will pay within 30 days after receipt of a valid invoice from Consultant.

#### **ARTICLE IV**

#### **CONSULTANT OBLIGATIONS**

**4.01** Consultant agrees to perform all assigned services in accordance with the terms and conditions of this Agreement including those specified in each Task Order. In performing the services required by this Agreement and any related Task Order Consultant shall comply with all local, state and federal laws, rules and regulations. Consultant shall also obtain and pay for any permits required for the services it performs under this Agreement and any related Task Order.

**4.02** Except as otherwise provided for in each Task Order, Consultant will supply all personnel and equipment required to perform the assigned services.

**4.03** Consultant shall be solely responsible for the health and safety of its employees, agents and subcontractors in performing the services assigned by SAWPA. Consultant hereby covenants and agrees to:

**4.03a** Obtain a Commercial General Liability and an Automobile Liability insurance policy, including contractual coverage, with limits for bodily injury and property damage in an amount of not less than \$2,000,000.00 per occurrence for each such policy. Such policy shall name SAWPA, its officers, employees, agents and volunteers, as an additional insured, with any right to subrogation waived as to SAWPA, its officers, employees, agents and volunteers.

If Commercial General Liability Insurance or other form with an aggregate limit is used, either the general aggregate limit shall apply separately to the work assigned by SAWPA under this Agreement or the general aggregate limit shall be at least twice the required occurrence limit. The coverage shall be at least as broad as Insurance Services Office Commercial General Liability Coverage (occurrence Form CG 00 01) and Insurance Services Office Form CA 00 01 covering Automobile Liability, Code 1 (any auto). The Commercial Liability Insurance shall include operations, products, and completed operations, as applicable;

**4.03b** Obtain a policy of Professional Liability (errors and omissions) insurance appropriate to the Consultant's profession in a minimum amount of \$2,000,000.00 per claim or occurrence to cover any negligent acts or omissions or willful misconduct committed by Consultant, its employees, agents and subcontractors in the performance of any services for SAWPA. Architects' and engineers' coverage shall include contractual liability;

**4.03c** Obtain a policy of Employer's Liability insurance in a minimum amount of \$1,000,000.00 per accident for bodily injury and property damage.

**4.03d** Provide worker's compensation insurance or a California Department of Insurance-approved self-insurance program in an amount and form required by the State of California and the Employer's Liability Insurance that meets all applicable Labor Code requirements, covering all persons or entities providing services on behalf of the Consultant and all risks to such persons or entities;

**4.03e** Consultant shall require any subcontractor that Consultant uses for work performed for SAWPA under this Agreement or related Task Order to obtain the insurance coverages specified above.

**4.03f** Consultant hereby agrees to waive subrogation which any insurer of Consultant may seek to require from Consultant by virtue of the payment of any loss. Consultant shall obtain an endorsement that may be necessary to give effect to this waiver of subrogation. In addition, the Workers Compensation policy shall be endorsed with a waiver of subrogation in favor of SAWPA for all work performed by Consultant, and its employees, agents and subcontractors.

All such insurance policy or policies shall be issued by a responsible insurance company with a minimum A. M. Best Rating of "A-" Financial Category "X", and authorized and admitted to do business in, and regulated by, the State of California. If the insurance company is not admitted in the State of California, it must be on the List of Eligible Surplus Line Insurers (LESLI), shall have a minimum A.M. Best Rating of "A", Financial Category "X", and shall be domiciled in the United States, unless otherwise approved by SAWPA in writing. Each such policy of insurance shall expressly provide that it shall be primary and noncontributory with any policies carried by SAWPA and, to the extent obtainable, such coverage shall be payable notwithstanding any act of negligence of SAWPA that might otherwise result in forfeiture of coverage. Evidence of all insurance coverage shall be provided to SAWPA prior to issuance of the first Task Order. Such policies shall provide that they shall not be canceled or amended without 30 day prior written notice to SAWPA. Consultant acknowledges and agrees that such insurance is in addition to Consultant's obligation to fully indemnify and hold SAWPA free and harmless from and against any and all claims arising out of an injury or damage to property or persons caused by the negligence, recklessness, or willful misconduct of Consultant in performing services assigned by SAWPA.

**4.04** Consultant hereby covenants and agrees that SAWPA, its officers, employees, and agents shall not be liable for any claims, liabilities, penalties, fines or any damage to property, whether real or personal, nor for any personal injury or death caused by, or resulting from, or claimed to have been caused by or resulting from, any negligence, recklessness, or willful misconduct of Consultant. Consultant shall hold harmless, defend and indemnify SAWPA and its officers, employees, agents and volunteers from and against any and all liability, loss, damage, fines, penalties, expense and costs, including, without limitation, attorneys' fees and litigation expenses and costs, of every nature arising out of or related to Consultant's negligence, recklessness, or willful misconduct related to or arising from the performance of the work required under this Agreement and any related Task Order or Consultant's failure to comply with any of its obligations contained in this Agreement and any related Task Order, except as to such loss or damage which was caused by the active negligence or willful misconduct of SAWPA.

**4.05** In the event that SAWPA requests that specific employees or agents of Consultant supervise or otherwise perform the services specified in each Task Order, Consultant shall ensure that such individual(s) shall be appointed and assigned the responsibility of performing the services.

**4.06** In the event Consultant is required to prepare plans, drawings, specifications and/or estimates, the same shall be furnished with a registered professional engineer's number and shall conform to local, state and federal laws, rules and regulations. Consultant shall obtain all necessary permits and approvals in connection with this Agreement, any Task Order or Change Order. However, in the event SAWPA is required to obtain such an approval or permit from another governmental entity, Consultant shall provide all necessary supporting documents to be filed with such entity, and shall facilitate the acquisition of such approval or permit.

## **ARTICLE V**

### **SAWPA OBLIGATIONS**

**5.01** SAWPA shall:

**5.01a** Furnish all existing studies, reports and other available data pertinent to each Task Order that are in SAWPA's possession;

**5.01b** Designate a person to act as liaison between Consultant and the General Manager and Commission of SAWPA.

## **ARTICLE VI**

### **ADDITIONAL SERVICES, CHANGES AND DELETIONS**

**6.01** During the term of this Agreement, the Commission of SAWPA may, from time to time and without affecting the validity of this Agreement or any Task Order issued pursuant thereto, order changes, deletions, and additional services by the issuance of written Change Orders authorized and approved by the Commission of SAWPA.

**6.02** In the event Consultant performs additional or different services than those described in any Task Order or authorized Change Order without the prior written approval of the Commission of SAWPA, Consultant shall not be compensated for such services.

**6.03** Consultant shall promptly advise SAWPA as soon as reasonably practicable upon gaining knowledge of a condition, event, or accumulation of events, which may affect the scope and/or cost of services to be provided pursuant to this Agreement. All proposed changes, modifications, deletions, and/or requests for additional services shall be reduced to writing for review and approval or rejection by the Commission of SAWPA.

**6.04** In the event that SAWPA orders services deleted or reduced, compensation shall be deleted or reduced by a comparable amount as determined by SAWPA and Consultant shall only be compensated for services actually performed. In the event additional services are properly authorized, payment for the same shall be made as provided in Article III above.

## **ARTICLE VII**

### **CONSTRUCTION PROJECTS: CONSULTANT CHANGE ORDERS**

**7.01** In the event SAWPA authorizes Consultant to perform construction management services for SAWPA, Consultant may determine, in the course of providing such services, that a Change Order should be issued to the construction contractor, or Consultant may receive a request for a Change Order from the construction contractor. Consultant shall, upon receipt of any requested Change Order or upon gaining knowledge of any condition, event, or accumulation of events, which may necessitate issuing a Change Order to the construction contractor, promptly consult with the liaison, General Manager and Commission of SAWPA. No Change Order shall be issued or executed without the prior approval of the Commission of SAWPA.

## **ARTICLE VIII**

### **TERMINATION OF AGREEMENT**

**8.01** In the event the time specified for completion of an assigned task in a Task Order exceeds the term of this Agreement, the term of this Agreement shall be automatically extended for such additional time as is necessary to complete such Task Order and thereupon this Agreement shall automatically terminate without further notice.

**8.02** Notwithstanding any other provision of this Agreement, SAWPA, at its sole option, may terminate this Agreement at any time by giving 10 day written notice to Consultant, whether or not a Task Order has been issued to Consultant.

**8.03** In the event of termination, the payment of monies due Consultant for work performed prior to the effective date of such termination shall be paid after receipt of an invoice as provided in this Agreement.

## **ARTICLE IX**

### **CONSULTANT STATUS**

**9.01** Consultant shall perform the services assigned by SAWPA in Consultant's own way as an independent contractor, in pursuit of Consultant's independent calling and not as an employee of SAWPA. Consultant shall be under the control of SAWPA only as to the result to be accomplished and the personnel assigned to perform services. However, Consultant shall regularly confer with SAWPA's liaison, General Manager, and Commission as provided for in this Agreement.

**9.02** Consultant hereby specifically represents and warrants to SAWPA that the services to be rendered pursuant to this Agreement shall be performed in accordance with the standards customarily applicable to an experienced and competent professional consulting organization rendering the same or similar services. Furthermore, Consultant represents and warrants that the individual signing this Agreement on behalf of Consultant has the full authority to bind Consultant to this Agreement.

## **ARTICLE X**

### **AUDIT AND OWNERSHIP OF DOCUMENTS**

**10.01** All draft and final reports, plans, drawings, specifications, data, notes, and all other documents of any kind or nature prepared or developed by Consultant in connection with the performance of services assigned to it by SAWPA are the sole property of SAWPA, and Consultant shall promptly deliver all such materials to SAWPA. Consultant may retain copies of the original documents, at its option and expense. Use of such documents by SAWPA for project(s) not the subject of this Agreement shall be at SAWPA's sole risk without legal liability or exposure to Consultant. SAWPA agrees to not release any software "code" without prior written approval from the Consultant.

**10.02** Consultant shall retain and maintain, for a period not less than four years following termination of this Agreement, all time records, accounting records, and vouchers and all other records with respect to all matters concerning services performed, compensation paid and expenses reimbursed. At any time during normal business hours and as often as SAWPA may deem necessary, Consultant shall make available to SAWPA's agents for examination of all such records and will permit SAWPA's agents to audit, examine and reproduce such records.

## **ARTICLE XI**

### **MISCELLANEOUS PROVISIONS**

**11.01** This Agreement supersedes all previous agreements, either oral or written, between the parties hereto with respect to the rendering of services by Consultant for SAWPA and contains all of the covenants and agreements between the parties with respect to the rendering of such services in any manner whatsoever. Any modification of this Agreement will be effective only if it is in writing signed by both parties.

**11.02** Consultant shall not assign or otherwise transfer any rights or interest in this Agreement without the prior written consent of SAWPA. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

**11.03** In the event Consultant is an individual person and dies prior to completion of this Agreement or any Task Order issued hereunder, any monies earned that may be due Consultant from SAWPA as of the date of death will be paid to Consultant's estate.

**11.04** Time is of the essence in the performance of services required hereunder. Extensions of time within which to perform services may be granted by SAWPA if requested by Consultant and agreed to in writing by SAWPA. All such requests must be documented and substantiated and will only be granted as the result of unforeseeable and unavoidable delays not caused by the lack of foresight on the part of Consultant.

**11.05** Consultant shall comply with all local, state and federal laws, rules and regulations including those regarding nondiscrimination and the payment of prevailing wages.

**11.06** SAWPA expects that Consultant will devote its full energies, interest, abilities and productive time to the performance of its duties and obligations under this Agreement, and shall not engage in any other consulting activity that would interfere with the performance of Consultant's duties under this Agreement or create any conflicts of interest. If required by law, Consultant shall file a Conflict of Interest Statement with SAWPA.





## COMMISSION MEMORANDUM NO. 2019.126

**DATE:** December 17, 2019

**TO:** SAWPA Commission

**SUBJECT:** Disadvantaged Community Involvement (DCI) Program - Technical Assistance Funding Recommendations

**PREPARED BY:** Rick Whetsel, Senior Watershed Manager

### RECOMMENDATION

That the Commission authorize the General Manager to execute sub-agreements for the portfolio of projects recommended for Proposition 1 Disadvantaged Community Involvement (DCI) Program Technical Assistance Grant Funding.

### DISCUSSION

Within the Disadvantaged Communities Involvement (DCI) Program is an activity called “Technical Assistance for Community Needs.” This activity has a grant budget of about \$2.9 million. The grant describes the activity this way:

#### Activity 18 Technical Assistance for Community Needs

During engagement efforts the program team will learn of projects, plans and programs. Following evaluation of these projects, plans and programs, an appropriate set will receive Technical Assistance (TA) including but not limited to project engineering services, curriculum development, translation services, and program support. The evaluation of the projects, plans, and programs will follow a set of evaluation criteria developed by DCI Technical Advisory Committee (TAC). This effort may also link to the State Board Technical Assistance Program, via the CSU DACC and Cal Rural Water Association which are both statewide TA providers.

In July 2019, eligibility criteria and the process for rating and ranking projects were finalized and approved by DWR staff.

In September 2019, the public was notified of the availability of TA grant funding and provided a link to the on-line application form. Included with this form were links to the eligibility criteria, eligible project types, community strengths and needs identified for the watershed, as well as, a link to the DWR mapping tool.

The DCI TAC made up of one person from each of the DCI Program partners, as well as three water agency representatives were provided monthly updates on application submittals in October and November. Through this process 22 project applications were submitted for consideration of TA Funding.

On November 21<sup>st</sup>, the OWOW Steering Committee was presented with the portfolio of projects recommendations including dollar allocations for technical assistance funding (see attached - List of Recommended Projects and TA funding allocations). These projects deemed compliant by the Department of Water Resources are now ready to proceed forward with implementation.

The attached presentation provides an overview of the process to evaluate project proposals submitted for TA funding and a brief description of each of the projects of technical assistance projects recommended for approval for funding by the TAC. Project deliverables, including draft technical memorandums are scheduled to be complete by December 2020.

## **BACKGROUND**

Proposition 1 IRWM funding included a requirement for DWR to spend no less than 10% on a Disadvantaged Community Involvement Program which would ensure that members of disadvantaged communities, economically distressed areas, and underrepresented communities were able to participate in IRWM Planning and develop needed projects for implementation. SAWPA, as the approved Regional Water Management Group of the Santa Ana River funding region, was issued this work following submittal of a grant application.

The Disadvantaged Communities Involvement Program (DCI Program) in the region has three Program Elements, within which are twenty separate activities. Those three Program Elements consist of 1) Strengths and Needs Assessment, 2) Engagement and Education, 3) Project Development. The California Rural Water Association is a project partner within the DCI Program. They have been tasked with performing multiple activities outlined in all three Program Elements.

Within Program Element 3 is activity 18: Technical Assistance (TA) for Community Needs. The grant describes this activity as providing TA to projects, plans and programs that address strengths and needs that were revealed during the outreach portion of Program Element 1. The TA activities includes but is not limited to project engineering services, curriculum development, translation services, and program capacity support. Program Element 3 has a grant budget of approximately \$2.9 million.

As part of the effort to expedite TA funding and initiate the implementation of TA projects the SAWPA Commission approved several “Early Action” projects recommended by the DCI Program Technical Advisory Committee (TAC) for TA Funding as follows:

- February 5, 2019, approved \$74,441 of TA funding to implement the Assessing Homelessness Impact on Water Quality, Riparian and Aquatic Habitat in Upper Santa Ana River Watershed
- July 16, 2019, approved \$121,939 of TA funding to form the Santa Ana River Watershed Tribal Advisory Committee.
- November 19, 2019, approved \$500,000 of TA funding to implement the Replenish Big Bear Project and \$350,000 of TA funding to implement the Residential Asbestos Cement Pipe Abandonment and Replacement Project.

Additionally, in January 2019, the TAC approved TA funding to conduct Median Household Income Surveys as needed to support communities/projects for TA Funding, where the DWR Mapping tool results were inconclusive.

## **CRITICAL SUCCESS FACTORS**

OWOW CSF #1 - Continued support from SAWPA commission of OWOW Steering Committee’s decision-making authority as a means of ensuring trust, transparency, and external communications.

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OWOW CSF #2 - Active participation of a diverse group of stakeholders representing counties, cities, and water districts, as well as the private sector and the regulatory, environmental, and environmental justice communities who integrate the different interests in the watershed beyond political boundaries. Ensuring all perspectives are heard and valued.

OWOW CSF #5 - A strong reputation and sufficient capacity within SAWPA staff for strategic facilitation, planning, communication, leadership and community engagement

### **RESOURCE IMPACTS**



The implementation of DCI Technical Assistance projects, programs and plans will be funded entirely by SAWPA's Disadvantaged Community Involvement Grant from DWR and budgeted out of Program Element 3: Technical Assistance for Community Needs.

#### **Attachments:**

1. PowerPoint Presentation
2. List of Recommended Projects and TA funding allocations

# Disadvantaged Community Involvement Program: Technical Assistance Funding Recommendations

Rick Whetsel, Senior Watershed Manager  
SAWPA | December 17, 2019  
Item No. 5.D.



1

## Recommendation

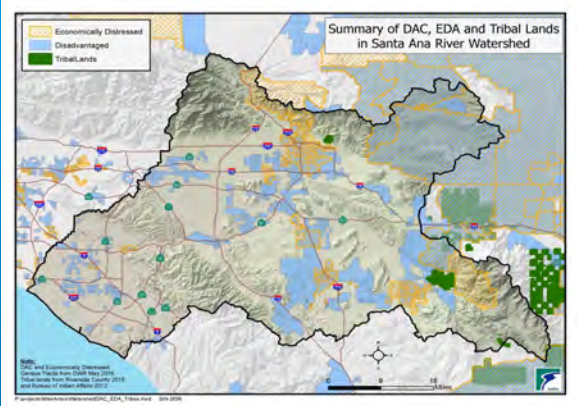
It is recommended that the Commission authorize the General Manager to execute sub-agreements for the portfolio of projects recommended for Proposition 1 Disadvantaged Community Involvement (DCI) Program Technical Assistance Grant Funding.




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## DCI Program Elements

1. Strengths and Needs Assessment
2. Education and Engagement
3. Project Development
4. Administration




Technical Assistance for Community Needs



3

## Activity 18: Technical Assistance for Community Need

- Objective: Technical Assistance (TA) funding to support the development of projects and programs that address the water needs of disadvantaged and underrepresented communities.
- Requires evaluation of projects, plans, and programs following set of evaluation criteria developed by DCI Technical Advisory Committee (TAC)
- Allocated Funding \$2.9 M



4



## DWR DCI Purpose/Objectives

- Purpose:
  - Ensure involvement of disadvantaged communities (DACs), economically distressed areas (EDAs), or underrepresented communities in IRWM planning efforts.
- Objectives:
  - Work collaboratively to involve DACs, community-based organizations, and stakeholders in IRWM Planning efforts to ensure balanced access and opportunity for participation in the IRWM planning process.
  - Increase the understanding, and where necessary, identify water management needs of DACs.
  - Develop strategies and long-term solutions that appropriately address the identified DAC water management needs.



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## Eligible Technical Assistance Projects/Programs

- Community Capacity Building
  - Technical Needs Assessment
  - Organization Support
  - Public Liaison
  - Water Operator Training
- K-12 Initiatives
  - Curriculum Development
  - General Educational Material
  - Presentations for Youth
  - Youth Events/Field Trips
  - Teacher Training
- Project Development Activities
  - Technical Feasibility & Financial Analysis
  - Project Development Support
  - Site Assessments (e.g. Median Household Income survey)
  - Feasibility Report
- Pre-Construction Activities
  - Preliminary Engineering Services
  - Water and Energy Audits
  - Pilot studies
  - CEQA Support

\*This is not an exhaustive list of eligible TA projects. TA projects that do not fall under one of the categories listed above may be considered on a case by case basis.



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## DCI Technical Advisory Committee

### Voting Members

- California State University, San Bernardino
- University of California, Irvine
- Local Government Commission
- California Rural Water Association
- Water Education Foundation
- SAWPA



### Non-Voting Members

- Eastern Municipal Water District
- RCFC&WCD
- OC Public Works



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## Technical Assistance Criteria

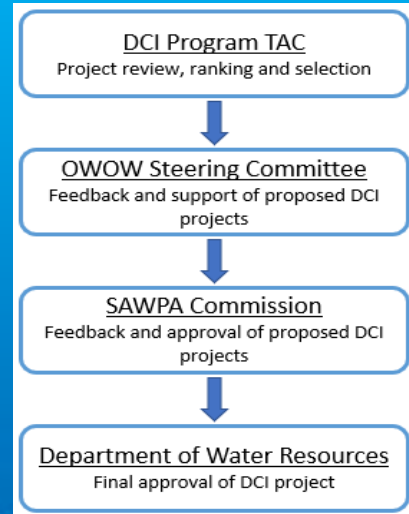
1. Serve members of disadvantaged or underrepresented communities
2. Address a need or utilize a strength identified in the Community Water Ethnography Report
3. Include a project sponsor that demonstrates engagement and readiness to receive the support and assistance
4. Meet at least one of the objectives outlined in Section 3 of the 2018 OWOW Plan Update
5. Provide detailed project information
  - Project location, schedule, scope, list of deliverables, grant amount requested
6. Achieve measurable improvements in the technical, managerial, or financial capacity of the project sponsor



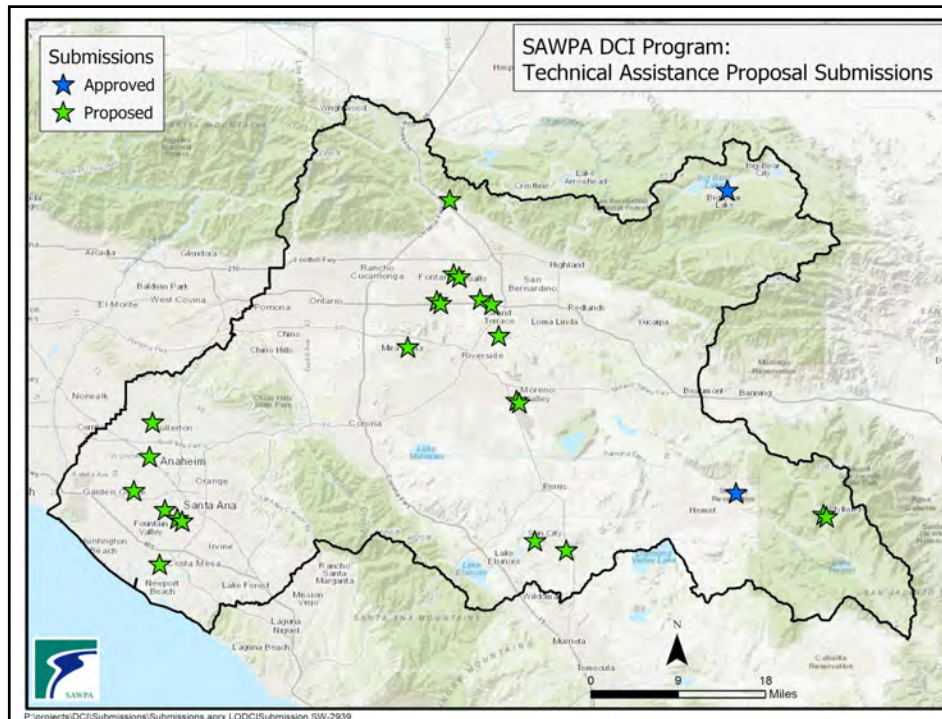
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# Project Submission Process

- Criteria also outlines the following:
    - Project Submissions Process
    - Limits of TA Project Funding
    - Project Ranking and Selection Process
    - Feedback and Approval Process
- DCI Program TA Criteria has been reviewed and approved by DWR



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## Five approved early-action projects:

- Income Surveys
- Tribal Advisory Committee
- Monitoring WQ & Riparian habitat impact of homelessness
- Replenish Big Bear Project
- Residential Asbestos Cement Pipe Abandonment and Replacement Project



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Recommendations for DCI Program Technical Assistance Funding		
Allocation	Project Sponsor:	Project Title:
\$175,000	Box Springs MWC	Project Planning in Support of Rehabilitation, Removal or Replacement of Water Storage Reservoirs with SCADA
\$200,000	City of Colton	Project Planning in Support of Installing Two New Potable Wells with Generators
\$100,000	Devore WC	Project Planning in Support of Installing a New Reservoir, Distribution System Upgrades and New Well
\$150,000	Idyllwild WD	Project Planning in Support of Installing Water Treatment Plant Upgrades with SCADA
\$100,000	Marygold MWC	Project Planning in Support of Installing a New Well and Generator
\$25,000	Riverside Highland WC	Project Planning in Support of Installing an Ion Exchange System
\$250,000	Terrace MWC	Project Planning in Support of Installing a New Well
\$200,000	Eastern Municipal WD	Quail Valley Sub-Area 4 Septic to Sewer, Phase 1 Planning Analysis
\$250,000	City of Rialto	Bohnert/Banyon Septic to Sewer Project, Phase 1 Planning Analysis
\$100,000	Orange County WD	Watershed Education and Field Trip Program for Disadvantaged Community Elementary Students
\$100,000	City of Fullerton	Fullerton's Water Future - Ensuring Delivery of Clean, Safe Drinking Water
\$50,000	Huerta del Valle	Feasibility study for reconnecting and enhancing water resources for greater community and environmental benefit
\$100,000	City of Santa Ana	Project Planning in Support of Washington Avenue Well Project

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## Project Planning in Support of Rehabilitation, Removal or Replacement of Water Storage Reservoirs with SCADA

Box Springs Mutual Water Company

- Concern:
  - Water quality impairment from nitrates (NO<sub>3</sub>) resulting in the need to purchase water for blending.
- Project:
  - Evaluate storage capacity and demands; identify easement needs; design storage facility improvements to ensure system capacity, monitor nitrates, and maximize blending efficiency to ensure reliability.

Recommended TA Funding: \$ 175,000



Photo Credit: <https://www.nationalstoragetank.com/blog/166000-gallon-fire-protection-tank-in-california/>;



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## Project Planning in Support of Installing Two New Potable Wells with Generators

City of Colton

- Concern:
  - Insufficient water production capacity due to water quality impairment from perchlorate and high iron/manganese concentrations.
- Project:
 

Draft preliminary engineering report to investigate two new wells, including initial topographic and mapping survey, well investigation, and geotechnical report, in support of increasing reliability, redundancy, and fire protection.



Recommended TA Funding: \$ 200,000



Photo Credit: <https://www.kqed.org/science/20012/californias-biggest-water-source-shrouded-in-secrecy>

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## Project Planning in Support of Installing a New Reservoir, Distribution System Upgrades and New Well

Devore Water Company

- Concern:
  - Insufficient water production capacity.
- Project:
 

Evaluate water demands, water sources, and storage capacity and demands, identify easement needs, and design a storage facility improvements - design to expand system capacity for reliability, redundancy, and fire protection.



Recommended TA Funding: \$ 100,000



Photo Credit: <https://www.nationalstoragetank.com/blog/166000-gallon-fire-protection-tank-in-california/> ;  
<http://www.rd108.org/groundwater/gw-pump/>

14



## Project Planning in Support of Installing Water Treatment Plant Upgrades with SCADA

Idyllwild Water District

- Concern:
  - Insufficient water production capacity due to water quality impairment from Trihalomethanes from aging facility/inadequate disinfection process.
- Project:
  - Upgrade of the existing water treatment plant and add SCADA: Engineering report, technical design and specifications, air quality studies, environmental reports, plant design, public outreach.
- Recommended TA Funding: \$ 150,000



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## Project Planning in Support of Installing a New Well and Generator

Marygold Mutual Water Company

- Concern:
  - Insufficient water production capacity and concerns regarding water quality.
- Project:
  - Evaluate system water quality for possible modifications and/or rehabilitation to existing wells and evaluate potential of a new well location.
- Recommended TA Funding: \$ 100,000



Photo Credit: <https://www.kqed.org/science/20012/californias-biggest-water-source-shrouded-in-secrecy>

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## Project Planning in Support of Installing an Ion Exchange System

Riverside Highland Water Company

- Concern:
  - Insufficient water production capacity due to water quality impairment from nitrates and other contaminants.
- Project:
  - Analyze water quality at well sites to determine water quality and treatment options with Ion Exchange. Determine placement of treatment facilities and costs of treatment.



Recommended TA Funding: \$ 25,000

[https://integratedwaterservices.com/portfolio\\_type/potablewater/](https://integratedwaterservices.com/portfolio_type/potablewater/)



17

## Project Planning in Support of Installing a New Well and Generator

Terrace Mutual Water Company

- Concern:
  - Insufficient water production capacity and concerns regarding water quality.
- Project:
  - Evaluate production wells to determine if water quality can be improved with modifications and/or rehabilitation and potential new well location.
- Recommended TA Funding: \$ 250,000



Photo Credit: <https://www.kqed.org/science/20012/californias-biggest-water-source-shrouded-in-secrecy>

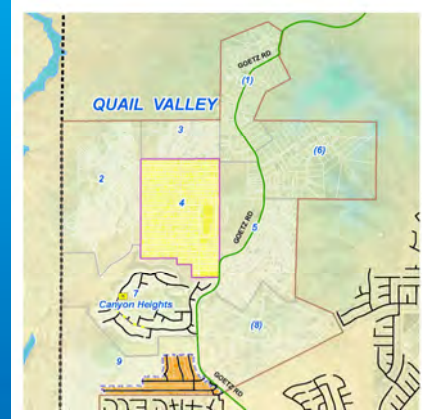


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# Quail Valley Sub-Area 4 Septic to Sewer, Phase 1 Planning Analysis

Eastern Municipal Water District

- Concern:
  - Failing septic systems resulting in polluted water in the community and downstream to an alternate drinking water source in Canyon Lake. Inadequate land and leaching surface to accommodate the wastewater produced.
- Project:
  - Conduct feasibility study, environmental, and a sewer backbone extension analysis.
- Recommended TA Funding: \$ 200,000



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# Bohnert/Banyon Septic to Sewer Project, Phase 1 Planning Analysis

City of Rialto

- Concern:
  - Failing septic systems resulting in polluted water in the community. Inadequate land and leaching surface to accommodate the wastewater produced.
- Project:
  - Conduct technical feasibility and financial analysis, preliminary design, and environmental analysis.
- Recommended TA Funding: \$ 250,000



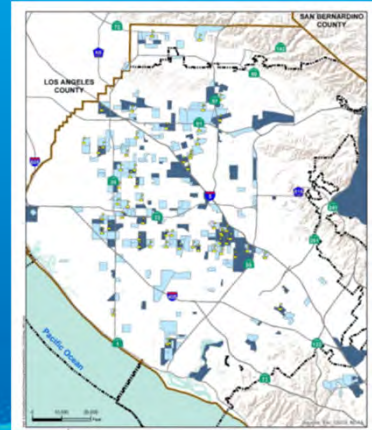
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# Watershed Education and Field Trip Program for Disadvantaged Community Elementary Students

Orange County Water District

- Concern:
  - Lack of resources in underserved communities to provide education and field trips to students about their water supplies, water quality, and their watershed.
- Project:
  - Promote water education and involvement for elementary school students in DACs in north Orange County
- Recommended TA Funding: \$ 100,000

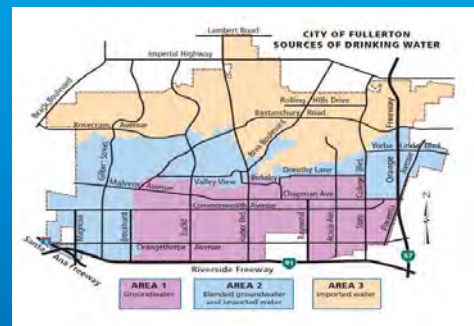


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# Fullerton's Water Future - Ensuring Delivery of Clean, Safe Drinking Water

City of Fullerton

- Concern:
  - Water quality impairment from volatile organic compounds (VOCs) and concerns of loss of additional wells due to the detection of PFOA and PFOS in several wells.
- Project:
  - Conduct technical feasibility and financial analysis to determine the appropriate treatment and develop potential project designs necessary to treat groundwater impacted by these constituents.
- Recommended TA Funding: \$ 100,000

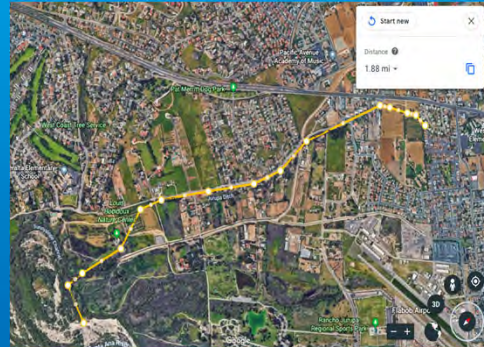


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## Feasibility Study for Reconnecting and Enhancing Water Resources for Greater Community and Environmental Benefit.

### Huerta del Valle

- Concern:
  - Restore historical flow to support the local community and improve riparian habitat.
- Project:
  - Conduct feasibility study to reconnect a historic water source for two underused sites supporting disadvantaged community farms through healthy affordable food access.
- Recommended TA Funding: \$ 50,000



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## Project Planning in Support of Washington Avenue Well

### City of Santa Ana

- Concern:
  - Insufficient water production capacity.
- Project:
  - Undertake the following to support a new well: Engineering report, technical design and specifications, air quality studies, environmental reports, plant design, public outreach.
- Recommended TA Funding: \$ 100,000



Photo Credit: <https://www.kqed.org/science/20012/californias-biggest-water-source-shrouded-in-secrecy>

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Proposals NOT Recommended for Technical Assistance funding, but recommended for consideration within other DCI Program Activities	
Orange County Environmental Justice Education Fund (OCEJEF)	Building Community Capacity with PhotoVoice: Documenting Orange County's Disadvantaged Community Water Concerns & Communicating with Decision-makers
Note: Community Outreach was recommended to be considered within the existing DCI funded Community Water Education Activity	
Box Springs Mutual Water Company	Training for System Water Operators
Note: Operator Training was recommended to be considered within the existing DCI funded Water Agency Training Activity	
San Bernardino Valley Municipal Water District/Inland Empire Resource Conservation District	Louis Rubidoux Nature Consortium, Tribal Programming and Engagement
Note: Tribal Programming was recommended to be considered within the existing DCI funded Santa Ana Watershed Tribal Advisory Committee	

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# Recommendation

It is recommended that the Commission authorize the General Manager to execute sub-agreements for the portfolio of projects recommended for Proposition 1 Disadvantaged Community Involvement (DCI) Program Technical Assistance Grant Funding.

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# Questions



# SAWPA DCI Program: Recommendations for Technical Assistance Funding and Support

**Total Project Cost:**     **Funding Requested:**     **TA Allocation:**     **Project Sponsor:**     **Project Title:**

Proposals Recommendations for Funding					
<b>1</b>	\$275,000	\$275,000	\$175,000	<b>Box Springs Mutual Water Company</b>	<b>Project Planning in Support of Rehabilitation, Removal or Replacement of Water Storage Reservoirs with SCADA</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Evaluate Storage Capacity and Demands, Storage Facility Improvements Design, Identify Easement Needs
<b>2</b>	\$500,000	\$500,000	\$200,000	<b>City of Colton</b>	<b>Project Planning in Support of Installing Two New Potable Wells with Generators</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Draft Preliminary Engineering Report to investigate two new wells, Initial Topographic and Mapping Survey, Well Investigation, Geotechnical Report
<b>3</b>	\$500,000	\$500,000	\$100,000	<b>Devore Water Company</b>	<b>Project Planning in Support of Installing a New Reservoir, Distribution System Upgrades and New Well</b>
Note: Recommendation of a partial funding award				Project Planning Activities	Evaluate water demands and water sources, Evaluate Storage Capacity and Demands, Storage Facility Improvements Design, Identify Easement Needs
<b>4</b>	\$1,000,000	\$300,000	\$150,000	<b>Idyllwild Water District</b>	<b>Project Planning in Support of Installing Water Treatment Plant Upgrades with SCADA</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Engineering Report, Technical Design and Specifications, Air Quality Studies, Environmental Reports, Engineering Drawings, Plant Design, Public Outreach
<b>5</b>	\$300,000	\$300,000	\$100,000	<b>Marygold Mutual Water Company</b>	<b>Project Planning in Support of Installing a New Well and Generator</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Improve WQ with modifications and/or rehabilitation to existing wells, evaluate potential of a new well location
<b>6</b>	\$400,000	\$400,000	\$25,000	<b>Riverside Highland Water Company</b>	<b>Project Planning in Support of Installing an Ion Exchange System</b>
Note: Recommendation of a partial funding award				Pre-construction Activities	Ion Exchange technology evaluation and design
<b>7</b>	\$411,000	\$411,000	\$250,000	<b>Terrace Mutual Water Company</b>	<b>Project Planning in Support of Installing a New Well</b>
Note: Recommendation of a partial funding award				Project Planning Activities	Improve WQ with modifications and/or rehabilitation to existing wells, evaluate potential of a new well location
<b>8</b>	\$935,000	\$435,000	\$200,000	<b>Eastern Municipal Water District</b>	<b>Quail Valley Sub-Area 4 Septic to Sewer, Phase 1 Planning Analysis</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Proposed conversion of septic to sewer Project, Initial Feasibility Study, Environmental Due Diligence Effort , Final Feasibility Report, Quail Valley Sewer Backbone Extension Analysis in Goetz Road
<b>9</b>	\$2,900,000	\$277,990	\$250,000	<b>City of Rialto</b>	<b>Bohnert/Banyon Septic to Sewer Project, Phase 1 Planning Analysis</b>
Note: Recommendation of a full funding award				Community Capacity Building, Project Planning Activities, Pre-construction Activities	Planning and limited preliminary design in support of the proposed conversion of septic to sewer Project
<b>10</b>	\$450,000	\$450,000	\$100,000	<b>Orange County Water District</b>	<b>Watershed Education and Field Trip Program for Disadvantaged Community Elementary Students</b>
Note: Recommendation of a partial funding award				K-12 Initiatives	Water education & field trip program, Program development and pilot testing, Develop watershed displays & preparation of materials, Outreach to schools
<b>11</b>	\$12,000,000	\$500,000	\$100,000	<b>City of Fullerton</b>	<b>Fullerton's Water Future: Ensuring Delivery of Clean, Safe Drinking Water</b>
Note: Recommendation of a partial funding award				Project Planning Activities, Pre-construction Activities	Develop interim approach and long-term strategy for addressing VOCs and PFAS treatment and reduction in local groundwater resources
<b>12</b>	\$1,250,000	\$500,000	\$50,000	<b>Huerta del Valle</b>	<b>Feasibility study for reconnecting and enhancing water resources for greater community and environmental benefit</b>
Note: Recommendation of a partial funding award				Community Capacity Building, Project Planning Activities, Pre-construction Activities	Feasibility study to investigate the installing wells on two park sites to make available irrigation water for community farm projects that service DA communities
<b>13</b>	\$630,000	\$500,000	\$100,000	<b>City of Santa Ana</b>	<b>Project Planning in Support of Washington Avenue Well</b>
Note: Recommendation of a partial funding award				Pre-construction Activities	Washington Ave Well Project will pump groundwater into the City's existing water distribution system

## Proposals NOT Recommended for Technical Assistance funding, but recommended for consideration within other DCI Program Activities

<b>14</b>	\$447,720	\$447,720	no award	<b>Orange County Environmental Justice Education Fund (OCEJEF)</b>	<b>Building Community Capacity with PhotoVoice: Documenting Orange County's Disadvantaged Community Water Concerns &amp; Communicating with Decision-makers</b>
Note: Community Outreach was recommended to be considered within the existing DCI funded Community Water Education Activity				Community Capacity Building	Preparation & Planning, Disadvantaged Community Outreach (40 participants from Anaheim and Garden Grove), Workshop Implementation & Evaluation Forum Implementation, Workshop Implementation & Evaluation
<b>15</b>	\$6,000	\$6,000	no award	<b>Box Springs Mutual Water Company</b>	<b>Training for System Water Operators</b>
Note: Operator Training was recommended to be considered within the existing DCI funded Water Agency Training Activity				Operator Training	Staff training
<b>16</b>	\$5,000,000	\$393,375	no award	<b>San Bernardino Valley Municipal Water District/Inland Empire Resource Conservation District</b>	<b>Louis Rubidoux Nature Consortium, Tribal Programming and Engagement</b>
Note: Tribal Programming was recommended to be considered within the existing DCI funded Santa Ana Watershed Tribal Advisory Committee				Community Capacity Building, K-12 Initiatives	Tribal program development for Louis Rubidoux Nature Center (priorities, objectives, master planning) including working with other project partners to add Native perspective to their programmed activities

# SAWPA DCI Program: Recommendations for Technical Assistance Funding and Support

Total Project Cost:	Funding Requested	TA Allocation	Project Sponsor:	Project Title:
<b>Proposals NOT Recommended for DCI Program Technical Assistance funding</b>				
<b>17</b>	\$498,478	\$498,478	no award	<b>Mesa Water District</b> Note: project not recommended for TA funding Pre-construction Activities <b>Mesa Water Reliability Facility Outreach Center – Design/Engineering, CEQA and DAC Involvement/Outreach</b> Water Reliability Facility Outreach Center - planning and design of a state-of-the-art multipurpose community room for water education tours, multimedia educational exhibits, digital displays, and informational signage for tours
<b>18</b>	\$529,000	\$500,000	no award	<b>City of Santa Ana</b> Note: project not recommended for TA funding Pre-construction Activities <b>Recycled Water Use Expansion Project</b> Expand Recycled Water Use from the existing OCWD's GAP system north into the City to key potential recycled water customers
<b>19</b>	\$10,000,000	\$500,000	no award	<b>San Bernardino Valley Municipal Water District</b> Note: project not recommended for TA funding Project Planning Activities, Pre-construction Activities <b>Lake Rialto Habitat Management and Community Open Space Project</b> Surveys – planometrics, digital terrain model, land appraisal and title search, Preliminary Design/Feasibility Study, Geotechnical Study, Biological Opportunities and Constraints Investigation, 30% Design with project cost estimate, CEQA and associated technical studies
<b>20</b>	\$500,000	\$500,000	no award	<b>Idyllwild Water District</b> Note: project not recommended for TA funding Project Planning Activities, Pre-construction Activities <b>Wastewater Treatment Plant Upgrade</b> Engineering Report, Technical Design and Specifications, Air Quality Studies, Environmental Reports, Hydrogeological Reports, Engineering Drawings, plant Design, Public Outreach
<b>21</b>	\$200,000	\$200,000	no award	<b>Marygold Mutual Water Company</b> Note: project not recommended for TA funding Project Planning Activities <b>Marygold Avenue Water Main and Service Line Replacement Project</b> Engineering Study of water pipes, water service laterals, Calculate costs for new service lines and connections, Research pre-construction design, Easement Study
<b>22</b>	\$25,000	\$25,000	no award	<b>City of Menifee</b> Note: project not recommended for TA funding Community Capacity Building, Project Planning Activities <b>Quail Valley Sewer Improvements Subarea 9, Phase 2</b> Income survey data, which may allow further planning and limited preliminary design, supports proposed Quail Valley Sewer Improvements Subarea 9, Phase 2 project

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## COMMISSION MEMORANDUM NO. 2019.119

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Fiscal Year 2018-19 Report on Audit  
**PREPARED BY:** Karen Williams, DGM/CFO

### RECOMMENDATION

It is recommended that the Commission review the Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended June 30, 2019 and 2018, which includes the Report on Audit prepared by Teaman, Ramirez & Smith, Inc., then:

1. Accept the CAFR, including the Report on Audit as prepared by Teaman, Ramirez & Smith, Inc.;
2. Direct staff to file the Report with the respective government agencies as required by law; and,
3. Direct staff to submit the CAFR, with any necessary changes, for the Certificate of Achievement for Excellence in Financial Reporting Award.

### DISCUSSION

As required by the State of California Government Code, all government agencies and/or special districts must contract for an independent financial audit. In addition, because SAWPA has received State Water Board grant funding, the independent audit must include additional work and reporting by the auditors, and testing of SAWPA's internal control procedures for receipt of grant funding to ensure compliance with respective State and Federal laws and regulations.

SAWPA has received the Government Finance Officers Associations (GFOA) Certificate of Achievement for Excellence in Financial Reporting for the past eight years. Staff will submit this CAFR for the award as well. The CAFR was prepared following the guidelines recommended by the Governmental Accounting Standards Board (GASB) and generally accepted accounting principles (GAAP). It includes three sections:

1. The Introductory Section, which provides an overview of the Agency, its background, organization, recent activities and accomplishments over the past fiscal year, local and economic conditions and forecasts, service efforts and accomplishments, and future plans.
2. The Financial Section, which includes the independent auditor's report, management's discussion and analysis, and all basic financial statements and notes to the basic financial statements.
3. The Statistical Section, which includes a number of unaudited tables and schedules that present historical trends for the past ten years, as well as demographic and other information about the Agency that is deemed relevant.

SAWPA is pleased to report that the financial statements presented herein, contain no qualifications or reportable conditions. This indicates that SAWPA's financial reporting meets generally accepted GAAP, it is compliant with applicable State and Federal laws and regulations, and internal controls are sufficient to safeguard against material errors or fraud.

Joshua Calhoun (Audit Partner) will be available to answer questions regarding SAWPA's FY 2018-19 Report on Audit (financial statements).

**RESOURCE IMPACTS**

The FY 2018-19 Audit contains no financial deficiencies to report.

Attachments:

1. FYE 2019 CAFR
2. Management Report
3. Internal Controls Letter



# **Santa Ana Watershed Project Authority**

## **Comprehensive Annual Financial Report Fiscal Year Ended June 30, 2019 and 2018**

**11615 Sterling Avenue • Riverside • California • 92503**  
**[www.sawpa.org](http://www.sawpa.org) • (951) 354-4220**

**Santa Ana Watershed Project Authority**  
**Riverside, CA**

**Comprehensive Annual Financial Report**

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**For the Fiscal Year Ended**  
**June 30, 2019 and 2018**

Prepared by the  
Finance Department

11615 Sterling Avenue, Riverside California 92503

951.354.4220 [www.sawpa.org](http://www.sawpa.org)



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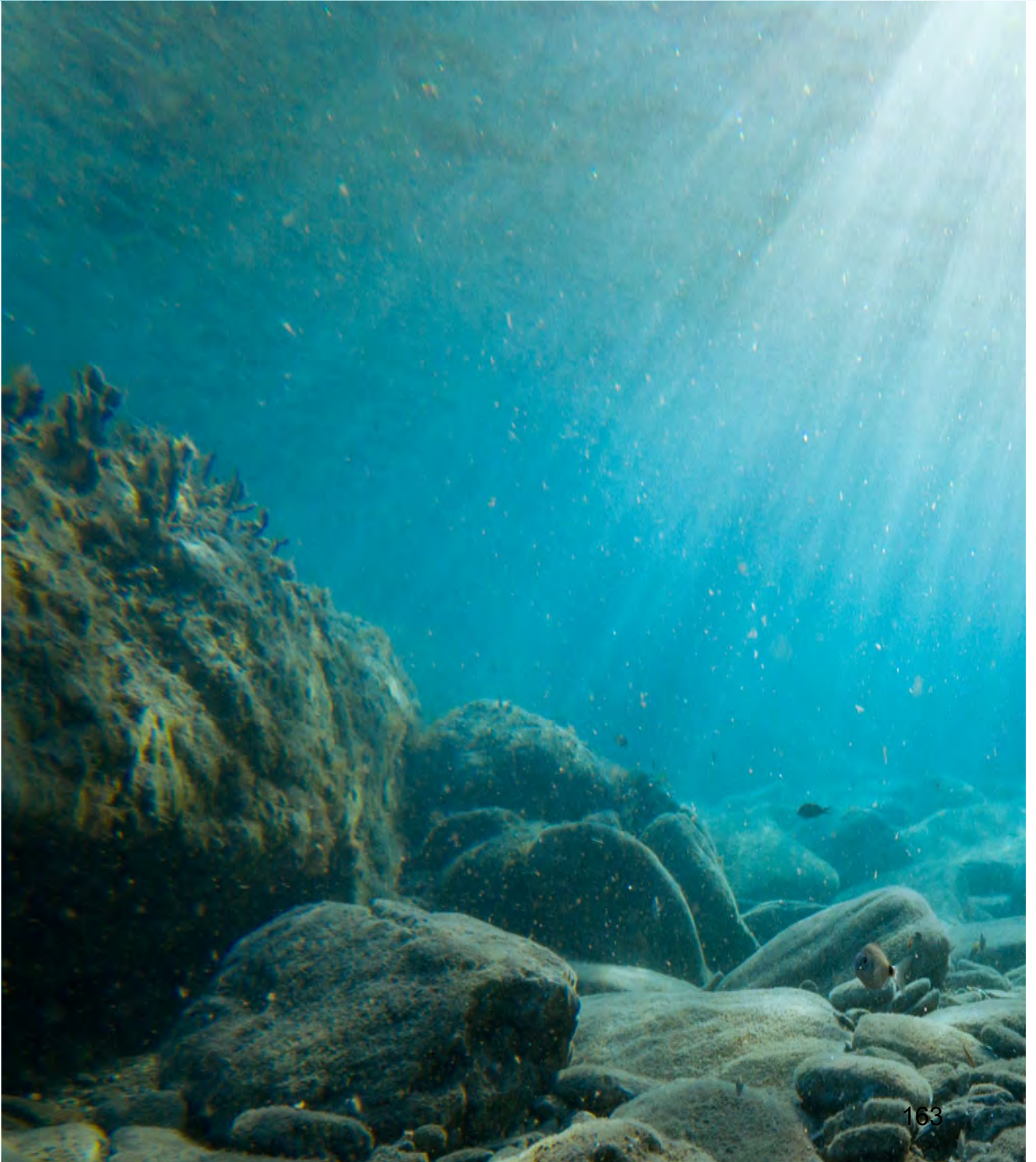


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# Introductory Section



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# Santa Ana Watershed Project Authority

OVER 50 YEARS OF INNOVATION, VISION, AND WATERSHED LEADERSHIP

December 17, 2019

To the Chair of the Board of Commissioners, Members of the Commission, and Member Agencies of the Santa Ana Watershed Project Authority (SAWPA):

We are pleased to present the Santa Ana Watershed Project Authority’s (hereinafter referred to as “the Authority”) Comprehensive Annual Financial Report for the fiscal year ended June 30, 2019.

The report was prepared by the Authority’s Finance Department following the guidelines recommended by the Governmental Accounting Standards Board (GASB) and generally accepted accounting principles (GAAP). Responsibility for both the accuracy of the data presented, and the completeness and fairness of the presentation, including disclosures, rests with the Authority’s management. We believe the data, as presented, is accurate in all material respects, and that it is presented in a manner that provides a fair representation of the financial position and results of operation of the Authority. Included are all disclosures we believe necessary to enhance your understanding of the financial condition of the Authority.

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management’s Discussion and Analysis (MD&A). The letter transmittal is designed to complement the MD&A and should be read in conjunction with it. The Authority’s MD&A can be found immediately following the Independent Auditors’ Report.

The Authority’s financial statements have been audited by Teaman, Ramirez & Smith, Inc., a firm of licensed certified public accountants. The goal of the independent audit is to provide reasonable assurance that the financial statements of the Authority for the fiscal year ended June 30, 2019, are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified opinion that the Authority’s financial statements for the fiscal year ended June 30, 2019, are fairly presented in conformity with GAAP. The Independent Auditors’ Report is presented as the first component of the financial section of this report.

Ronald W. Sullivan  
Chair  
Eastern Municipal  
Water District

Kati Parker  
Vice Chair  
Inland Empire  
Utilities Agency

Denis R. Bilodeau, P.E.  
Secretary-Treasurer  
Orange County  
Water District

Brenda Dennstedt  
Commissioner  
Western Municipal  
Water District

T. Milford Harrison  
Commissioner  
San Bernardino Valley  
Municipal Water District

Richard E. Haller, P.E.  
General Manager

## Reporting Entity and Its Services

### Governmental Structure

The Authority was first formed in 1968 as a planning agency, and reformed in 1972, with a mission to plan and build facilities to protect the water quality of the Santa Ana River Watershed (hereinafter referred to as “the Watershed”). The Authority is a Joint Powers Authority (JPA), comprised of the five largest water agencies in the Watershed: Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), Orange County Water District (OCWD), San Bernardino Valley Municipal Water District (SBVMWD), and Western Municipal Water District (WMWD).

### Service Area

The Watershed spans approximately 2,840 square miles, and spans the western portion of San Bernardino and Riverside Counties, northern portion of Orange County, as well as a small eastern sliver of Los Angeles County. It is home to over 6 million people. The Watershed, and the State as a whole, is facing many challenges in guaranteeing sufficient, high-quality water for the ever-growing population of the region. The Authority works with planners, scientists, water experts, design and construction engineers, and other government agencies to identify issues and develop innovative solutions to resolve many water-related problems.

### Vision

The Authority’s vision is a sustainable Santa Ana River Watershed that provides clean and reliable water resources for a vibrant economy and high quality of life for all, while maintaining healthy ecosystems and open space opportunities.

A successful Authority provides value to its member agencies and to the Watershed as a whole by facilitating collaboration across boundaries to address common goals and tackle problems that are larger than any individual entity.

### Mission

The Authority strives to make the Santa Ana River Watershed sustainable through fact-based planning and informed decision-making; regional and multi-jurisdictional coordination; and the innovative development of policies, programs, and projects. Our mission is accomplished through a number of specific functions:

- Maintaining peace in the Watershed;
- Facilitating conflict resolution through collaborative processes;
- Preparing an integrated watershed-wide water management plan that provides a unified vision for the Watershed;
- Operating the Inland Empire Brine Line to convey salt out of the Watershed and support economic development;
- Developing water-related initiatives, particularly those that require the participation of several entities;
- Identifying, pursuing, securing, and administering supplemental funds for the Watershed; and
- Influencing legislation for the benefit of the Watershed.



## Our Values

Our strategy and day-to-day operations are guided by values strongly held by our member agencies, management, and staff:

**Leadership** in the development and advancement of a vision and plan for a sustainable Watershed, and in the incorporation of new paradigms for water and watershed planning.

**Collaboration and cooperation** among member agencies and other stakeholders in the Watershed toward the formulation and implementation of solutions to watershed-wide, multi-jurisdictional problems.

**Creativity** in the pursuit of new approaches to watershed planning, the use of new technologies, and the enhancement of a new water ethic in the Watershed.

**Fact-based decision-making** to identify neutral and transparent solutions that maximize the benefit to the entire Watershed.

**Respect** for all voices and perspectives in the Watershed to develop sound solutions and maximize consensus building.

**Transparency, integrity and professionalism** to maintain the respect and trust of our partners, and to attract and retain talented and committed individuals to our organization.

The Authority uses a three-pronged approach to accomplish our mission with the services it offers, which are listed below.

## Inland Empire Brine Line

The Authority's enterprise includes ownership and operation of the Inland Empire Brine Line (Brine Line). The 73-mile long regional brine line is designed to convey 30 million gallons per day of non-reclaimable wastewater from the upper Santa Ana River Basin to the Pacific Ocean for disposal, after treatment. The Brine Line is currently used for: 1) the disposal of high Total Dissolved Solids (TDS) brine from brackish groundwater desalter operations and power plants within the region; 2) the disposal of industrial wastewater that is unacceptable for discharge into local wastewater treatment facilities, usually because of high concentrations of TDS from commercial and industrial facilities; and 3) the disposal of domestic or industrial wastewater that is managed by public agencies and which meets standards of local treatment facilities. Some users of the Brine Line have temporary or emergency needs and connect to the system for a fixed term. The Brine Line protects the water quality of the Santa Ana River, a major water source for Orange County groundwater basins.

This 46-year old utility was built as the fundamental method of salt export for the region. Historic import of water for agricultural purposes has increased the salinity of many groundwater basins within the Watershed. Removing salt by means of the Brine Line allows the Watershed to work towards achieving salt balance – a key Watershed goal and indicator of sustainability. Salt is removed from brackish groundwater by reverse osmosis desalters, which discharge the concentrated brine into the Brine Line. The treated water from the desalters is delivered for consumption as potable water. Brine disposal will be essential to support water recycling efforts and economic growth within the Watershed.

### Integrated Regional Watershed Planning

SAWPA has been involved in watershed and integrated water resource planning since its formation. The latest plan adopted in February 2019 is the Santa Ana Watershed Integrated Regional Water Management Plan (IRWMP) called the One Water One Watershed (OWOW) Plan Update 2018. The plan reflects a decentralized stakeholder involvement process that includes the participation of multiple agency and non-profit staff, local experts and interested volunteers from a broad range of fields and locations across the Watershed. This regional plan serves as a milestone of extraordinary collaboration and vision that will be used to address water challenges over the next two decades. The plan addresses climate change; water supply reliability; water and land use; water quality improvement; flood control and stormwater runoff; water use efficiency; water recycling; parks, recreation and open space; environmental justice; and environment and habitat. Through this integration of water resource management strategies along with workgroups (or pillars) designated for each strategy, scarce resources will be leveraged and cost-effective solutions will be developed to address a multiplicity of water challenges using an integrated multi-beneficial approach.

Another major component of the IRWM program under Proposition 1 is the Disadvantaged Communities Involvement (DCI) program, which SAWPA administers. This program aims to determine the strengths and needs of disadvantaged, economically distressed and underrepresented communities in the watershed through engagement and education, uncover and share the needs and capacities within the water agencies and communities, and support the technical planning to address these water needs in preparation of future implementation. Through partnership with several nonprofit organizations, the DCI team in this watershed has collected one-on-one and group interview data through an ethnographically informed process to better understand strengths and needs. When complete, this program is anticipated to be a model for pre-planning inclusion, education, and responsiveness on behalf of water agencies to address water needs of these communities across the State.

### Roundtables

The Authority has taken the lead role in establishing effective regional partnerships with the Regional Water Quality Control Board and other stakeholders in the Watershed to solve water quality problems, as well as water and natural resource problems. The Authority serves as the administrator/facilitator and creates a neutral venue for a number of efforts bringing together many agencies and organizations to address and solve a multiplicity of problems through integration and innovation.

## **Economic Conditions and Outlook**

### Local Economy

All in all, the Inland Empire turned in a strong performance in 2018, which has continued into 2019. As the population expanded, local job gains outpaced the state and nation, home prices jumped, and consumer spending rose. While a lack of workers has slowed both job gains and labor force growth across the state and nation, the Inland Empire's affordability advantage

over its surrounding neighbors has been a key factor in helping the region avoid much of the slowdown. Economic forecasters expect the economy to continue to improve and remain strong in the coming years due to the availability of land, the ideal location for commerce, a relatively strong manufacturing base, and affordable housing.

#### Sound Financial Policies

The Authority continues to manage funds to ensure financial stability and demonstrate responsible stewardship by sustaining reasonable rates for customers, containing costs through careful planning, preserving investments, safeguarding reserves, and active debt management.

#### Financial Planning

The Commission approves a biennial operating budget as a management tool. The budget is developed with input from the various departments within the organization and adopted prior to the start of each fiscal year. Monthly comparison reports of budget to actual are prepared, and quarterly budget to actual results by fund type are provided to and discussed with the Commission, along with financial position and other key performance information.

#### Reserves Policy

The Authority adopted a reserve policy, which states the purpose, source, and funding limits for each of its designated reserves. The reserves are essential for maintaining liquidity in the marketplace, which enables the Authority to access the lowest cost-of-capital borrowing opportunities.

#### Investment Policy

The Authority invests its funds in instruments permitted by California Government Code sections 53601 et seq., and in accordance with its investment policy. The investment objectives of the Authority are to first preserve capital, followed by maintaining liquidity, and finally, maximizing the rate of return without compromising the first two objectives.

#### Debt Administration

The Authority actively manages its debt portfolio, seeking to minimize its total debt costs. This goal is met by the use of state revolving fund (SRF) loans to fund part of its capital projects. Reserves will also be used to fund capital projects.

## **Major Initiatives and Accomplishments**

Fiscal year 2018-19 was another busy year for the Authority. It not only administers the day-to-day operations of the JPA, it operates the Brine Line Enterprise and Capital Improvement Program, administers the OWOW Program, administers several grant programs, serves as the Lake Elsinore & San Jacinto Watersheds Authority administrator, conducts regional planning activities, and facilitates seven stakeholder task force work groups. Some of the major initiatives and accomplishments for FYE 2019 are listed below.

### Brine Line Enterprise

- Completed the Reach 4D Work Plan that addresses pipeline corrosion on portions of Reach 4D. The Work Plan included a pipeline condition assessment to evaluate the condition of this portion of the Reach 4D pipeline and recommended near, mid, and long-term actions to monitor the condition of the Brine Line and provide repairs as necessary in the future.
- Implemented and completed the near-term actions as recommended in the Reach 4D Work Plan. Work included personnel-entry inspections at two key locations, clean and CCTV one (1) pipeline segment, and update the Work Plan as necessary.
- Continued to implement the SAWPA Pretreatment Program (PTP). Performed 98 on-site discharger inspections, 120 monitoring (or sampling) events, and reissued 20 existing permits. Additionally, one (1) permit was closed, and one (1) new permit was issued.
- Represented SAWPA's interest during implementation of Orange County Sanitation District's (OCSD) Santa Ana Regional Interceptor (SARI) Rock Removal Project in Orange County.
- Completed agreement with City of Beaumont, SBVMWD, and SAWPA to allow Beaumont to connect to the Brine Line contingent on final approval from OCSD.
- Established City of Beaumont as a Contract Agency through a Multijurisdictional Pretreatment Agreement.
- Completed audit of all SAWPA pretreatment program contract agencies.
- Completed Capacity Pool Agreement to allow existing and potential dischargers to lease brine line pipeline and treatment and disposal capacity right.
- Utilized a data and records management system (OnBase) for expedient notification of Brine Line Liquid Waste Hauler rejected loads.
- Continued to implement the Sewer System Management Plan (SSMP) as required by the SWRCB's statewide permit for Collection Systems in excess of one mile in length.
- Cleaned the Reach IV-B Upper pipeline eliminating hydraulic choke points caused by scale build up.
- Continued periodic siphon cleaning program for 13 system inverted siphons.
- Relocated approximately 90-feet of pipe to avoid a conflict with a Southern California Edison high voltage conduit.
- Continued to locate facilities, particularly on Reach V, by potholing and updating as-built information.
- Conducted recurring maintenance of air release valves to reduce incidence of "dripping" or small releases of brine from the valves.
- Continued implementation of the Brine Line marketing plan.
- Completed repair of selected Maintenance Access Structures (MAS).
- Responded to nearly 4,150 requests from contractors to mark the location of the Brine Line in the field resulting in 168 utility markings in the field. Required direct coordination with the contractor to review the proposed work and any potential concerns for the Brine Line.
- Monitored construction activities in close proximity to the Brine Line to ensure protection of the Brine Line.
- Reduced Sanitary Sewer Overflows (SSO) by 800% over the last three years, reducing risk of environmental damage and liability.

## OWOW

- Implemented multiple water use efficiency improvements using grant funding from the California Department of Water Resources (DWR) Proposition 84 Integrated Regional Water Resources Management (IRWM) Emergency Drought Round. Over \$12.8 million in grant funding along with \$10.6 million in local match has been provided for SAWPA, its member agencies, and stakeholders. Funding is being used to implement water use efficiency improvements such as support for budget-based water rate structures for retail water agencies, water use efficiency web-based outreach tools, aerial mapping and area measurement using GIS throughout the Santa Ana River and Upper Santa Margarita Watersheds. Work is anticipated to be complete under this grant program by the end of 2019.
- Continued support in working with project proponents to implement projects using the \$61 million made available to SAWPA and the Watershed from DWR's Proposition 84 Integrated Regional Water Management (IRWM) 2015 Round funding. This funding along with local matching funds of \$173 million will be used to implement three integrated large scale projects reflecting a multi-agency and multi-benefit approach. One of the three projects called the Santa Ana River Conservation and Conjunctive Use Project is a conjunctive use water storage project that will store over 150,000 AF of water for use in dry periods and is being implemented by a SAWPA Committee composed of the SAWPA member agencies.
- Continued execution of deliverables under Proposition 1 IRWM funding designated for Disadvantaged Community Involvement (DACI). \$6.3 million has been specifically designated to the Santa Ana River Watershed to support the DACI focusing on the water needs assessment of disadvantaged communities in the Watershed. The work on this effort commenced in FYE 2017 and is expected to conclude in April 2021.
- Completed and adopted the Santa Ana River Watershed Integrated Regional Water Management Plan known as the OWOW Plan Update 2018 in February 2019. Implemented tasks under an agreement with DWR using Proposition 1 IRWM funding of \$250,000 awarded to SAWPA to update the OWOW Plan Update 2018 as necessary to meet new IRWM plan standards.
- Initiated and completed a Call for Projects for grant funding, a rating and ranking stakeholder process for project consideration, and a Pre-Application Workshop with DWR. This work included the execution of an MOU with Orange County stakeholders to ensure a 30% allocation of the Proposition 1 IRWM grant funding be directed to integrated water projects in North Orange County.
- Processed 24 grant invoices totaling nearly \$64 million in grant funds and conducted 26 quality assurance site visits. In coordination with the Proposition 84 sub-grantees, completed 23 progress reports, 8 project completion reports, and 8 post performance reports.

## Stakeholder Partnering (Roundtable Efforts)

- Commenced the third year of pathogen monitoring under the new Regional Water Quality Monitoring Program Task Force. This task force is composed of SAWPA, the Regional Board, and the three flood control districts in Orange, San Bernardino, and Riverside Counties. This task force is implementing the necessary pathogen monitoring as required under the Stormwater Quality Standards Task Force. The monitoring program reflects



the merger of the ongoing pathogen monitoring conducted by the Middle Santa Ana River (MSAR) Total Maximum Daily Load (TMDL) Task Force.

- Worked with the Regional Board in finalizing the updated and revised TMDLs on the Lake Elsinore and Canyon Lake nutrient TMDL. A draft TMDL Update report is anticipated to be adopted by the Regional Board in early 2020 and the SWRCB and EPA later in the 2020 calendar year.
- Continued progress on the update to the Santa Ana River Wasteload Allocation model using consultant, Geoscience Support Services under the Basin Monitoring Program Task Force. Final report for the Regional Board is anticipated in November 2019. SAWPA submitted the 2018 Annual Report of Santa Ana River Water Quality to stakeholders and Regional Board staff. We also continued work on the development of drought policy modifications to recycled water permits based on TDS trends analysis from Southern California Salinity Coalition work.
- Continued support for salinity management research and coordination among the Southern California water community in addressing salinity issues.
- Completed annual habitat survey for the threatened fish species, Santa Ana sucker fish. The Riverwalk is the longest running and largest voluntary annual habitat assessment conducted in Southern California for an aquatic species.
- Supported the Lake Elsinore & San Jacinto Watersheds Authority and the associated TMDL Task Force in implementing two more successful alum applications to Canyon Lake to reduce the phosphorus content, reduce algae, and help meet the TMDL targets for the lake. Water quality results over the past six years of alum application show significant improvements in water clarity, decreased algae and increased oxygen levels.
- Continued installation of indoor water and energy saving devices in the three counties under the Water Energy Community Action Network (WECAN). This work includes replacement of turf with water efficient landscapes in the Watershed. Funding for the project is provided by the state-funded water-energy grant and additional work has been funded by West Valley Water District's federal grant received from the Bureau of Reclamation. Grant funded work was completed in December 2018 with supplemental support to the WVWD program scheduled through December 2019.
- Supported the Forest First MOU by working with the San Bernardino National Forest in a CAL FIRE grant application to apply for DWR grant funds through the One Water One Watershed Proposition 1 IRWM Round 1 program to expand fire breaks in the Cleveland National Forest located within the Santa Ana River Watershed.
- For Arundo Removal and Habitat Management, staff completed its work in association with the Santa Ana Watershed Association (SAWA) for an Arundo survey and property access. The work allowed removal of approximately 300 acres in the upper watershed.
- Continued support to Imported Water Recharge Workgroup through coordination of efforts to revise the Cooperative Agreement with the Regional Board and establish the work activities under this Agreement as a new subcommittee under the Basin Monitoring Program Task Force. The activities of the subcommittee would then be administered by SAWPA. An Amendment No. 1 for the Cooperative Agreement has been prepared and is undergoing the signature process for approval among the nine imported water recharging agencies in the watershed.

#### Technology

- Acquired new Dell 84-inch touchscreen and PC for Boardroom.

- Trenched Boardroom/OWOW Room/Library for network and power cabling of new tables.
- Acquired new Dell 55-inch touchscreen and PC for OWOW Room.
- Added wireless Bluetooth speaker phones to both meeting rooms.
- Deployed Intel Unite software to allow outside PCs/IOS/Android devices to present.
- Managed Website updates and additions.
- Upgraded Great Plains 2013 to 2018.
- Deployed Journyx Timekeeping software.
- Deployed Zoom Meeting software to DCI program.
- Created an online form and database to record OWOW and Proposition 1 Project Submissions.
- Created Proposition 1 database query to rank projects for funding eligibility.
- Created Proposition 1 application and database query to transform information collected by SAWPA to a format that can be submitted to DWR.
- Updated DigAlert application to work with a new email format.
- Updated DigAlert application to submit positive response in a batch process at the end of the day to improve the success rate of positive response submissions.
- Created an on-line app for DCI program that allows agencies to submit requests to have documents and meetings translated into other languages.
- Created GIS maps to support Planning, Engineering, and the DCI Program.
- Updated the Brine Line billing application to include a 10% surcharge on emergency discharges and included a new report that shows all billing sites in one report to make pre-billing review more efficient.

## Accounting System

The Finance Department is responsible for providing financial services for the Authority, including financial accounting and reporting, payroll, accounts payable and receivable, custody and investment of funds, billing and collection of wastewater charges, and other revenues. The Authority accounts for its activities as an enterprise fund and prepares its financial statements on the accrual basis of accounting, under which revenues are recognized when earned and expenses are recorded when incurred. It is the intent of the Board of Commissioners to manage the Authority's operations as a business, thus matching revenues against the cost of providing services.

## Internal Controls

The Authority operates within a system of internal accounting controls established and is continually reviewed by management to provide reasonable assurance that assets are adequately safeguarded and transactions are recorded in accordance with Authority policies and procedures. When establishing and reviewing controls, management must consider the cost of the control and the value of the benefit derived from its utilization. Management normally maintains or implements only those controls for which its value adequately exceeds its cost. Recent audits have not noted any weaknesses in internal controls.

## Audit and Financial Reporting

State Law requires the Agency to obtain an annual audit of its financial statements by an independent certified public accountant. The accounting firm of Teaman, Ramirez & Smith, Inc. has conducted the audit of the Authority's financial statements. Their unmodified (clean) Independent Auditors' Report appears in the Financial Section.

## Awards

The Government Finance Officers Association of the United States and Canada ("GFOA") awarded a Certificate of Achievement for Excellence in Financial Reporting to the Authority for its comprehensive annual financial report for the fiscal year ended June 30, 2018. This was the ninth year that the Authority has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both GAAP and applicable legal requirements. A Certificate of Achievement is valid for a period of only one year.

We believe that our current comprehensive annual financial report continues to meet the programs requirements and will submit our current June 30, 2019, report to the GFOA to determine its eligibility for a certificate.

The GFOA presented a Distinguished Budget Presentation Award to the Authority for the two-year Budget beginning July 1, 2017. In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operating guide, as a financial plan, and as a communication device. We have submitted the two-year Budget beginning July 1, 2019 to the GFOA as well.

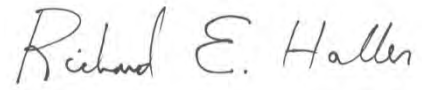
## Acknowledgements

The preparation of this report could not have been accomplished without the efficient and dedicated services of the entire staff of the Authority's Finance Department. We also would like to express our appreciation to the other Authority Departments for their cooperation, assistance, and support.

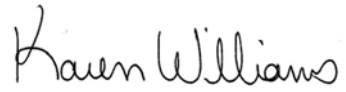
We further acknowledge the thorough and professional manner in which our auditors, Teaman, Ramirez & Smith, Inc., conducted the audit.

Additionally, we would like to acknowledge the Board of Commissioners for their continued support of the Authority's goal of sound accountable financial management, and for maintaining the highest standards of professionalism in the management of the Authority's finances. We truly appreciate their unfailing interest and support.

Respectfully submitted,

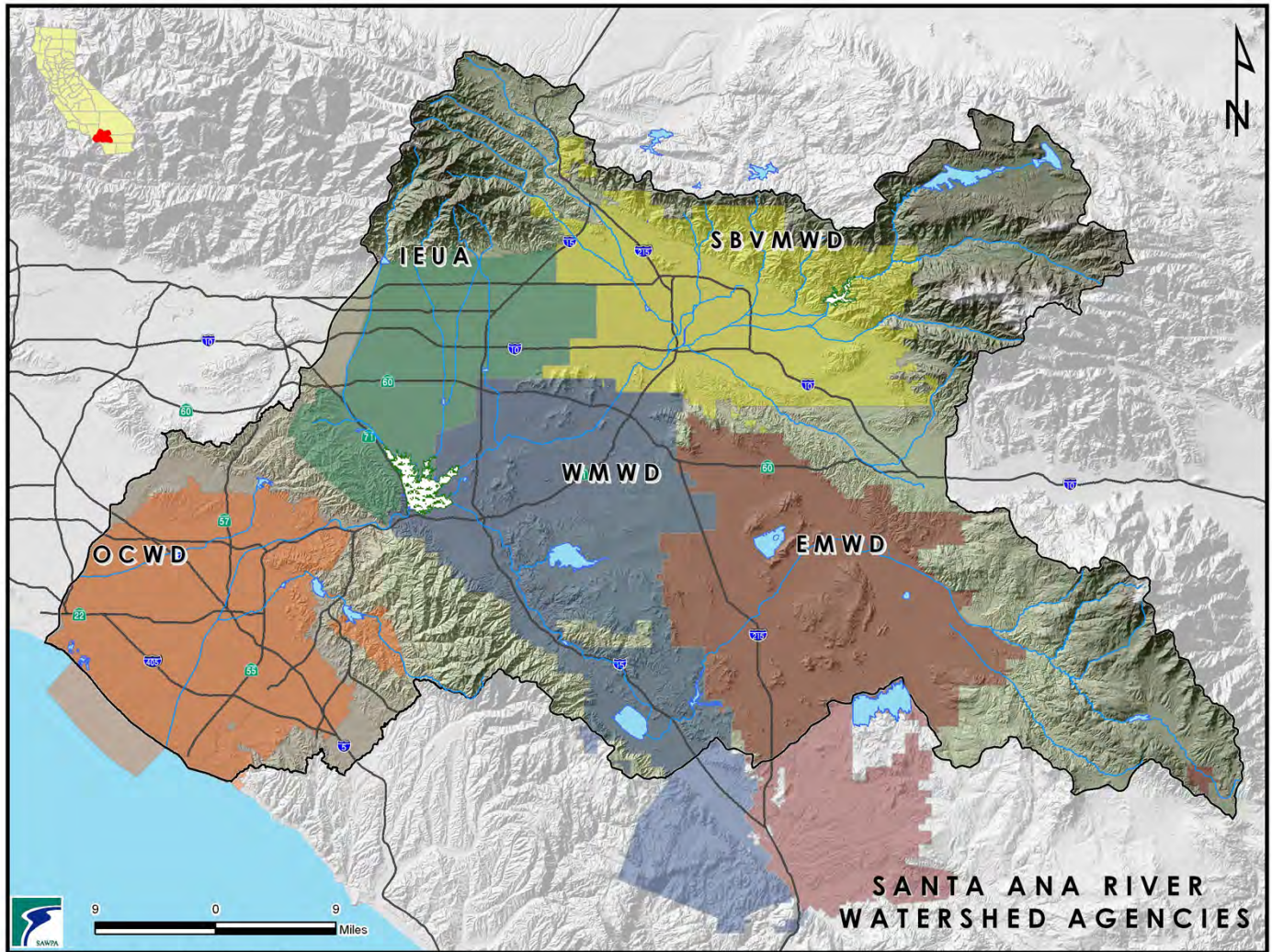
Handwritten signature of Richard E. Haller in black ink.

Richard Haller  
General Manager

Handwritten signature of Karen Williams in black ink.

Karen Williams  
Deputy General Manager/Chief Financial Officer

# Santa Ana Watershed Project Authority Authority Service Area Map



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Government Finance Officers Association

**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Santa Ana Watershed Project Authority  
California**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2017**

*Christopher P. Morrill*

Executive Director/CEO

# **Santa Ana Watershed Project Authority**

## **Authority Officials**

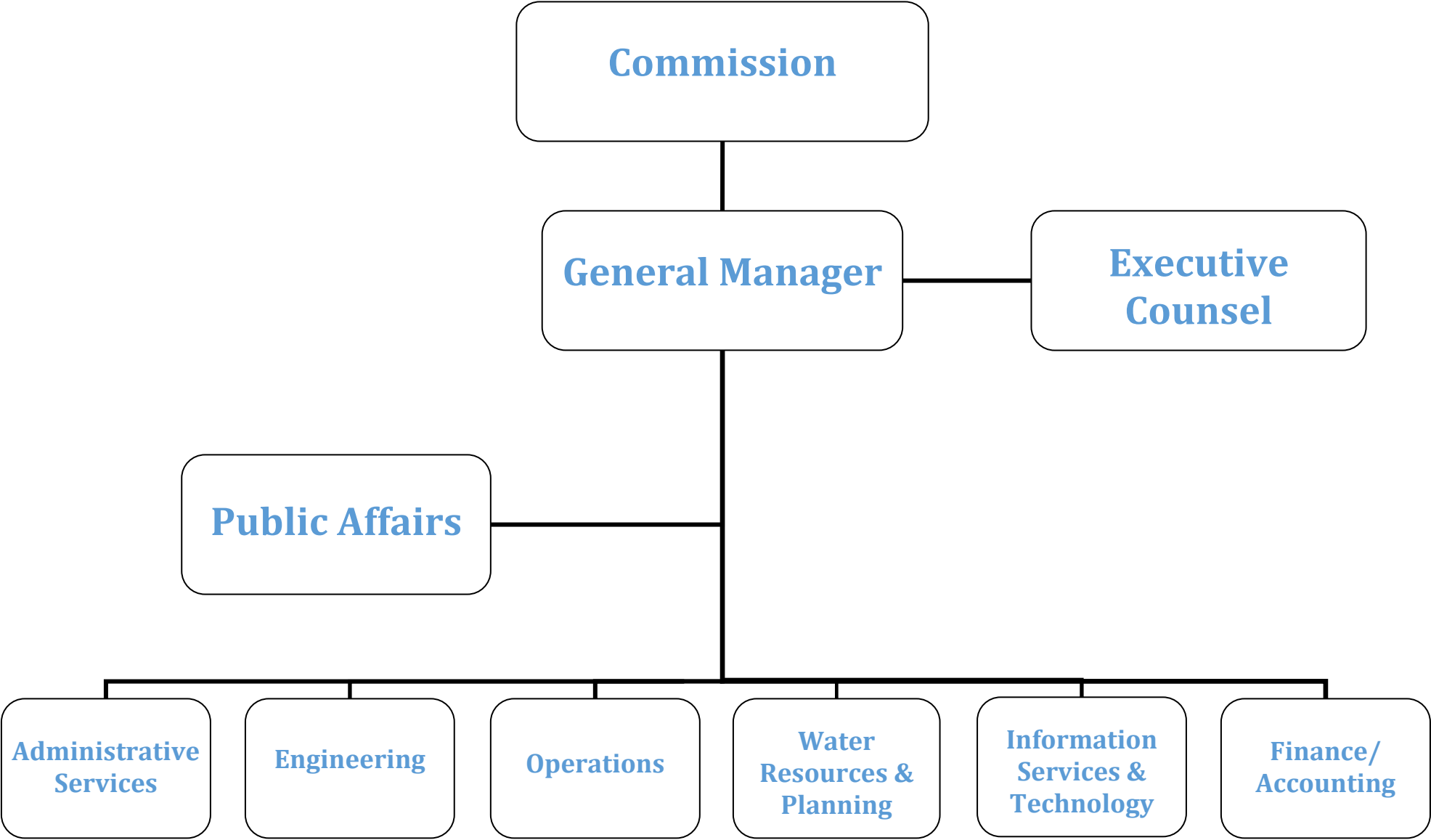
### **Board of Commissioners**

<b>Ronald W. Sullivan</b>	Chair	EMWD
<b>Kati Parker</b>	Vice Chair	IEUA
<b>Denis R. Bilodeau</b>	Secretary/Treasurer	OCWD
<b>T. Milford Harrison</b>	Commission Member	SBVMWD
<b>Brenda Dennstedt</b>	Commission Member	WMWD

### **Management Staff**

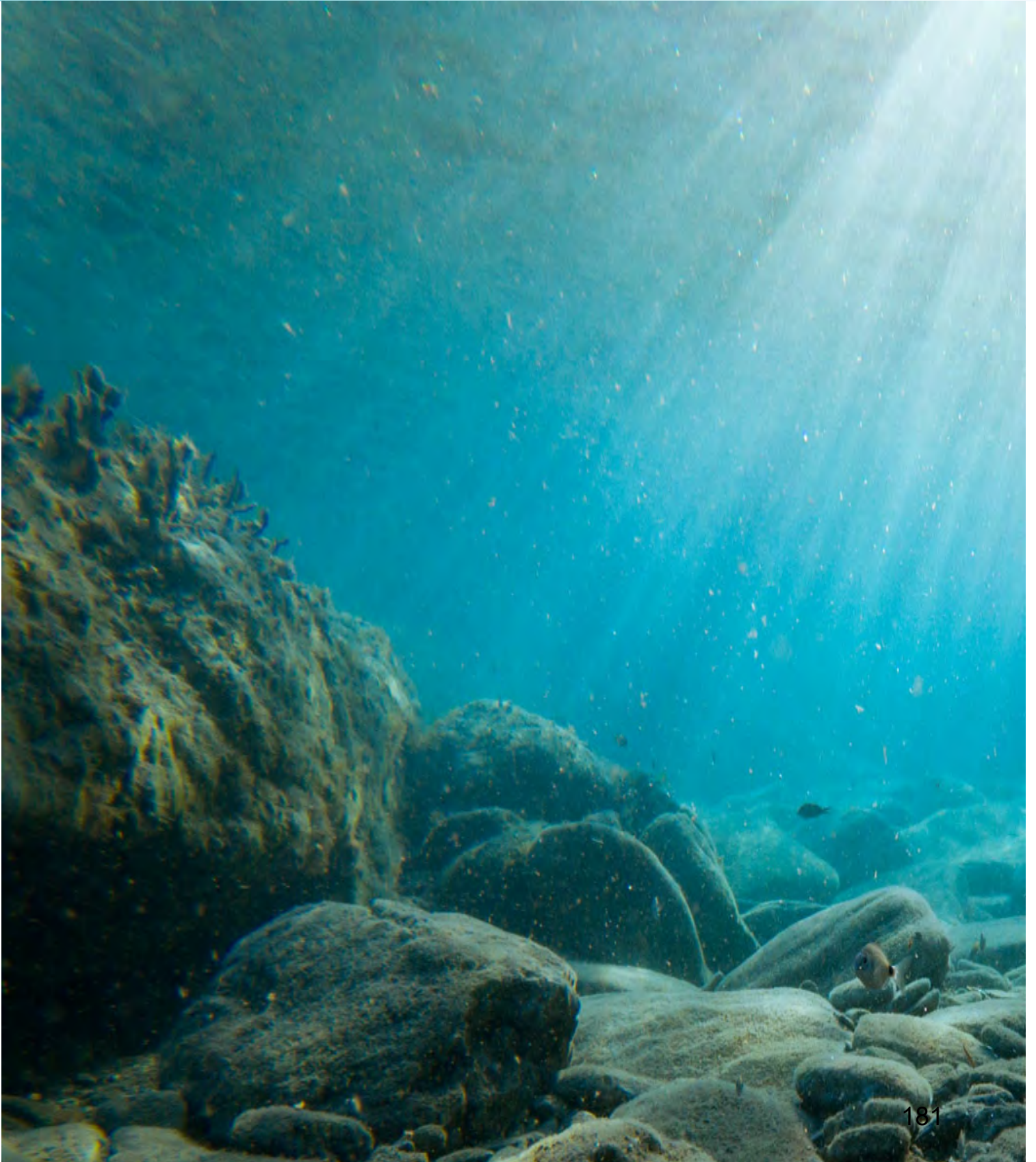
<b>Richard Haller</b>	General Manager
<b>Kelly Berry</b>	Administrative Services Manager/Clerk of the Board
<b>Karen Williams</b>	Chief Financial Officer
<b>Dean Unger</b>	IS and Technology Manager
<b>David Ruhl</b>	Manager of Engineering
<b>Carlos Quintero</b>	Manager of Operations
<b>Mark Norton</b>	Water Resources and Planning Manager
<b>Larry McKenney</b>	Executive Counsel

**Santa Ana Watershed Project Authority**  
**Organizational Chart**



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# Financial Section





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## INDEPENDENT AUDITORS' REPORT

Board of Commissioners  
Santa Ana Watershed Project Authority  
Riverside, California

### Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and aggregate remaining fund information of the Santa Ana Watershed Project Authority (the "Authority"), as of and for the years ended June 30, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and the California State Controller's Minimum Audit Requirements for California Special Districts. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

## Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and aggregate remaining fund information of the Santa Ana Watershed Project Authority as of June 30, 2019 and 2018, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## Emphasis of Matter

As described in Note 1 to the basic financial statements, as of June 30, 2019, the Authority adopted the provisions of Governmental Accounting Standards Board Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. Our opinion is not modified with respect to this matter.

As described in Note 1 to the basic financial statements, as of June 30, 2018, the Authority adopted the provisions of Governmental Accounting Standards Board Statement No. 75, *Accounting and Financing Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to this matter.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the schedule of proportionate share of the net pension liability, the schedule of contributions - pension, the schedule of changes in the net OPEB liabilities and related ratios, and the schedule of contributions - OPEB, identified as Required Supplementary Information (RSI) in accompanying table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the RSI in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The introductory section, combining schedules, and statistical section are presented for purposes of additional analysis and is not a required part of the basic financial statements.

The combining schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional

procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining schedules are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated \_\_\_\_\_, 2019, on our consideration of the Authority’s internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority’s internal control over financial reporting and compliance.

Riverside, California  
\_\_\_\_\_, 2019

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The intent of the Management Discussion and Analysis is to provide highlights of the financial activities for the fiscal year ended June 30, 2019, of the Santa Ana Watershed Project Authority (the "Authority"). Readers are encouraged to read this section in conjunction with the transmittal letter and the accompanying basic financial statements.

## The Authority

The Authority was formed in 1972 pursuant to the provisions of Article 1, Chapter 5, Division 7, Title 1 of the Government Code of the State of California relating to the joint exercise powers common to public agencies. The Authority was formed for the purpose of undertaking projects for water quality control and protection as well as pollution abatement in the Santa Ana River Watershed.

The Authority's five member agencies are Eastern Municipal Water District (EMWD), Inland Empire Utilities Agency (IEUA), Orange County Water District (OCWD), San Bernardino Valley Municipal Water District (SBVMWD), and Western Municipal Water District (WMWD).

## Overview of the Financial Statements

The Authority is a special purpose government (special district) engaged only in activities that support themselves through user charges and member contributions. Accordingly, the accompanying financial statements are presented in the format prescribed for proprietary funds by the Governmental Accounting Standards Board (GASB).

These financial statements consist of three interrelated statements designed to provide the reader with relevant, understandable data about the Authority's financial condition and operating results. They are the (1) Statement of Net Position; (2) Statement of Revenues, Expenses and Changes in Net Position; and (3) Statement of Cash Flows.

The Statement of Net Position presents information on all the Authority's assets, deferred inflow of resources, liabilities, and deferred outflow of resources, with the differences between the four reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The Statement of Revenues, Expenses and Changes in Net Position presents information showing how the Authority's net position changed during the year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of timing of the related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flow in future fiscal periods.

The Statement of Cash Flows conveys to financial statement users how the Authority managed cash resources during the year. This statement converts the change in net position presented on the Statement of Revenues, Expenses and Changes in Net Position into actual cash provided by and used for operations. The Statement of Cash Flows also details how the Authority obtains cash through financing and investing activities, and how cash is spent for these purposes.

## Summary Financial Information and Analysis

The Authority's financial operations remained sound during the fiscal year 2019. The Statement of Net Position remains strong, providing a foundation for continued growth within the Authority's service area. As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$71.5 million at June 30, 2019, by \$68.7 million at June 30, 2018, and by \$70.4 million at June 30, 2017.

### Statements of Net Position

For the Fiscal Years Ended June 30, 2019, 2018, and 2017

	Fiscal Year End June 30,				
	2019	2018	Increase/ (Decrease)	2017	Increase/ (Decrease)
<b>Assets</b>					
Current	\$64,863,786	\$60,081,766	\$4,782,020	\$61,182,398	\$(1,100,633)
Noncurrent	1,150,720	1,003,811	146,909	3,917,605	(2,913,794)
Capital	110,912,773	115,988,540	(5,075,767)	113,502,447	2,486,093
<b>Total Assets</b>	<b>176,927,279</b>	<b>177,074,117</b>	<b>(146,838)</b>	<b>178,602,450</b>	<b>(1,528,334)</b>
<b>Deferred Outflows</b>	1,482,258	1,621,887	(139,629)	1,017,473	604,414
<b>Liabilities</b>					
Current	6,492,607	5,009,098	1,483,509	8,415,128	(3,406,030)
Noncurrent	100,020,142	104,691,573	(4,671,431)	100,542,958	4,148,615
<b>Total Liabilities</b>	<b>106,512,749</b>	<b>109,700,671</b>	<b>(3,187,922)</b>	<b>108,958,086</b>	<b>742,585</b>
<b>Deferred Inflows</b>	337,312	318,374	18,938	273,599	44,775
<b>Net Position</b>					
Net Investment in Capital	82,216,012	85,226,499	(3,010,487)	90,622,870	(5,396,371)
<b>Assets</b>					
Restricted	2,960,560	2,960,560	-	3,921,155	(960,595)
Unrestricted (Deficit)	(13,617,096)	(19,510,100)	5,893,004	(24,155,787)	4,645,687
<b>Total Net Position</b>	<b>\$71,559,476</b>	<b>\$68,676,959</b>	<b>\$2,882,517</b>	<b>\$70,388,238</b>	<b>(\$1,711,279)</b>

The following denotes explanations on some of the changes between fiscal years 2019 and 2018, as compared in the table above.

- The \$4.8 million increase in Current Assets is due to the receipt of SRF Loan funds for the Reach V Capital Repair Project and a decrease in grants receivable for Proposition 84 grant projects. Retention was released for many of the Round I projects.
- The \$5 million decrease in Capital Assets is due to removing obsolete or inactive assets from the balance sheet and an offset of depreciation and amortization to property, plant, and equipment.
- The \$1.5 million increase in Current Liabilities is due to an increase in costs for the Proposition 1 DACI grant, Proposition 84 Drought Round and 2015 Final Round projects.
- The \$4.7 million decrease in Noncurrent Liabilities is due primarily to the amortization of pipeline and wastewater treatment rights combined with a decrease in long-term debt from scheduled debt service payments.

The following denotes explanations on some of the changes between fiscal years 2018 and 2017, as compared in the table above.

- The \$1.1 million decrease in Current Assets is due to a decrease in cash used to fund the Reach V Capital Repair Project until SRF Loan funds are received and an increase in grants receivable for Proposition 84 grant projects.
- The \$2.9 million decrease in Noncurrent Assets is due primarily to a decrease in installment notes from scheduled notes receivable receipts, and total payments of \$3.4 million received for funds loaned to the Orange County Flood Control District (OCFCD) for the relocation of the SARI located in Orange County.
- The \$2.5 million increase in Capital Assets is due primarily to the Reach V Capital Repairs Project and an offset of depreciation and amortization to property, plant, and equipment.
- The \$3.4 million decrease in Current Liabilities is due primarily to a decrease in accounts payable from the release of retention on Round I and II Proposition 84 grant projects and the release of retention for construction related to the Reach V Capital Repair Project.
- The \$4.1 million increase in Noncurrent Liabilities is due primarily to the amortization of pipeline and wastewater treatment rights combined with the increase in long-term debt from the Reach V Capital Repair Project SRF Loan.

## Category of Net Position

The Authority is required to present its net position in three categories: (1) Net Investment in Capital Assets; (2) Restricted; and (3) Unrestricted.

### Net Investment in Capital Assets

At June 30, 2019, 2018, and 2017, Net Investment in Capital Assets consisted of the following:

### Net Investment in Capital Assets (In Millions)

	2019	2018	2017
Property, Plant & Equipment	\$159.0	\$159.2	\$131.3
Accumulated Depreciation	(73.4)	(70.0)	(66.6)
Wastewater Treatment & Disposal Rights	55.6	55.6	55.6
Accumulated Amortization	(29.5)	(28.1)	(26.7)
Construction in Process	0.4	0.2	19.9
Related Payables and Loans, Net of Discounts	(29.9)	(31.7)	(22.9)
<b>Total</b>	<b>\$82.2</b>	<b>\$85.2</b>	<b>\$90.6</b>

### Restricted

At June 30, 2019, Restricted Net Position of \$3.0 million is legally restricted by contract to fund additional Arundo Management and Habitat Restoration projects within the Santa Ana River Watershed and by the State Water Resources Control Board (SWRCB) for the SRF Loan reserve requirement.

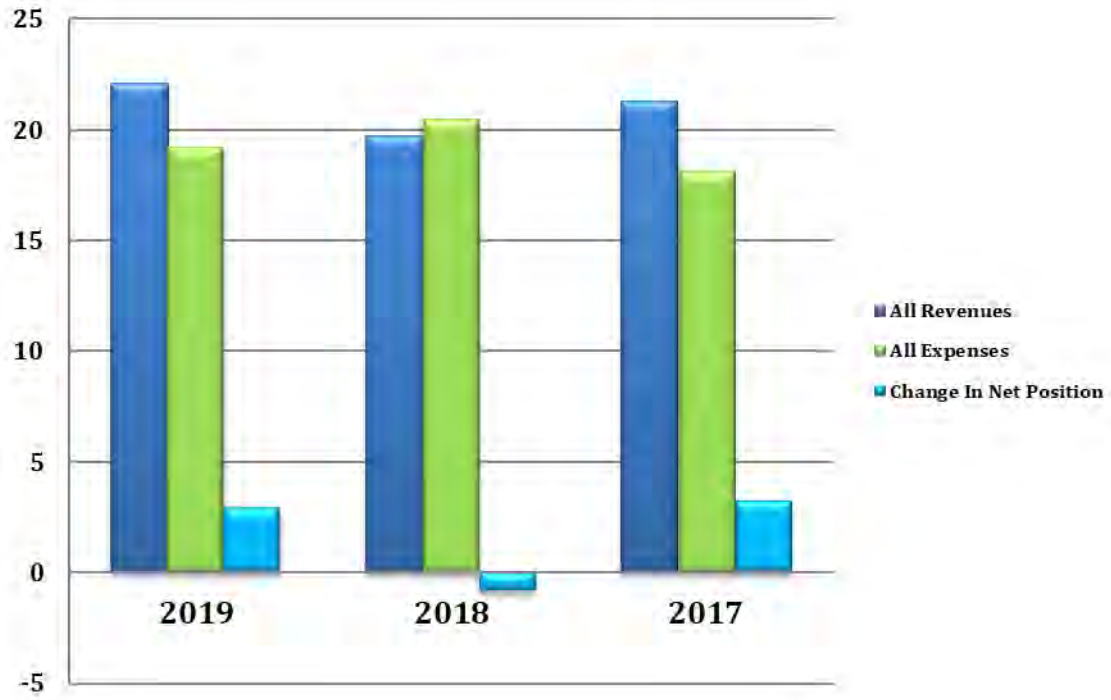
### Unrestricted

At June 30, 2019, the Authority had an unrestricted net deficit of \$13.6 million. However, the Authority does possess \$67.7 million in unearned revenues being realized over a 50 year period of approximately \$2.5 million per year.

### Change in Net Position

Overall, the fiscal year ended June 30, 2019, brought an increase in net position of \$2.9 million, a \$4.6 million increase from the previous year. The primary reason for this increase over the prior year was due to an increase of \$2.4 million in total revenues and a decrease of \$1.3 million in total expenses for FYE 2019.

### Change in Net Position (in millions)





**Statements of Revenues, Expenses, and Changes in Net Position**

For the Fiscal Years Ended June 30, 2019, 2018, and 2017

	Fiscal Year End June 30,				
	2019	2018	Increase/ (Decrease)	2017	Increase/ (Decrease)
<b>Operating Revenues:</b>					
WWT & Disposal	\$12,334,346	\$10,935,848	\$1,398,498	\$11,273,024	(\$337,176)
WWT & Disposal Capacity Rights	2,510,154	2,510,154	-	2,519,533	(9,379)
Other Operating Revenues	205,812	214,498	(13,686)	204,904	14,594
<b>Total Operating Revenues</b>	<b>15,050,312</b>	<b>13,665,500</b>	<b>1,384,812</b>	<b>13,997,461</b>	<b>(331,961)</b>
<b>Nonoperating Revenues:</b>					
Member Contributions	1,909,415	2,303,325	(393,910)	2,307,624	(4,299)
Intergovernmental	3,490,615	3,413,408	77,207	4,795,478	(1,382,070)
Investment Income	1,660,061	326,487	1,333,574	193,157	133,330
<b>Total Nonoperating Revenues</b>	<b>7,060,091</b>	<b>6,043,220</b>	<b>1,016,871</b>	<b>7,296,259</b>	<b>(1,253,039)</b>
<b>Total Revenues</b>	<b>22,110,403</b>	<b>19,708,720</b>	<b>2,401,683</b>	<b>21,293,720</b>	<b>(1,585,000)</b>
<b>Operating Expenses:</b>					
WWT and Disposal	6,545,654	5,841,074	704,580	6,421,150	(580,076)
General, Admin, and Overhead	1,326,428	1,429,043	(102,615)	591,686	837,357
Studies and Planning Costs	4,082,052	7,186,572	(3,104,520)	3,293,487	3,893,085
Depreciation	3,742,801	3,355,132	387,669	3,174,253	3,699
Amortization of WWT and Disposal Rights	1,400,918	1,400,918	-	1,400,914	4
<b>Total Operating Expenses</b>	<b>17,097,853</b>	<b>19,212,739</b>	<b>(2,114,886)</b>	<b>14,881,490</b>	<b>4,331,249</b>
<b>Nonoperating Expenses:</b>					
Interest Expense	713,448	487,975	225,473	563,942	(75,967)
Grant Program Expenses	1,416,585	791,862	624,723	2,627,795	(1,835,933)
<b>Total Nonoperating Expenses</b>	<b>2,130,033</b>	<b>1,279,837</b>	<b>850,196</b>	<b>3,191,737</b>	<b>(1,911,900)</b>
<b>Total Expenses</b>	<b>19,227,886</b>	<b>20,492,576</b>	<b>(1,264,690)</b>	<b>18,073,227</b>	<b>2,419,349</b>
<b>Change in Net Positions</b>	<b>2,882,517</b>	<b>(783,856)</b>	<b>3,666,373</b>	<b>3,220,493</b>	<b>(4,004,349)</b>
Beginning Net Position *	68,676,959	70,388,238	(783,856)	67,167,745	3,220,493
Prior Period Adjustments	-	(927,423)	(927,423)	-	(927,423)
<b>Ending Net Position</b>	<b>\$71,559,476</b>	<b>\$68,676,959</b>	<b>\$2,882,517</b>	<b>\$70,388,238</b>	<b>(\$1,711,279)</b>

\* GASB No. 75 implemented in FYE 2018. Prior years were not restated as the information was not readily available.

Revenues

Combined revenues for the fiscal year 2019 totaled \$22.1 million, an increase of \$2.4 million, or 12.2%, more than the prior fiscal year. The following denotes explanations on some of the changes between fiscal years 2019 and 2018.

- The \$1.4 million increase in Waste Water Treatment and Disposal is due to increases in biochemical oxygen demand (BOD) and total suspended solids (TSS) concentrations from the prior year.
- The \$1.3 million increase in Investment Income is due to higher interest rates and increased market value of investments in FYE 2019.

Combined revenues for the fiscal year 2018 totaled \$19.7 million, a decrease of \$1.6 million, or 7.4%, less than the prior fiscal year. The following denotes explanations on some of the changes between fiscal years 2018 and 2017.

- The \$0.3 million decrease in Waste Water Treatment and Disposal is due to decreases in biochemical oxygen demand (BOD) and total suspended solids (TSS) concentrations from the prior year.
- The \$1.4 million decrease in Intergovernmental is due to Proposition 84 Drought and 2015 implementation round grant contracts having passthrough amounts included in FYE 2017 but not included for FYE 2018 and increases in Proposition 1 DACI grant and the Water-Energy DAC grant.
- The \$0.1 million increase in Investment Income is due to higher interest rates in FYE 2018.

Expenses

Combined expenses for the fiscal year 2019 totaled \$19.2 million, a decrease of \$1.3 million, or 6.2% less than the prior fiscal year. The following denotes explanations on some of the changes between fiscal years 2019 and 2018.

- The \$0.7 million increase in Waste Water Treatment and Disposal is due to increases in BOD and TSS concentrations from the prior year and increases in the brine line rates.
- The \$3.1 million decrease in Studies and Planning Costs is due to the competition of the Reach V Capital Repair Project in FYE 2018 and most of the work for the Water Energy DAC Grant being completed in the prior year.
- The \$0.6 million increase in Grant Program Expenses is due to the Proposition 84 Drought projects being wrapped up this year with the grant

contract expiring in December 2019 and many of the 2015 Final Round projects have begun implementation.

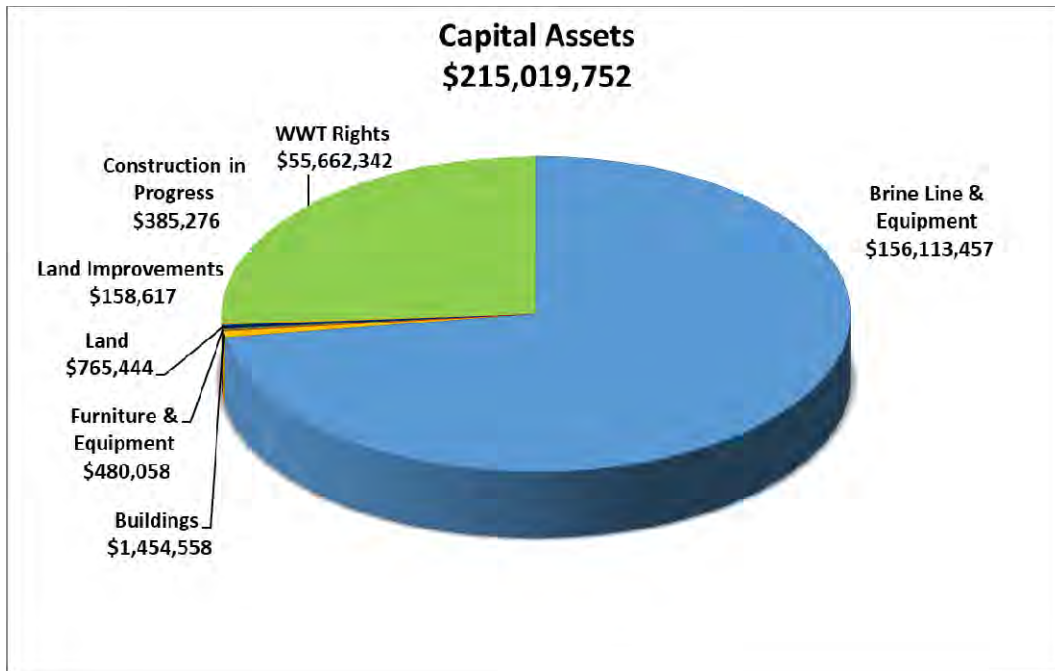
Combined expenses for the fiscal year 2018 totaled \$20.5 million, an increase of \$2.4 million, or 13.4% more than the prior fiscal year. The following denotes explanations on some of the changes between fiscal years 2018 and 2017.

- The \$3.9 million increase in Studies and Planning Costs is due to increased efforts in the Brine Line Protection Project, the Water-Energy DAC grant, the Proposition 1 DACI grant, and the expensing of non-capitalizable costs associated with Reach V Capital Repairs Project litigation.
- The \$1.8 million decrease in Grant Program Expenses is due to Proposition 84 Drought projects and 2015 implementation round grant contracts passthrough amounts that were included in Grant Program Expense for FYE 2017 instead of being included in Agency Funds. Passthrough amounts were correctly classified as Agency Funds in FYE 2018.

## Capital Assets

### Existing Capital Assets

The following chart is the composition of the Authority's total capital assets, not including depreciation and amortization, as of June 30, 2019; additional information can be found in Note 5 of the Notes to Financial Statements.



A comparison of the changes by major category between the current and prior fiscal years is provided in the Category of Net Position section on page 8 of this report.

### Future Capital Improvements

The capital improvements program (CIP) includes annual capital repairs to correct pipeline and MAS defects identified during closed circuit television (CCTV) and direct visual inspection. The repairs include items such as sealing pipe joints with major groundwater infiltration, repairing MAS and pipe corrosion protection (plastic "T-Lok" type liner), and completing repairs where structure corrosion has occurred.

A four mile stretch of the SARI, within Orange County, has been relocated outside the floodplain by the Orange County Flood Control District (OCFCD). Relocation to the south side of the Santa Ana River protects the pipeline from Prado Dam water releases. In fiscal year 2012, the Authority loaned \$10 million to the OCFCD and the OCSD loaned up to \$70 million, to facilitate earlier completion of the relocation project. Project design was completed in fiscal year 2011 and the project was bid and awarded in fiscal year 2012. Construction completion was expected by fall 2013, but was delayed until spring 2014. Flows were diverted to the new line on May 7, 2014. Prior to the relocation of the SARI outside the floodplain, OCSD had performed several protection projects installing grade stabilizers and bank protection that was constructed using large rock. Upon completion of the project and as part of the Army Corps of Engineers permit condition, OCSD is required to remove the rock from the Santa Ana River floodplain. Project design and preparation of bid documents were completed in FYE 2018. Construction commenced in mid FYE 2019 with completion in FYE 2020. As of June 2018, the \$10 million loaned by SAWPA to the OCFCD has been paid in full.

The Brine Line Reach 4D was constructed in the early 1990's, and runs from the intersection with Reach 4A in the City of Chino approximately 21 miles East to the intersection with Reach 4E in the City of Rialto. About seven miles of the Brine Line Reach 4D consists of T-Lok Lined 42-inch reinforced concrete pipe (RCP). The T-Lok lining is a polyvinyl chloride (PVC) lining on the interior circumference of the pipe that provides a protective corrosion barrier between the flow and concrete pipe. The T-Lok lining on this portion of the Brine Line was installed on the upper 270 degrees of the pipeline leaving the invert or bottom 90 degrees of the pipe unlined. Low flows during the initial years of operation placed the flow line below the termination of the T-Lok liner and exposed the concrete to corrosion and uplifting of the T-Lok liner. A consultant was hired in March 2018 to conduct a pipeline condition assessment, evaluate the condition and remaining useful life of this portion of the Reach 4D pipeline, and prepare the Reach 4D Work Plan. The pipeline field investigation work was completed in May 2018. The Work Plan completed in mid FYE 2019 includes an evaluation of potential repair methods, near, mid and long term recommended actions to monitor the condition of the Brine Line and provide repairs as necessary in the future, and a schedule and cost estimate for the proposed recommendations. The near term recommended field investigation work was completed in May 2019. The Near-Term Recommended Inspections Data Analysis and Summary Report will be completed in early FYE 2020.

Several projects have been completed as a result of the ACOE Prado Dam Mainstem Project. SAWPA was required to move a portion of the Brine Line to avoid a conflict with the relocated low flow channel to the new outlet works. This work has been completed. In FYE 2015, the ACOE and the project sponsor, OCPW, relocated and protected a portion of the upper Reach IV-A Brine Line in the City of Chino (Yorba Slaughter Adobe Dike).

The ACOE is constructing the Alcoa Protective Dike in the City of Corona as part of the Santa Ana Mainstem Project. There are two locations where the proposed dike improvements will cross over the existing Brine Line on Reach 4B. A consultant was hired to prepare a technical memorandum to evaluate the impact to the Brine Line, recommend actions to protect the Brine Line and prepare a cost estimate for the proposed recommendations. A technical memorandum was completed in FYE 2019 recommending protection/relocation of the Brine Line at the two locations where the Dike will cross over the Brine Line. Design of the recommended protection/relocation methods will be completed in FYE 2020 and completion of the protection/relocation in FYE 2021.

## Long-Term Debt

The Authority's long-term debt consists of four loans from the SWRCB for construction of Reach V of the Brine Line, a loan from the SWRCB for repairs of Reach IV-A and IV-B, a loan from a member agency for the repurchase of wastewater capacity and treatment/disposal rights, and a contractual obligation due to a related joint powers authority.

During the fiscal years ended June 30, 2019, 2018, and 2017, the Authority made all of its scheduled principal payments on these debts as follows:

Debt Service	2019	2018	2017
SWRCB TVRI Line	\$1,018,693	\$991,996	\$966,002
SWRCB Reach IVA & IVB	710,565	692,558	675,008
SWRCB Reach V Capital Repairs	433,019	-	-
OCWD Repurchase of Wastewater Rights	-	336,085	317,061
WRCRWA* Contractual Obligation	-	519,182	505,239

\*West Riverside County Regional Wastewater Authority

These payments decreased the outstanding balance in long-term debt by \$2.2 million. Repayment began this year on the \$15 million loan from the SWRCB for the Reach V Capital Repair Project. For more detailed information refer to Note 7 of the Notes to Financial Statements.

## Fiscal Year 2019-2020 Budget

### Economic and Financial Factors

The economy in the Authority's service area has continued to improve. As the population has expanded, local job gains outpaced the state and nation, home prices jumped, and consumer spending rose. Economic forecasters expect the economy to continue to improve and remain strong in the coming years due to the availability of land, the ideal location for commerce, a relatively strong manufacturing base, and affordable housing. The Authority has continued to seek ways to increase efficiency and reduce our budget by optimizing operational processes and implementation of a number of cost cutting measures throughout operations. Since 2010, six positions have been added in Brine Line operations. These positions have been added to bring functions previously provided for by consultants in house, which greatly increase the efficiency and effectiveness of our operations. Through these efforts, we have been able to reduce costs and pass those savings on to our member agencies through reduced fees and member contributions.

The Authority is faced with a \$60 million Capital Improvement Program over the next 25 years. To ensure that there will be funds available to implement the program, the Authority conducted a long-term financial plan and rate model for the Brine Line. This model has served as a financial planning tool to ensure sufficient revenues are collected for operating needs, capital needs, and the funding of a long-term capital repair and replacement reserve.

Management is unaware of any other conditions that could have a significant past, present, or future impact on the Authority's current financial position, net position, or operating results.

### Contacting the Authority's Financial Management

This financial report is designed to provide a general overview of the Authority's finances for the Board of Commissioners, customers, investors, creditors, and other interested parties. Questions concerning any information provided in the report or requests for additional information should be addressed to the Authority's Finance Department, 11615 Sterling Avenue, Riverside, CA 92503.



## **BASIC FINANCIAL STATEMENTS**

**Santa Ana Watershed Project Authority**  
**Statements of Net Position**  
**Proprietary Fund**  
June 30, 2019 and 2018

	Business-Type Activities Enterprise Fund	
	2019	2018
<b>ASSETS</b>		
Current Assets:		
Cash and Cash Equivalents (Note 2)	\$ 45,496,851	\$ 28,286,259
Cash and Cash Equivalents - Restricted (Note 2)	950,955	949,002
Investments (Note 2)	12,374,662	17,380,431
Interest Receivable	265,417	175,425
Accounts Receivable	1,934,937	6,759,970
Accounts Receivable - Grants	1,617,042	4,123,841
Notes Receivable - Other	80,940	160,236
Notes Receivable - Current Portion (Note 3)	-	84,011
Prepaid Items and Other Assets	232,422	252,031
Mitigation Credits (Note 4)	1,910,560	1,910,560
Total Current Assets	<u>64,863,786</u>	<u>60,081,766</u>
Noncurrent Assets:		
Capital Assets (Note 5):		
Not Being Depreciated	1,150,720	1,003,811
Being Depreciated, Net of Accumulated Depreciation and Amortization	<u>110,912,773</u>	<u>115,988,540</u>
Total Noncurrent Assets	<u>112,063,493</u>	<u>116,992,351</u>
Total Assets	<u>176,927,279</u>	<u>177,074,117</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Deferred Amounts from Pension Plans	1,286,579	1,445,773
Deferred Amounts from OPEB Plan	<u>195,679</u>	<u>176,114</u>
Total Deferred Outflows of Resources	<u>\$ 1,482,258</u>	<u>\$ 1,621,887</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Statements of Net Position - Continued**  
**Proprietary Fund**  
June 30, 2019 and 2018

	Business-Type Activities Enterprise Fund	
	2019	2018
<b>LIABILITIES</b>		
Current Liabilities:		
Accounts Payable	\$ 3,702,529	\$ 2,131,358
Accrued Salaries and Wages	153,801	137,407
Accrued Interest Payable	287,613	442,396
Deposits	-	10,000
Long-Term Liabilities - Due Within One Year:		
Compensated Absences (Note 6)	188,125	180,887
Loans Payable (Note 7)	2,160,539	2,107,050
Total Current Liabilities	6,492,607	5,009,098
Noncurrent Liabilities:		
Unearned Revenue (Note 8)	67,698,980	70,209,134
Long-Term Liabilities - Due in More than One Year:		
Compensated Absences (Note 6)	438,957	412,022
Loans Payable (Note 7)	27,686,942	29,742,813
Net Pension Liability (Note 11)	3,649,848	3,724,430
Net OPEB Liability (Note 12)	545,415	603,174
Total Noncurrent Liabilities	100,020,142	104,691,573
Total Liabilities	106,512,749	109,700,671
<b>DEFERRED INFLOWS OF RESOURCES</b>		
AW	298,841	314,268
Deferred Amounts from OPEB Plan	38,471	4,106
Total Deferred Inflows of Resources	337,312	318,374
<b>NET POSITION (NOTE 9)</b>		
Net Investment in Capital Assets	82,216,012	85,226,499
Restricted for:		
SRF Reach IVA & IVB Reserve Requirement	1,050,000	1,050,000
Mitigation	1,910,560	1,910,560
Unrestricted	(13,617,096)	(19,510,100)
Total Net Position	\$ 71,559,476	\$ 68,676,959

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Statements of Revenues, Expenses and Changes in Net Position**  
**Proprietary Fund**

For the Fiscal Years Ended June 30, 2019 and 2018

	Business-Type Activities Enterprise Fund	
	2019	2018
<b>OPERATING REVENUES</b>		
Wastewater Treatment and Disposal	\$ 12,334,346	\$ 10,935,848
Wastewater Treatment and Disposal - Capacity Rights	2,510,154	2,510,154
Other	205,812	219,498
	<u>15,050,312</u>	<u>13,665,500</u>
<b>OPERATING EXPENSES</b>		
Wastewater Treatment and Disposal	6,545,654	5,841,074
General and Administrative and Overhead	1,326,428	1,429,043
Studies and Planning Costs	4,082,052	7,186,572
	<u>11,954,134</u>	<u>14,456,689</u>
Operating Income (Loss) Before Depreciation and Amortization	3,096,178	(791,189)
Depreciation	(3,742,801)	(3,355,132)
Amortization	(1,400,918)	(1,400,918)
	<u>(2,047,541)</u>	<u>(5,547,239)</u>
<b>NON-OPERATING REVENUES (EXPENSES)</b>		
Member Contributions	1,909,415	2,303,325
Intergovernmental	3,490,615	3,413,408
Investment Earnings	1,660,061	326,487
Interest Expense	(713,448)	(487,975)
Grant Program Expenses	(1,416,585)	(791,862)
	<u>4,930,058</u>	<u>4,763,383</u>
Change in Net Position	<u>2,882,517</u>	<u>(783,856)</u>
Net Position - Beginning of Year, As Previously Reported	68,676,959	70,388,238
Prior Period Adjustment	-	(927,423)
Net Position - Beginning of Year, As Restated	<u>68,676,959</u>	<u>69,460,815</u>
Net Position - End of Year	<u>\$ 71,559,476</u>	<u>\$ 68,676,959</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Statements of Cash Flows**  
**Proprietary Fund**  
For the Fiscal Years Ended June 30, 2019 and 2018

	Business-Type Activities Enterprise Fund	
	2019	2018
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Cash Received from Customers	\$ 17,518,498	\$ 13,456,570
Cash Paid to Employees	(3,807,014)	(3,627,185)
Cash Paid to Suppliers	(6,479,547)	(13,490,568)
	7,231,937	(3,661,183)
<b>CASH FLOWS FROM NONCAPITAL AND RELATED FINANCING ACTIVITIES</b>		
Member Contributions	1,909,415	2,353,064
Other Governments	5,997,414	1,881,753
Grant Program Expenses	(1,416,585)	(791,862)
	6,490,244	3,442,955
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</b>		
Acquisition and Construction of Capital Assets	(214,861)	(8,245,954)
Proceeds from Loans Payable	159,895	7,595,992
Principal Payments on Long-term Debt	(2,162,277)	(2,689,248)
Interest Paid on Long-term Debt	(868,231)	(414,830)
	(3,085,474)	(3,754,040)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of Investments	(1,028,500)	(2,667,268)
Proceeds from Sale of Investments	6,034,269	4,394,256
Interest Received	1,570,069	319,637
	6,575,838	2,046,625
Net Cash Provided By (Used For) Investing Activities	6,575,838	2,046,625
Net Decrease in Cash and Cash Equivalents	17,212,545	(1,925,643)
Cash and Cash Equivalents - Beginning of Year	29,235,261	31,160,904
Cash and Cash Equivalents - End of Year	\$ 46,447,806	\$ 29,235,261
<b>RECONCILIATION OF CASH AND CASH EQUIVALENTS TO THE STATEMENT OF NET POSITION</b>		
Cash and Cash Equivalents	\$ 45,496,851	\$ 28,286,259
Cash and Cash Equivalents - Restricted	950,955	949,002
	\$ 46,447,806	\$ 29,235,261

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Statements of Cash Flows - Continued**  
For the Years Ended June 30, 2019 and June 30, 2018

	Business-Type Activities Enterprise Fund	
	2019	2018
	<b>Reconciliation of Operating Income (Loss) to Net Cash Provided By (Used For) Operating Activities:</b>	
Operating Income (Loss)	\$ (2,047,541)	\$ (5,547,239)
Adjustments:		
Depreciation	3,742,801	3,355,132
Amortization	1,400,918	1,400,918
Change in Assets, Deferred Outflows of Resources, Liabilities and Deferred Inflows of Resources:		
(Increase) Decrease in Accounts Receivable	4,825,033	(4,863,595)
(Increase) Decrease in Prepaid Items and Other Assets	19,609	51,225
(Increase) Decrease in Notes Receivable	163,307	3,742,287
(Increase) Decrease in Loans Receivable	-	3,412,531
(Increase) Decrease in Deferred Outflows of Resources AW	159,194	(428,300)
(Increase) Decrease in Deferred Outflows of Resources from OPEB Plan	(19,565)	50,719
Increase (Decrease) in Accounts Payable	1,571,171	(2,968,911)
Increase (Decrease) in Accrued Salaries and Wages	16,394	10,283
Increase (Decrease) in Customer Deposits	(10,000)	10,000
Increase (Decrease) in Compensated Absences	34,173	(1,385)
Increase (Decrease) in Unearned Revenue	(2,510,154)	(2,510,153)
Increase (Decrease) in Net Pension Liability	(74,582)	619,688
Increase (Decrease) in Net OPEB Liability	(57,759)	(39,158)
Increase (Decrease) in Deferred Inflows of Resources from Pension Plans	(15,427)	40,669
Increase (Decrease) in Deferred Inflows of Resources from OPEB Plans	34,365	4,106
	<u>\$ 7,231,937</u>	<u>\$ (3,661,183)</u>
<b>NONCASH INVESTING, CAPITAL AND FINANCING ACTIVITIES:</b>		
Net increase in the fair value of investments	\$ 497,681	\$ 340,068

The accompanying notes are an integral part of this statement.



**Santa Ana Watershed Project Authority**  
**Statements of Fiduciary Assets and Liabilities**  
**Agency Funds**  
June 30, 2019 and 2018

	<b>Total Agency Funds</b>	
	2019	2018
<b>ASSETS</b>		
Current Assets:		
Cash and Cash Equivalents	\$ 458,596	\$ 465,925
Accounts Receivable - Grants	25,209,477	3,405,211
Total Assets	\$ 25,668,073	\$ 3,871,136
<b>LIABILITIES</b>		
Current Liabilities:		
Accounts Payable	\$ 25,209,477	\$ 3,419,860
Total Current Liabilities	25,209,477	3,419,860
Noncurrent Liabilities:		
Deposits - Legal Defense	458,596	451,276
Total Noncurrent Liabilities	458,596	451,276
Total Liabilities	\$ 25,668,073	\$ 3,871,136

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**A) Organization and Purpose**

The Santa Ana Watershed Project Authority (“the Authority”) was reformed in 1972 pursuant to the provisions of Article 1, Chapter 5, Division 7, Title 1 of the Government Code of the State of California relating to the joint exercise of powers common to public agencies, for purpose of undertaking projects for water quality control and protection and pollution abatement in the Santa Ana River Watershed. The five member agencies are the Orange County Water District, Inland Empire Utilities Agency (formerly Chino Basin Municipal Water District), Eastern Municipal Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District. The Board of Commissioners is the governing body of the Authority. Each member of the Authority appoints, by resolution of its governing body, one member of its governing body to act as its Commissioner on the Board.

Accounting principles generally accepted in the United States of America require that the reporting entity include (1) the primary government, (2) organizations for which the primary government is financially accountable, and (3) other organizations for which the nature and significance of their relationship with the primary government are such that exclusion would cause the reporting entity’s financial statements to be misleading or incomplete. The criteria provided in Governmental Accounting Standard Board (GASB) Statements have been considered and there are no agencies or entities which should be presented with the Authority.

The Authority’s enterprise activities are accounted for on the basis of funds, each of which is considered a separate accounting entity. The operations of each activity are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows of resources, liabilities, deferred inflows of resources, net position, revenue, and expenses. Authority resources are allocated to and accounted for in individual funds based on the purposes for which they are to be spent and the means by which spending activities are controlled. The Authority’s various funds are grouped as follows:

*Capital Projects Activities* - Record the activity of the various capital improvement projects and programs undertaken by the Authority.

*Internal Administration* - Reflect the grouping of general and administration expenses and department overhead costs. Reported amounts are net of allocations made in support of capital projects and enterprise activities.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**A) Organization and Purpose - Continued**

*Enterprise Activities* - Reflect operations of the Inland Empire Brine Line System (Brine Line) pipelines.

The Authority also has the following Fiduciary Funds:

*Agency Funds* - Agency funds are utilized to record monies held on behalf of others in a fiduciary capacity. The Authority has two agency funds:

*The Legal Defense Fund* - This fund was established in conjunction with the Environmental Protection Agency in connection with potential third-party lawsuits arising from the discharge of effluent which originates from the Stringfellow Hazardous Waste Site, while the facility is operated by the Environmental Protection Agency or its agents under the use permit.

*The Integrated Regional Water Management Program (Prop 84 Capital Projects)* - This fund was established to account for pass-through monies of the Authority's member and other agencies.

**B) Basis of Presentation**

The Authority reports its activities as an enterprise fund, which is a Proprietary type fund used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the Authority is that the cost of providing services on a continuing basis be financed or recovered primarily through user charges, capital grants, and similar funding.

**C) Measurement Focus and Basis of Accounting**

"Measurement focus" is a term used to describe *which* transactions are recorded within the various financial statements. "Basis of accounting" refers to *when* transactions are recorded regardless of the measurement focus applied. The accompanying financial statements are reported using the "economic resources measurement focus", and the "accrual basis of accounting". Under the economic measurement focus, all assets, deferred outflows of resources, liabilities and deferred inflows of resources (whether current or noncurrent) associated with these activities are included on the statements of net position.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**C) Measurement Focus and Basis of Accounting - Continued**

The Statements of Revenues, Expenses and Changes in Net Position, present increases (revenues) and decreases (expenses) in total net position. Under the accrual basis of accounting, revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

**D) New Accounting Pronouncements**

**Current Year Standards**

- GASB 83 - *Certain Asset Retirement Obligations*, effective beginning after June 15, 2018 and did not impact the Authority.
- GASB 88 - *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, effective for fiscal years beginning after June 15, 2018 and is reflected on the Authority's financial statements.

**Pending Accounting Standards**

GASB has issued the following statements, which may impact the Authority's financial reporting requirements in the future:

- GASB 84 - *Fiduciary Activities*, effective for periods beginning after December 15, 2018.
- GASB 87 - *Leases*, effective for periods beginning after December 15, 2019.
- GASB 89 - *Accounting for Interest Cost Incurred before the End of a Construction Period*, effective for fiscal years beginning after December 15, 2019.
- GASB 90 - *Majority Equity Interests – an amendment of GASB Statements No. 14 and No. 61*, effective for fiscal years beginning after December 15, 2018.
- GASB 91 - *Conduit Debt Obligations*, effective for fiscal years beginning December 15, 2020.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**E) Deferred Outflows / Inflows of Resources**

In addition to assets, the Statements of Net Position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, *deferred outflows of resources*, represents a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense) until that time. The Authority has the following items that qualify for reporting in this category:

- Deferred outflows related to pensions and OPEB is equal to employer contributions made after the measurement date of the net pension liability and OPEB, as applicable.
- Deferred outflows related to pensions and OPEB are for differences between expected and actual experiences. This amount is amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions and OPEB through the plans.
- Deferred outflows related to pensions and OPEB are for differences between projected and actual earning on pensions and OPEB through the plans. These amounts are amortized over 5 years.
- Deferred outflows related to pensions and OPEB are for changes in proportion and differences between employer contributions and proportionate share of contributions. This amount is amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the plans.

In addition to liabilities, the Statements of Net Position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, *deferred inflows of resources*, represents an acquisition of net position that applies to a future period and will not be recognized as an inflow of resources (revenue) until that time. The Authority has the following items that qualify for reporting in this category:

- Deferred inflows related to pensions and OPEB are for differences between expected and actual experiences. This amount is amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the plans.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**E) Deferred Outflows / Inflows of Resources - Continued**

- Deferred inflows from pensions and OPEB resulting from changes in assumptions. This amount is amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions and OPEB through the plans.
- Deferred inflows related to pensions and OPEB plans for changes in proportion and differences between employer contributions and proportionate share of contributions. This amount is amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions and OPEB through the plans.

**F) Net Position Flow Assumption**

Sometimes the Authority will fund outlays for a particular purpose from both restricted (e.g., restricted bond or grant proceeds) and unrestricted resources. In order to calculate the amounts to report as restricted - net position and unrestricted - net position, a flow assumption must be made about the order in which the resources are considered to be applied.

It is the Authority's practice to consider restricted - net position to have been depleted before unrestricted - net position is applied; however it is at the Board of Commissioners' discretion.

**G) Operating Revenues and Expenses**

Operating revenues, such as wastewater treatment and wastewater disposal, capacity rights, and contractual services, result from exchange transactions associated with the principal activity of the Authority. Exchange transactions are those in which each party receives and gives up essentially equal values.

Revenues not included in the above category are reported as nonoperating revenues. Nonoperating revenues such as a grant funding, member contributions, and investment earnings, result from nonexchange transactions or ancillary activities in which the Authority gives (receives) value without directly receiving (giving) value in exchange.



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**G) Operating Revenues and Expenses - Continued**

Operating expenses include wastewater treatment and disposal, studies and planning costs, management, administration, and depreciation/amortization on capital assets. All expenses not meeting this definition are reported as nonoperating expenses.

**H) Cash and Cash Equivalents**

Substantially all the Authority's cash is invested in interest bearing cash accounts. The Authority considers all highly liquid investments with initial maturities of three months or less to be cash equivalents.

**I) Investments and Investment Policy**

The Authority has adopted an investment policy directing the Authority's Chief Financial Officer to deposit funds in financial institutions.

Investments are stated at their fair value which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Investments that are not traded on a market, such as investments in external pools, are valued based on the stated fair value as represented by the external pool.

Changes in fair value that occur during a fiscal year are recognized as investment income reported for the fiscal year. Investment earnings include interest earnings, changes in market value, and any gains or losses realized upon the liquidation or sale of investments.

**J) Restricted Assets**

Restricted assets are financial resources generated for a specific purpose such as capital projects or debt service. These assets are for the benefit of a specified purpose and, as such, are legally or contractually restricted by an external third-party agreement.

**K) Accounts Receivable**

The Authority extends credit in the normal course of operations. Management deems all accounts receivable as collectible at year end. Accordingly, an allowance for doubtful accounts has not been recorded.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**L) Prepaid Items**

Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as prepaid items in the basic financial statements.

**M) Mitigation Credits**

Mitigation credits are recorded at cost and are purchased and used by those agencies or businesses needing habitat mitigation within the Watershed for specific development projects.

**N) Capital Assets**

Capital assets acquired and/or constructed are capitalized at historical cost. Capital assets are defined as assets with an initial individual cost of more than \$5,000 and an estimated useful life in excess of one year. Donated assets are recorded at acquisition value at the date of contribution. Upon retirement or other disposition of capital assets, the cost and related accumulated depreciation are removed from the respective balances and any gains or losses are recognized. Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets as follows:

Depreciation is calculated using the straight-line method over the following estimated useful lives:

Buildings and Improvements	40 Years
Land Improvements	15-20 Years
Furniture and Office Equipment	3 Years
Brine Line and Equipment	25 Years

Wastewater treatment and disposal rights are included as capital assets and are capitalized at cost. Amortization is computed using the straight-line method over the remaining life of the Authority's contract with the Orange County Sanitation District for the acquisition of the rights at the time the rights were acquired. The current contract expires April 26, 2046.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**O) Compensated Absences**

The Authority's policy is to pay out sick leave time accrued upon retirement, death or termination on a variable scale of 15% to 60% based on years of service. Each full-time employee accrues 96 hours of sick time per year. The liability for this benefit has been accrued in these financial statements.

Employees of the Authority are entitled to paid vacation depending on length of service. Vacation is accrued for full-time employees beginning on the first day of full-time employment, and ranges from 12 to 22 days per year based on longevity with the Authority. Part-time employees accrue vacation on a prorated basis on the actual number of hours worked.

Authority policy requires employees to pass a probationary period prior to payment for accrued vacation hours. Employees are allowed to accumulate vacation leave up to twice their annual accrual, but no more than 36 days.

**P) Unearned Revenue**

Unearned revenue represents advance payments received for wastewater treatment and disposal capacity rights sold, which are being recognized as revenue as the services are provided.

**Q) Capital Contributions**

Capital contributions consist of grants awarded and contributions received for the acquisition and/or construction of capital assets. Contributions received for studies, planning, administration, and other noncapital assets are considered nonoperating revenue.

**R) Capital and Operating Grants**

When a grant agreement is approved and eligible expenditures are incurred, the amount is recorded as a capital or operating grant receivable on the Statements of Net Position and as capital grant contribution or operating grant revenue, as appropriate, on the Statements of Revenues, Expenses and Changes in Net Position.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**S) Budgetary Policies**

The Authority adopts a biannual non-appropriated budget for planning, control, and evaluation purposes. Budgetary control and evaluation are affected by comparisons of actual revenues and expenses with planned revenues and expenses for the period.

**T) Net Position**

The financial statements utilize a net position presentation. Net position is categorized as follows:

- Net Investment in Capital Assets - This component of net position consists of capital assets, net of accumulated depreciation and reduced by any outstanding debt against the acquisition, construction or improvement of those assets.
- Restricted Net Position - This component of net position consists of constraints placed on net position use imposed by creditors, grantors, contributors, or laws or regulations of other governments, or constraints imposed by law through constitutional provisions or enabling legislation.
- Unrestricted Net Position - This component of net position consists of net position that does not meet the definition of *net investment in capital assets or restricted*.

**U) Pensions**

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's California Public Employees' Retirement System (CalPERS) plan (Plan) and addition to/deduction from the Plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES - Continued**

**V) Other Post-Employment Benefits (OPEB)**

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the Authority's plan (OPEB Plan) and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value.

Generally accepted accounting principles require that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

June 30, 2019

Valuation Date: June 30, 2017  
Measurement Date: June 30, 2018  
Measurement Period: July 1, 2017 to  
June 30, 2018

June 30, 2018

Valuation Date: June 30, 2016  
Measurement Date: June 30, 2017  
Measurement Period: July 1, 2016 to  
June 30, 2017

**W) Use of Estimates**

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that effect certain report amounts and disclosures. Accordingly, actual results could differ from the estimates.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS**

Cash and investments are classified in the accompanying financial statements as follows:

	2019	2018
Statement of Net Position:		
Cash and Cash Equivalents	\$ 45,496,851	\$ 28,286,259
Cash and Cash Equivalents - Restricted	950,955	949,002
Investments	12,374,662	17,380,431
Total Cash and Investments	58,822,468	46,615,692
Statement of Fiduciary Assets and Liabilities - Agency Funds:		
Cash and Investments	458,596	465,925
Total Cash and Investments	\$ 59,281,064	\$ 47,081,617

Cash and investments consist of the following:

	2019	2018
Cash on Hand	\$ 500	\$ 500
Deposits with Financial Institutions	1,660,149	1,333,347
Investments	57,620,415	45,747,770
Total Cash and Investments	\$ 59,281,064	\$ 47,081,617

Investments in LAIF and CalTRUST are considered highly liquid, and deposits can be converted to cash within 24 hours without loss of interest. As of June 30, 2019 and 2018, the LAIF and CalTRUST pools had a weighted average maturity of the following:

	2019	2018
California Local Agency Investment Fund (LAIF)	173 days	193 days
Investment Trust of California (CalTRUST)	788 days	799 days



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Investments Authorized by the California Government Code and the Authority's Investment Policy**

The table below identifies the investment types that are authorized by the Authority in accordance with the California Government Code (or the Authority's Investment Policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the Authority's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

<u>Authorized Investment Type</u>	<u>Maximum Maturity</u>	<u>Maximum Percentage Of Portfolio</u>	<u>Maximum Investment In One Issuer</u>
U.S Treasury Bills, Notes and Bonds	5 years	None	N/A
U.S. Government Sponsored Agency Securities	5 years	None	None
Mutual Funds	90 days	15%	None
Municipal Bonds	5 years	None	None
Banker's Acceptances	180 years	40%	30%
Commercial Paper	270 days	15%	*
Negotiable Certificates of Deposit	5 years	30%	\$250,000
Repurchase Agreements	1 year	None	None
Medium-Term Corporate Notes	5 years	30%	None
Local Agency Investment Fund (LAIF)	N/A	None	N/A
Collateralized Bank Deposits	5 years	25%	None
Investment Trust of California (CalTRUST)	5 years	15%	N/A

N/A - Not Applicable

\*10% of outstanding paper of an issuing corporation.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Custodial Credit Risk**

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. With respect to investments, custodial credit risk generally applies only to direct investments in marketable securities. Custodial credit risk does not apply to a local government's indirect investment in securities through the use of mutual funds or government investment pools (such as LAIF and CalTRUST).

The California Government Code and the Authority's investment policy does not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit), and the Authority's investment policy that requires no more than two-thirds of the Authority's deposits in a depository shall be collateralized by mortgage-backed securities, with the remainder to be secured by non-mortgage-backed securities. The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure Authority deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. Of the Authority's bank deposits, up to \$250,000 is federally insured and the remaining balance is collateralized in accordance with the Code; however, the collateralized securities are not held in the Authority's name.

**Investment in State Investment Pool**

The Authority is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California. The fair value of the Authority's investment in this Pool is reported in the accompanying financial statements based upon the Authority's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio. The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Investment in State Investment Pool - Continued**

CalTRUST is a Joint Powers Agency Authority created by local public agencies to provide a convenient method for local public agencies to pool their assets for investment purposes. CalTRUST is governed by a Board of Trustees made up of experienced local agency treasurers and investment officers. The Board sets overall policies for the program and selects and supervises the activities of the investment manager and other agents. CalTRUST maintains and administers four pooled accounts within the program: Money Market, Short-Term, Medium-Term and Long-Term. The Money Market account permits daily transactions, with same-day liquidity (provided redemption requests are received by 1:00 p.m. Pacific time), with no limit on the amount of funds that may be invested.

The short-term account permits an unlimited number of transactions per month (with prior day notice), with no limit on the amount of funds that may be invested. The medium- and long-term accounts permit investments, withdrawals and transfers once per month, with five days advance notice. All CalTRUST accounts comply with the limits and restrictions placed on local agency investments by the California Government Code. CalTRUST imposes a \$250,000 minimum investment; however, there is no maximum limit. The fair value of the Authority's investment in this pool is reported in the accompanying financial statements at amounts based upon the Authority's percentage interest of the fair value provided by CalTRUST for the CalTRUST accounts (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by CalTRUST.

**Interest Rate Risk**

Interest rate risk is the risk where changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Authority manages its exposure to interest rate risk by purchasing a combination of shorter term and longer term investments, and by timing cash flows from maturities so that a portion of the portfolio matures or comes close to maturity evenly over time as necessary to provide requirements for cash flow and liquidity needed for operations. Information about the sensitivity of the fair cash values of the Authority's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the Authority's investments by maturity date.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Interest Rate Risk - Continued**

Maturities of investments and cash equivalents as of June 30, 2019 and June 30, 2018, were as follows:

**2019**

Investment Type	Remaining Maturity (in Months)			Total
	12 Months or Less	13 to 24 Months	25 to 60 Months	
U.S. Treasury Strips	\$ 1,385,794	\$ 2,488,750	\$ 987,109	\$ 4,861,653
U.S. Government Sponsored Agency Securities	997,642	1,994,013	2,500,738	5,492,393
LAIF	44,787,157	-	-	44,787,157
Medium-Term Corporate Notes	504,840	-	523,660	1,028,500
Negotiable Certificates of Deposit	706,712	496,000	248,000	1,450,712
	<u>\$ 48,382,145</u>	<u>\$ 4,978,763</u>	<u>\$ 4,259,507</u>	<u>\$ 57,620,415</u>

**2018**

Investment Type	Remaining Maturity (in Months)			Total
	12 Months or Less	13 to 24 Months	25 to 60 Months	
U.S. Treasury Strips	\$ 1,364,313	\$ 1,341,110	\$ 3,398,301	\$ 6,103,724
U.S. Government Sponsored Agency Securities	1,500,890	983,958	4,377,493	6,862,341
LAIF	28,367,339	-	-	28,367,339
CalTRUST Medium-Term Fund	2,182,874	-	-	2,182,874
Medium-Term Corporate Notes	499,831	-	-	499,831
Negotiable Certificates of Deposit	739,661	248,000	744,000	1,731,661
	<u>\$ 34,654,908</u>	<u>\$ 2,573,068</u>	<u>\$ 8,519,794</u>	<u>\$ 45,747,770</u>

**Credit Risk**

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Presented below is the minimum rating required by (where applicable) the California Government Code, the Authority's Investment Policy, or debt agreements and the actual rating as of year-end for each investment type. This is measured by the assignment of a rating by a nationally recognized statistical rating organization; however, LAIF and CalTRUST are not rated.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Credit Risk - Continued**

Credit ratings by Standard & Poor's of investments and cash equivalents as of June 30, 2019, and June 30, 2018 were as follows:

**2019**

Investment Type		Medium Legal Rating	Exempt From Disclosure	Ratings as of Year End			Not Rated
				AA+	AA-	A+	
U.S. Treasury Strips	\$ 4,861,653	N/A	\$ 4,861,653	\$ -	\$ -	\$ -	\$ -
U.S. Government Sponsored Agency Securities	5,492,393	N/A	-	5,492,393	-	-	-
LAIF	44,787,157	N/A	-	-	-	-	44,787,157
Medium-Term Corporate Notes	1,028,500	N/A	-	-	-	1,028,500	-
Negotiable Certificates of Deposit	1,450,712	N/A	-	-	-	-	1,450,712
<b>Total</b>	<b>\$ 57,620,415</b>		<b>\$ 4,861,653</b>	<b>\$ 5,492,393</b>	<b>\$ -</b>	<b>\$ 1,028,500</b>	<b>\$ 46,237,869</b>

**2018**

Investment Type		Medium Legal Rating	Exempt From Disclosure	Ratings as of Year End			Not Rated
				AA+	AA-	A+	
U.S. Treasury Strips	\$ 6,103,724	N/A	\$ 6,103,724	\$ -	\$ -	\$ -	\$ -
U.S. Government Sponsored Agency Securities	6,862,341	N/A	-	6,862,341	-	-	-
LAIF	28,367,339	N/A	-	-	-	-	28,367,339
CalTRUST Medium-Term Fund	2,182,874	N/A	-	-	-	-	2,182,874
Medium-Term Corporate Notes	499,831	N/A	-	-	-	499,831	-
Negotiable Certificates of Deposit	1,731,661	N/A	-	-	-	-	1,731,661
<b>Total</b>	<b>\$ 45,747,770</b>		<b>\$ 6,103,724</b>	<b>\$ 6,862,341</b>	<b>\$ -</b>	<b>\$ 499,831</b>	<b>\$ 32,281,874</b>

**Concentration of Credit Risk**

The investment policy of the Authority contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. The Authority has no investments that represent 5% or more of total Authority investments invested in one issuer.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Fair Value Measurements**

Governmental Accounting Standards Board (GASB) Statement No. 72, Fair Value Measurements and Application, provides the framework for measuring fair value. The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value with Level 1 given the highest priority and Level 3 the lowest priority. The three levels of the fair value hierarchy are as follows:

*Level 1* inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the organization has the ability to access at the measurement date.

*Level 2* inputs are inputs other than quoted prices included within *Level 1* that are observable for the asset or liability, either directly or indirectly. *Level 2* inputs include the following:

- a. Quoted prices for similar assets or liabilities in active markets.
- b. Quoted prices for identical or similar assets or liabilities in markets that are not active.
- c. Inputs other than quoted prices that are observable for the asset or liability (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, and default rates).
- d. Inputs that are derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).

Investments classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Uncategorized investments do not fall under the fair value hierarchy as there is no active market for the investments.

*Level 3* inputs are unobservable inputs for the asset or liability.



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**2) CASH AND INVESTMENTS - Continued**

**Fair Value Measurements - Continued**

The Authority has the following recurring fair value measurements as of June 30, 2019 and June 30, 2018:

**2019**

	Quoted Prices Level 1	Observable Inputs Level 2	Unobservable Inputs Level 3	Total
U.S. Treasury Strips	\$ -	\$ 4,861,653	\$ -	\$ 4,861,653
U.S. Government Sponsored Agency Securities	-	5,492,393	-	5,492,393
Medium-Term Corporate Notes	-	1,028,500	-	1,028,500
Negotiable Certificates of Deposit	-	1,450,712	-	1,450,712
<b>Total Investments</b>	<b>\$ -</b>	<b>\$ 12,833,258</b>	<b>\$ -</b>	<b>12,833,258</b>
Local Agency Investment Fund*				44,787,157
<b>Total Investment Portfolio</b>				<b>\$ 57,620,415</b>

\*Not subject to fair value measurement hierarchy.

**2018**

	Quoted Prices Level 1	Observable Inputs Level 2	Unobservable Inputs Level 3	Total
U.S. Treasury Strips	\$ -	\$ 6,103,724	\$ -	\$ 6,103,724
U.S. Government Sponsored Agency Securities	-	6,862,341	-	6,862,341
Medium-Term Corporate Notes	-	499,831	-	499,831
Negotiable Certificates of Deposit	-	1,731,661	-	1,731,661
<b>Total Investments</b>	<b>\$ -</b>	<b>\$ 15,197,557</b>	<b>\$ -</b>	<b>15,197,557</b>
Local Agency Investment Fund*				28,367,339
CalTRUST Investment Pool*				2,182,874
<b>Total Investment Portfolio</b>				<b>\$ 45,747,770</b>

\*Not subject to fair value measurement hierarchy.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**3) NOTES RECEIVABLE**

During the year ended June 30, 1999, the Authority sold capacity rights in the Brine Line pipeline under an installment agreement with Western Municipal Water District. Sale terms specify annual installments of \$89,063 with zero interest due July 1 of each year through 2019. The receivable has been discounted at the imputed interest rate of 6.00% and totals \$0 at June 30, 2019 and \$84,011 at June 30, 2018. Remaining repayments total \$89,053 with an unamortized discount of \$0 at June 30, 2019 and \$5,042 at June 30, 2018.

Notes receivable amounts at June 30, 2019 and June 30, 2018, are as follows:

**2019**

Year Ending June 30,	Principal	Interest	Total
<u>2020</u>	\$ -	<u>\$ -</u>	<u>\$ -</u>
Less: Current Portion	<u>-</u>		
Total Non-current	<u>\$ -</u>		

**2018**

Year Ending June 30,	Principal	Interest	Total
<u>2019</u>	\$ 84,011	<u>\$ 5,042</u>	<u>\$ 89,053</u>
Less: Current Portion	<u>(84,011)</u>		
Total Non-current	<u>\$ -</u>		

**4) MITIGATION CREDITS**

On March 17, 2000, the State of California voted to approve Proposition 13, the Costa-Machado Water Act of 2000 containing the Southern California Integrated Watershed Program (SCIWP), providing \$235 million for local grant assistance. The State Legislature appropriated the funds to the State Water Resource Control Board (SWRCB) to be allocated to the Authority for projects to rehabilitate and improve the Santa Ana River Watershed.

On April 23, 2003, as part of the SCIWP, the Authority purchased 100 acres of mitigation credits from the Riverside County Regional Park and Open Space District. These credits are purchased and used by those needing habitat mitigation within the Watershed for specific development projects.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**4) MITIGATION CREDITS - Continued**

The changes to mitigation credits at June 30, 2019 and June 30, 2018 were as follows:

**2019**

Balance 2018	Additions	Deletions	Balance 2019
\$ 1,910,560	\$ -	\$ -	\$ 1,910,560

**2018**

Balance 2017	Additions	Deletions	Balance 2018
\$ 1,910,560	\$ -	\$ -	\$ 1,910,560

**5) CAPITAL ASSETS**

Changes in capital assets for the year ended June 30, 2019 were as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
Capital Assets, Not Being Depreciated:				
Land	\$ 765,444	\$ -	\$ -	\$ 765,444
Construction in Progress	238,367	146,909	-	385,276
Total Capital Assets, Not Being Depreciated	1,003,811	146,909	-	1,150,720
Capital Assets, Being Depreciated				
Land Improvements	158,617	-	-	158,617
Buildings	1,454,558	-	-	1,454,558
Furniture and Equipment	532,845	59,427	(112,214)	480,058
Brine Line and Equipment	156,279,568	43,436	(209,547)	156,113,457
Wastewater Treatment and Disposal Rights	55,662,342	-	-	55,662,342
Total Capital Assets, Being Depreciated	\$214,087,930	\$ 102,863	\$ (321,761)	\$213,869,032

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**5) CAPITAL ASSETS - Continued**

	Beginning Balance	Additions	Deletions	Ending Balance
Less Accumulated Depreciation				
Land Improvements	\$ (90,625)	\$ (4,425)	\$ -	\$ (95,050)
Buildings	(938,757)	(37,549)	-	(976,306)
Furniture and Equipment	(368,501)	(35,321)	112,214	(291,608)
Brine Line and Equipment	(68,573,081)	(3,665,506)	174,636	(72,063,951)
Accumulated Amortization	(28,128,426)	(1,400,918)	-	(29,529,344)
 Total Accumulated Depreciation	 (98,099,390)	 (5,143,719)	 286,850	 (102,956,259)
 Total Capital Assets Being Depreciated, Net	 115,988,540	 (5,040,856)	 (34,911)	 110,912,773
 Total Capital Assets, Net	 <u>\$116,992,351</u>	 <u>\$ (4,893,947)</u>	 <u>\$ (34,911)</u>	 <u>\$112,063,493</u>

Changes in capital assets for the year ended June 30, 2018 were as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
Capital Assets, Not Being Depreciated:				
Land	\$ 765,444	\$ -	\$ -	\$ 765,444
Construction in Progress	19,943,664	8,143,373	(27,848,670)	238,367
Total Capital Assets, Not Being Depreciated	20,709,108	8,143,373	(27,848,670)	1,003,811
Capital Assets, Being Depreciated				
Land Improvements	140,217	18,400	-	158,617
Buildings	1,454,558	-	-	1,454,558
Furniture and Equipment	517,335	15,510	-	532,845
Brine Line and Equipment	128,362,228	27,917,340	-	156,279,568
Wastewater Treatment and Disposal Rights	55,662,342	-	-	55,662,342
Total Capital Assets Being Depreciated	\$186,136,680	\$ 27,951,250	\$ -	\$214,087,930

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**5) CAPITAL ASSETS - Continued**

	Beginning Balance	Additions	Deletions	Ending Balance
Less Accumulated Depreciation				
Land Improvements	\$ (86,903)	\$ (3,722)	\$ -	\$ (90,625)
Buildings	(901,208)	(37,549)	-	(938,757)
Furniture and Equipment	(334,817)	(33,684)	-	(368,501)
Brine Line and Equipment	(65,292,905)	(3,280,176)	-	(68,573,081)
Accumulated Amortization	(26,727,508)	(1,400,918)	-	(28,128,426)
 Total Accumulated Depreciation	 (93,343,341)	 (4,756,049)	 -	 (98,099,390)
 Total Capital Assets Being Depreciated, Net	 92,793,339	 23,195,201	 -	 115,988,540
 Total Capital Assets, Net	 <u>\$113,502,447</u>	 <u>\$ 31,338,574</u>	 <u>\$(27,848,670)</u>	 <u>\$116,992,351</u>

**6) COMPENSATED ABSENCES**

Compensated absences comprise of unpaid vacation and sick leave which is accrued as earned.

The changes to compensated absences balances at June 30, 2019 and 2018 were as follows:

	Balance 2018	Earned	Taken	Balance 2019	Current Portion	Long-term Portion
Compensated Absences	\$ 592,909	\$ 471,054	\$(436,881)	\$ 627,082	\$ 188,125	\$ 438,957
	Balance 2017	Earned	Taken	Balance 2018	Current Portion	Long-term Portion
Compensated Absences	\$ 594,294	\$ 282,787	\$(284,172)	\$ 592,909	\$ 180,887	\$ 412,022

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT**

Changes in long-term debt for the year ended June 30, 2019, were as follows:

	<u>Beginning Balance</u>	<u>Additions</u>	<u>Deletions</u>	<u>Ending Balance</u>
<i>SWRCB Brine Line Reach V Loans</i>				
<i>(Direct Borrowings):</i>				
Loan I	\$ 1,265,570	\$ -	\$ (303,895)	\$ 961,675
Loan II & III	1,019,265	-	(245,091)	774,174
Loan IV	643,848	-	(208,511)	435,337
Loan V	1,086,243	-	(261,196)	825,047
Total SWRCB Brine Line Reach V Loans	<u>4,014,926</u>	<u>-</u>	<u>(1,018,693)</u>	<u>2,996,233</u>
 <i>State Revolving Fund Loan</i>				
<i>(Direct Borrowing):</i>				
Reach IVA & IVB	<u>12,834,937</u>	<u>-</u>	<u>(710,565)</u>	<u>12,124,372</u>
 <i>SWRCB Inland Empire Brine Line</i>				
<i>Reach V Loans (Direct Borrowing):</i>				
Loan I	<u>15,000,000</u>	<u>159,895</u>	<u>(433,019)</u>	<u>14,726,876</u>
Total Long-term Debt	31,849,863	<u>\$ 159,895</u>	<u>\$(2,162,277)</u>	29,847,481
Less: Current Portion	<u>(2,107,050)</u>			<u>(2,160,539)</u>
Long-term Portion	<u>\$29,742,813</u>			<u>\$27,686,942</u>



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

Changes in long-term debt for the year ended June 30, 2018, were as follows:

	Beginning Balance	Additions	Deletions	Ending Balance
<i>SWRCB Brine Line Reach V Loans</i>				
<i>(Direct Borrowings):</i>				
Loan I	\$ 1,561,475	\$ -	\$ (295,905)	\$ 1,265,570
Loan II & III	1,258,145	-	(238,880)	1,019,265
Loan IV	846,482	-	(202,634)	643,848
Loan V	1,340,820	-	(254,577)	1,086,243
Total SWRCB Brine Line Reach V Loans	<u>5,006,922</u>	<u>-</u>	<u>(991,996)</u>	<u>4,014,926</u>
<i>Member Agency Loans:</i>				
OCWD Loan	336,085	-	(336,085)	-
WRCRWA SFR Loans #2, 3, and 4	<u>519,182</u>	<u>-</u>	<u>(519,182)</u>	<u>-</u>
Total Member Agency Loans	<u>855,267</u>	<u>-</u>	<u>(855,267)</u>	<u>-</u>
<i>State Revolving Fund Loan</i>				
<i>(Direct Borrowing):</i>				
Reach IVA & IVB	<u>13,527,495</u>	<u>-</u>	<u>(692,558)</u>	<u>12,834,937</u>
<i>SWRCB Inland Empire Brine Line</i>				
<i>Reach V Loans (Direct Borrowing):</i>				
Loan I	<u>7,553,435</u>	<u>7,595,992</u>	<u>(149,427)</u>	<u>15,000,000</u>
Total Long-term Debt	26,943,119	<u>\$ 7,595,992</u>	<u>\$(2,689,248)</u>	31,849,863
Less: Current Portion	<u>(2,640,196)</u>			<u>(2,107,050)</u>
Long-term Portion	<u>\$24,302,923</u>			<u>\$29,742,813</u>

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

**Direct Borrowings and Direct Placements**

The Authority's total outstanding loans are from direct borrowings and direct placements. There are no provisions for the outstanding loans in the event of default and no assets were held as collateral.

**State Water Resources Control Board - Brine Line Reach V Loan No. I**

This loan, in the amount of \$5,089,798, was for the construction of Reach V of the Brine Line Pipeline. Annual principal and interest payments of \$338,065, at the rate of 2.70%, commenced on October 5, 2002, and will mature on October 5, 2021.

<u>For the Year Ended June, 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 312,100	\$ 25,965	\$ 338,065
2021	320,527	17,538	338,065
2022	329,048	8,886	337,934
Total	<u>961,675</u>	<u>\$ 52,389</u>	<u>\$ 1,014,064</u>
Less: Current Portion	<u>(312,100)</u>		
Total Noncurrent	<u>\$ 649,575</u>		

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

**State Water Resources Control Board - Brine Line Reach V Loan No. II and III**

This loan, in the amount of \$4,187,933, was for the construction of Reach V of the Brine Line Pipeline. Annual principal and interest payments of \$271,592, at the rate of 2.60%, commenced on October 5, 2002, and will mature on October 5, 2021.

For the Year Ended June, 30,	Principal	Interest	Total
2020	\$ 251,463	\$ 20,129	\$ 271,592
2021	258,001	13,591	271,592
2022	264,710	6,882	271,592
Total	<u>774,174</u>	<u>\$ 40,602</u>	<u>\$ 814,776</u>
Less: Current Portion	<u>(251,463)</u>		
Total Noncurrent	<u>\$ 522,711</u>		

**State Water Resources Control Board - Brine Line Reach V Loan No. IV**

This loan, in the amount of \$3,373,815, was for the construction of Reach V of the Brine Line Pipeline. Annual principal and interest payments of \$227,182, at the rate of 2.90%, commenced on September 11, 2001, and will mature on September 11, 2020.

For the Year Ended June, 30,	Principal	Interest	Total
2020	\$ 214,557	\$ 12,625	\$ 227,182
2021	220,780	6,401	227,181
Total	<u>435,337</u>	<u>\$ 19,026</u>	<u>\$ 454,363</u>
Less: Current Portion	<u>(214,557)</u>		
Total Noncurrent	<u>\$ 220,780</u>		

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

**State Water Resources Control Board - Brine Line Reach V Loan No. V**

This loan, in the amount of \$4,455,792, was for the construction of Reach V of the Brine Line Pipeline. Annual principal and interest payments of \$289,439, at the rate of 2.90%, commenced on October 5, 2004, and will mature on October 5, 2021.

For the Year Ended June, 30,	Principal	Interest	Total
2020	\$ 267,987	\$ 21,452	\$ 289,439
2021	274,955	14,484	289,439
2022	282,105	7,333	289,438
Total	825,047	\$ 43,269	\$ 868,316
Less: Current Portion	(267,987)		
Total Noncurrent	\$ 557,060		

**Orange County Water District**

This was a purchase obligation for Brine Line Pipeline capacity in the amount of \$4,706,326. Annual principal and interest payments of \$356,250, at the rate of 6.00%, commenced on July 1, 1999, and will mature on July 1, 2018. This obligation was paid in full as of June 30, 2018.

**Western Riverside County Regional Wastewater Authority**

This is a contractual obligation in the amount of \$8,003,454, with the WRCRWA Joint Powers Authority for a portion of loans from the State Water Resources Control Board for the construction of wastewater treatment facilities. Annual principal and interest payments of \$533,924, at the rate of 2.80%, commenced on February 13, 1999, and will mature on June 1, 2018. This obligation was paid in full as of June 30, 2018.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

**State Revolving Fund Loan - Reach IV-A and IV-B**

On April 13, 2011, the Authority entered into a loan agreement to receive up to \$16,850,337 from the California State Water Resources Control Board to repair the existing brine disposal pipeline to extend its useful life of the Inland Empire Brine Line upstream of Prado Dam. Terms of the loan call for annual principal and interest payments of \$1,044,273 based on the net loan amount of \$16,850,337, at the rate of 2.60%, commenced on December 29, 2013, and will mature on December 29, 2032.

<u>For the Year Ended June, 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 729,040	\$ 315,233	\$ 1,044,273
2021	747,994	296,279	1,044,273
2022	767,442	276,831	1,044,273
2023	787,396	256,877	1,044,273
2024	807,868	236,405	1,044,273
2025-2029	4,365,547	855,819	5,221,366
2030-2033	3,919,085	231,546	4,150,631
Total	<u>12,124,372</u>	<u>\$ 2,468,990</u>	<u>\$ 14,593,362</u>
Less: Current Portion	<u>(729,040)</u>		
Total Noncurrent	<u>\$ 11,395,332</u>		

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**7) LONG-TERM DEBT - Continued**

**SWRCB Inland Empire Brine Line Reach V Loans - Loan 1**

On May 14, 2014, the Authority entered into a loan agreement to receive up to \$15,000,000 from the California State Water Resources Control Board to repair the existing brine disposal pipeline to extend the useful life of the Inland Empire Brine Line. Terms of the loan call for annual principal and interest payments of \$665,203 commencing on March 31, 2019, at the rate of 1.9%, and maturing March 31, 2048.

For the Year Ended June, 30,	Principal	Interest	Total
2020	\$ 385,392	\$ 279,811	\$ 665,203
2021	392,714	272,488	665,202
2022	400,176	265,027	665,202
2023	407,779	257,423	665,202
2024	415,527	249,675	665,202
2025-2029	2,199,104	1,126,909	3,326,013
2030-2034	2,416,109	909,903	3,226,012
2035-2039	2,654,529	671,483	3,226,012
2040-2044	2,916,476	409,536	3,226,012
2045-2048	2,539,070	121,741	2,660,811
Total	<u>14,726,876</u>	<u>\$ 4,563,996</u>	<u>\$19,290,872</u>
Less: Current Portion	<u>(385,392)</u>		
Total Noncurrent	<u>\$ 14,341,484</u>		

**8) UNEARNED REVENUE**

The changes in unearned revenue at June 30, 2019 and 2018 were as follows:

Balance 2018	Additions	Deletions	Balance 2019
\$ 70,209,134	\$ -	\$ 2,510,154	\$ 67,698,980



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**8) UNEARNED REVENUE - Continued**

Balance 2017	Additions	Deletions	Balance 2018
\$ 75,719,287	\$ -	\$ (5,510,153)	\$ 70,209,134

**9) NET POSITION**

Calculation of net position as of June 30, 2019 and 2018 were as follows:

	2019	2018
Net Investment in Capital Assets:		
Capital Assets - Not Being Depreciated	\$ 1,150,720	\$ 1,003,811
Depreciable Capital Assets, Net	110,912,773	115,988,540
SWRCB Brine Line Reach V Loans Payable	(2,996,233)	(4,014,926)
SRF Reach IVA & IVB Loan Payable	(12,124,372)	(12,834,937)
SWRCB Brine Line Reach V Loans Payable	(14,726,876)	(15,000,000)
SWRCB Brine Line Reach V Loans Receivable (Note 8)	-	84,011
Total Net Investment in Capital Assets	82,216,012	85,226,499
Restricted Net Position:		
SRF Reach IVA & IVB Reserve Requirement	1,050,000	1,050,000
Mitigation	1,910,560	1,910,560
Total Restricted	2,960,560	2,960,560
Unrestricted Net Position	(13,617,096)	(19,510,100)
Total Net Position	\$ 71,559,476	\$ 68,676,959

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**10) JOINT VENTURES**

**Western Riverside County Regional Wastewater Authority (WRCRWA)**

The Authority was a member of WRCRWA, a Joint Powers Authority created on April 23, 1992, for the purpose of developing a regional wastewater treatment facility for the benefit of its members. On June 30, 2012, Addendum No. 7 to the Joint Exercise of Powers Agreement was entered into by all members of the Authority to execute the withdrawal of the Authority from WRCRWA.

The Authority is responsible for a certain portion of WRCRWA's long-term debt and will continue making annual debt service payments to the Joint Powers Authority for its share of the State Revolving Fund Loans from the State Water Resources Control Board. The recorded amount is reflected in the financial statements as long-term debt.

The financial statements of WRCRWA are available from Western Municipal Water District, 14205 Meridian Parkway, Riverside, California 92508.

**Lake Elsinore & San Jacinto Watersheds Authority (LESJWA)**

The Authority is a member of LESJWA, a Joint Powers Authority created on March 8, 2000, for the purpose of implementing projects and programs to improve the two watersheds in order to preserve agricultural land, protect wildlife habitat, protect and enhance recreational resources, and improve lake water quality, for the benefit of the general public. Other members include the City of Canyon Lake, the City of Lake Elsinore, Elsinore Valley Municipal Water District, and the County of Riverside. Each member agency appoints one Director and one alternate to serve on the Board, with both also on the member's agency's board. Each member agency has agreed to make contributions for construction and operations, if necessary.

Upon dissolution of LESJWA, each member agency will receive its proportionate or otherwise defined share of the assets, and each member agency will contribute its proportionate or otherwise defined share of any enforceable liabilities incurred.

The Authority conducts the administrative function of LESJWA, which reimburses the Authority based on invoices for administrative services provided. During the year ended June 30, 2019 and 2018, administrative services provided to LESJWA totaled \$193,588 and \$188,687, respectively, which is included in operating revenue.

The financial statements for LESJWA are available from the Authority.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**10) JOINT VENTURES - Continued**

**Lake Elsinore & San Jacinto Watersheds Authority (LESJWA) - Continued**

As of June 30, 2019 and 2018, LESJWA had assets, liabilities and deferred inflows of resources and net position as follows:

	2019	2018
Total Assets	\$ 607,750	\$ 582,573
Total Liabilities and Deferred Inflows of Resources	\$ 262,951	\$ 70,340
Net Position	\$ 344,799	\$ 512,233

**11) DEFINED BENEFIT PENSION PLANS**

**A. General Information about the Pension Plans**

***Plan Descriptions***

All qualified permanent and probationary employees are eligible to participate in the Authority's 2% at 55 (Classic) and 2% at 62 (PEPRA) Miscellaneous Employee Pension Plans, cost-sharing multiple-employer employer defined benefit pension plans administered by the California Public Employees' Retirement System (CalPERS). Benefit provisions under the Plans are established by State statute and District resolution. CalPERS issues publicly available reports that include a full description of the pension plans regarding provisions, assumptions and membership information that can be found on the CalPERS website.

***Benefits Provided***

CalPERS provides service retirement and disability benefits, annual cost of living adjustments and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 to 62 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after five (5) years of service. The death benefit is one of the

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**A. General Information about the Pension Plans - Continued**

***Benefits Provided - Continued***

following: the Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. The cost of living adjustments for the plan are applied as specified by the Public Employees' Retirement Law.

The Plans' provisions and benefits in effect at June 30, 2019 and 2018, are summarized as follows:

	Miscellaneous	
	Prior to January 1, 2013	On or After January 1, 2013
Hire Date		
Benefit Formula	2% at 55	2% at 62
Benefit Vesting Schedule	5 years service	5 years service
Benefit Payments	Monthly for life	Monthly for life
Retirement Age	50 - 63	52 - 67
Monthly Benefits, as a % of Eligible Compensation	1.426% to 2.418%	1.0% to 2.5%
Required Employee Contribution Rates	7%	6.50%
Required Employer Contribution Rates:		
Normal Cost Rate	10.411%	7.383%
Payment of Unfunded Liability	\$ 187,178	\$ 5,685

***Contributions***

Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates for all public employers are determined on an annual basis by the actuary and shall be effective on July 1 following notice of a change in the rate. The total contributions are determined through the CalPERS' annual actuarial valuation process. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The Authority is required to contribute the difference between the actuarially determined rate and the contribution rate of employees. Authority contribution rates may change if plan contracts are amended. Payments made by the employer to satisfy contribution requirements that are identified by the pension plan terms as plan member contributions requirements are classified as plan member contributions.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions**

As of June 30, 2019 and 2018, the Authority reported net pension liabilities for its proportionate share of the net pension liability of the Plan as follows:

	2019	2018
Miscellaneous	\$ 3,649,848	\$ 3,724,430

The Authority's net pension liability was measured as of June 30, 2018 and 2017, and the total pension liabilities used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2017 and 2016, rolled forward to June 30, 2018 and 2017, using standard update procedures. The Authority's proportionate share of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plans relative to the projected contributions of all participating employers, actuarially determined.

The changes in the Authority's proportionate share of the collective net pension liabilities were as follows:

	2019	2018
Beginning of Measurement Period	0.03756%	0.035880%
Ending of Measurement Period	0.03788%	0.037555%
Change - Increase (Decrease)	0.00032%	0.001675%

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

For the year ended June 30, 2019, the Authority recognized pension expense of \$554,514. At June 30, 2019, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Pension contributions subsequent to measurement date	\$ 485,329	\$ -
Differences between expected and actual experience	140,038	(47,654)
Changes in assumptions	416,094	(101,976)
Change in employer's proportion	227,074	-
Differences between the employer's contributions and the employer's proportionate share of contributions	-	(149,211)
Net differences between projected and actual earnings on plan investments	<u>18,044</u>	<u>-</u>
Total	<u>\$ 1,286,579</u>	<u>\$ (298,841)</u>

For the year ended June 30, 2018, the Authority recognized pension expense of \$654,489. At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Pension contributions subsequent to measurement date	\$ 422,430	\$ -
Differences between expected and actual experience	5,640	(80,806)
Changes in assumptions	699,815	(53,362)
Change in employer's proportion	159,619	(36,751)
Differences between the employer's contributions and the employer's proportionate share of contributions	-	(143,349)
Net differences between projected and actual earnings on plan investments	<u>158,269</u>	<u>-</u>
Total	<u>\$ 1,445,773</u>	<u>\$ (314,268)</u>



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
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**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

\$485,329 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ended June 30	Amount
2020	\$ 393,496
2021	235,225
2022	(93,485)
2023	(32,827)
2024	-
Thereafter	-

\$422,430 reported as deferred outflows of resources related to contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ending June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized as pension expense as follows:

Year Ended June 30	Amount
2019	\$ 125,201
2020	424,187
2021	253,654
2022	(93,967)
2023	-
Thereafter	-

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
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**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

***Actuarial Assumptions***

For the measurement periods ended June 30, 2018 and 2017, the total pension liabilities were determined by rolling forward the June 30, 2017 and 2016 total pension liabilities determined in the June 30, 2017 and 2018 actuarial accounting valuation. The June 30, 2018 and 2017 total pension liabilities, was based on the following actuarial methods and assumptions:

Valuation Dates	June 30, 2018 and 2017
Measurement Dates	June 30, 2018 and 2017
Actuarial Cost Method	Entry-Age Normal Cost Method
Actuarial Assumptions:	
Discount Rate	7.15%
Inflation	2.5% (2018) and 2.75% (2017)
Salary Increase	Varies by Entry Age and Service
Mortality Rate Table*	Derived using CalPERS' Membership Data for all Funds
Post Retirement Benefit	Contract COLA up to 2.50% until Purchasing Power Protection Allowance Floor on Purchasing Power applies, 2.50% thereafter

\* The mortality table used was developed based on CalPERS' special data. The table includes 20 years of mortality improvements using Society of Actuaries Scale BB. For more details on this table, please refer to the 2014 Experience Study report.

All other actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from 1997 to 2011, including updates to salary increase, mortality and retirement rates. The Experience Study report can be obtained at the CalPERS website under Forms and Publications.

***Change of Assumptions***

In the 2018 fiscal year, the accounting discount rate reduced from 7.65 percent to 7.15 percent. In the fiscal year 2019, the accounting discount rate remained the same at 7.15 percent.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

*Discount Rate*

The discount rate used to measure the total pension liability at June 30, 2018 and 2017 measurement dates was 7.15% for the Plan. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. The tests revealed the assets would not run out. Therefore, the 7.15% discount rate is appropriate and the use of the municipal bond rate calculation is not deemed necessary. The long term expected discount rate of 7.15% is applied to all plans in the Public Employees Retirement Fund (PERF). The stress test results are presented in a detailed report called "GASB 68 Crossover Testing Report" that can be obtained from the CalPERS website.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term expected rate of return, CalPERS took into account both short-term and long-term market return expectations as well as the expected pension fund cash flows. Using historical returns of all the funds' asset classes, expected compound returns were calculated over the short-term (first 10 years) and the long-term (11+ years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equal to the single equivalent rate calculated above and adjusted to account for assumed administrative expenses.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

***Discount Rate - Continued***

The table below reflects the long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation.

**2019**

Asset Class <sup>(a)</sup>	New Strategic Allocation	Real Return Years 1 - 10 <sup>(b)</sup>	Real Return Years 11+ <sup>(c)</sup>
Global Equity	50.0%	4.80%	5.98%
Global Fixed Income	28.0%	1.00%	2.62%
Inflation Assets	-	0.77%	1.81%
Private Equity	8.0%	6.30%	7.23%
Real Assets	13.0%	3.75%	4.93%
Liquidity	1.0%		-0.92%
Total	<u>100%</u>		

<sup>(a)</sup> In the System's CAFR, fixed income is included in Global Debt Securities; liquidity is included in Short-term Investments; Inflation Assets are included in both Global Equity Securities and Global Debt Securities

<sup>(b)</sup> An expected inflation of 2.00% used for this period.

<sup>(c)</sup> An expected inflation of 2.92% used for this period.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

**2018**

Asset Class	New Strategic Allocation	Real Return Years 1 - 10 <sup>(a)</sup>	Real Return Years 11+ <sup>(b)</sup>
Global Equity	47.0%	4.90%	5.38%
Global Fixed Income	19.0%	0.80%	2.27%
Inflation Sensitive	6.0%	0.60%	1.39%
Private Equity	12.0%	6.60%	6.63%
Real Estate	11.0%	2.80%	5.21%
Infrastructure and Forestland	3.0%	3.90%	5.36%
Liquidity	2.0%	-0.40%	-0.90%
Total	<u>100%</u>		

<sup>(a)</sup> An expected inflation of 2.5% used for this period.

<sup>(b)</sup> An expected inflation of 3.0% used for this period.

***Sensitivity of the Proportionate Share of Net Pension Liability to Changes in the Discount Rate***

The following presents the Authority's proportionate share of the net pension liability for the Plan, calculated using the discount rate for the Plans, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	2019	2018
1% Decrease	6.15%	6.15%
Net Pension Liability	\$ 6,043,266	\$ 6,031,219
Current Discount Rate	7.15%	7.15%
Net Pension Liability	\$ 3,649,848	\$ 3,724,430
1% Increase	8.15%	8.15%
Net Pension Liability	\$ 1,674,120	\$ 1,813,906

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**11) DEFINED BENEFIT PENSION PLANS - Continued**

**B. Pension Liabilities, Pension Expenses and Deferred Outflows/Inflows of Resources Related to Pensions - Continued**

*Pension Plans Fiduciary Net Position*

Detailed information about each pension plan's fiduciary net position is available in the separately issued CalPERS financial reports.

**C. Payable to the Pension Plans**

At June 30, 2019 and 2018, the Authority had no outstanding amount of contributions to the pension plans required for the years ended June 30, 2019 and 2018.

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB)**

**Plan Description and Benefits Offered**

The Authority defined benefit post-employment healthcare plan, SAWPA Post Employment Healthcare Plan (SPHP), provides medical benefits to eligible retired Authority employees and spouses. The Authority's employees hired prior to July 1, 2005, who retire at age 58 or older with a minimum of ten years of service with the Authority are eligible for lifetime medical benefits. Benefits are also provided to spouses. Employees hired on or after July 1, 2005, are not eligible to receive employer subsidized post-employment medical benefits. The Authority contributes the entire premium cost up to a predetermined cap. The cap is defined as the Kaiser Family premium rate. The 2019 monthly cap per retiree is \$1,745. SHPHP is part the Public Agency portion of the California Employers' Retiree Trust Fund (CERBT), an agent multiple-employer plan administered by California Public Employees' Retirement System.

**Plan Description and Benefits Offered**

CalPERS acts as a common investment and administrative agent for participating public employers within the State of California. A menu of benefit provisions as well as other requirements is established by State statute within the Public Employees' Retirement Law. SPHP selects optional benefit provisions from the benefit menu by contract with CalPERS and adopts those benefits through Authority resolution. CalPERS issues a Comprehensive Annual



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

**Plan Description and Benefits Offered - Continued**

Financial Report (CAFR). The CAFR is issued in aggregate and includes the sum of all CalPERS plans. Copies of the CalPERS CAFR may be obtained from the CalPERS Executive Office, 400 P Street, Sacramento, California 95814.

**Funding Policy**

The contribution requirements of plan members and the Authority are established and may be amended by the Commission. The Authority contributes the entire premium cost up to a predetermined cap. The 2019 calendar cap is \$1,745 per month. Employees hired on or after July 1, 2005, are not eligible to receive employer subsidized postemployment medical benefits.

**Employees Covered**

As of the June 30 actuarial valuation, the following current and former employees were covered by the benefit terms under the Plan:

	2018	2017
Active employees	9	9
Inactive employees or beneficiaries currently receiving benefits	5	5
Inactive employees entitled to, but not yet receiving benefits	-	-
<b>Total</b>	14	14

**Contributions**

The annual contribution is based on the actuarially determined contribution. For the fiscal years ended June 30, 2019 and 2018, the Authority's cash contributions were \$72,317 and \$65,813, respectively in payments to the trust.

**Net OPEB Liability**

The Authority's net OPEB liability was measured as of June 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated June 30, 2018, based on the following actuarial methods and assumptions:

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***Net OPEB Liability - Continued***

**Actuarial Assumptions** (Measurement Periods June 30, 2018 and 2017)

Discount Rate	6.73%
Inflation	2.25%
Salary Increases	3.25% plus merit
Investment Rate of Return	6.73%
Mortality Rate <sup>(1)</sup>	Derived using CalPERS Membership Data for all funds
Pre-Retirement Turnover <sup>(2)</sup>	Derived using CalPERS Membership Data for all funds
Healthcare Trend Rate	5.00% Medicare and 7.75% Non-Medicare

Notes:

<sup>(1)</sup>Pre-retirement mortality information was derived from data collected during 1997 to 2011 CalPERS Experience Study dated January 2014 and post-retirement mortality information was derived from the 2007 to 2011 CalPERS Experience Study. The Experience Study Reports may be accessed on the CalPERS website [www.calpers.ca.gov](http://www.calpers.ca.gov) under Forms and Publications.

<sup>(2)</sup>The pre-retirement turnover information was developed based on CalPERS specific data. For more details, please refer to the 2007 to 2011 Experience Study Report. The Experience Study Report may be accessed on the CalPERS website [www.calpers.ca.gov](http://www.calpers.ca.gov) under Forms and Publications.

The long-term expected rate of return on OPEB plan investments was determined using a building block method in which best-estimate ranges of expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset are summarized in the following table for measurement periods June 30, 2018 and 2017:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-term Expected Real Rate of Return</u>
Equity	43.0%	5.43%
Fixed Income	49.0%	1.63%
REITs	8.0%	5.06%
<b>Total</b>	<b>100%</b>	

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***Discount Rate***

The discount rate used to measure the total OPEB liability was 6.73 percent for the measurement periods June 30, 2018 and 2017. The projection of cash flows used to determine the discount rate assumed that Authority contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position was projected to be available to make all projected OPEB payments for current active and inactive employees and beneficiaries. Therefore, the long-term expected rate of return on OPEB plan investments was applied to all periods of projects benefit payments to determine the total OPEB liability.

***Changes in the OPEB Liability***

The changes in the net OPEB liability for the Plan are as follows:

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(Asset) (c) = (a) - (b)
<b>Balance at June 30, 2018</b> <b><i>(Valuation Date June 30, 2017)</i></b>	\$ 1,815,524	\$ 1,212,350	\$ 603,174
<b>Changes Recognized for the Measurement Period:</b>			
Service Cost	27,181	-	27,181
Interest	122,126	-	122,126
Differences between expected and actual experience	(4,383)	-	(4,383)
Changes of Assumptions	-	-	-
Contribution - Employer	-	129,352	(129,352)
Net Investment Income	-	73,974	(73,974)
Benefit Payments	(57,035)	(57,035)	-
Administrative Expense	-	(643)	643
<b>Net Changes</b>	<b>87,889</b>	<b>145,648</b>	<b>(57,759)</b>
<b>Balance at June 30, 2019</b> <b><i>(Measurement Date June 30, 2018)</i></b>	<b>\$ 1,903,413</b>	<b>\$ 1,357,998</b>	<b>\$ 545,415</b>

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***Changes in the OPEB Liability - Continued***

	Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability/(Asset) (c) = (a) - (b)
<b>Balance at June 30, 2017</b> <i>(Valuation Date June 30, 2017)</i>	\$ 1,610,557	\$ 1,067,945	\$ 542,612
<b>Changes Recognized for the Measurement Period:</b>			
Service Cost	26,828	-	26,828
Interest	108,355	-	108,355
Differences between expected and actual experience	22,281	-	22,281
Changes of Assumptions	103,114	-	103,114
Contribution - Employer	-	121,424	(121,424)
Net Investment Income	-	79,164	(79,164)
Benefit Payments	(55,611)	(55,611)	-
Administrative Expense	-	(572)	572
<b>Net Changes</b>	<b>204,967</b>	<b>144,405</b>	<b>60,562</b>
<b>Balance at June 30, 2018</b> <i>(Measurement Date June 30, 2017)</i>	\$ 1,815,524	\$ 1,212,350	\$ 603,174

***Sensitivity of the Net OPEB Liability to Changes in the Discount Rate***

The following presents the net OPEB liability of the Authority if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate, for measurement periods ended June 30, 2018 and 2017:

	1% Decrease (5.73%)	Current Discount Rate (6.73%)	1% Increase (7.73%)
<b>2018</b>			
Net OPEB Liability	\$ 341,773	\$ 545,415	\$ 788,787
<b>2017</b>			
Net OPEB Liability	\$ 408,601	\$ 603,174	\$ 835,787

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***Sensitivity of the Net OPEB Liability to Changes in the Health Care Cost Trend Rates***

The following presents the net OPEB liability of the Authority if it were calculated using health care cost trend rates that are one percentage point lower or one percentage point higher than the current rate, for measurement period ended June 30, 2018 and 2017:

	1% Decrease (4.00%)	Current Healthcare Cost Trend Rates (5.00%)	1% Increase (6.00%)
<b>2018</b>			
Net OPEB Liability	\$ 811,148	\$ 545,415	\$ 325,864
<b>2017</b>			
Net OPEB Liability	\$ 856,636	\$ 603,174	\$ 393,758

***OPEB Plan Fiduciary Net Position***

CERBT issues a publicly available financial report that may be obtained from the California Public Employees Retirement System Executive Office, 400 P Street, Sacramento, California 95814.

***Recognition of Deferred Outflows and Deferred Inflows of Resources***

Gains and losses related to changes in total OPEB liability and fiduciary net position are recognized in OPEB expense systematically over time.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***Recognition of Deferred Outflows and Deferred Inflows of Resources - Continued***

Amounts are first recognized in OPEB expense for the year the gain or loss occurs. The remaining amounts are categorized as deferred outflows and deferred inflows of resources related to OPEB and are to be recognized in future OPEB expense.

The recognition period differs depending on the source of the gain or loss:

Net difference between projected and actual earnings on OPEB plan investments	5 years
All other amounts	Expected average remaining service lifetime (EARSL)

***OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB***

For the fiscal year ended June 30, 2019, the Authority recognized OPEB expense of \$87,800. As of fiscal year ended June 30, 2019, the Authority reported deferred outflows of resources related to OPEB from the following services:

	Deferred Outflows of Resources	Deferred Inflows of Resources
	<u>                    </u>	<u>                    </u>
OPEB contributions subsequent to measurement date	\$ 73,723	\$ -
Changes in assumptions	-	34,843
Differences between expected and actual experience in the measurement of the total OPEB liability	117,044	3,628
Net differences between projected and actual earnings on OPEB plan investments	4,912	-
	<u>                    </u>	<u>                    </u>
Total	<u>\$ 195,679</u>	<u>\$ 38,471</u>



**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB - Continued***

The \$73,723 reported as deferred outflows of resources related to contributions subsequent to the June 30, 2018 measurement date will be recognized as a reduction of the net OPEB liability during the fiscal year ending June 30, 2019. Other amounts reported as deferred outflows of resources related to OPEB will be recognized as expense as follows:

Year Ended June 30,	Deferred Outflow/(Inflows) of Resources
2020	\$ 21,814
2021	21,814
2022	21,812
2023	18,653
2024	(608)
Thereafter	-

For the fiscal year ended June 30, 2018, the Authority recognized OPEB expense of \$20,380. As of fiscal year ended June 30, 2018, the Authority reported deferred outflows of resources related to OPEB from the following services:

	Deferred Outflows of Resources	Deferred Inflows of Resources
OPEB contributions subsequent to measurement date	\$ 72,317	\$ -
Changes in assumptions	85,354	-
Differences between expected and actual experience in the measurement of the total OPEB liability	18,443	-
Net differences between projected and actual earnings on OPEB plan investments	-	(4,106)
<b>Total</b>	<b>\$ 176,114</b>	<b>\$ (4,106)</b>

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**12) OTHER POST-EMPLOYMENT BENEFITS (OPEB) - Continued**

***OPEB Expense and Deferred Outflows/Inflows of Resources Related to OPEB - Continued***

The \$72,317 reported as deferred outflows of resources related to contributions subsequent to the June 30, 2017 measurement date will be recognized as a reduction of the net OPEB liability during the fiscal year ending June 30, 2019. Other amounts reported as deferred outflows of resources related to OPEB will be recognized as expense as follows:

Year Ended June 30,	Deferred Outflow/(Inflows) of Resources
2019	\$ 20,572
2020	20,572
2021	20,571
2022	20,571
2023	17,405
Thereafter	-

**13) RISK MANAGEMENT**

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority purchases commercial insurance policies from independent third parties. Settled claims have been immaterial and have not exceeded insurance coverage for the past four years.

On February 22, 1986, the Authority became self-insured with respect to its comprehensive liability coverage for toxic waste handling as allowed under California Government Code, Section 990. Coverage includes occurrences and incidents resulting in liability to the Authority, its Commissioners, officers, employees and agents. There are no outstanding claims pending.

**Santa Ana Watershed Project Authority**  
**Notes to Financial Statements**  
Years Ended June 30, 2019 and 2018

**14) COMMITMENTS AND CONTINGENCIES**

**Grant Awards**

Grant funds received by the Authority are subject to audit by the grantor agencies. Such audits could require reimbursements to the grantor agencies for expenditures disallowed under terms of the grant. Management of the Authority believes that such disallowance, if any, would not be significant.

**Litigation**

In the ordinary course of operations, the Authority is subject to claims and litigation from outside parties. After consultation with legal counsel, the Authority believes the ultimate outcome of such matters, if any, will not materially affect its financial condition.

**Other Commitments and Contingencies**

The Authority is contractually obligated to pay a pro rata share of capital costs associated with the maintenance of the Santa Ana Regional Interceptor (SARI) Pipeline owned by OCSD. Within the SARI pipeline, the Authority's portion is referred to as the Inland Empire Brine Line. The percentage varies with each Reach of the SARI.

In addition, there is a capital project estimated at \$3 million for which the Authority could potentially be responsible for 76 percent of the related costs.

**15) PRIOR PERIOD ADJUSTMENT**

In the previous fiscal year ending June 30, 2018, there was a prior period adjustment of \$927,423 related to the implementation of GASB Statement 75 for postemployment benefits other than pensions. According to GASB Statement 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, which was implemented by the Authority in the 2018 fiscal year, recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expenses related to OPEB plan. In the current fiscal year ending June 30, 2019 there was no prior period adjustment.

## REQUIRED SUPPLEMENTARY INFORMATION

**Santa Ana Watershed Project Authority**  
**Schedule of Proportionate Share of the Net Pension Liability**  
**Last Ten Years\***  
**As of June 30, 2019 and 2018**

Fiscal Year	Proportion of the Net Pension Liability	Proportionate Share of the Net Pension Liability	Covered Payroll	Proportionate Share of the Net Position Liability as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2015	0.03487%	\$ 2,169,716	\$ 2,294,398	94.57%	79.82%
2016	0.03274%	\$ 2,247,501	\$ 2,560,510	87.78%	78.40%
2017	0.03588%	\$ 3,104,742	\$ 2,795,885	111.05%	74.06%
2018	0.03755%	\$ 3,724,430	\$ 3,098,371	120.21%	73.31%
2019	0.0378.8%	\$ 3,649,848	\$ 3,065,932	119.05%	75.26%

Notes to Schedule:

Benefit Changes:

There were no changes in benefits.

Changes in Assumptions:

For the 2019 and 2017 fiscal years, there were no changes. For the 2018 fiscal year, the accounting discount rate reduced from 7.65% to 7.15%. For the 2016 fiscal year, amounts reported reflect an adjustment to the discount rate of 7.5% (net of administrative expense) to 7.65% (without a reduction for pension plan administrative expense). In 2014, amounts reported were based on the 7.5% discount rate.

\* Fiscal year 2015 was the 1<sup>st</sup> year of implementation, therefore only five years are shown.

**Santa Ana Watershed Project Authority**  
**Schedule of Contributions - Pension**  
**Last Ten Years\***  
**As of June 30, 2019 and 2018**

Fiscal Year	Contractually Required Contribution (Actuarially Determined)	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	\$ 273,547	\$ (273,547)	\$ -	\$ 2,560,510	10.68%
2016	\$ 339,020	\$ (339,020)	\$ -	\$ 2,795,885	12.13%
2017	\$ 388,896	\$ (388,896)	\$ -	\$ 3,098,371	12.55%
2018	\$ 422,430	\$ (422,430)	\$ -	\$ 3,065,932	13.78%
2019	\$ 485,329	\$ (485,329)	\$ -	\$ 3,166,203	15.33%

**Notes to Schedule:**

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method	Entry Age**
Amortization Method	Level Percent of Payroll, Closed**
Asset Valuation Method	Market Value***
Inflation	2.75%**
Salary Increases	Depending on Age, Service, and Type of Employment**
Investment Rate of Return	7.50%, Net of Pension Plan Investment, Including Inflation**
Retirement Age	50 for All Plans with the Exception of 52 for Miscellaneous PEPRA 2% at 62**
Mortality	Mortality Assumptions are Based on Mortality Rates Resulting from the Most Recent CalPERS Experience Study Adopted by the CalPERS Board**

\* Fiscal year 2015 was the 1<sup>st</sup> year of implementation, therefore only five years are shown.

\*\* The valuation for June 30, 2012 and 2013 (applicable to fiscal years ended July 30, 2015 and 2016, respectively) included the same actuarial assumptions.

\*\*\* The valuation for June 30, 2012 (applicable to fiscal year ended June 30, 2015) valued assets using a 15-year Smoothed Market Method. The market value asset valuation method was utilized for the June 30, 2013 and 2014 valuations (applicable to fiscal years ended June 30, 2016 and 2017, respectively).



**Santa Ana Watershed Project Authority**  
**Schedule of Changes in the Net OPEB Liability and Related Ratios for**  
**Measurement Periods Ended June 30,**

Measurement Period	2018	2017
<b>Total OPEB Liability</b>		
Service Cost	\$ 27,181	\$ 26,828
Interest on the Total OPEB Liability	122,126	108,355
Differences between Expected and Actual Experience	(4,383)	22,281
Changes in Assumptions	-	103,114
Changes in Benefit Terms	-	-
Benefit Payments	(57,035)	(55,611)
<b>Net Change in Total OPEB Liability</b>	<b>87,889</b>	<b>204,967</b>
<b>Total OPEB Liability - Beginning</b>	<b>1,815,524</b>	<b>1,610,557</b>
<b>Total OPEB Liability - Ending (a)</b>	<b>\$ 1,903,413</b>	<b>\$ 1,815,524</b>
<b>Plan Fiduciary Net Position</b>		
Contribution - Employer	\$ 129,352	\$ 121,424
Net Investment Income	73,974	79,164
Benefit Payments	(57,035)	(55,611)
Administrative Expense	(643)	(572)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>145,648</b>	<b>144,405</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>1,212,350</b>	<b>1,067,945</b>
<b>Plan Fiduciary Net Position - Ending (b)</b>	<b>\$ 1,357,998</b>	<b>\$ 1,212,350</b>
<b>Net OPEB Liability - Ending (a)-(b)</b>	<b>\$ 545,415</b>	<b>\$ 603,174</b>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	71%	66.78%
Covered Payroll	\$ 1,238,555	\$ 1,156,128
Net OPEB Liability as a Percentage of Covered Payroll	44%	52.17%

**Notes to Schedule:**

Historical information is required only for measurement periods for which GASB 75 is applicable. Future years' information will be displayed up to 10 years as information becomes available.

**Santa Ana Watershed Project Authority  
Schedule of Contributions - OPEB  
Last Ten Fiscal Years'**

Fiscal Year Ended June 30,	<b>2019</b>	<b>2018</b>
Actuarially Determined Contribution (ADC)	\$ 72,317	\$ 65,813
Contributions in Relation to the ADC	(129,352)	(121,424)
Contribution Deficiency (Excess)	\$ (57,035)	\$ (55,611)
Covered-Employee Payroll	1,238,555	1,227,878
 Contributions as a percentage of covered-employee payroll	 10%	 5.89%

**Notes to Schedule:**

The actuarial methods and assumptions used to set the actuarially determined contributions for Fiscal Years 2019 and 2018 were from the June 30, 2017 actuarial valuation, respectively.

**Methods and assumptions used to determine contributions:**

Actuarial Cost Method	Entry Age Normal
Amortization Method/Period	Level percent of payroll over a closed rolling 15-year period
Asset Valuation Method	Market value
Inflation	2.25%
Payroll Growth	3.25% plus merit
Investment Rate of Return	6.73% per annum
Healthcare Cost-trend Rates	5.00% Medicare and 7.75% Non-Medicare
Retirement Age	The probabilities of Retirement are based on the 2014 CalPERS Experience Study for the period from 1997 to 2011.
Mortality	Pre-retirement mortality probability based on 2014 CalPERS 1997-2011 Experience Study covering CalPERS participants. Post-retirement mortality probability based on CalPERS Experience Study 2007-2011 covering participants in CalPERS.

Historical information is required only for measurement periods for which GASB 75 is applicable.

Future years' information will be displayed up to 10 years as information becomes available.

## **SUPPLEMENTARY SCHEDULES**

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Net Position**  
**Enterprise Funds**  
June 30, 2019

	<u>Capital Projects Activities</u>	<u>Internal Administration</u>	<u>Enterprise Activities</u>	<u>Totals</u>
<b>ASSETS</b>				
Current Assets:				
Cash and Cash Equivalents	\$ 1,585,913	\$ 3,251,166	\$ 40,659,772	\$ 45,496,851
Cash and Cash Equivalents - Restricted	950,955	-	-	950,955
Investments	-	-	12,374,662	12,374,662
Interest Receivable	16,241	23,457	225,719	265,417
Accounts Receivable	-	4	1,934,933	1,934,937
Accounts Receivable - Grants	871,389	332,850	412,803	1,617,042
Accounts Receivable - Other	80,940	-	-	80,940
Prepaid Items and Other Assets	-	119,773	112,649	232,422
Mitigation Credits	1,910,560	-	-	1,910,560
Due from Other Funds	-	308,167	-	308,167
	<u>5,415,998</u>	<u>4,035,417</u>	<u>55,720,538</u>	<u>65,171,953</u>
Non-current Assets:				
Capital Assets:				
Not Being Depreciated	379,169	451,543	320,008	1,150,720
Being Depreciated, Net of Accumulated Depreciation and Amortization	-	696,891	110,215,882	110,912,773
	<u>379,169</u>	<u>1,148,434</u>	<u>110,535,890</u>	<u>112,063,493</u>
Total Non-current Assets	<u>379,169</u>	<u>1,148,434</u>	<u>110,535,890</u>	<u>112,063,493</u>
Total Assets	<u>5,795,167</u>	<u>5,183,851</u>	<u>166,256,428</u>	<u>177,235,446</u>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>				
Deferred Amounts from Pension Plans	-	1,286,579	-	1,286,579
Deferred Amounts from OPEB Plan	-	195,679	-	195,679
Total Deferred Outflows of Resources	<u>\$ -</u>	<u>\$ 1,482,258</u>	<u>\$ -</u>	<u>\$ 1,482,258</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Net Position - Continued**  
**Enterprise Funds**  
June 30, 2019

	<u>Capital Projects Activities</u>	<u>Internal Administration</u>	<u>Enterprise Activities</u>	<u>Totals</u>
<b>LIABILITIES</b>				
Current Liabilities:				
Accounts Payable	\$ 1,041,155	\$ 58,488	\$ 2,602,886	\$ 3,702,529
Accrued Salaries and Wages	-	153,801	-	153,801
Accrued Interest Payable	109	-	287,504	287,613
Deposits	-	-	-	
Due to Other Funds	308,167	-	-	308,167
Long-term Liabilities - Due Within One Year:				
Compensated Absences	-	188,125	-	188,125
Loans Payable	-	-	2,160,539	2,160,539
<b>Total Current Liabilities</b>	<b>1,349,431</b>	<b>400,414</b>	<b>5,050,929</b>	<b>6,800,774</b>
Noncurrent Liabilities:				
Unearned Revenue	-	-	67,698,980	67,698,980
Long-term Liabilities - Due in More Than One Year:				
Compensated Absences	-	438,957	-	438,957
Loans Payable	-	-	27,686,942	27,686,942
Net Pension Liability	-	3,649,848	-	3,649,848
Net OPEB Liability	-	545,415	-	545,415
<b>Total Noncurrent Liabilities</b>	<b>-</b>	<b>4,634,220</b>	<b>95,385,922</b>	<b>100,020,142</b>
<b>Total Liabilities</b>	<b>1,349,431</b>	<b>5,034,634</b>	<b>100,436,851</b>	<b>106,820,916</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>				
Deferred Amount from Pension Plans	-	298,841	-	298,841
Deferred Amount from OPEB Plan	-	38,471	-	38,471
<b>Total Deferred Inflows of Resources</b>	<b>-</b>	<b>337,312</b>	<b>-</b>	<b>337,312</b>
<b>NET POSITION</b>				
Net Investment in Capital Assets	379,169	1,148,434	80,688,409	82,216,012
Restricted for:				
SRF Reach IVA & IVB Reserve Requirement	-	-	1,050,000	1,050,000
Mitigation	1,910,560	-	-	1,910,560
Unrestricted	2,156,007	145,729	(15,918,832)	(13,617,096)
<b>Total Net Position</b>	<b>\$ 4,445,736</b>	<b>\$ 1,294,163</b>	<b>\$ 65,819,577</b>	<b>\$ 71,559,476</b>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position**  
**Enterprise Funds**  
For the Year Ended June 30, 2019

	<u>Capital Projects Activities</u>	<u>Internal Administration</u>	<u>Enterprise Activities</u>	<u>Totals</u>
<b>OPERATING REVENUES</b>				
Wastewater Treatment and Disposal	\$ -	\$ -	\$ 12,334,346	\$ 12,334,346
Wastewater Treatment and Disposal - Capacity Rights	-	-	2,510,154	2,510,154
Other	204,388	1,424	-	205,812
<b>Total Operating Revenues</b>	<u>204,388</u>	<u>1,424</u>	<u>14,844,500</u>	<u>15,050,312</u>
<b>OPERATING EXPENSES</b>				
Wastewater Treatment and Disposal	-	-	6,545,654	6,545,654
General and Administrative and Overhead	-	1,326,428	-	1,326,428
Studies and Planning Costs	4,082,052	-	-	4,082,052
<b>Total Operating Expenses</b>	<u>4,082,052</u>	<u>1,326,428</u>	<u>6,545,654</u>	<u>11,954,134</u>
Operating Income (Loss) Before Depreciation and Amortization	(3,877,664)	(1,325,004)	8,298,846	3,096,178
Depreciation	-	(77,163)	(3,665,638)	(3,742,801)
Amortization	-	-	(1,400,918)	(1,400,918)
<b>Operating Income (Loss)</b>	<u>(3,877,664)</u>	<u>(1,402,167)</u>	<u>3,232,290</u>	<u>(2,047,541)</u>
<b>NONOPERATING REVENUES (EXPENSES)</b>				
Member Contributions	867,000	604,695	437,720	1,909,415
Intergovernmental	2,442,415	472,702	575,498	3,490,615
Investment Earnings	58,862	84,189	1,517,010	1,660,061
Interest Expense	-	-	(713,448)	(713,448)
Grant Program Expenses	-	-	(1,416,585)	(1,416,585)
<b>Total Nonoperating Revenues (Expenses)</b>	<u>3,368,277</u>	<u>1,161,586</u>	<u>400,195</u>	<u>4,930,058</u>
Income (Loss) Before Transfers	(509,387)	(240,581)	3,632,485	2,882,517
<b>TRANSFERS</b>	<u>854,611</u>	<u>-</u>	<u>(854,611)</u>	<u>-</u>
<b>Changes in Net Position</b>	345,224	(240,581)	2,777,874	2,882,517
Net Position - Beginning of Year	4,100,512	1,534,744	63,041,703	68,676,959
Net Position - End of Year	<u>\$ 4,445,736</u>	<u>\$ 1,294,163</u>	<u>\$ 65,819,577</u>	<u>\$ 71,559,476</u>

The accompanying notes are an integral part of this statement.



**Santa Ana Watershed Project Authority**  
**Combining Schedule of Net Position**  
**Capital Projects Activities**  
June 30, 2019

	<u>Brine Line Protection Project</u>	<u>Basin Planning</u>	<u>Imported Water Recharge Workgroup</u>
<b>ASSETS</b>			
Current Assets:			
Cash and Cash Equivalents	\$ -	\$ 210,792	\$ -
Cash and Cash Equivalents - Restricted	-	-	-
Interest Receivable	-	1,508	-
Accounts Receivable - Grants	-	-	-
Accounts Receivable - Other	-	-	-
Mitigation Credits	-	-	-
	<hr/>	<hr/>	<hr/>
Total Current Assets	-	212,300	-
	<hr/>	<hr/>	<hr/>
Noncurrent Assets:			
Capital Assets:			
Not Being Depreciated	-	-	-
	<hr/>	<hr/>	<hr/>
Total Noncurrent Assets	-	-	-
	<hr/>	<hr/>	<hr/>
Total Assets	-	212,300	-
	<hr/>	<hr/>	<hr/>
<b>LIABILITIES</b>			
Current Liabilities:			
Accounts Payable	45,070	3,011	-
Accrued Interest Payable	-	-	-
Due to Other Funds	-	-	-
	<hr/>	<hr/>	<hr/>
Total Liabilities	45,070	3,011	-
	<hr/>	<hr/>	<hr/>
<b>NET POSITION</b>			
Net Investment in Capital Assets	-	-	-
Restricted for Mitigation	-	-	-
Unrestricted	(45,070)	209,289	-
	<hr/>	<hr/>	<hr/>
Total Net Position	\$ (45,070)	\$ 209,289	\$ -
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

The accompanying notes are an integral part of this statement.

<u>Watershed Management Plan</u>	<u>Basin Monitoring Prg. Task Force</u>	<u>Santa Ana River Fish Conservation</u>	<u>MSAR TMDL Task Force</u>	<u>RWQ Monitoring Task Force</u>	<u>Arundo Mgmt. &amp; Habitat Restoration</u>
\$ 249,154	\$ 318,907	\$ 119,416	\$ 128,508	\$ 247,885	\$ -
-	-	-	-	-	950,955
1,557	2,218	751	851	1,717	5,806
-	-	-	-	-	-
51,701	-	-	-	-	-
-	-	-	-	-	1,910,560
<u>302,412</u>	<u>321,125</u>	<u>120,167</u>	<u>129,359</u>	<u>249,602</u>	<u>2,867,321</u>
-	-	-	-	-	-
-	-	-	-	-	-
<u>302,412</u>	<u>321,125</u>	<u>120,167</u>	<u>129,359</u>	<u>249,602</u>	<u>2,867,321</u>
23,705	50,255	-	2,520	94,108	-
-	-	-	-	-	-
-	-	-	-	-	-
<u>23,705</u>	<u>50,255</u>	<u>-</u>	<u>2,520</u>	<u>94,108</u>	<u>-</u>
-	-	-	-	-	-
-	-	-	-	-	1,910,560
<u>278,707</u>	<u>270,870</u>	<u>120,167</u>	<u>126,839</u>	<u>155,494</u>	<u>956,761</u>
<u>\$ 278,707</u>	<u>\$ 270,870</u>	<u>\$ 120,167</u>	<u>\$ 126,839</u>	<u>\$ 155,494</u>	<u>\$ 2,867,321</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Net Position - Continued**  
**Capital Projects Activities**  
June 30, 2019

	<u>Water Energy DAC Grant</u>	<u>Emerging Constituents Task Force</u>	<u>Lake Elsinore Management</u>
<b>ASSETS</b>			
Current Assets:			
Cash and Cash Equivalents	\$ 235,095	\$ 76,156	\$ -
Cash and Cash Equivalents - Restricted	-	-	-
Interest Receivable	1,333	500	-
Accounts Receivable - Grants	-	-	-
Accounts Receivable - Other	-	-	29,239
Mitigation Credits	-	-	-
	<u>236,428</u>	<u>76,656</u>	<u>29,239</u>
Total Current Assets			
Noncurrent Assets:			
Capital Assets:			
Not Being Depreciated	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>
Total Noncurrent Assets			
	<u>-</u>	<u>-</u>	<u>-</u>
Total Assets			
	<u>236,428</u>	<u>76,656</u>	<u>29,239</u>
<b>LIABILITIES</b>			
Current Liabilities:			
Accounts Payable	188,929	4,847	15
Accrued Interest Payable	-	-	109
Due to Other Funds	-	-	27,753
	<u>188,929</u>	<u>4,847</u>	<u>27,877</u>
Total Current Liabilities			
	<u>188,929</u>	<u>4,847</u>	<u>27,877</u>
<b>NET POSITION</b>			
Net Investment in Capital Assets	-	-	-
Restricted for Mitigation	-	-	-
Unrestricted	47,499	71,809	1,362
	<u>47,499</u>	<u>71,809</u>	<u>1,362</u>
Total Net Position			
	<u>\$ 47,499</u>	<u>\$ 71,809</u>	<u>\$ 1,362</u>

The accompanying notes are an integral part of this statement.

<u>Reach V Capital Projects</u>	<u>Reach IV-D Corrosion Repair</u>	<u>Prop 1 DACI Grant</u>	<u>Totals</u>
\$ -	\$ -	\$ -	\$ 1,585,913
-	-	-	950,955
-	-	-	16,241
-	-	871,389	871,389
-	-	-	80,940
-	-	-	1,910,560
-	-	871,389	5,415,998
-	379,169	-	379,169
-	379,169	-	379,169
-	379,169	871,389	5,795,167
-	37,734	590,961	1,041,155
-	-	-	109
-	-	280,414	308,167
-	37,734	871,375	1,349,431
-	379,169	-	379,169
-	-	-	1,910,560
-	(37,734)	14	2,156,007
<u>\$ -</u>	<u>\$ 341,435</u>	<u>\$ 14</u>	<u>\$ 4,445,736</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position**  
**Capital Projects Activities**  
For the Year Ended June 30, 2019

	<u>Brine Line Protection Project</u>	<u>Basin Planning</u>	<u>Imported Water Recharge Workgroup</u>
<b>OPERATING REVENUES</b>			
Other	\$ -	\$ -	\$ -
Total Operating Revenues	<u>-</u>	<u>-</u>	<u>-</u>
<b>OPERATING EXPENSES</b>			
Studies and Planning Costs	<u>236,528</u>	<u>296,768</u>	<u>71</u>
Total Operating Expenses	<u>236,528</u>	<u>296,768</u>	<u>71</u>
Operating Loss	<u>(236,528)</u>	<u>(296,768)</u>	<u>(71)</u>
<b>NONOPERATING REVENUES (EXPENSES)</b>			
Member Contributions	-	376,000	-
Intergovernmental	-	-	-
Investment Earnings	<u>-</u>	<u>6,907</u>	<u>-</u>
Total Nonoperating Revenues (Expenses)	<u>-</u>	<u>382,907</u>	<u>-</u>
Income (Loss) Before Transfers	(236,528)	86,139	(71)
<b>TRANSFERS</b>	<u>242,121</u>	<u>(17,936)</u>	<u>792</u>
Changes in Net Position	5,593	68,203	721
Net Position - Beginning of Year	<u>(50,663)</u>	<u>141,086</u>	<u>(721)</u>
Net Position - End of Year	<u>\$ (45,070)</u>	<u>\$ 209,289</u>	<u>\$ -</u>

The accompanying notes are an integral part of this statement.

<u>Watershed Management Plan</u>	<u>Basin Monitoring Prg. Task Force</u>	<u>Santa Ana River Fish Conservation</u>	<u>MSAR TMDL Task Force</u>	<u>RWQ Monitoring Task Force</u>	<u>Arundo Mgmt. &amp; Habitat Restoration</u>
\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -
10,000	-	-	-	-	-
485,679	260,404	121,246	58,527	380,164	14,867
485,679	260,404	121,246	58,527	380,164	14,867
(475,679)	(260,404)	(121,246)	(58,527)	(380,164)	(14,867)
425,000	-	56,000	-	-	-
203,819	274,806	19,000	252,326	244,463	-
5,552	8,668	2,706	1,948	6,410	19,729
634,371	283,474	77,706	254,274	250,873	19,729
158,692	23,070	(43,540)	195,747	(129,291)	4,862
17,144	-	-	(144,252)	144,252	-
175,836	23,070	(43,540)	51,495	14,961	4,862
102,871	247,800	163,707	75,344	140,533	2,862,459
<u>\$ 278,707</u>	<u>\$ 270,870</u>	<u>\$ 120,167</u>	<u>\$ 126,839</u>	<u>\$ 155,494</u>	<u>\$ 2,867,321</u>

The accompanying notes are an integral part of this statement.



**Santa Ana Watershed Project Authority**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position - Continued**  
**Capital Projects Activities**  
For the Year Ended June 30, 2019

	Water Energy DAC Grant	Emerging Constituents Task Force	Lake Elsinore Management
<b>OPERATING REVENUES</b>			
Other	\$ 800	\$ -	\$ 193,588
Total Operating Revenues	800	-	193,588
<b>OPERATING EXPENSES</b>			
Studies and Planning Costs	698,530	56,739	203,588
Total Operating Expenses	698,530	56,739	203,588
Operating Loss	(697,730)	(56,739)	(10,000)
<b>NONOPERATING REVENUES (EXPENSES)</b>			
Member Contributions	-	-	10,000
Intergovernmental	448,971	40,002	-
Investment Earnings	4,883	2,059	-
Total Nonoperating Revenues (Expenses)	453,854	42,061	10,000
Income (Loss) Before Transfers	(243,876)	(14,678)	-
<b>TRANSFERS</b>			
Changes in Net Position	(243,876)	(14,678)	-
Net Position - Beginning of Year	291,375	86,487	1,362
Net Position - End of Year	\$ 47,499	\$ 71,809	\$ 1,362

The accompanying notes are an integral part of this statement.

<u>Reach V Capital Projects</u>	<u>Reach IV-D Corrosion Repair</u>	<u>Prop 1 DACI Grant</u>	<u>Totals</u>
\$ -	\$ -	\$ -	\$ 204,388
-	-	-	204,388
309,918	-	959,023	4,082,052
309,918	-	959,023	4,082,052
(309,918)	-	(959,023)	(3,877,664)
-	-	-	867,000
-	-	959,028	2,442,415
-	-	-	58,862
-	-	959,028	3,368,277
(309,918)	-	5	(509,387)
372,389	240,101	-	854,611
62,471	240,101	5	345,224
(62,471)	101,334	9	4,100,512
\$ -	\$ 341,435	\$ 14	\$ 4,445,736

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Net Position**  
**Enterprise Activities**  
June 30, 2019

	Prop 84 Drought & Final Round	Brine Line Enterprise	Totals
<b>ASSETS</b>			
Current Assets:			
Cash and Cash Equivalents	\$ 423,980	\$ 40,235,792	\$ 40,659,772
Investments	-	12,374,662	12,374,662
Interest Receivable	-	225,719	225,719
Accounts Receivable	-	1,934,933	1,934,933
Accounts Receivable - Grants	412,803	-	412,803
Prepaid Items and Other Assets	-	112,649	112,649
Total Current Assets	<u>836,783</u>	<u>54,883,755</u>	<u>55,720,538</u>
Noncurrent Assets:			
Capital Assets:			
Not Being Depreciated	-	320,008	320,008
Being Depreciated, Net of Accumulated Depreciation and Amortization	-	110,215,882	110,215,882
Total Noncurrent Assets	<u>-</u>	<u>110,535,890</u>	<u>110,535,890</u>
Total Assets	<u>836,783</u>	<u>165,419,645</u>	<u>166,256,428</u>
<b>LIABILITIES</b>			
Current Liabilities:			
Accounts Payable	821,497	1,781,389	2,602,886
Accrued Interest Payable	-	287,504	287,504
Long-term Liabilities - Due Within One Year:			
Loans Payable	-	2,160,539	2,160,539
Total Current Liabilities	<u>821,497</u>	<u>4,229,432</u>	<u>5,050,929</u>
Noncurrent Liabilities:			
Unearned Revenue	-	67,698,980	67,698,980
Long-term Liabilities - Due in More Than One Year:			
Loans Payable	-	27,686,942	27,686,942
Total Noncurrent Liabilities	<u>-</u>	<u>95,385,922</u>	<u>95,385,922</u>
Total Liabilities	<u>821,497</u>	<u>99,615,354</u>	<u>100,436,851</u>
<b>NET POSITION</b>			
Net Investment in Capital Assets	-	80,688,409	80,688,409
Restricted for:			
SRF Reach IVA & IVB Reserve Requirement	-	1,050,000	1,050,000
Unrestricted	15,286	(15,934,118)	(15,918,832)
Total Net Position	<u>\$ 15,286</u>	<u>\$ 65,804,291</u>	<u>\$ 65,819,577</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position**  
**Enterprise Activities**  
For the Year Ended June 30, 2019

	Prop 84 Drought & Final Round	Brine Line Enterprise	Totals
<b>OPERATING REVENUES</b>			
Wastewater Treatment and Disposal	\$ -	\$ 12,334,346	\$ 12,334,346
Wastewater Treatment and Disposal - Capacity Rights	-	2,510,154	2,510,154
Total Operating Revenues	-	14,844,500	14,844,500
<b>OPERATING EXPENSES</b>			
Wastewater Treatment and Disposal	-	6,545,654	6,545,654
Total Operating Expenses	-	6,545,654	6,545,654
Operating Income (Loss) Before Depreciation and Amortization	-	8,298,846	8,298,846
Depreciation	-	(3,665,638)	(3,665,638)
Amortization	-	(1,400,918)	(1,400,918)
Operating Income (Loss)	-	3,232,290	3,232,290
<b>NONOPERATING REVENUES (EXPENSES)</b>			
Member Contributions	437,720	-	437,720
Intergovernmental	575,498	-	575,498
Investment Earnings	-	1,517,010	1,517,010
Investment Expense	-	(713,448)	(713,448)
Grant Program Expenses	(1,416,585)	-	(1,416,585)
Total Nonoperating Revenues (Expenses)	(403,367)	803,562	400,195
Income Before Transfers	(403,367)	4,035,852	3,632,485
<b>TRANSFERS</b>	-	(854,611)	(854,611)
Changes in Net Position	(403,367)	3,181,241	2,777,874
Net Position - Beginning of Year	418,653	62,623,050	63,041,703
Net Position - End of Year	<u>\$ 15,286</u>	<u>\$ 65,804,291</u>	<u>\$ 65,819,577</u>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Fiduciary Assets and Liabilities**  
**Agency Funds**  
June 30, 2019

	Legal Defense Fund	Integrated Regional Management Program Prop 84 Capital Projects	Totals
<b>ASSETS</b>			
Current Assets:			
Cash and Cash Equivalents	\$ 458,596	\$ -	\$ 458,596
Accounts Receivable - Grants	-	25,209,477	25,209,477
<b>Total Assets</b>	<b>\$ 458,596</b>	<b>\$ 25,209,477</b>	<b>\$ 25,668,073</b>
<b>LIABILITIES</b>			
Current Liabilities:			
Accounts Payable	\$ -	\$ 25,209,477	\$ 25,209,477
<b>Total Current Liabilities</b>	<b>-</b>	<b>25,209,477</b>	<b>25,209,477</b>
Noncurrent Liabilities:			
Deposits - Legal Defense	458,596	-	458,596
<b>Total Noncurrent Liabilities</b>	<b>458,596</b>	<b>-</b>	<b>458,596</b>
<b>Total Liabilities</b>	<b>\$ 458,596</b>	<b>\$ 25,209,477</b>	<b>\$ 25,668,073</b>

The accompanying notes are an integral part of this statement.

**Santa Ana Watershed Project Authority**  
**Combining Schedule of Changes in Fiduciary Assets and Liabilities**  
**Agency Funds**  
June 30, 2019

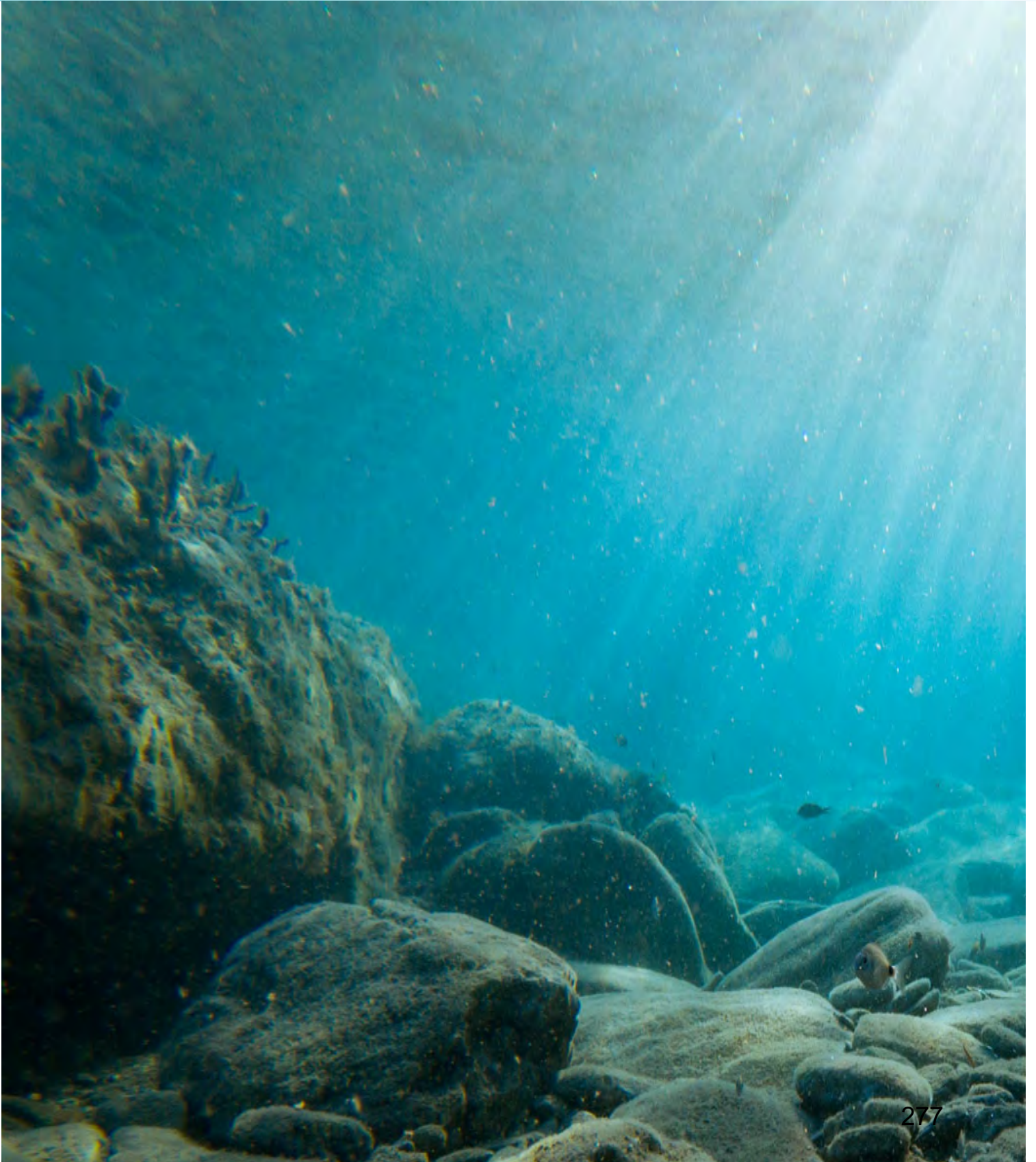
	Balance July 1, 2018	Additions	Deletions	Balance June 30, 2019
<b>LEGAL DEFENSE FUND</b>				
Current Assets:				
Cash and Cash Equivalents	\$ 451,276	\$ 7,320	\$ -	\$ 458,596
Total Assets	<u>\$ 451,276</u>	<u>\$ 7,320</u>	<u>\$ -</u>	<u>\$ 458,596</u>
Noncurrent Liabilities:				
Deposits - Legal Defense	\$ 451,276	\$ 7,320	\$ -	\$ 458,596
Total Liabilities	<u>\$ 451,276</u>	<u>\$ 7,320</u>	<u>\$ -</u>	<u>\$ 458,596</u>
<b>INTEGRATED REGIONAL WATER MANAGEMENT PROGRAM - PROP 84 CAPITAL PROJECTS</b>				
Current Assets:				
Cash and Cash Equivalents	\$ 14,649	\$ 1,694,443	\$ 1,709,092	\$ -
Account Receivable - Grants	3,405,211	27,367,247	5,562,981	25,209,477
Total Assets	<u>\$ 3,419,860</u>	<u>\$ 29,061,690</u>	<u>\$ 7,272,073</u>	<u>\$ 25,209,477</u>
Current Liabilities:				
Accounts Payable	\$ 3,419,860	\$ (5,970,811)	\$ (27,760,428)	\$ 25,209,477
Total Liabilities	<u>\$ 3,419,860</u>	<u>\$ (5,970,811)</u>	<u>\$ (27,760,428)</u>	<u>\$ 25,209,477</u>
<b>TOTAL AGENCY FUNDS</b>				
Current Assets:				
Cash and Cash Equivalents	\$ 465,925	\$ 1,701,763	\$ 1,709,092	\$ 458,596
Accounts Receivable - Grants	3,405,211	27,367,247	5,562,981	25,209,477
Total Assets	<u>\$ 3,871,136</u>	<u>\$ 29,069,010</u>	<u>\$ 7,272,073</u>	<u>\$ 25,668,073</u>
Current Liabilities:				
Accounts Payable	\$ 3,419,860	\$ (5,970,811)	\$ (27,760,428)	\$ 25,209,477
Noncurrent Liabilities:				
Deposits - Legal Defense	451,276	7,320	-	458,596
Total Liabilities	<u>\$ 3,871,136</u>	<u>\$ (5,963,491)</u>	<u>\$ (27,760,428)</u>	<u>\$ 25,668,073</u>

The accompanying notes are an integral part of this statement.



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# Statistical Section



## Statistical Section

This part of the Authority's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Authority's overall financial health.

### **Contents**

#### **Financial Trends**

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time.

#### **Revenue Capacity**

These schedules contain information to help the reader assess the factors affecting the Authority's ability to generate revenues.

#### **Debt Capacity**

These schedules present information to help the reader assess the affordability of the Authority's current levels of outstanding debt and the Authority's ability to issue additional debt in the future.

#### **Demographic and Economic Information**

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place and to help make comparisons over time and with other agencies.

#### **Operating Information**

These schedules contain service and infrastructure data to help the reader understand how the information in the Authority's financial report relates to the service the Authority provides.

**Table I – Net Position by Component  
Last Ten Fiscal Years**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>Net Investment in Capital Assets</b>	\$82,216,012	\$85,226,499	\$90,622,870	\$84,798,833	\$82,709,425	\$80,456,568	\$81,274,020	\$80,560,654	\$81,597,589	\$81,698,370
<b>Restricted</b>	2,960,560	2,960,560	3,921,155	3,923,403	3,969,074	4,167,861	4,232,102	4,263,626	3,347,218	3,597,747
<b>Unrestricted</b>	(13,617,096)	(19,510,100)	(24,155,787)	(21,554,491)	(21,643,941)	(20,734,190)	(17,845,678)	(17,765,116)	(19,325,941)	(19,535,270)
<b>Total Net Position</b>	\$71,559,476	\$68,676,959	\$70,388,238	\$67,167,745	\$65,034,558	\$63,890,239	\$67,660,444	\$67,059,164	\$65,618,866	\$65,760,847

*Source: Santa Ana Watershed Project Authority*

**Table II – Changes in Net Position  
Last Ten Fiscal Years**

Fiscal Year	Operating Revenue (1)	Operating Expense (2)	Operating Income/(Loss)	Total Non Operating Revenue/(Expense)	Income/(Loss) Before Capital Contributions	Special Items (3)	Change in Net Position
2019	\$15,050,312	\$17,097,853	(\$2,047,541)	\$4,930,058	\$2,882,517	\$0	\$2,882,517
2018	13,665,500	19,212,739	(5,547,239)	4,763,383	(783,856)	(927,423)	(1,711,279)
2017	13,997,461	14,881,490	(884,029)	4,104,522	3,220,493	0	3,220,493
2016	12,049,027	12,762,714	(713,687)	2,846,874	2,133,187	0	2,133,187
2015	11,731,196	13,057,424	(1,326,228)	2,470,547	1,144,319	0	1,144,319
2014	11,243,430	14,527,075	(3,283,645)	2,219,169	(1,064,476)	(2,705,729)	(3,770,205)
2013	11,900,861	14,312,673	(2,411,812)	3,013,092	601,280	0	601,280
2012	12,739,489	14,859,529	(2,120,040)	3,394,668	1,274,628	0	1,274,628
2011	13,743,782	16,662,206	(2,918,424)	2,776,443	(141,981)	0	(141,981)
2010	15,189,120	16,709,227	(1,520,107)	5,119,045	3,598,938	0	3,598,938

(1) See Table III for details of revenues.

(2) See Table IV for details of expenses.

(3) Reduction of net position from implementation of GASB 68 and GASB 75.

Source: Santa Ana Watershed Project Authority

**Table III – Revenues by Source  
(Excluding Capital Contributions and Special Items)  
Last Ten Fiscal Years**

Fiscal Year	Operating Revenues					NonOperating Revenues						
	WWT & Disposal	WWT & Disposal Capacity Rights	Program Admin	Other Operating	Total Operating Revenue	Member Contributions	Inter Governmental	Investment Income	Gain on Disposal of Asset	Other Non Operating Income	Total Non Operating Income	Combined Revenue
2019	\$12,334,346	\$2,510,154	\$0	\$205,812	\$15,050,312	\$1,909,415	\$3,490,615	\$1,660,061	\$0	\$0	\$7,060,091	\$22,110,403
2018	10,935,848	2,510,154	0	219,498	13,665,500	2,303,325	3,413,408	326,487	0	0	6,043,220	19,708,720
2017	11,273,024	2,519,533	0	204,904	13,997,461	2,307,624	4,795,478	193,157	0	0	7,296,259	21,293,720
2016	9,323,505	2,519,748	0	205,774	12,049,027	1,730,491	2,765,270	567,709	1,123	0	5,064,593	17,113,620
2015	8,958,914	2,510,154	0	262,128	11,731,196	1,806,745	1,257,581	432,179	1,123	0	3,497,628	15,228,824
2014	8,575,085	2,510,154	0	158,191	11,243,430	1,771,587	843,283	457,867	13,021	0	3,085,758	14,329,188
2013	9,170,287	2,510,154	0	220,420	11,900,861	1,829,845	1,432,832	343,591	0	0	3,606,268	15,507,129
2012	10,053,123	2,481,109	0	205,257	12,739,489	1,697,194	2,563,956	1,058,984	2,223	0	5,322,357	18,061,846
2011	10,989,257	2,467,971	268,253	18,301	13,743,782	1,646,170	1,542,723	1,178,639	0	42,000	4,409,532	18,153,314
2010	12,391,354	2,458,418	256,486	82,862	15,189,120	1,499,558	2,514,206	2,007,183	1,616	0	6,022,563	21,211,683

Source: Santa Ana Watershed Project Authority

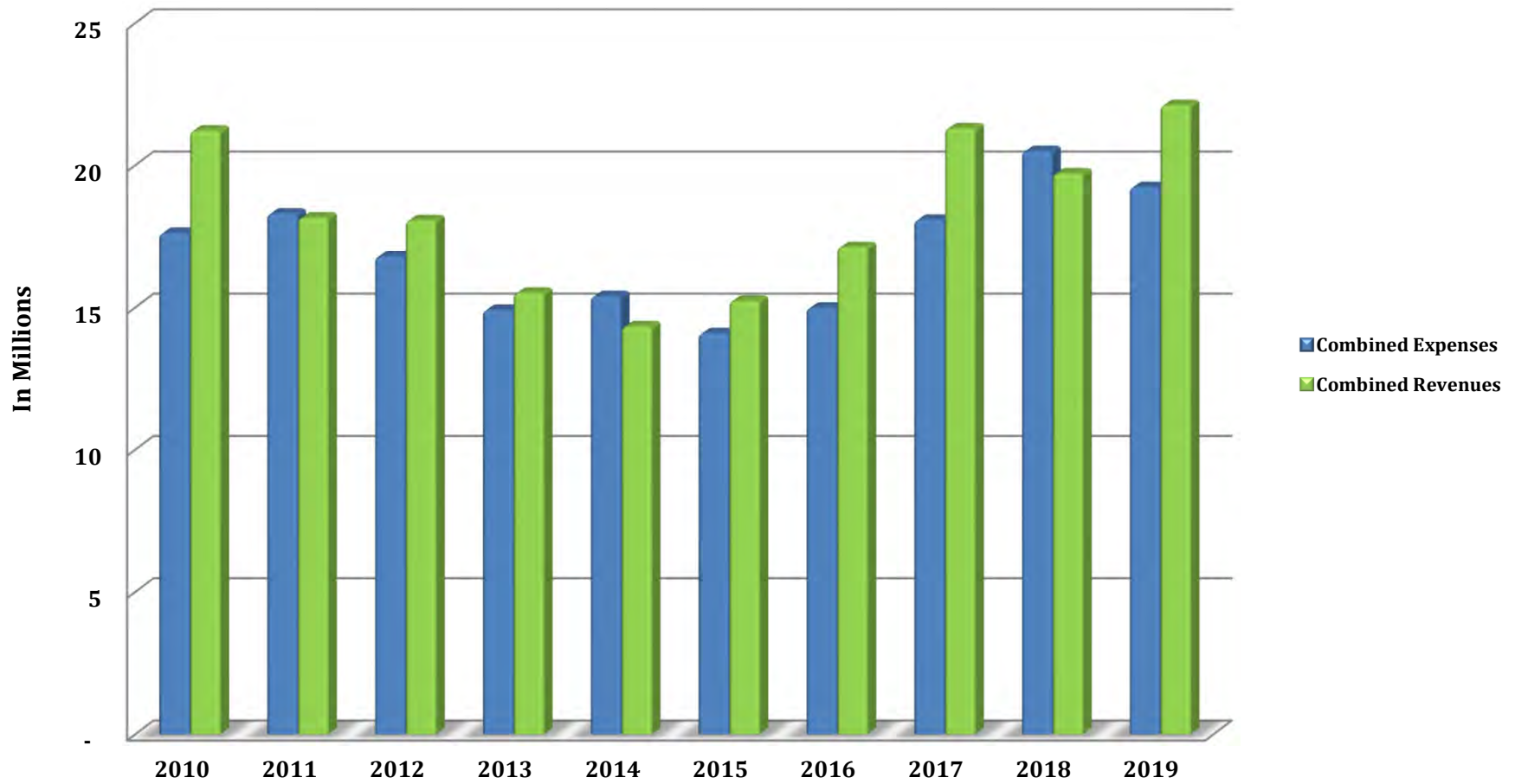


**Table IV – Expenses by Function  
Last Ten Fiscal Years**

Operating Expenses								
Fiscal Year	WWT & Disposal	General & Admin	Studies & Planning Costs	Depreciation	Amortization of WWT Rights	Total Operating Expenses	Total Non Operating Expenses	Combined Expenses
2019	\$6,545,654	\$1,326,428	\$4,082,052	\$3,742,801	\$1,400,918	\$17,097,853	\$2,130,033	\$19,227,886
2018	5,841,074	1,429,043	7,186,572	3,355,132	1,400,918	19,212,739	1,279,837	20,492,576
2017	6,421,150	591,686	3,293,487	3,174,253	1,400,914	14,881,490	3,191,737	18,073,227
2016	6,434,652	270,613	1,485,977	3,170,554	1,400,918	12,762,714	2,217,719	14,980,433
2015	6,222,868	678,992	1,604,703	3,149,943	1,400,918	13,057,424	1,027,081	14,084,505
2014	6,864,435	487,308	2,636,556	3,137,858	1,400,918	14,527,075	866,589	15,393,664
2013	6,686,530	588,883	2,501,681	3,134,661	1,400,918	14,312,673	593,176	14,905,849
2012	7,356,155	1,125,143	2,244,658	2,732,655	1,400,918	14,859,529	1,927,689	16,787,218
2011	7,491,739	838,929	4,287,122	2,643,498	1,400,918	16,662,206	1,633,089	18,295,295
2010	9,803,154	850,538	1,998,300	2,656,317	1,400,918	16,709,227	903,518	17,612,745

*Source: Santa Ana Watershed Project Authority*

Chart I - Combined Expenses and Revenues  
Last Ten Fiscal Years



**Table V - Wastewater Discharge by Type  
Last Ten Fiscal Years**

Discharge Type	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Industrial *	146.2297	158.8551	182.3629	176.0173	149.1266	149.7733	153.7463	235.2575	233.8056	186.6322
Domestic *	365.5703	594.2034	605.6648	539.1186	686.9780	817.2502	854.2526	1,027.1307	1,015.4773	908.3414
Power Plant *	182.3315	151.9927	211.0939	203.7717	255.9079	238.1875	285.4555	362.7061	346.2390	285.0138
Water Supply/Desalter *	2,977.7296	2,838.0161	2,832,6086	2,789.4969	2,894.5452	2,698.2170	2,728.7335	2,657.6589	2,702.2033	2,877.3705
Temp/Emergency *	13.8265	2.2784	12.9104	4.7210	6.9285	10.6266	7.9366	5.0106	20.1418	18.1715
Truck Discharge *	32.1043	36.2431	29.9249	34.3066	27.2869	23.3557	30.6147	42.3407	43.2777	53.3668
<b>Total</b>	<b>3,717.7919</b>	<b>3,781.5888</b>	<b>3,874.5655</b>	<b>3,747.4321</b>	<b>4,020.7731</b>	<b>3,937.4103</b>	<b>4,060.7392</b>	<b>4,330.1045</b>	<b>4,361.1447</b>	<b>4,328.8962</b>

\* MGD = million gallons per day

Source: Santa Ana Watershed Project Authority

**Table VI - Summary of Wastewater Treatment Rates  
Last Ten Fiscal Years**

Fiscal Year	Flow per MGD*	BOD Charge (1,000 lbs)	TSS Charge (1,000 lbs)	Minimum Flow Charge	Monthly Fixed Pipeline Charge	Monthly Fixed Treatment Charge	Truck - Non-Brine (per gallon)	Truck - Tier 1 (per gallon)	Truck - Tier 2 (per gallon)	Truck - Tier 3 (per gallon)	Truck - Brine (per gallon)
2019	\$946.00	\$307.00	\$429.00	\$150.00	\$6,217.00	\$12,607.00	(a)	n/a	n/a	n/a	\$0.015
2018	901.00	307.00	429.00	150.00	5,921.00	12,007.00	(b)	0.017	0.035	(c)	0.012
2017	858.00	307.00	429.00	150.00	5,639.00	11,433.00	(b)	0.016	0.033	(d)	0.011
2016	817.00	301.00	420.00	150.00	5,370.00	10,888.00	(b)	0.015	0.032	(e)	0.010
2015	777.00	295.00	411.00	150.00	5,114.00	10,369.00	(b)	0.015	0.031	(f)	0.010
2014	736.00	266.00	395.00	150.00	4,870.00	9,875.00	(b)	0.015	0.031	(g)	0.010
2013	794.00	253.00	376.00	150.00	4,083.00	8,749.00	(b)	0.015	0.030	(h)	0.010
2012	830.00	225.00	335.00	150.00	3,430.00	7,868.00	(b)	0.014	0.029	(i)	0.010
2011	891.00	312.00	462.00	150.00	2,710.00	6,775.00	(b)	0.015	0.032	(j)	0.010
2010	850.00	283.00	420.00	150.00	2,581.00	6,452.00	0.029	0.000	0.000	0.000	0.010

\* MGD – million gallons per day

- (a) FYE 2019 - Non-brine truck rate dischargers will be charged based on actual BOD and TSS concentrations over 100 mg/l using the following components: \$0.015 per gallon, \$0.75/pound of BOD, and \$0.716/pound of TSS.
- (b) Non-brine truck rate was divided into three tiers based on BOD and TSS Concentrations. Tier 1 = 100 to 999 mg/l, Tier 2 = 1,000 to 2,499 mg/l, and Tier 3 = 2,500 mg/l and higher.
- (c) FYE 2018 – Tier 3 dischargers will be charged based on actual concentrations of the waste discharged using the following components: \$0.0029/gallon, \$0.729/pound of BOD, and \$0.695/pound of TSS.
- (d) FYE 2017 – Tier 3 dischargers will be charged based on actual concentrations of the waste discharged using the following components: \$0.0027/gallon, \$0.695/pound of BOD, and \$0.662/pound of TSS.
- (e) FYE 2016 – Tier 3 dischargers will be charged based on actual concentrations of the waste discharged using the following components: \$0.0026/gallon, \$0.694/pound of BOD, and \$0.661/pound of TSS.
- (f) FYE 2015 – Tier 3 dischargers will be charged based on actual concentrations of the waste discharged using the following components: \$0.0026/gallon, \$0.687/pound of BOD, and \$0.652/pound of TSS.
- (g) FYE 2014 – Tier 3 dischargers will be charged based on actual concentrations of the waste discharged using the following components: \$0.0026/gallon, \$0.658/pound of BOD, and \$0.636/pound of TSS.
- (h) FYE 2013 - Tier 3 dischargers will be charged based on the actual concentration of the waste discharged using the following components: \$0.0026/gallon, \$0.645/pound of BOD, and \$0.617/pound of TSS.
- (i) FYE 2012 - Tier 3 dischargers will be charged based on the actual concentration of the waste discharged using the following components: \$0.0026/gallon, \$0.617/pound of BOD, and \$0.576/pound of TSS.
- (j) FYE 2011 - Tier 3 dischargers will be charged based on the actual concentration of the waste discharged using the following components: \$0.0025/gallon, \$0.672/pound of BOD, and \$0.683/pound of TSS.

Source: Santa Ana Watershed Project Authority

Table VII - Principal Sewer Customers  
Current Fiscal Year and Nine Years Prior

Fiscal Year 2018-19

Customer Name	Discharge in MG*	Percentage of Total Discharge
Chino Desalter I	772.1617	20.77%
Temescal Desalter	585.1935	15.74%
Perris Desalter	489.9438	13.18%
Chino Desalter II	328.8607	8.85%
Arlington Desalter	310.8377	8.36%
Menifee Desalter	309.0879	8.31%
JCSD - Etiwanda **	207.8593	5.59%
Mountainview Power Plant	149.8770	4.03%
Yucaipa Valley Water District	138.1244	3.72%
Mission Linen	83.5336	2.25%
<b>Total Principal Customers</b>	<b>3,375.4796</b>	<b>90.80%</b>
<b>Other Customers</b>	<b>342.3123</b>	<b>9.20%</b>
<b>Total Discharge</b>	<b>3,717.7919</b>	<b>100.00%</b>

Fiscal Year 2009-10

Customer Name	Discharge in MG*	Percentage of Total Discharge
Chino Desalter I	746.2904	17.24%
Temescal Desalter	606.6891	14.01%
Chino Desalter II	484.1867	11.18%
Arlington Desalter	415.8737	9.61%
Menifee Desalter	334.3397	7.72%
JCSD - Etiwanda **	311.6991	7.20%
Perris Desalter	276.7889	6.39%
California Rehabilitation Center	229.7053	5.31%
Inland Empire Energy Center	156.0821	3.61%
Chino Institute for Women	133.7122	3.09
<b>Total Principal Customers</b>	<b>3,695.3672</b>	<b>85.37%</b>
<b>Other Customers</b>	<b>633.529</b>	<b>14.63%</b>
<b>Total Discharge</b>	<b>4,328.8962</b>	<b>100.00%</b>

\* MG - million gallons

\*\* Jurupa Community Services District (JCSD) connections.

Source: Santa Ana Watershed Project Authority

**Table VIII - Debt Coverage Ratio  
Last Ten Fiscal Years**

Fiscal Year	Debt Service Requirements				Debt to Expense Ratio
	Combined Expenses	SRF Loans *	Member Loans **	Total Debt	
2019	\$19,227,886	\$2,835,753	\$-	\$2,835,753	14.7%
2018	20,492,576	2,704,270	356,250	3,060,520	14.9%
2017	18,073,226	2,704,475	356,250	3,060,725	16.9%
2016	14,980,433	3,618,242	356,250	3,974,492	26.5%
2015	14,084,505	4,152,560	356,250	4,508,810	32.0%
2014	15,393,664	4,222,260	356,250	4,578,510	29.7%
2013	14,905,849	4,179,190	356,250	4,535,440	30.4%
2012	16,787,218	4,179,191	356,250	4,535,441	27.0%
2011	18,295,295	4,179,191	356,250	4,535,441	24.8%
2010	17,612,745	4,179,192	356,250	4,535,442	25.8%

The Authority does not receive property tax. All revenues are collected through rates and fees or agency contributions.

The Authority does not have any outstanding Revenue Bonds. The only debt of the Authority is SRF and member agency loans.

Treasury strips were purchased to fully cover all future debt service payments. The Treasury strips mature as debt service payments come due. No operating revenues are used to make debt service payments.

*Notes:*

\* *State Revolving Fund (SRF) Loans for construction of the Brine Line.*

\*\* *Repurchase of Pipeline Capacity from Orange County Water District.*

*Source: Santa Ana Watershed Project Authority*

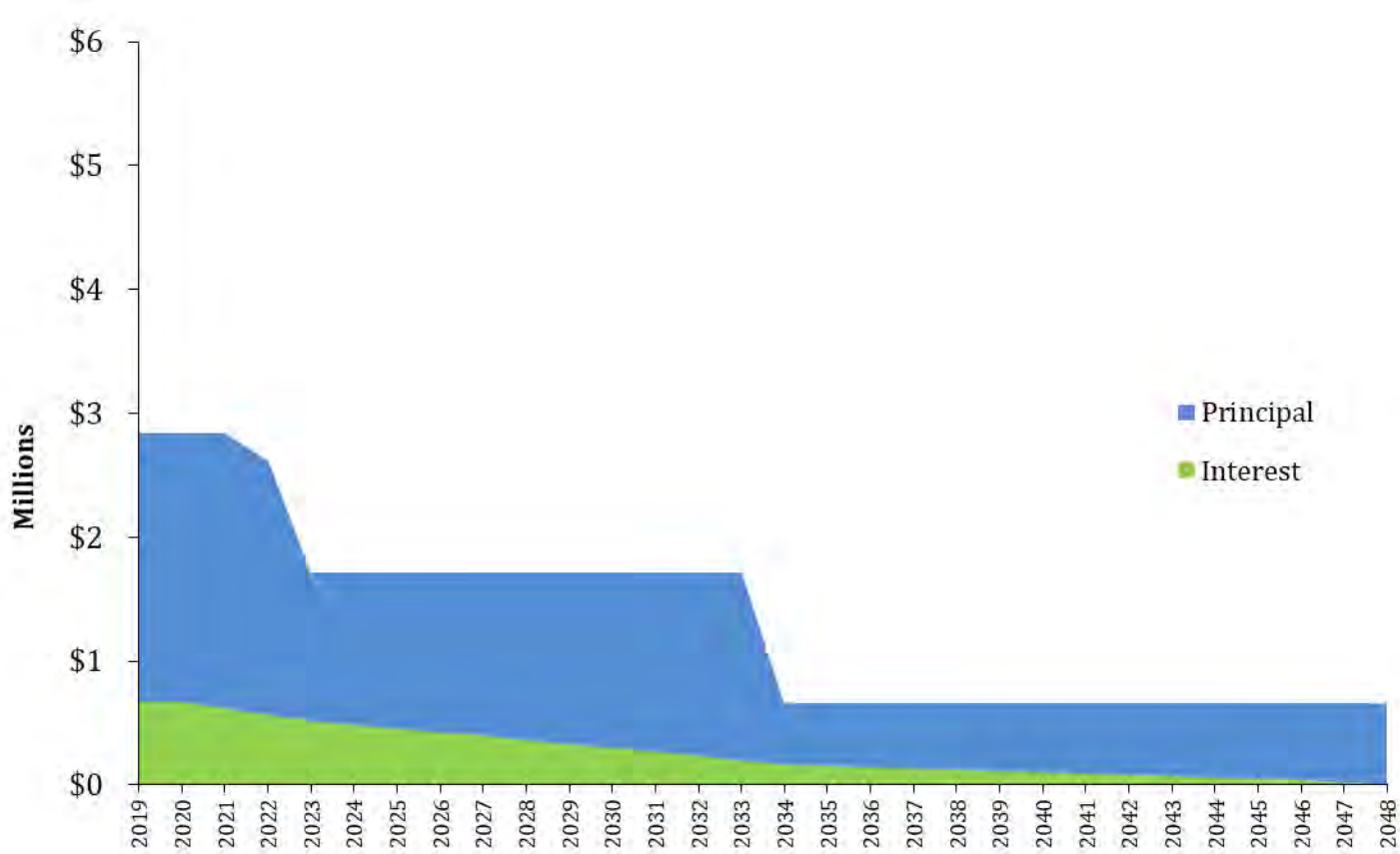


**Table IX - Debt Service Payment Schedule  
Fiscal Years 2019 - 2048**

<b>Fiscal Year</b>	<b>Interest</b>	<b>Principal</b>	<b>Total Payment</b>	<b>Remaining Principal</b>
2019	\$673,477	\$2,162,276	\$2,835,753	\$29,847,480
2020	675,214	2,160,539	2,835,753	27,686,941
2021	620,782	2,214,971	2,835,753	25,471,969
2022	564,959	2,043,480	2,608,439	23,428,489
2023	514,301	1,195,175	1,709,476	22,233,314
2024	486,080	1,223,395	1,709,476	21,009,919
2025	457,181	1,252,295	1,709,476	19,757,624
2026	427,585	1,281,891	1,709,476	18,475,734
2027	397,276	1,312,199	1,709,476	17,163,534
2028	366,237	1,343,239	1,709,476	15,820,295
2029	334,449	1,375,027	1,709,476	14,445,268
2030	301,894	1,407,582	1,709,476	13,037,686
2031	268,553	1,440,923	1,709,476	11,596,763
2032	234,407	1,475,068	1,709,476	10,121,695
2033	199,437	1,510,039	1,709,476	8,611,656
2034	163,621	501,581	665,203	8,110,075
2035	154,091	511,111	665,203	7,598,964
2036	144,380	520,822	665,203	7,078,142
2037	134,485	530,718	665,203	6,547,424
2038	124,401	540,801	665,203	6,006,622
2039	114,126	551,077	665,203	5,455,546
2040	103,655	561,547	665,203	4,893,999
2041	92,986	572,217	665,203	4,321,782
2042	82,114	583,089	665,203	3,738,693
2043	71,035	594,167	665,203	3,144,526
2044	59,746	605,457	665,203	2,539,069
2045	48,242	616,960	665,203	1,922,109
2046	36,520	628,682	665,203	1,293,427
2047	24,575	640,627	665,203	652,799
2048	12,403	652,799	665,203	0

*Source: Santa Ana Watershed Project Authority*

## Chart II – Debt Service Payment Schedule Fiscal Years 2019 - 2048

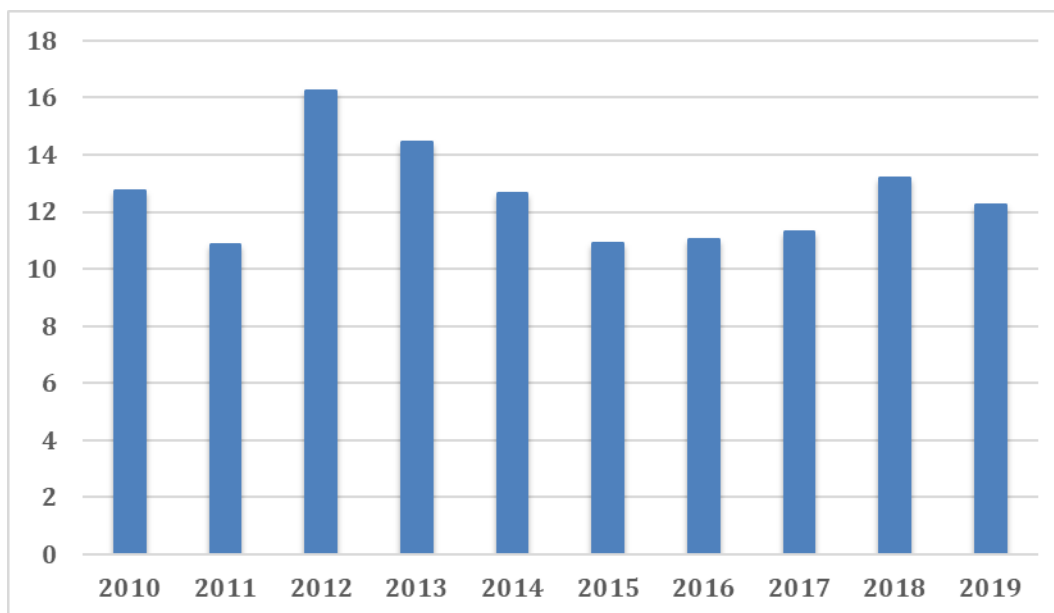


Source: Santa Ana Watershed Project Authority

Table X – Ratio of Outstanding Debt by Type  
Last Yen Fiscal Years

Fiscal Year	Population Estimate	SRF Loans	Member Loans	Total Debt	Per Capita (1)
2019	2,440,124	\$29,847,481	\$-	\$29,847,481	\$12.23
2018	2,415,955	31,849,863	-	31,849,863	13.18
2017	2,384,783	26,087,852	855,267	26,943,119	11.30
2016	2,347,828	24,184,502	1,677,567	25,862,069	11.02
2015	2,308,441	22,740,274	2,468,160	25,208,434	10.92
2014	2,279,967	25,629,872	3,228,436	28,858,308	12.66
2013	2,255,059	28,574,379	3,959,716	32,534,095	14.43
2012	2,227,577	31,494,836	4,663,261	36,158,097	16.23
2011	2,217,778	18,766,947	5,340,266	24,107,213	10.87
2010	2,179,692	21,801,931	5,991,877	27,793,808	12.75

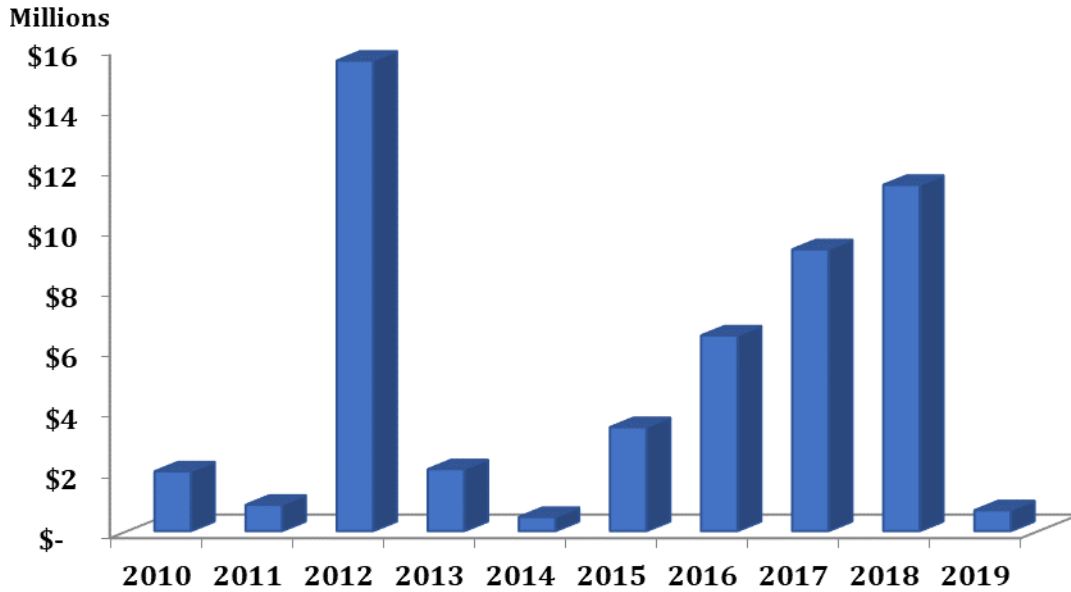
Chart III – Outstanding Debt Per Capita  
Last Yen Fiscal Years



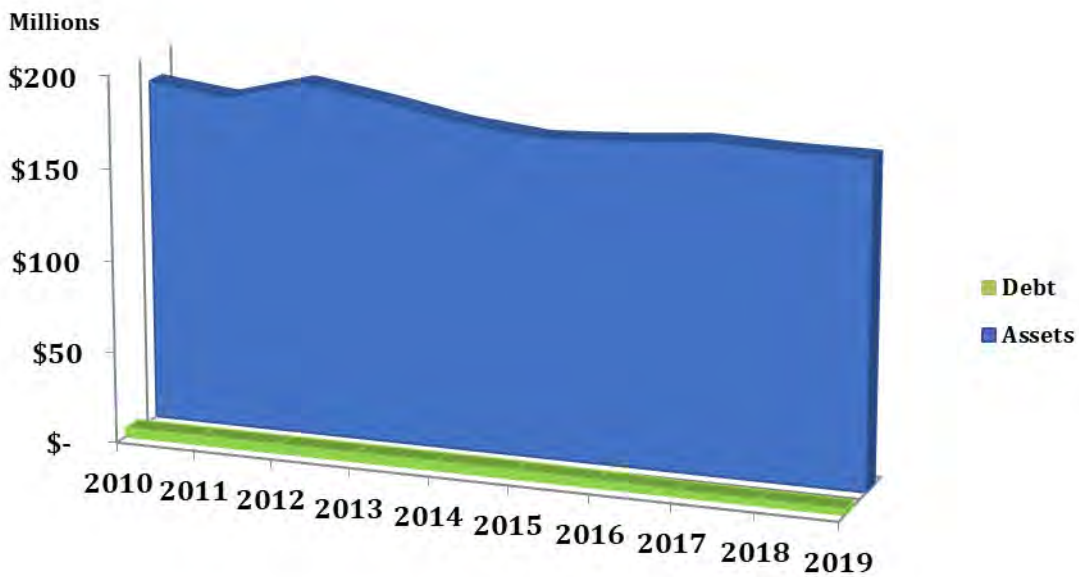
(1) Calculated by dividing the total outstanding debt by the estimated population for Riverside County.

Source: Santa Ana Watershed Project Authority

### Chart IV – Capital Spending Last Ten Fiscal Years



### Chart V – Total Debt to Assets Last Ten Fiscal Years



Source: Santa Ana Watershed Project Authority

**Table XI - Demographic and Economic Statistics  
Last Ten Calendar Years**

Fiscal Year	Population County (3)	Personal Income (1)	County Per Capita Personal Income	Unemployment Rate (June) <sup>4</sup>	
				County	State
2019	2,440,124	\$5,693,835,260	\$36,734 (2)	3.6%	4.1%
2018	2,415,955	5,547,654,496	36,149 (5)	4.8	4.5
2017	2,384,783	5,363,874,000	35,286 (5)	5.7	4.7
2016	2,347,828	5,203,504,800	34,506 (5)	6.7	5.4
2015	2,308,441	5,122,926,900	34,359 (5)	6.6	6.3
2014	2,279,967	4,994,193,600	33,836 (5)	8.4	7.4
2013	2,255,059	4,868,571,400	33,278 (5)	9.2	8.5
2012	2,227,577	4,602,590,000	31,742 (5)	11.8	10.7
2011	2,217,778	4,294,524,500	29,927 (5)	13.3	11.8
2010	2,179,692	4,134,913,000	29,222 (5)	14.5	12.2

(1) Projected personal income based on Riverside County Per Capital Personal Income.

(2) Projected based on a 10 year average.

(3) Source: California, State Department of Finance.

(4) Source: CA Employment Development Department and US Dept. of Labor. County data as of June 2019.

(5) Source: County of Riverside Comprehensive Annual Financial Report.

**Table XII - Principal Employers  
Last Ten Fiscal Years**

June 30, 2018 (1)			June 30, 2009 (2)		
Employer	No of Employees	% of Total Labor Force	Employer	No of Employees	% of Total Labor Force
County of Riverside	21,215	2.0%	County of Riverside	18,456	2.0%
March Air Reserve Base	9,000	0.9%	March Air Reserve Base	8,600	1.0%
U.C. Riverside	8,735	0.8%	U.C. Riverside	7,321	0.8%
Kaiser Permanente	5,592	0.5%	Stater Bros. Markets	6,900	0.7%
Corona-Norco School District	4,989	0.5%	Wal-Mart	6,550	0.7%
Pechanga Resort & Casino	4,683	0.4%	Riverside Unified School District	5,099	0.6%
Riverside Unified School Dist.	4,335	0.4%	Abbot Vascular	4,500	0.5%
Hemet Unified School District	4,302	0.4%	Pechanga Resort & Casino	4,000	0.4%
Eisenhower Medical Center	3,743	0.4%	Kaiser Permanente	3,600	0.4%
<b>Total</b>	<b>66,594</b>	<b>6.3%</b>	<b>Total</b>	<b>65,026</b>	<b>7.1%</b>

Sources: (1) County of Riverside Economic Development Agency. Data presented is the most current available at the time of preparation of this report.

(2) The Business Press 2009 Book of Lists

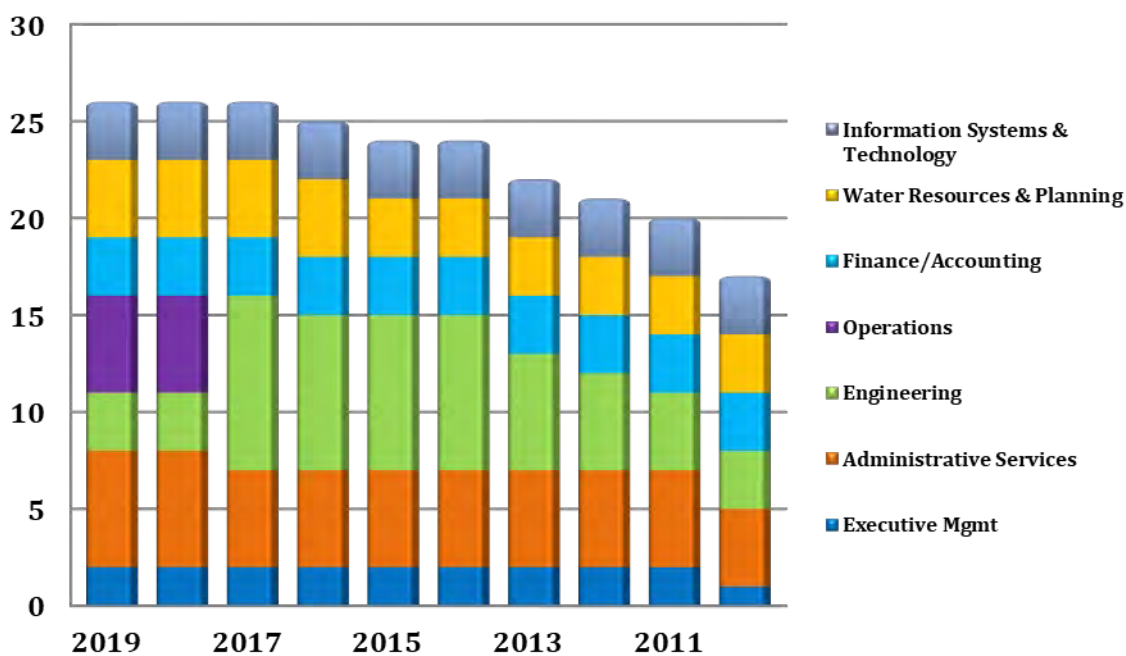
### Table XIII - Number of Employees Last Ten Fiscal Years

Department	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Executive Management	2	2	2	2	2	2	2	2	2	1
Administrative Services	6	6	5	5	5	5	5	5	5	4
Engineering	3	3	9	8	8	8	6	5	4	3
Operations *	5	5	0	0	0	0	0	0	0	0
Finance/Accounting	3	3	3	3	3	3	3	3	3	3
Water Resources & Planning	4	4	4	4	3	3	3	3	3	3
Information Systems & Technology	3	3	3	3	3	3	3	3	3	3
<b>Total</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>25</b>	<b>24</b>	<b>24</b>	<b>22</b>	<b>21</b>	<b>20</b>	<b>17</b>

\*Engineering and Operations Department was split in FYE 2018

Notes: All managers are included with their divisions. Temporary and Interns are not included.

### Chart VI – Total Employees Last Ten Fiscal Years



Source: Santa Ana Watershed Project Authority

**Table XIV - Operating and Capital Indicators  
Last Ten Fiscal Years**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>Total Meter Connections</b>	40	41	51	48	48	50	50	50	45	46
<b>Number of Air Release Valves</b>	63	63	63	65	65	65	65	65	62	62
<b>Miles of Sewer Lines</b>	73	73	73	73	73	73	73	73	73	73
<b>Total Flows for Fiscal Years (MG)</b>	3,717.7919	3,774.5718	3,874.5655	3,747.4321	4,020.7731	3,937.4103	4,060.7392	4,330.1045	4,361.1447	4,328.8962
<b>Owned Treatment Capacity (MGs)</b>	17	17	17	17	17	17	17	17	17	17

**Miscellaneous Statistics**

Year of Formation: 1972  
 Governing Body: 5-Member Board of Commissioners (1 from each Member Agency elected Board of Directors)  
 Form of Government: Joint Powers Authority  
 Staff: 26 full-time equivalent employees  
 Authority: Section 6500 et. Seq. Government Code  
 Service: Waste Disposal, Watershed Planning, Task Force Facilitation  
 Service Area (square miles): 2,840  
 Total Population Served: Approximately 6 million

*Source: Santa Ana Watershed Project Authority*





# **Santa Ana Watershed Project Authority**

**11615 Sterling Avenue • Riverside • California • 92503**  
**[www.sawpa.org](http://www.sawpa.org) • (951) 354-4220**

\_\_\_\_\_, 2019

Board of Commissioners  
Santa Ana Watershed Project Authority  
Riverside, CA

We have audited the financial statements of the Santa Ana Watershed Project Authority (the “Authority”) for the year ended June 30, 2019. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated May 9, 2019. Professional standards also require that we communicate to you the following information related to our audit.

### Significant Audit Matters

#### *Qualitative Aspects of Accounting Practices*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Authority are described in Note 1 to the financial statements. As described in Note 1 to the financial statements, the Authority changed accounting policies related to Statement of Governmental Accounting Standards (GASB Statement) No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*, in the 2019 fiscal year. Accordingly, the cumulative effect of the accounting changes as of the beginning of the year are reported in the financial statements. We noted no transactions entered into by the Authority during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management’s knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the business-type activities’ financial statements were:

Management’s estimate of the fair value of investments is based on information provided by financial institutions. We evaluated the key factors and assumptions used to develop the fair value of investments in determining that it is reasonable in relation to the financial statements taken as a whole.

Management’s estimate of capital assets depreciation is based on historical estimates of each capitalized item’s useful life. We evaluated the key factors and assumptions used to develop the capital assets depreciation in determining that it is reasonable in relation to the financial statements taken as a whole.

Management’s estimate of net other postemployment benefits (OPEB) liability is based on an actuarial valuation. We evaluated the key factors and assumptions used to develop the net OPEB liability in determining that it is reasonable in relation to the financial statements taken as a whole.



Management's estimation of defined benefit pension obligation is based on an actuarial valuation. We evaluated the key factors and assumptions used to develop the defined benefit pension obligation in determining that it is reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

The disclosure of the fair value of investments in Note 2 to the financial statements represents amounts susceptible to market fluctuation.

The disclosure of capital assets in Note 5 to the financial statements is based on historical information which could differ from actual useful lives of each capitalized item.

The disclosure of other postemployment benefits and the net OPEB liability in Note 12 to the financial statements represents management's estimate based on an actuarial valuation. Actual results could differ depending on these key factors and assumptions used for the actuarial valuation.

The disclosure of defined benefit pension plan in Note 11 to the financial statements represents management's estimate based on an actuarial valuation. Actual results could differ depending on these key factors and assumptions used for the actuarial valuation.

The financial statement disclosures are neutral, consistent and clear.

#### *Difficulties Encountered in Performing the Audit*

We encountered no significant difficulties in dealing with management in performing and completing our audit.

#### *Corrected and Uncorrected Misstatements*

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. None of the misstatements detected as of a result of audit procedures were material, either individually or in the aggregate, to the financial statements taken as a whole.

#### *Disagreements with Management*

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

#### *Management Representations*

We have requested certain representations from management that are included in the management representation letter dated \_\_\_\_\_, 2019.

### *Management Consultations with Other Independent Accountants*

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a “second opinion” on certain situations. If a consultation involves application of an accounting principle to the Authority’s financial statements or a determination of the type of auditor’s opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

### *Other Audit Findings or Issues*

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Authority’s auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

### Other Matters

We applied certain limited procedures to the management and discussion and analysis, Schedule of Changes in the Net OPEB Liability and Related Ratios, Schedule of Contributions - OPEB, Schedule of Proportionate Share of the Net Pension Liability, and Schedule of Contributions - Pension, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management’s responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

We were not engaged to report on the introductory and statistical sections, which accompany the financial statements but are not RSI. We did not audit or perform other procedures on this other information and we do not express an opinion or provide any assurance on it.

As part of the audit, we assisted with the preparation of the financial statements and related notes and state controllers report preparation. However, these services, does not constitute an audit under *Government Auditing Standards* and are considered nonaudit services. Management has reviewed, approved, and accepted responsibility for the results of these services.

### Restriction on Use

This information is intended solely for the use of the Board of Commissioners and management of the Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

**Independent Auditors' Report on Internal Control Over Financial Reporting and on  
Compliance and Other Matters Based on an Audit of Financial Statements  
Performed in Accordance with *Government Auditing Standards***

Board of Commissioners  
Santa Ana Watershed Project Authority  
Riverside, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Santa Ana Watershed Project Authority (the "Authority"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated \_\_\_\_\_, 2019.

**Internal Control Over Financial Reporting**

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Authority's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

***DRAFT COPY – 11/21/2019***  
**PRELIMINARY & TENTATIVE**  
**for DISCUSSION PURPOSES ONLY**

## **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Riverside, California  
\_\_\_\_\_, 2019

***DRAFT COPY – 11/21/2019***  
**PRELIMINARY & TENTATIVE**  
**for DISCUSSION PURPOSES ONLY**

## COMMISSION MEMORANDUM NO. 2019.120

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** CalPERS Unfunded Liability Payment Options  
**PREPARED BY:** Karen Williams, DGM/CFO

### RECOMMENDATION

It is recommended that the Commission receive a presentation on the CalPERS Unfunded Liability and payment options; and, approve Option 1, Pay off \$2,551,673 of the amortization bases listed below using General Fund Reserves of \$972,510 and Brine Line Operating Reserves of \$1,579,163.

### DISCUSSION

The Agency contracts with the California Public Employees' Retirement System (CalPERS) to provide a defined benefit retirement plan for employees. Classic employees (hired before January 1, 2013) participate in the 2% at 55 Miscellaneous Employee Pension Plan. Those hired after January 1, 2013, PEPRAs employees, participate in the 2% at 62 Miscellaneous Employee Pension Plan. The table below shows the number of employees in each plan.

CalPERS Plan	# of Employees
Classic Employees	15
PEPRA Employees	11
<b>Total</b>	<b>26</b>

FYE 2015 was the first year that the Agency was required to implement the Government Accounting Standards Boards Standard No. 68, (GASB 68). GASB 68 requires that Agencies recognize their net pension liability in their financial statements. This Statement establishes standards for measuring and recognizing liabilities, deferred outflows of resources and deferred inflows of resources, and expense/expenditures. For defined benefit pensions, this Statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Because of the reporting requirements, the net pension liability that is reported on the financial statements will be different from the unfunded liability reported by CalPERS. As of June 30, 2019, the net pension liability reported on our financial statements is \$3,649,848.

At the September 17, 2019 Commission meeting, it was suggested that staff bring back some options on paying down the Agency's unfunded liability. The Agency is currently on a 30-year amortization schedule to pay the unfunded liability. The payment for FYE 2020 was \$237,191 for the Classic plan. If we continue to pay off the liability over the next 30 years, we will pay over \$3.9 million in interest charges.

In December 2016, CalPERS' Board of Directors voted to lower the discount rate used in its actuarial valuations from 7.5% to 7.0% over three fiscal years, beginning in fiscal year 2018. Using a discount rate of 7.0% for FYE 2020, our unfunded liability is expected to jump to \$4.5 million. There are many options to pay down our unfunded liability and save both interest and/or lower our annual payment.



**Option 1 – Pay Off High Balance Amortization Bases**

Included in the attachments is our Actuarial Valuation as of June 30, 2018. On page 10 of the valuation is a Schedule of Plan’s Amortization Bases. If we were to pay off the \$972,510 balance on the 1<sup>st</sup> item (Share of Pre-2013 Pool UAL) we could save an estimated \$80,000 from our annual payment. If we paid off the \$1,579,163 balance on the Asset (Gain)/Loss on 06/30/13, we could save an estimated \$107,126 annually. By paying off some of the amortization bases, we could save the annual amount as well as the 7.0% interest that is charged by CalPERS on the annual balance.

General Fund Reserves would be able to pay off \$1 million of the liability. It would be possible to pay off a portion of the liability using the Brine Line Operating Reserve if approved by the Commission. Brine Line labor costs are about 36% of the Agency’s total labor costs. There currently is over \$3.9 million in this reserve account and only \$1.3 million is required per the Reserve Policy.

<b>Amortization Base</b>	<b>Balance at 06/30/20</b>	<b>Payment 2020-21</b>
Share of Pre-2013 Pool UAL	\$972,510	\$80,246
Asset (Gain)/Loss 06/30/13	\$1,579,163	\$107,126
<b>Total</b>	<b>\$2,551,673</b>	<b>\$187,372</b>

If we were to pay \$2,551,673 on or before June 30, 2020, the projected savings would be approximately \$2,538,190 in interest over the amortization period and would reduce our annual payment to an estimated \$187,372, from \$277,384. Staff would suggest that we continue to make the higher payments to reduce our remaining liabilities and save interest.

The numbers listed above are based on discussions with our Actuary and the Actuarial Valuation as of June 30, 2018. If the payments were made before June 30, 2019, the interest savings would be higher. The Commission may decide to pay off different amortization bases than those listed above. Once it is determined if, and which, amortization bases the Commission would like to pay off, we can talk to our Actuary and get the actual interest and payment savings.

**Option 2 – Make Unfunded Liability Payment Using Alternate Schedules (15 yr. or 10 yr.)**

Another option would be to make the payment from the 15 Year Amortization Schedule, or the 10 Year Amortization Schedule shown on page 12 of the report. By making a higher payment we would save interest and reduce the number of years required to pay off the liability.

At the October 15, 2019 Commission meeting, staff was directed to discuss the two options with the member agency CFO’s and General Managers. On October 28, 2019, staff met with the CFO’s to discuss the options. Staff also met with the General Managers on November 12, 2019. Based on those meetings, the recommendation was to go with Option 1 and pay off \$2,551,673 using both General and Brine Line Operating Reserves.

**RESOURCE IMPACTS**

The impact on reserves would be a decrease of \$2,551,673 to General and Brine Line Operating Reserves.

Attachments:

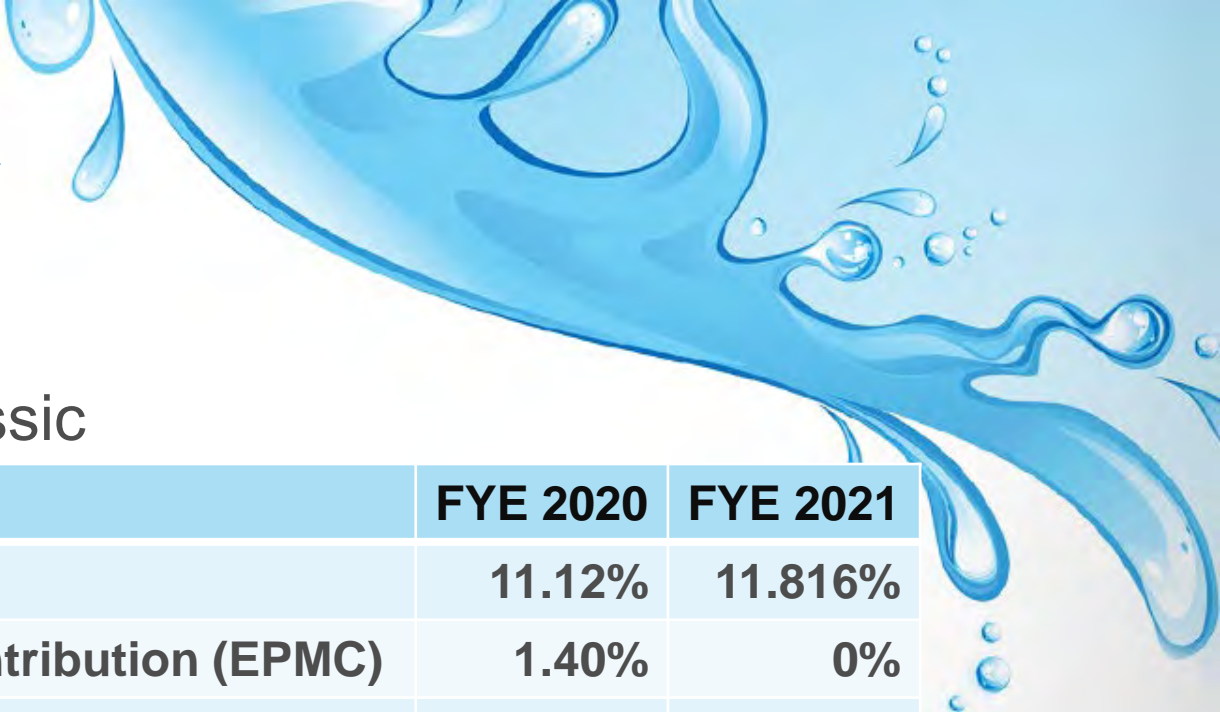
1. CalPERS Unfunded Liability Payment Options Presentation

A large, stylized graphic of a water splash in shades of blue, with various droplets and bubbles, set against a light blue background. The splash originates from the top right and flows towards the bottom left.

# SAWPA

## CalPERS Unfunded Liability Payment Options

# CalPERS Formula



## PERS 2% @ 55 - Classic

	<b>FYE 2020</b>	<b>FYE 2021</b>
<b>PERS Employers Rate</b>	<b>11.12%</b>	<b>11.816%</b>
<b>Employer Paid Member Contribution (EPMC)</b>	<b>1.40%</b>	<b>0%</b>
<b>Unfunded Liability Payment</b>	<b>\$229,033</b>	<b>\$277,384</b>

## PERS 2% @ 62 - PEPRA

	<b>FYE 2020</b>	<b>FYE 2021</b>
<b>PERS Employers Rate</b>	<b>7.191%</b>	<b>7.847%</b>
<b>Unfunded Liability Payment</b>	<b>\$6,095</b>	<b>\$11,686</b>

# CalPERS & OPEB Funding Status



PERS 2% @ 55 – Classic

- 78% funded

PERS 2% @ 62 – PEPRA

- 91.7% funded

Retiree Medical Benefits – OPEB Trust

- 71% funded

# Unfunded Liability as of 06/30/19

<b>Liability</b>	<b>As of 06/30/19</b>
CalPERS Pension	\$3,649,848
Retiree Medical Benefits	545,415
<b><i>Total</i></b>	<b>\$4,195,263</b>





# Definitions

## Unfunded Liability

A liability that does not have current or projected assets to cover the liability.

## Unfunded Accrued Liability (UAL)

The present value of future employer contributions for service that has already been earned.

## Deferred Outflows of Resources

The consumption of net assets by the government that is applicable to a future reporting period. (prepaid items and deferred charges)

## Deferred Inflows of Resources

An acquisition of net assets by the government that is applicable to a future reporting period. (deferred revenue and advance collections)



# Options to Pay Down the UAL



- Option 1
  - Pay off a portion of the UAL
- Option 2
  - Use Alternative Amortization Schedule
    - 15 year
    - 10 year

# Option 1- Pay Down the UAL

## Schedule of Plan's Amortization Bases

Reason for Base	Date Established	Amorti- zation Period	Balance 6/30/18	Payment 2018-19	Balance 6/30/19	Payment 2019-20	Balance 6/30/20	Scheduled Payment for 2020-21
SHARE OF PRE-2013 POOL UAL	06/30/13	17	\$995,357	\$77,016	\$985,366	\$79,110	\$972,510	\$80,246
NON-ASSET (GAIN)/LOSS	06/30/13	25	\$(14,944)	\$(792)	\$(15,171)	\$(1,018)	\$(15,180)	\$(1,030)
ASSET (GAIN)/LOSS	06/30/13	25	\$1,554,636	\$82,432	\$1,578,192	\$105,860	\$1,579,163	\$107,126
NON-ASSET (GAIN)/LOSS	06/30/14	26	\$1,312	\$52	\$1,350	\$72	\$1,370	\$91
ASSET (GAIN)/LOSS	06/30/14	26	\$(1,231,331)	\$(49,085)	\$(1,266,750)	\$(67,242)	\$(1,285,867)	\$(85,030)
ASSUMPTION CHANGE	06/30/14	16	\$752,049	\$41,374	\$761,895	\$56,665	\$756,613	\$71,946
NON-ASSET (GAIN)/LOSS	06/30/15	27	\$(60,302)	\$(1,627)	\$(62,840)	\$(2,508)	\$(64,645)	\$(3,381)
ASSET (GAIN)/LOSS	06/30/15	27	\$764,857	\$20,639	\$797,048	\$31,809	\$819,938	\$42,886
NON-ASSET (GAIN)/LOSS	06/30/16	28	\$(113,778)	\$(1,579)	\$(120,109)	\$(3,245)	\$(125,160)	\$(4,919)
ASSET (GAIN)/LOSS	06/30/16	28	\$955,787	\$13,263	\$1,008,973	\$27,257	\$1,051,406	\$41,319
ASSUMPTION CHANGE	06/30/16	18	\$290,704	\$5,486	\$305,379	\$11,272	\$315,096	\$17,155
NON-ASSET (GAIN)/LOSS	06/30/17	29	\$(23,572)	\$0	\$(25,222)	\$(350)	\$(26,625)	\$(708)
ASSET (GAIN)/LOSS	06/30/17	29	\$(472,726)	\$0	\$(505,817)	\$(7,027)	\$(533,955)	\$(14,193)
ASSUMPTION CHANGE	06/30/17	19	\$306,173	\$(17,773)	\$345,990	\$6,535	\$363,449	\$13,253
NON-ASSET (GAIN)/LOSS	06/30/18	30	\$70,036	\$0	\$74,938	\$0	\$80,184	\$1,095
ASSET (GAIN)/LOSS	06/30/18	30	\$(146,190)	\$0	\$(156,423)	\$0	\$(167,373)	\$(2,286)
METHOD CHANGE	06/30/18	20	\$136,321	\$(1,020)	\$146,918	\$(1,048)	\$158,286	\$2,951
ASSUMPTION CHANGE	06/30/18	20	\$479,689	\$(15,410)	\$529,207	\$(15,833)	\$582,630	\$10,863
<b>TOTAL</b>			<b>\$4,244,078</b>	<b>\$152,976</b>	<b>\$4,382,924</b>	<b>\$220,309</b>	<b>\$4,461,840</b>	<b>\$277,384</b>

Discount rate used by CalPERS= 7%

# Option 1 – Pay Down the UAL

- Pay off amortization bases of \$2,551,673 using reserves
- Interest savings of \$2,538,190 over amortization period
- Lower annual payment approximately \$190,000 per year
  
- Other Options
  - Could pay off other amortization bases
    - Will ask CalPERS Actuary for biggest savings
  - Could pay off the total UAL

# Option 1 – Pros and Cons




- Pros
  - Reduce the annual payment or continue same payment to pay down faster
  - Net Interest savings - \$1,131,665 (\$2,538,190 less \$1,406,525)
  - Reduce liabilities on the balance sheet
  - Pay of UAL faster
  - Reserves earn average interest of 2%, liability accrues interest at 7%
- Cons
  - Lowers our total reserves
    - General Fund (100)
    - Brine Line Operating
    - Loss of \$1.4 million in interest on reserves (@2%)

# Option 2 - Use Alternate Amortization Schedule

- 15 Year Amortization Schedule
  - Increase annual payment amount by \$125,046 for FYE 2020
  - Estimated interest savings of \$1,052,918
- 10 Year Amortization Schedule
  - Increase annual payment amount by \$272,759 for FYE 2020
  - Estimated interest savings of \$2,167,359
- Suggested use of General Fund Reserves (\$1 million) to offset increased payment for the 10-Year Amortization Schedule and not increase member contributions

# Option 2 – Pros and Cons



- Pros
  - Pay off UAL faster
  - Reduce liabilities on the balance sheet
  - Interest savings
- Cons
  - Is the higher payment sustainable?
  - Payment would continue to increase each year
  - Increased indirect cost and benefit allocation rates
  - After \$1 million of reserves is used, member contributions would increase



# Option 2 –10 Year Amortization Schedule

## FYE 2020

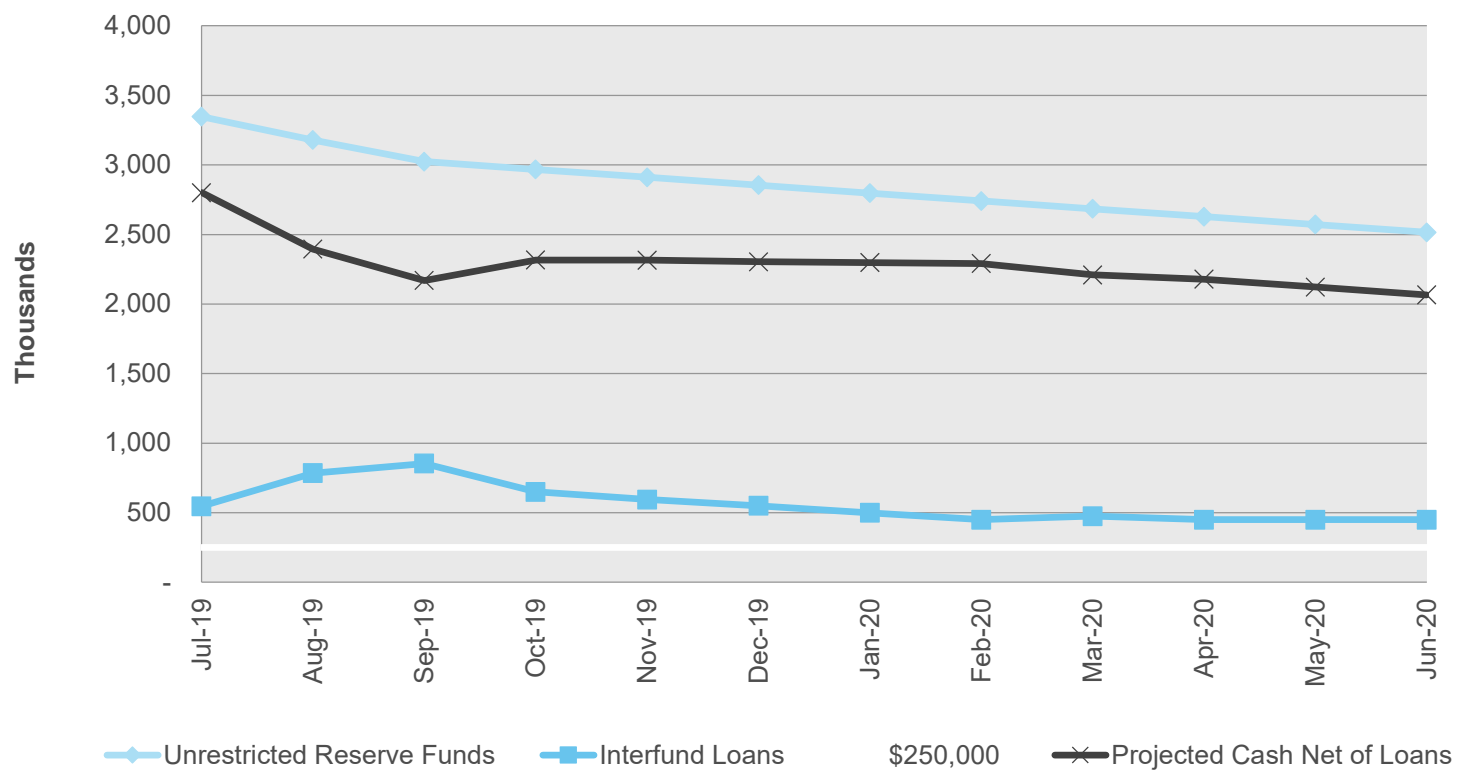
	Current	10-Year Sch	Difference
UAL Payment	\$277,384	\$550,143	\$272,759
Member Agency Contribution	305,393	348,621	43,228
Benefit Rate	45.6%	53.8%	8.2%
Indirect Rate	150.5%	147.2%	(3.3%)
Total Allocation Rate	196.1%	201.0%	4.9%

## FYE 2021

	Current	10-Year Sch	Difference
UAL Payment	\$325,627	\$565,272	\$239,645
Member Agency Contribution	306,068	343,128	37,060
Benefit Rate	45.3%	52.3%	7.0%
Indirect Rate	150.8%	148.8%	(2.0%)
Total Allocation Rate	196.1%	201.0%	4.9%

# General Fund - Reserves

## Projected General Cash / Reserves Fund Balance



# General Fund - Reserves

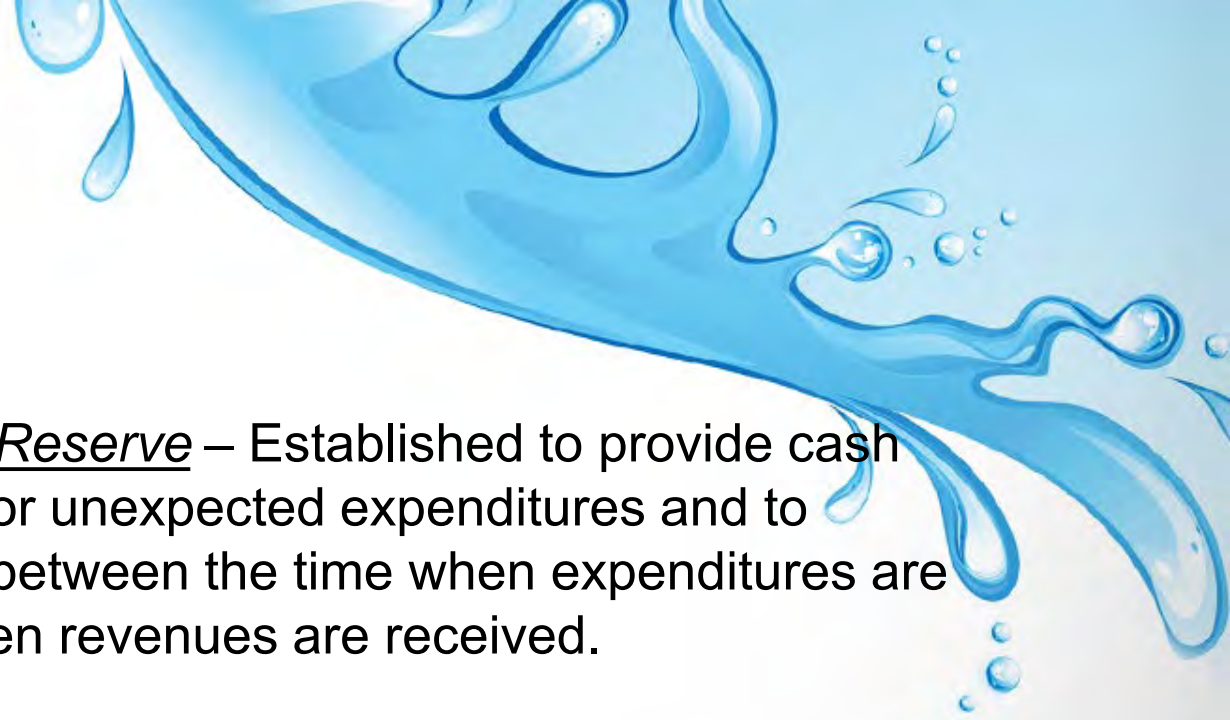


FYE	Balance
2014	\$1,424,120
2015	\$1,865,111
2016	\$2,196,752
2017	\$2,350,788
2018	\$2,542,993
2019	\$2,359,816
09/30/19	\$3,023,603

**180 days of operating expenses FYE 2020 Budget = \$1,674,077**  
**90 days of operating expenses FYE 2020 Budget = \$ 837,038**

Accrued Vacation & Sick = \$629,820

# General Fund - Reserves




- General Fund Operating Reserve – Established to provide cash flow for unbudgeted and/or unexpected expenditures and to mitigate potential delays between the time when expenditures are incurred and the time when revenues are received.
- Target Level – There is no required minimum for this reserve, although a prudent target level will be equal to 180 days of SAWPA's General Fund total budgeted operating expenditures. This reserve will be funded only based on realized efficiencies in the General Fund resulting in actual year-end expenditures being under budget.
- Member Agency CFO's suggest changing to 90 days of total budgeted operating expenditures.

# Total Reserves @ 09/30/2019



<b>Reserve</b>	<b>Balance</b>
Self Insurance	\$4,216,433
Debt Service	5,025,902
Pipeline Replacement	21,332,328
OCSD Rehabilitation	3,650,852
Capacity Management	11,691,357
OCSD Future Capacity	1,789,985
Flow Imbalance	86,513
Rate Stabilization	1,003,055
Operating	4,649,837
<b>Total Reserves</b>	<b>\$53,446,262</b>

# BL Operating - Reserves



FYE	Balance
2014	\$2,000,562
2015	2,342,219
2016	3,790,275
2017	4,545,484
2018	3,988,170
2019	4,512,993

25% of operating expenses FYE 2020 Budget = \$1,301,069



# Total BL Reserves

FYE	Balance
2014	\$51,621,279
2015	49,309,299
2016	49,975,185
2017	44,403,605
2018	40,513,834
2019	52,610,454
09/30/19	53,446,262

# BL Operating - Reserves



- Brine Line Operating Reserve: The Brine Line Operating Reserve is established to cover temporary cash flow deficiencies that occur as a result of timing differences between the receipt of operating revenue and expenditure requirements. The reserve is utilized as needed to pay outstanding Brine Line Enterprise expenditures prior to the receipt of anticipated operating revenues.
- Target Level – Funding shall be targeted at a minimum amount equal to 90 days (i.e. 25%) of SAWPA’s Brine Line Enterprise total annual operating expenditures. If SAWPA elects to issue variable rate debt, the minimum required balance in this reserve might need to be higher.

# Other Information



- Average Rate of Return as of 09/30/19 = 2.216%
- Interest rates are declining
  - LAIF Interest = 2.18% @ as of 10/23/19
- CalPERS discount rate = 7%
- 36.4% of total hours are for brine line
  - 22,940 Brine Line and Capital Projects
  - 63,040 total labor hours budgeted

# Recommendation

A decorative graphic of a blue water splash, with various droplets and bubbles, positioned in the upper right corner of the slide.

- Pay off \$2,551,673 of our UAL
  - \$972,510 from General Fund Reserves
  - \$1,579,163 from Brine Line Operating Reserves



Questions?

## COMMISSION MEMORANDUM NO. 2019.127

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Strategic Plan Update  
**PREPARED BY:** Rich Haller, General Manager

### RECOMMENDATION

It is recommended that the Commission provide input on the process and format for an update to the Strategic Plan; and, direct staff to issue a Request for Proposals (RFP) for Strategic Plan Facilitator Consultant Services.

### DISCUSSION

It is proposed to update the Strategic Plan, most recently completed in 2016. The 2016 Strategic Plan consisted of Goals and Objective, Critical Success Factors (CSFs), and Processes, Activities and Tasks (PATs) prepared for each of the three SAWPA business lines – OWOW, Roundtables, Brine Line. The following six-step process was utilized:

1. Consolidated overlapping and crosscutting activities.
2. Clustered PATs considering synergies, dependencies, and efficiencies.
3. Determined the level of certainty of achievement that is appropriate to each PAT, understanding that “A” level of certainty would require more resources than “C” level certainty.
4. Fine-tuned the resources needed to accomplish the PATs at the level deemed necessary. Identify revenue to support the efforts.
5. Determined the skill sets needed to accomplish each PAT and determine if SAWPA has the capability and capacity to do the work in-house, or if staff should be brought in, or if the PAT would best be accomplished with contracted help.
6. Build the results of analysis into the next overall SAWPA budget recommendation.

The effort in 2016 was facilitated by Paul Brown during which he interviewed Commissioners and conducted several workshops. Attachments 1 and 2 contain the briefing slides and report prepared by Paul Brown. Attachment 3 contains the current status of the Critical Success Factors developed in 2016.

July 19, 2016, Commission motion

*Receive and file this strategic assessment final report and the Critical Success Factors (CSFs) and Processes, Activities or Tasks (PATs) for each of the three SAWPA business lines (Brine Line, OWOW, Roundtables), and direct staff to provide a status update in six (6) months relative to accomplishing these CSFs and PATs, with continuing periodic status updates thereafter.*

It is expected the rest of the 2019/20 strategic planning process would be streamlined to reduce the number and simplify the PATs, identify common interests, desired outcomes, and focus on corresponding factors needed to achieve success. It is recommended that a facilitator be used to obtain Commissioner input, member agency input, and keep the results on-target and on-schedule.



**RESOURCE IMPACTS**

This effort is budgeted under Fund 100 with support from the Roundtables, OWOW, and the Brine Line (Fund 240).

Attachments:

1. PowerPoint Presentation
2. Commission Memo 2019.57, June 4, 2019 (with attachments)
  - a. Paul Brown Strategic Assessment Slides, July 19, 2016
  - b. Paul Brown SAWPA Business Line Evaluation, June 28, 2016
  - c. Status of Critical Success Factors June 2019

# SAWPA STRATEGIC PLAN

RICHARD HALLER, P.E., GENERAL MANAGER

COMMISSION | DECEMBER 17, 2019

ITEM 5.G.



1

## RECOMMENDATION

That the Commission provide input on the process and format for an update to the Strategic Plan; and, direct staff to issue a Request for Proposals (RFP) for Strategic Plan Facilitator Consultant Services.

2

## BACKGROUND

- Last Strategic Plan completed in 2016
- Paul Brown was facilitator
- Results:
  - **SAWPA Business Line Focus**
    - OWOW | Roundtables | Brine Line
  - **Prepared for Each Business Line**
    - Goals and Objectives
    - Critical Success Factors (CSFs)
    - Processes, Activities and Tasks (PATs)

3

## 2016 PROCESS

1. Consolidated overlapping and crosscutting activities.
2. Clustered PATs considering synergies, dependencies, and efficiencies.
3. Determined level of certainty of achievement appropriate to each PAT, understanding that “A” level of certainty would require more resources than “C” level certainty.

4

## **2016 PROCESS (CONTINUED)**

4. Fine-tuned necessary resources to accomplish the PATs at the level deemed necessary and identified revenue to support efforts.
5. Determined necessary skill sets to accomplish each PAT and whether SAWPA had the capability/capacity to do the work in-house; or, would the PAT best be accomplished by staff or contracted help.
6. Build the results of analysis into the next overall SAWPA budget recommendation.

5

## **PROPOSED 2020 PROCESS**

- Similar to 2016, but with fewer and simpler PATs
- Use Facilitator to obtain Commissioner and Member Agency input and to keep efforts focused and on-schedule.

6

## **RECOMMENDATION**

That the Commission provide input on the process and format for an update to the Strategic Plan; and, direct staff to issue a Request for Proposals (RFP) for Strategic Plan Facilitator Consultant Services.

**COMMISSION MEMORANDUM NO. 2019.57**

**DATE:** June 4, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Strategic Plan Update  
**PREPARED BY:** Rich Haller, General Manager

**RECOMMENDATION**

Receive a report on the 2016 SAWPA strategic planning efforts, determine if an update is needed in 2019, and if so direct staff to develop an approach for Commission consideration.

**DISCUSSION**

This item is being presented as background information on SAWPA’s strategic planning efforts completed in 2016. Based on this background, the Commission is being asked to consider preparing an update to the 2016 effort. If directed, Staff will prepare an approach for the strategic planning effort and present it for Commission consideration at a future meeting, likely the July 16<sup>th</sup> meeting. The effort in 2016 was facilitated by Paul Brown during which he interviewed Commissioners and conducted several workshops. Attachments 1 and 2 contain the briefing slides and report prepared by Paul Brown. Attachment 3 contains the current status of the Critical Success Factors developed in 2016.

Commission Motion 7/19/16

***Receive and file this strategic assessment final report and the Critical Success Factors (CSFs) and Processes, Activities or Tasks (PATs) for each of the three SAWPA business lines (Brine Line, OWOW, Roundtables), and direct staff to provide a status update in six (6) months relative to accomplishing these CSFs and PATs, with continuing periodic status updates thereafter.***

It is expected the 2019 strategic planning process would be streamlined to identify common interests, desired outcomes, and focus on corresponding factors needed to achieve success.


**RESOURCE IMPACTS**

This effort is budgeted under Fund 100 with support from the Roundtables, OWOW, and the Brine Line.

**.Attachments:**

1. Paul Brown Strategic Assessment Slides 7/19/16
2. Paul Brown SAWPA Business Line Evaluation 6/28/16
3. Status of Critical Success Factors June 2019






SAWPA

# Strategic Assessment

July 19, 2016

## Conclusions and Final Recommendations



1

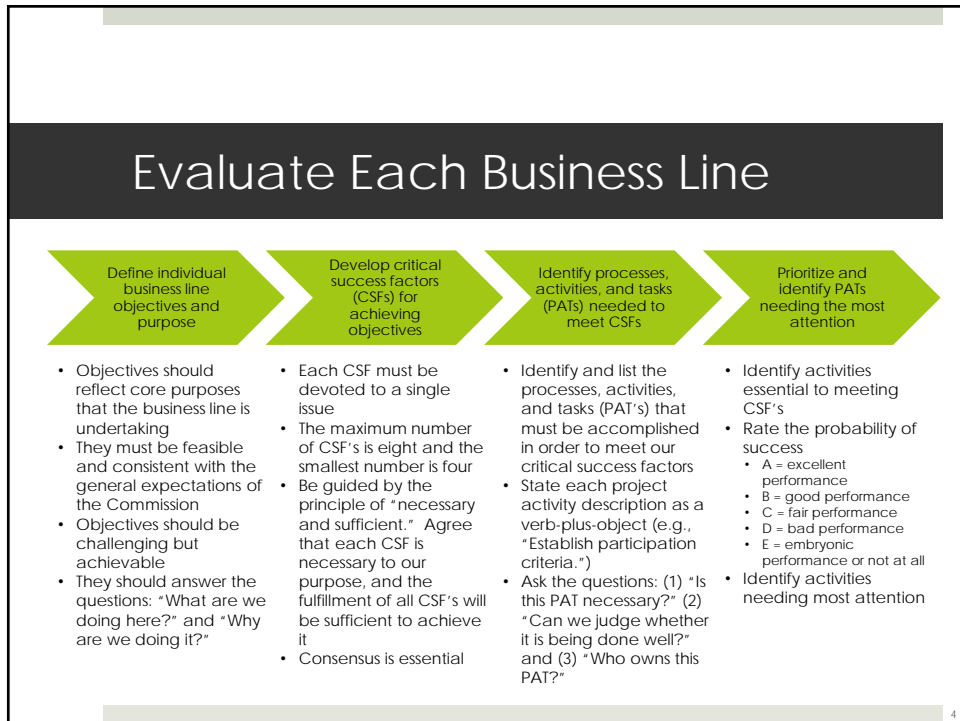
# Where will the future lead?

- SAWPA's challenges are an outgrowth of its success in many different roles over more than four decades
- Continued success depends on addressing issues at every level including:
  - Achieving better alignment around mission and purpose
  - Clarifying governance roles and decision-making responsibilities and process
  - Providing resources appropriate to current and future commitments
- Because these issues are interdependent, the path forward should embrace all of them

2



3



4



## Roundtables Purpose and Objectives

- Through collaborative processes (1) where SAWPA serves as an administering and participating member; (2) that are formed with member agency participants; or (3) where SAWPA is retained as an administrative facilitator by others, SAWPA will:
  1. Create value by building relationships among regulators, SAWPA members, regulated parties that allow for economies of scale, reduced costs, or increased benefits in addressing water related issues;
  2. Provide regional capacity and neutral venue for supporting multi-agency forum(s) to address the water resources challenges in the Santa Ana River Watershed; and
  3. Assist in the establishment and on-going facilitation of stakeholder processes to address watershed-specific issues.

5



## Roundtables Critical Success Factors

1. SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted facilitator, leader, and administrator of contracted activities.
2. Goals, scope, costs, resources, timelines, and the contract term are approved by the Commission before executing an agreement to participate in a roundtable group.
3. Clear upfront criteria and terms for completing or transitioning efforts that have been successfully established or completed.
4. Report and use results of roundtable's work, leverage information and involvement for the benefit of SAWPA, its members, and other stakeholders.
5. Annual reviews of workplans and budgets for each task force activity.
6. Adequate professional staff and resources to effectively provide facilitation, management, administrative and technical support to collaborative work efforts.

6



## Brineline Purpose and Objectives

- Support the achievement of a long-term, watershed-wide salinity balance through:
  1. Water quality maintenance, enhancement, and protection in the Santa Ana River and groundwater basins;
  2. Water resources management, including imported water recharge;
  3. Disposal of emergency discharges from local wastewater treatment plants;
  4. Supporting industries limited by salt in their effluent, including energy production facilities; and
  5. Providing existing and future public agencies and private industry with a cost-effective salinity management option.

7



## Brineline Critical Success Factors

1. Minimize disruptions to customers.
2. Ensure that Brine Line value and benefits are known to economic development agencies and others.
3. Maintain sufficient funding and reserves for current and future Capital and O&M costs through a stable, predictable, and affordable rates and charges.
4. Provide professional and highly-trained staff across planning, administration, engineering and field operations.
5. Protect and preserve the useful life of Brine Line assets through strategic maintenance, repair, and capital improvements.
6. Conduct proactive capital and O&M planning to improve efficiency and maintain needed capacity in the long and medium terms.
7. Maintain strong relationships with OCSD and regulatory agencies.
8. Operate the Brine Line to: (1) protect the OCSD treatment plant and the environment from non-compliant dischargers, and (2) eliminate any uncontrolled pipeline releases.

8



## OWOW Purpose and Objectives

- Fulfill SAWPA's role as a CA IRWM Program Regional Water Management Group and provide for a process of determining IRWM funding that meets statutory requirements.
- Prepare a credible integrated watershed-wide water management plan that is updated regularly, meets regional needs and DWR IRWM plan requirements, and provides safe, clean, reliable and affordable water for the Santa Ana River Watershed.
- Facilitate the discovery and development of new watershed solutions.
- Maximize funding opportunities and policy influence by uniting efforts watershed wide.

9



## OWOW Critical Success Factors

1. Continued support from SAWPA commission of OWOW Steering Committee's decision making authority as a means of ensuring trust, transparency, and external communications.
2. Active participation of a diverse group of stakeholders representing counties, cities, and water districts, as well as the private sector and the regulatory, environmental, and environmental justice communities who integrate the different interests in the watershed beyond political boundaries. Ensuring all perspectives are heard and valued.
3. Distribution of benefits from the implementation of all integrated water resources management activities across the watershed in a fair and equitable fashion. Recognition that upstream conditions affect downstream water quality and quantity.
4. OWOW criteria and values are transparent to watershed-wide stakeholders.

10



## OWOW Critical Success Factors

5. A strong reputation and sufficient capacity within SAWPA staff for strategic facilitation, planning, communication, leadership and community engagement.
6. Administration of the OWOW process and plan in a highly efficient and cost-effective manner.
7. Successful implementation of an integrated regional water resource plan that reflects the watershed management needs of the public and the environment.
8. Annual review the accomplishments and implementation performance of the plan with the Commission and the Steering Committee.
9. Data and information needed for decision-making is available to all.

11

11

## Processes, Activities, and Tasks (PATs)

Business Line	Number of PATs	Total Estimated Hours Needed	Estimated Annual Hours Budgeted	Difference Between Needed and Budgeted
Brine Line	41	18,408	14,360	4,048
Roundtables	35	4,540	2,825	1,715
OWOW	21	13,190	9,590	3,600
Totals	97	36,138	26,775	9,363
Full-Time Equivalents*		17.4	12.9	4.5

\*Based on 2,080 hours/year

12

12



## Observations

- There is an apparent gap between proposed resource needs and estimates of what is currently budgeted
- That said, this specific exercise shouldn't be viewed as a budgeting activity
- The value of the PATs is in identification of specific priorities and areas where increased focus can help ensure success
- Additional effort could be focused on prioritization activities and the resources needed to accomplish them (differentiating "must-haves" and "nice-to-haves")
- Overlapping and cross-cutting activities can probably be consolidated
- Results of the effort should inform the budget process

13

## SAWPA "Business Lines"



14

# SAWPA Business Line Evaluation

*Business Line:* **Inland Empire Brine Line (Brine Line)**

## Purpose and Objectives

Support the achievement of a long-term, watershed-wide salinity balance through:

1. Water quality maintenance, enhancement, and protection in the Santa Ana River and groundwater basins;
2. Water resources management, including imported water recharge;
3. Disposal of emergency discharges from local wastewater treatment plants;
4. Supporting industries limited by salt in their effluent, including energy production facilities; and
5. Providing existing and future public agencies and private industry with a cost-effective salinity management option.

## Critical Success Factors

1. Minimize disruptions to customers.
2. Ensure that Brine Line value and benefits are known to economic development agencies and others.
3. Maintain sufficient funding and reserves for current and future Capital and O&M costs through a stable, predictable, and affordable rates and charges.
4. Provide professional and highly-trained staff across planning, administration, engineering and field operations.
5. Protect and preserve the useful life of Brine Line assets through strategic maintenance, repair, and capital improvements.
6. Conduct proactive capital and O&M planning to improve efficiency and maintain needed capacity in the long and medium terms.
7. Maintain strong relationships with OCSD and regulatory agencies.
8. Operate the Brine Line to: (1) protect the OCSD treatment plant and the environment from non-compliant dischargers, and (2) eliminate any uncontrolled pipeline releases.

## Processes, Activities, and Tasks

\*Colors represent position on Priority Matrix (see page 5)

## Grading of PAT Implementation

Ratings:

A = excellent probability of success

B = good probability of success

C = fair probability of success

D = unlikely probability of success

E = embryonic performance or not previously attempted

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
	<b>Marketing Plan</b>				<b>1,040</b>	<b>200</b>	<b>840</b>
1.	Prepare plan – ID target audiences.	SAWPA	2-3	E	208	0	208
2.	Implement plan	SAWPA	2-3	E	312	80	232
3.	Identify potential customers and promote	SAWPA	2-3	E	208	40	168
4.	Help capacity holders market their unused capacity in the Brine Line.	SAWPA	2-3	E	156	40	116
5.	Streamline information exchange, application, permit issuance process, complete physical connection.	SAWPA	2-3	B	156	40	116
	<b>Business Plan</b>				<b>1,040</b>	<b>440</b>	<b>600</b>
6.	Update Plan.	SAWPA	1-8	B	260	0	260
7.	Investigate financing options for customer capacity investment, physical connection cost for Commission consideration.	SAWPA	1,5-6,8	E	104	20	84
8.	Investigate financing options for the protection and/or relocation of the Brine Line.	SAWPA	1,5-6,8	A	104	60	44
9.	Evaluate options for streamlining Collection Station operations and minimizing source control risk.	SAWPA	2-3,5-6	B	208	120	88
10.	Conduct workshop to review forecasted costs for operations and maintenance.	SAWPA	3,6	B	52	0	52

11.	Evaluate all aspects of the Brine Line rate and TSS Formation Billing Formula.	SAWPA	3,6	In work	260	220	40
12.	Establish and maintain repair and replacement reserve targets.	SAWPA	3,6	A	52	20	32
<b>Sewer System Management Plan</b>					<b>15,288</b>	<b>13,100</b>	<b>2,188</b>
13.	Continue to update, implement & audit a comprehensive maintenance management program.	SAWPA	1,4-8	A	312	240	72
14.	Update Overflow Emergency Response Plan. Conduct response team training.	SAWPA	1,6,8	A	104	104	0
15.	Ensure availability of Emergency Response resources.	SAWPA	1	B	52	40	12
16.	Implement spill prevention measures as part of system maintenance practices.	SAWPA	1,6,8	A	52	52	0
17.	Implement a source control program as the Delegated Control Authority. Prepare and approve an Ordinance, Enforcement Response Plan, Policies and Procedures Manual, SOPs consistent with Federal requirements and OCSD standards.	SAWPA	1,7-8	A	1,040	1,040	0
18.	Implement the four components of a Source Control Program: permitting, monitoring, enforcement, reporting.	SAWPA	1,7-8	A	3,120	2,720	400
19.	Water Quality Sampling - Database maintenance.	SAWPA	1,7-8	A	520	480	40
20.	Operations – perform monthly flow meter readings, monitor/record data on operations performance.	SAWPA	5-6	A	208	208	0
21.	Maintenance – perform activities – line cleaning, CCTV pipe inspection, MAS inspection, R/W maintenance, valve	SAWPA	5-6	A	1,040	900	140

	exercising, etc. Prepare bid documents, scope of work, bid, evaluate, recommend contract award, manage performance.						
22.	Repair – perform one time and recurring repairs – T-Lok liner, erosion, sink holes.	SAWPA	5-6	B	1,040	900	140
23.	Repair – recurring, a/v valves, high frequency to reduce SSOs.	SAWPA	5-6,8	B	1,040	900	140
24.	Repair – recurring – MASs, raise lid, erosion.	SAWPA	5-6	A	520	520	0
25.	Utility locating and marking – perform as required by state law, document.	SAWPA	5-6	A	1,040	1,040	0
26.	Potholing - As-built drawing update.	SAWPA	5-6	C	520	320	200
27.	MAS inspection.	SAWPA	5-6	A	520	520	0
28.	Storm inspection.	SAWPA	5-6	A	156	156	0
29.	Safety meetings, equipment maintenance/calibration.	SAWPA	4	A	104	104	0
30.	Construction in proximity to pipe – review plans for adequate spacing/ protection, observe construction.	SAWPA	5	A	520	520	0
31.	Automate system operations, data collection, and use of remote sensing.	SAWPA	5-6	E	520	120	400
32.	Implement a prioritized repair and capital improvement program.	SAWPA	6	B	1,560	1,200	360
33.	Prepare design/construction docs for minor relocations, addition of MASs, etc. Bid/present results to Commission for award, manage construction.	SAWPA	3,5-6	B	520	400	120
34.	Maintain computer based hydraulic model of system, confirm calibration,	SAWPA	6	A	312	312	0

	run scenarios.						
35.	Evaluate other export concepts and opportunities.	SAWPA	6	B	312	200	112
36.	Develop comprehensive risk management program.	SAWPA	3, 5-6	A	104	104	0
37.	Establish personnel positions to allow for career progression while recognizing the diverse skill set required.	SAWPA	4	B	52	0	52
	<b>Communications</b>				<b>1,040</b>	<b>620</b>	<b>420</b>
38.	Survey customer satisfaction regarding all aspects of customer interface - notifications and scheduling of maintenance, permit requirements, water quality monitoring, reporting, costs/billing.	SAWPA	1,8	E	104	0	104
39.	Establish and maintain Brine Line performance metrics and indicators. Present to Commission and agencies.	SAWPA	3,5-6	B	156	120	36
40.	Meet regularly with OCSD (Joint Policy Committee, Joint Operations Committee) to exchange information, discuss planning, budgeting, and costs.	SAWPA	3, 6-8	A	260	260	0
41.	Develop/use web-based tools for discharge permit applications, permit management, and billing.	SAWPA	1,7	E	520	240	280
TOTALS					18,408	14,360	4,048




Brine Line PAT Priority Matrix (Numbers in matrix correspond to specific PATs on table)

Number of CSFs Impacted	Rating				
	E	D	C	B	A
8				6	
7					
6					13
5					
4	7			9	8,40
3				18,23,39	14,16,17,19 33,36
2	1,2,3,4,31 38,41		26	5,10	11,12,20,21 24,25,27,28
1				15,32,35 37	29,30,34

Low Concern 

More Attention 

High Focus 

# SAWPA Business Line Evaluation

Business Line: **OWOW**

## Purpose and Objectives

1. Fulfill SAWPA's role as a CA IRWM Program Regional Water Management Group and provide for a process of determining IRWM funding that meets statutory requirements.
2. Prepare a credible integrated watershed-wide water management plan that is updated regularly, meets regional needs and DWR IRWM plan requirements, and provides safe, clean, reliable and affordable water for the Santa Ana River Watershed.
3. Facilitate the discovery and development of new watershed solutions.
4. Maximize funding opportunities and policy influence by uniting efforts watershed wide.

## Critical Success Factors

1. Continued support from SAWPA commission of OWOW Steering Committee's decision making authority as a means of ensuring trust, transparency, and external communications.
2. Active participation of a diverse group of stakeholders representing counties, cities, and water districts, as well as the private sector and the regulatory, environmental, and environmental justice communities who integrate the different interests in the watershed beyond political boundaries. Ensuring all perspectives are heard and valued.
3. Distribution of benefits from the implementation of all integrated water resources management activities across the watershed in a fair and equitable fashion. Recognition that upstream conditions affect downstream water quality and quantity.
4. OWOW criteria and values are transparent to watershed-wide stakeholders.
5. A strong reputation and sufficient capacity within SAWPA staff for strategic facilitation, planning, communication, leadership and community engagement.
6. Administration of the OWOW process and plan in a highly efficient and cost-effective manner.
7. Successful implementation of an integrated regional water resource plan that reflects the watershed management needs of the public and the environment.
8. Annual review the accomplishments and implementation performance of the plan with the Commission and the Steering Committee.
9. Data and information needed for decision-making is available to all.

Processes, Activities, and Tasks

	Process, Activity, or Task	Owner	Impact on CSFs	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
1.	Prepare standard progress reporting on scope, schedule, deliverables, and budget.	SAWPA	8,9	B	80	40	40
2.	Implement a regular process (bi-annually) for confirming or adjusting priorities and resources.	SAWPA	1,6,8	B	80	40	40
3.	Engage with stakeholders at key milestones to assess group results towards achievement of objectives.	SAWPA	2,6	C	80	20	60
4.	Distribute information to OWOW stakeholders including use of regional GIS functionality and social media.	SAWPA	2,4,9	A	200	100	100
5.	Assess and report the Watershed’s progress toward sustainability and resiliency.	SAWPA	4,7,8,9	C	160	40	120

	Process, Activity, or Task	Owner	Impact on CSFs	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
6.	Update the OWOW Plan every 3-4 years or more frequently as needed to reflect current regional water resource needs, knowledge, data, or policy.	SAWPA	2,5,6,7	A	800	800	0
7.	Retain and strengthen staff and consultants with capacity to conduct integrated water resource management including administrative, accounting, planning, implementation, and communication functions.	SAWPA	5,8	C	240	100	140
8.	Exercise SAWPA’s fiduciary responsibility in administering and overseeing the appropriate use of all grant funds awarded to the DWR RAP accepted region, SAWPA, and to OWOW project proponents	SAWPA	3,6,7	A	5,570**	5570	0
9.	Manage funding through dedicated, interest bearing accounts.	SAWPA	6	A	40	40	0

	Process, Activity, or Task	Owner	Impact on CSFs	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
10.	Provide support to OWOW governance (Steering Committee and SAWPA Commission) to ensure successful administration and approval of OWOW planning and project implementation	SAWPA	1,2	C	280	100	180
11.	Successfully apply for, receive, and administer all available State grant funding under IRWM programs designated for the Santa Ana River Watershed	SAWPA	6,7	A	320	320	0
12.	Identify, pursue, secure and administer additional funding for integrated water resources management	SAWPA	6,7	C	120	60	60
13.	Establish and maintain effective and state-of-the-art communication and meeting facilitation systems at SAWPA.	SAWPA	2,5,6	C	120	40	80

	Process, Activity, or Task	Owner	Impact on CSFs	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
14.	Develop standard data capture, storage and distribution protocols to improve regional utilization of data and information generated in the watershed.	SAWPA	2,5,6	B	160	80	80
15.	Institute and administer OWOW Calls for Projects and Project Selection with criteria that reflects a systems approach, that encourages multi-benefit, multi-jurisdictional integrated regional projects and programs	SAWPA	1,2,3,4	A	480	480	0
16.	Produce communications strategy, plan and outreach to describe SAWPA’s successes and capabilities under OWOW.	SAWPA	2,5,6	E	120	0	120
17.	Evaluate Calls for Projects and Project Selection efforts for future process improvement	SAWPA	4,6,7,8	C	120	30	90



	Process, Activity, or Task	Owner	Impact on CSFs	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
18.	Conduct post assessment of past OWOW Plan and scoping for next OWOW plan update in order to learn from past OWOW planning and to improve processes	SAWPA	6,7,8	C	80	20	60
19.	Convene Pillars, arrange regular workshops and serve as liaison, facilitator, presenter and coordinator during OWOW planning phase, OWOW funding and selection criteria and OWOW project implementation support.	SAWPA	2,5,6	A	580	580	0
20.	Engage with watershed stakeholders with education programs and listening sessions about the benefits of watershed wide thinking and planning.	SAWPA	2,3,4,5	A	580	580	0
21.	Implement SAWPA programs and projects identified by the OWOW Plan	SAWPA	2,5,6,7	B	2,980	550	2430
	Total Annual OWOW Staff Hours				13,190	9590	3600

\*Colors represent position on Priority Matrix (see page 5)

\*\*Item 8 reflects all SAWPA annual budget to administer approved IRWM grants.

### Grading of PAT Implementation

#### Ratings:

A = excellent probability of success

B = good probability of success

C = fair probability of success


D = unlikely probability of success

E = embryonic performance or not previously attempted

OWOW PAT Priority Matrix (Numbers in matrix correspond to specific PATs on table)

Number of CSFs Impacted	Rating				
	E	D	C	B	A
9					
8					
7					
6					
5					
4			5,17	21	6,15,20
3	16		13,18	2,14	4,8,19
2			3,7,10,12	1	11
1					9

Low Concern 

More Attention 

High Focus 

# SAWPA Business Line Evaluation

*Business Line:*     **Roundtables**

## Purpose and Objectives

Through collaborative processes (1) where SAWPA serves as an administering and participating member; (2) that are formed with member agency participants; or (3) where SAWPA is retained as an administrative facilitator by others, SAWPA will:

1. Create value by building relationships among regulators, SAWPA members, regulated parties that allow for economies of scale, reduced costs, or increased benefits in addressing water related issues;
2. Provide regional capacity and neutral venue for supporting multi-agency forum(s) to address the water resources challenges in the Santa Ana River Watershed; and
3. Assist in the establishment and on-going facilitation of stakeholder processes to address watershed-specific issues.

## Critical Success Factors

1. SAWPA has a strong reputation as a watershed-wide, knowledgeable, neutral and trusted facilitator, leader, and administrator of contracted activities.
2. Goals, scope, costs, resources, timelines, and the contract term are approved by the Commission before executing an agreement to participate in a roundtable group.
3. Clear upfront criteria and terms for completing or transitioning efforts that have been successfully established or completed.
4. Report and use results of roundtable's work, leverage information and involvement for the benefit of SAWPA, its members, and other stakeholders.
5. Annual reviews of workplans and budgets for each task force activity.
6. Adequate professional staff and resources to effectively provide facilitation, management, administrative and technical support to collaborative work efforts.

Processes, Activities, and Tasks

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
1.	Prepare standard progress reporting on scope, schedule, deliverables, and budget for each Roundtable agreement.	SAWPA	2,4-5	B	160	80	80
2.	Implement a regular process (bi-annually) for confirming or adjusting priorities and resources.	SAWPA	3	B	20	5	15
3.	Engage with stakeholders at key milestones to assess group results towards achievement of objectives.	SAWPA	3,4,5	E	80	0	80
4.	Distribute information collected and developed under Roundtable efforts available to other stakeholders and Roundtables to avoid duplication and improve efficiency.	SAWPA	4	A	40	40	0
5.	Track the implementation of identified solution(s) resulting from each Roundtable.	SAWPA	4,5	C	80	10	70

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
6.	Prepare standard criteria, review, and approval process for accepting new potential Roundtable activities.	SAWPA	2	C	20	10	10
7.	Retain and strengthen capacity of staff and consultants to conduct integrated water resource management including administrative, accounting, planning, implementation, and communication functions.	SAWPA	1,6	C	120	40	80
8.	Prepare and manage Roundtable annual budgets showing cost breakdown of study costs by agency, revenue needs and obtain Roundtable approval. Include budgets into annual SAWPA budget.	SAWPA	1,4,5	A	240	240	0
9.	Manage funding through dedicated, interest bearing accounts for each Roundtable.	SAWPA	1,4,5	A	120	120	0

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
10.	Provide project management and transparent accounting for shared funds on joint projects and activities.	SAWPA	1,4,5	A	160	160	0
11.	Produce video describing SAWPA’s successes and capabilities in collaboration.	SAWPA	1,4,5	E	120	0	120
12.	Maintain and/or upgrade SAWPA facilities and virtual meeting capabilities.	SAWPA	1,4,6	D	120	10	110
13.	Work directly with other agencies to obtain or provide water resource planning data related to a specific Roundtable; receive updated data from a variety of sources; screen, filter, and prepare data to ensure compatibility with Agency computer systems. Develop standard data protocols to improve regional utilization of data and information generated in the watershed.	SAWPA	1,4	C	120	40	80



	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
14.	Prepare newsletter articles, brochures, fact sheets and project and program descriptions for distribution.	SAWPA	1,4,5	D	200	10	190
15.	Serve as leader, facilitator and in some cases, Chair, of the Roundtable meetings to ensure consensus.	SAWPA	1,4,5	A	120	120	0
16.	Conduct independent studies, research or analyses including data, maps, charts, tables, diagrams, reports and fact sheets as requested by Roundtable members and SAWPA related to specific Roundtable activities.	SAWPA	1,4,5	B	120	40	80
17.	Manage and coordinate the Roundtable project or program to ensure compliance with environmental requirements, established standards, specifications, Agency policies, and cost and schedule limitations.	SAWPA	1,4,5	B	40	20	20

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
18.	Prepare RFPs and RFQs for consultant services. Evaluate and assist in the selection of consultants; provide administration of all contracts for assigned projects and programs; evaluate and critique work products of consultants including technical reports, memoranda, power point presentations and environmental documents; respond to correspondence as needed	SAWPA	1,4,5	A	240	240	0
19.	Manage Roundtable projects and programs per Agency policies and procedures with particular emphasis on obtaining maximum job quality, accurate cost control, compliance with schedules, and satisfactory project relations.	SAWPA	1,4,5	B	240	100	140

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
20.	Compile and develop environmental documentation as needed for Roundtable projects and programs; manage the work of environmental consultants in their provision of documentation and mitigation monitoring activities to meet the requirements and regulations of State and Federal agencies.	SAWPA	1,4,5	C	80	20	60
21.	Attend Regional Board and State Board meetings as needed to provide oral status report of Roundtable studies prior to consultant presentations.	SAWPA	1,4,5	B	40	20	20

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
22.	Work directly with other agencies to obtain or provide water resource planning data related to a specific Roundtable; receive updated data from a variety of sources; screen, filter, and prepare data to ensure compatibility with Agency computer systems.	SAWPA	1,4,5	A	40	40	0
23.	Perform liaison and coordination activities with government and public agencies, NGOs, research and regulatory organizations, universities and the public related to each Roundtable	SAWPA	1,4,5	B	120	60	60
24.	Prepare all Roundtable formation Agreements, Funding Agreements, Consultant Agreements, Task Orders and Amendments	SAWPA	1,4,5	A	160	160	0

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
25.	Direct and forecast any additional funding needed for staffing, equipment, materials, and supplies; direct the monitoring of and approve expenditures; recommend adjustments as necessary.	SAWPA	1,4,5	B	120	80	40
26.	Facilitate related Scoping Committee meetings, Technical Review Committee meetings, and Consultant coordination meetings	SAWPA	1,4,5	A	400	400	0

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
27.	Respond to information requests and make presentations to the SAWPA Commission, Committees, other agencies, and public interest groups; participate in and represent the Agency in meetings with the public, citizen groups, NGOs, professional associations, private firms, and other agencies; make recommendations to executive staff and the Commission.	SAWPA	1,4,5	B	240	180	60
28.	Coordinate and integrate Roundtable activities with other SAWPA departments, consultants, engineers, and outside planning and water resource agencies	SAWPA	1,4,5	B	80	40	40
29.	Prepare grant applications to supplement project/ program funding	SAWPA	1,4,5,6	C	460	100	360

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
30.	Provide access to project database for consultant use upon approval of impacted Roundtable members.	SAWPA	1,4,5	A	40	40	0
31.	Discuss, develop and coordinate meetings, handouts, and general study progress with Consultants	SAWPA	1,4,5	A	40	40	0
32.	Post all handouts, presentations, reports and other resource material related to Roundtable to respective Roundtable webpages.	SAWPA	1,4,5	A	160	160	0
33.	Inform Roundtable parties of OWOW activities including Call for Projects under OWOW, State and Federal grant programs and application process	SAWPA	1,4,5	A	40	40	0
34.	Provide written quarterly status reports about study to SAWPA Commission and Santa Ana River Dischargers Association.	SAWPA	1,4,5	A	40	40	0



	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours
35.	Prepare and administer Roundtable meeting agendas, meeting notes or minutes, meeting location and audio-visual setup, review minutes and receive and respond to comments from Roundtable members	SAWPA	1,4,5	A	120	120	0
	Total Annual Roundtable hours Totals				4540	2825	1715

\*Colors represent position on Priority Matrix (see page 7)




### Grading of PAT Implementation

Rating:

- A = excellent probability of success
- B = good probability of success
- C = fair probability of success
- D = Unlikely probability of success
- E = embryonic performance or not yet attempted

Roundtables PAT Priority Matrix (Numbers in matrix correspond to specific PATs on table)

Number of Responses	Rating				
	E	D	C	B	A
6					
5					
4			29		
3	3,11	12,14	20	1,16,17,19 21,23,25 27,28	8,9,10,15 18,22,24 26
2			5,7,13		30,31,32,33 34,35
1			6	2	4

Low Concern 
    
 More Attention 
    
 High Focus 

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## OWOW

BL #	OWOW Process, Activity, or Task	Impact on CSFs	5-21-19 Status
<b>OWOW Plan Development</b>			
3	Engage with stakeholders at key milestones to assess group results towards achievement of objectives.	2,6	OWOW Plan Update 2018 was successfully adopted on Feb. 19, 2019 reflecting successful engagement
4	Distribute information to OWOW stakeholders including use of regional GIS functionality and social media.	2,4,9	Info was successfully provided through Pillars to populate and use GIS tools and social media.
5	Assess and report the Watershed's progress toward sustainability and resiliency.	4,7,8,9	A watershed sustainability assessment tool was developed and included with adopted plan to allow future annual assessments.
6	Update the OWOW Plan every 3-4 years or more frequently as needed to reflect current regional water resource needs, knowledge, data, or policy.	2,5,6,7	OWOW Plan Update 2018 was successfully completed four years after the OWOW 2.0 Plan adoption in 2014.
14	Develop standard data capture, storage and distribution protocols to improve regional utilization of data and information generated in the watershed.	2,5,6	Data was captured, stored and distributed to Pillars for plan development and future data use utilization such as for WUE.
18	Conduct post assessment of past OWOW Plan and scoping for next OWOW plan update in order to learn from past OWOW planning and to improve processes	6,7,8	Assessment was conducted of OWOW 2.0 Plan to determine what could be done to improve in order to complete the OWOW Plan Update 2018.
19	Convene Pillars, arrange regular workshops and serve as liaison, facilitator, presenter and coordinator during OWOW planning phase, OWOW funding and selection criteria and OWOW project implementation support.	2,5,6	All work regarding convening pillars, workshops and facilitating OWOW planning went well and successfully. Ongoing work on OWOW funding and selection criteria for Prop 1 IRWM Round 1 has been cited by many as the best process ever conducted by SAWPA for grant funding.
20	Engage with watershed stakeholders with education programs and listening sessions about the benefits of watershed wide thinking and planning.	2,3,4,5	Through pillars and DCI program, tremendous planning, education and listening programs have been implemented to support regional planning and thinking.
<b>OWOW Administration</b>			
1	Prepare standard progress reporting on scope, schedule, deliverables, and budget.	8,9	Overall, all work on the IRWM grant administration has been meeting scope deliverables on time and within budget.
2	Implement a regular process (bi-annually) for confirming or adjusting priorities and resources.	1,6,8	Through the successful SAWPA budget process, priorities and resources were confirmed and adjusted as needed.
7	Retain and strengthen staff and consultants with capacity to conduct integrated water resource management including administrative, accounting, planning, implementation, and communication functions.	5,8	Planning Dept. lost one sr. watershed manager due to another career advancement opportunity. However, his position has now been filled. All other staff remain effective in all functions associated with the grant administration.
9	Manage funding through dedicated, interest bearing accounts.	6	All dedicated funding for OWOW grant administration is used to reimburse projects for project expenses.
10	Provide support to OWOW governance (Steering Committee and SAWPA Commission) to ensure successful administration and approval of OWOW planning and project implementation	1,2	Regular updates and financial reporting are provided to OWOW Governance to ensure project work is implemented effectively.

**OWOW**

BL #	OWOW Process, Activity, or Task	Impact on CSFs	5-21-19 Status
13	Establish and maintain effective and state-of-the-art communication and meeting facilitation systems at SAWPA.	2,5,6	Through recent acquisitions for SAWPA Board room, the audio visual systems have improved significantly.
15	Institute and administer OWOW Calls for Projects and Project Selection with criteria that reflects a systems approach, that encourages multi-benefit, multi-jurisdictional integrated regional projects and programs	1,2,3,4	With the exception of the OC funding breakaway, the OWOW Call for Projects and Project Selection has gone very well. For all participants involved, comments received reflect compliments to staff that the recent approach reflected a fair, open and competitive process.
16	Produce communications strategy, plan and outreach to describe SAWPA’s successes and capabilities under OWOW.	2,5,6	Brochures regarding the past OWOW Prop 84 IRWM funding Rounds results and the recent OWOW Plan and Program have been produced and shared with stakeholders and decision makers.
17	Evaluate Calls for Projects and Project Selection efforts for future process improvement	4,6,7,8	Upon completion of the Call for Projects and Project Selection process anticipated by this Fall, an evaluation will be undertaken to see if stakeholders felt that the process had improved in being more effective, fair, open and transparent.
<b>OWOW Grant Application and Implementation</b>			
11	Successfully apply for, receive, and administer all available State grant funding under IRWM programs designated for the Santa Ana River Watershed	6,7	Work is ongoing to respond to the Prop 1 IRWM Round 1 Proposal Solicitation Package though selection of a list of projects and funding allocation. Final application to State will occur in fall of 2019.
12	Identify, pursue, secure and administer additional funding for integrated water resources management	6,7	Efforts are underway to secure US Bureau of Reclamation funding to help support an IRWM project proposed by SAWPA to enhance a decision support tool for improved water use efficiency.
21	Implement SAWPA programs and projects identified by the OWOW Plan	2,5,6,7	Work is underway to still implement past Prop 84 projects and programs including the largest IRWM in the State, SARCCUP.
<b>OWOW SAWPA Grant Administration</b>			
8	Exercise SAWPA’s fiduciary responsibility in administering and overseeing the appropriate use of all grant funds awarded to the DWR RAP accepted region, SAWPA, and to OWOW project proponents	3,6,7	SAWPA staff is fully accountable and tracks all grant funds awarded to SAWPA to implement the Prop 84 IRWM and Prop 1 projects and program.
<b>TOTALS</b>			

## ROUNDTABLE

BL #	Roundtable Process, Activity, or Task	Impact on CSFs	Status 5-21-19
	<b>Roundtable Administration</b>		
2	Implement a regular process (bi-annually) for confirming or adjusting priorities and resources.	3	Roundtables priorities and resources were reviewed and adjusted as part of the recent SAWPA FY 20-21 Budget process
5	Track the implementation of identified solution(s) resulting from each Roundtable.	4,5	Work in most Roundtables are tracked by regular annual reports provided to the Regional Board. In all cases, the solutions proposed and implemented have been successful overall as demonstrated in recent Roundtables brochure material.
6	Prepare standard criteria, review, and approval process for accepting new potential Roundtable activities.	2	No new Roundtables have been proposed over the past year. However, efficiencies have improved with current efforts to fold the Imported Water Recharge Workgroup under the Basin Monitoring Program Task Force
7	Retain and strengthen capacity of staff and consultants to conduct integrated water resource management including administrative, accounting, planning, implementation, and communication functions.	1,6	Work has commenced on succession plan for the regulatory advisor and facilitator, Risk Sciences, and an RFQ has been prepared. Staff levels to support Roundtables have been evaluated and deemed adequate now with the filling of a watershed manager to replace a recently departed sr. watershed manager.
8	Prepare and manage Roundtable annual budgets showing cost breakdown of study costs by agency, revenue needs and obtain Roundtable approval. Include budgets into annual SAWPA budget.	1,4,5	Budgets have been effectively prepared and approved for all Roundtables except the LE/CL TMDL Roundtable. All budgets prepared have folded into the approved SAWPA FY 20-21 Budget.
9	Manage funding through dedicated, interest bearing accounts for each Roundtable.	1,4,5	Funding for all Roundtables are kept in separate dedicated, interest bearing accounts for each Roundtable and managed by Planning and Finance staff.
10	Provide project management and transparent accounting for shared funds on joint projects and activities.	1,4,5	Regular quarterly reports for each an every Roundtable is prepared by the Planning Dept. and shared with upper mgt, SAWPA member agency GMs, and SAWPA Commission to ensure effective project management and transparency. All accounting of shared funding among Roundtables is conducted by the SAWPA Finance Dept. in coordination with the SAWPA Planning Dept.
12	Maintain and/or upgrade SAWPA facilities and virtual meeting capabilities.	1,4,6	The recent acquisition of the SAWPA Boardroom high definition screen has improved effectiveness of presentations and meetings. Future capabilities to utilize virtual meetings through this hardware will be utilized soon.
17	Manage and coordinate the Roundtable project or program to ensure compliance with environmental requirements, established standards, specifications, Agency policies, and cost and schedule limitations.	1,4,5	All Roundtable projects and programs are meeting required environmental requirements, standards, specifications, agency policies, cost and schedule limitations. This is evidenced through the successful SAR fish habitat project and the LE/CL TMDL Update.
19	Manage Roundtable projects and programs per Agency policies and procedures with particular emphasis on obtaining maximum job quality, accurate cost control, compliance with schedules, and satisfactory project relations.	1,4,5	All Roundtable projects are reflecting SAWPA's policies and procedures with effective quality and cost control measures implemented.
25	Direct and forecast any additional funding needed for staffing, equipment, materials, and supplies; direct the monitoring of and approve expenditures; recommend adjustments as necessary.	1,4,5	Long term funding needs to support the Roundtable have been effectively planned for and is included in the approved 2020-2021 FYE SAWPA Budget.

## ROUNDTABLE

BL #	Roundtable Process, Activity, or Task	Impact on CSFs	Status 5-21-19
29	Prepare grant applications to supplement project/ program funding	1,4,5,6	Grant applications to support Roundtable efforts have been sought and supported by staff. The grant applications include both the Bureau of Reclamation grants and other State grant programs.
<b>Roundtable Communication &amp; Outreach</b>			
1	Prepare standard progress reporting on scope, schedule, deliverables, and budget for each Roundtable agreement.	2,4-5	Regular quarterly reports for each an every Roundtable reflecting progress on scope, schedule, deliverables and budget are prepared by the Planning Dept. and shared with SAWPA upper mgt, SARDA SAWPA member agency GMs, and SAWPA Commission.
3	Engage with stakeholders at key milestones to assess group results towards achievement of objectives.	3,4,5	With the assistance of our regulatory advisor, progress towards key milestones especially for TMDL compliance are provided to the Regional Board and reported in staff's quarterly reports.
4	Distribute information collected and developed under Roundtable efforts available to other stakeholders and Roundtables to avoid duplication and improve efficiency.	4	Brochures that reflect the work, progress and results of each Roundtable have now been prepared and have been distributed to Roundtable participants, SAWPA member agency GMs and SAWPA Commission.
11	Produce video describing SAWPA's successes and capabilities in collaboration.	1,4,5	Work on an overall video describing successes and capabilities of collaboration has not been produced yet. Wall displays for SAWPA office to reflect success of OWOW and Roundtable are under development by Planning Dept.
13	Work directly with other agencies to obtain or provide water resource planning data related to a specific Roundtable; receive updated data from a variety of sources; screen, filter, and prepare data to ensure compatibility with Agency computer systems. Develop standard data protocols to improve regional utilization of data and information generated in the watershed.	1,4	Work is ongoing with Roundtables to ensure that all data is shared with all Roundtable agencies and that standard protocols for sharing that data is generated. An example is the agreed upon approach to obtain TDS and nitrogen data for groundwater basins through the Basin Monitoring Program Task Force.
14	Prepare newsletter articles, brochures, fact sheets and project and program descriptions for distribution.	1,4,5	Newsletter articles under the SAWPA blog, brochure and fact sheets have been completed for all OWOW and Roundtable efforts.
15	Serve as leader, facilitator and in some cases, Chair, of the Roundtable meetings to ensure consensus.	1,4,5	SAWPA staff serves as the leader, chair and facilitator for many of the Roundtables and works effectively to obtain consensus.
20	Compile and develop environmental documentation as needed for Roundtable projects and programs; manage the work of environmental consultants in their provision of documentation and mitigation monitoring activities to meet the requirements and regulations of State and Federal agencies.	1,4,5	All work associated with obtaining the necessary environmental documentation and permits has been obtained and is managed well. An example has been the successful CEQA and permits obtained for the Santa Ana Sucker habitat restoration project.
22	Work directly with other agencies to obtain or provide water resource planning data related to a specific Roundtable; receive updated data from a variety of sources; screen, filter, and prepare data to ensure compatibility with Agency computer systems.	1,4,5	Under Roundtables, all data collected for planning development is conducted in close coordination with the IT department of SAWPA and member agencies to ensure compatibility and effectiveness.
27	Respond to information requests and make presentations to the SAWPA Commission, Committees, other agencies, and public interest groups; participate in and represent the Agency in meetings with the public, citizen groups, NGOs, professional associations, private firms, and other agencies; make recommendations to executive staff and the Commission.	1,4,5	SAWPA staff has been very responsive in information requests and presentations for various agencies and public interest groups throughout the watershed. For example, an informational presentation about watershed management was provided to a citizen group interested in Riverside development and multiple water agencies about WUE tools developed using grant funding.



## ROUNDTABLE

BL #	Roundtable Process, Activity, or Task	Impact on CSFs	Status 5-21-19
31	Discuss, develop and coordinate meetings, handouts, and general study progress with Consultants	1,4,5	SAWPA staff works closely with Roundtable consultants to ensure handouts and study progress reports are provided prior to meetings.
32	Post all handouts, presentations, reports and other resource material related to Roundtable to respective Roundtable webpages.	1,4,5	All resource material produced in a Roundtable effort are posted on the SAWPA webpages corresponding to each respective Roundtable.
33	Inform Roundtable parties of OWOW activities including Call for Projects under OWOW, State and Federal grant programs and application process	1,4,5	Information about the OWOW Conference and OWOW Call for Projects for grant funding was shared with all Roundtable parties.
34	Provide written quarterly status reports about study to SAWPA Commission and Santa Ana River Dischargers Association.	1,4,5	SAWPA staff regularly prepares quarterly status reports for the SAWPA Commission, SAWPA member agency GMs and Santa Ana River Dischargers Association.
35	Prepare and administer Roundtable meeting agendas, meeting notes or minutes, meeting location and audio-visual setup, review minutes and receive and respond to comments from Roundtable members	1,4,5	All Roundtable agencies receive Outlook invites for future meetings and all necessary resource materials including agendas, meeting notes, meeting location info, etc a week prior to the scheduled meetings.
<b>Roundtable Facilitation</b>			
21	Attend Regional Board and State Board meetings as needed to provide oral status report of Roundtable studies prior to consultant presentations.	1,4,5	SAWPA staff often attends and makes presentations to the Regional Board. This was recently done in association with the Lake Elsinore and Canyon Lake TMDL Revision and Update Workshop.
23	Perform liaison and coordination activities with government and public agencies, NGOs, research and regulatory organizations, universities and the public related to each Roundtable	1,4,5	SAWPA staff regularly conducts liaison and coordination activities with multiple types of organizations across the watershed. An example is the outreach conducted to support water use efficiency tools created by SAWPA and shared with water agencies throughout the watershed.
26	Facilitate related Scoping Committee meetings, Technical Review Committee meetings, and Consultant coordination meetings	1,4,5	SAWPA has administered and supported Scoping Committees, Technical Review Committees and Consultant coordination meetings for several of Roundtables over the past nine months. This was evidenced in the Basin Monitoring Program Task Force in the scoping and consultant selection for the triennial ambient water quality update.
28	Coordinate and integrate Roundtable activities with other SAWPA departments, consultants, engineers, and outside planning and water resource agencies	1,4,5	Information regarding sampling under the upcoming Emerging Contaminants Program Task Force will be shared to also benefit the Middle SAR TMDL Task Force.
<b>Roundtable Implementation</b>			
16	Conduct independent studies, research or analyses including data, maps, charts, tables, diagrams, reports and fact sheets as requested by Roundtable members and SAWPA related to specific Roundtable activities.	1,4,5	An independent study was requested by the SAWPA Commission to look at the water quality, riparian and ecosystem impacts of homelessness. This study will be undertaken this fall and will reflect coordination and data sharing of several of the Roundtables focused on bacteria data collection.
18	Prepare RFPs and RFQs for consultant services. Evaluate and assist in the selection of consultants; provide administration of all contracts for assigned projects and programs; evaluate and critique work products of consultants including technical reports, memoranda, power point presentations and environmental documents; respond to correspondence as needed	1,4,5	RFPs and RFQs have been prepared as needed by Roundtables. RFPs were conducted for several of the Roundtable to acquire consultant support and an RFQ for technical writing and grant writing support as well as for regulatory/facilitator support.

## ROUNDTABLE

BL #	Roundtable Process, Activity, or Task	Impact on CSFs	Status 5-21-19
24	Prepare all Roundtable formation Agreements, Funding Agreements, Consultant Agreements, Task Orders and Amendments	1,4,5	Staff prepared all Roundtable Agreement for Services, Funding Partnerships, Task Orders and Amendments working closely with other SAWPA departments.
30	Provide access to project database for consultant use upon approval of impacted Roundtable members.	1,4,5	Consultants may request data from SAWPA for data only after permission is granted from the local agencies impacted. An example is the nitrogen and TDS and groundwater level data provided as prepared by the Basin Monitoring Program Task Force.
<b>TOTALS</b>			

## IT

IT Effort	Supporting CSFs	Rating	Status
<b>Office Support</b>			
Email - User Account Management			Office 365 - Continuous upgrades with occasional addition or subtraction of accounts
Word / Excel / Powerpoint			
Phone System - Replacement			RFP writing under way for October replacement
File Recovery			On Request
OnBase Document Management / Workflow			Adding more Workflows / adding search menus and providing support
Time Sheet Software and support			Supporting current software while about to move to cloud based time sheet software
Desktops			Refresh under way along with new hire support
<b>Website Support</b>			
New Pages			Working with departments on page content and structure
User Account Management			Adding users and issuing new passwords
User Support			working with users on new site
Interaction with Webmaster			Working with webmaster on capabilities
<b>Data</b>			
Database			Managing multiple databases
Data Capture Projects and support			Working with Planning on Landscape data project
Reports			Reports generated from most databases
<b>GIS</b>			
Applications such as DigAlert, OWOW Project Applications etc.			Ongoing Support
Data Collection and reporting (Aerial Photos, NAICS codes etc)			Working with SCAG and OWOW project Team
Map and Display Generation			Support for Task forces and ongoing projects
<b>Meeting Room Support</b>			
New interactive Displays			Support new Building refresh
New Presentation Software / Hardware			
New Conference Abilities			
Upgrade Infrastructure - Floor and wall monuments			

**BRINE LINE**

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours	Status
	<b>Marketing Plan</b>				<b>1,040</b>	<b>200</b>	<b>840</b>	
1	Prepare plan – ID target audiences.	SAWPA	3-Feb	E	208	0	208	Update to the website to include more customer friendly search and information. Includes information on what is the Brine Line and how to connect to the Brine Line. Key Pretreatment documents included. Brine Line brochure has been developed and distributed to potential customers. Staff is in the process of updating the Brine Line brochure. Lease Capacity Pool Agreement was prepared and signed by Member Agencies to help capacity holders utilize their unused capacity and as a mechanism to allow smaller industries to connect to the Brine Line.
2	Implement plan	SAWPA	3-Feb	E	312	80	232	
3	Identify potential customers and promote	SAWPA	3-Feb	E	208	40	168	
4	Help capacity holders market their unused capacity in the Brine Line.	SAWPA	3-Feb	E	156	40	116	
5	Streamline information exchange, application, permit issuance process,	SAWPA	3-Feb	B	156	40	116	
	<b>Business Plan</b>				<b>1,040</b>	<b>440</b>	<b>600</b>	
6	Update Plan.	SAWPA	8-Jan	B	260	0	260	Staff is in the process of updating the Brine Line Business Plan.
7	Investigate financing options for customer capacity investment, physical connection cost for Commission consideration.	SAWPA	1,5-6,8	E	104	20	84	A Brine Line lease rate and Lease Capacity Pool agreement has been developed to assist those industrial customers with limited capital resources.
8	Investigate financing options for the protection and/or relocation of the Brine Line.	SAWPA	1,5-6,8	A	104	60	44	Financing options have typically utilized SRF loans and reserves designated for Brine Line replacement. As major capital improvement projects are identified a financing plan will be prepared.
9	Evaluate options for streamlining Collection Station operations and minimizing source control risk.	SAWPA	2-3,5-6	B	208	120	88	SAWPA Staff is working with OCS staff to streamline the operation of the Collection stations through depermitting the stations and approving their use through other mechanism such as a multi-agency MOU or letter to discharge. Discussions with OCS are on-going.
10	Conduct workshop to review forecasted costs for operations and maintenance.	SAWPA	3,6	B	52	0	52	Operations
11	Evaluate all aspects of the Brine Line rate and TSS Formation Billing Formula.	SAWPA	3,6	In work	260	220	40	Operations
12	Establish and maintain repair and replacement reserve targets.	SAWPA	3,6	A	52	20	32	Staff will hire Consultant/Contractor to assess the value of the brine line and cost for catastrophic repair. Values will be used to determine reserve targets.
	<b>Sewer System Management Plan</b>				<b>15,288</b>	<b>13,100</b>	<b>2,188</b>	
13	Continue to update, implement & audit a comprehensive maintenance management program.	SAWPA	1,4-8	A	312	240	72	Operations
14	Update Overflow Emergency Response Plan. Conduct response team training.	SAWPA	1,6,8	A	104	104	0	Operations
15	Ensure availability of Emergency Response resources.	SAWPA	1	B	52	40	12	Operations
16	Implement spill prevention measures as part of system maintenance practices.	SAWPA	1,6,8	A	52	52	0	Operations

**BRINE LINE**

Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours	Status	
17	Implement a source control program as the Delegated Control Authority. Prepare and approve an Ordinance, Enforcement Response Plan, Policies and Procedures Manual, SOPs consistent with Federal requirements and OCSD standards.	SAWPA	1,7-8	A	1,040	1,040	0	Ordinance was updated and adopted in September 2017. Update to Enforcement Response Plan, Policies and Procedures Manual and SOPs consistent with Federal requirements and OCSD standards was completed in April 2018 and submitted to OCSD. Comments were received by OCSD in February 2019. Staff is reviewing comments and editing the Contract Documents as appropriate. A 1st draft response is anticipated in July 2019.
18	Implement the four components of a Source Control Program: permitting, monitoring, enforcement, reporting.	SAWPA	1,7-8	A	3,120	2,720	400	SAWPA continues to implement the four components of a Source Control Program. Metrics? # of permits, monitoring, enforcement and reports?
19	Water Quality Sampling - Database maintenance.	SAWPA	1,7-8	A	520	480	40	SAWPA continues to perform water quality sampling and overseas sampling of Member/contract Agencies.
20	Operations – perform monthly flow meter readings, monitor/record data on operations performance.	SAWPA	6-May	A	208	208	0	Operations
21	Maintenance – perform activities – line cleaning, CCTV pipe inspection, MAS inspection, R/W maintenance, valve exercising, etc. Prepare bid documents, scope of work, bid, evaluate, recommend contract award, manage performance.	SAWPA	6-May	A	1,040	900	140	Operations
22	Repair – perform one time and recurring repairs – T-Lok liner, erosion, sink holes.	SAWPA	6-May	B	1,040	900	140	Operations
23	Repair – recurring, a/v valves, high frequency to reduce SSOs.	SAWPA	5-6,8	B	1,040	900	140	Operations
24	Repair – recurring – MASs, raise lid, erosion.	SAWPA	6-May	A	520	520	0	Operations
25	Utility locating and marking – perform as required by state law, document.	SAWPA	6-May	A	1,040	1,040	0	Operations
26	Potholing - As-built drawing update.	SAWPA	6-May	C	520	320	200	Operations
27	MAS inspection.	SAWPA	6-May	A	520	520	0	Operations
28	Storm inspection.	SAWPA	6-May	A	156	156	0	Operations
29	Safety meetings, equipment maintenance/calibration.	SAWPA	4	A	104	104	0	Operations
30	Construction in proximity to pipe – review plans for adequate spacing/ protection, observe construction.	SAWPA	5	A	520	520	0	SAWPA staff continues to review plans from others to determine impact to the Brine Line.
31	Automate system operations, data collection, and use of remote sensing.	SAWPA	6-May	E	520	120	400	Operations

**BRINE LINE**

	Process, Activity, or Task	Owner	Impact on CSFs*	Rating (likelihood of success)	Estimated Annual Hours – Need for “A” Level	Estimated Annual Budgeted Hours	Difference between Need and Budgeted Hours	Status
32	Implement a prioritized repair and capital improvement program.	SAWPA	6	B	1,560	1,200	360	Short Tern Repair and CIP have been prioritized and included in FY 20 and 21 Budget. Cost estimate and schedule developed for long term CIP (4D repairs). Continued coordination with OCSD on their CIP program.
33	Prepare design/construction docs for minor relocations, addition of MASs, etc. Bid/present results to Commission for award, manage construction.	SAWPA	3,5-6	B	520	400	120	Design/Construction are presented to Commision as they are developed.
34	Maintain computer based hydraulic model of system, confirm calibration, run scenarios.	SAWPA	6	A	312	312	0	Operations
35	Evaluate other export concepts and opportunities.	SAWPA	6	B	312	200	112	
36	Develop comprehensive risk management program.	SAWPA	3, 5-6	A	104	104	0	
37	Establish personnel positions to allow for career progression while recognizing the diverse skill set required.	SAWPA	4	B	52	0	52	An Pretreatment Program Apprentice position has been included in the FY 20 budget.
	<b>Communications</b>				<b>1,040</b>	<b>620</b>	<b>420</b>	
38	Survey customer satisfaction regarding all aspects of customer interface - notifications and scheduling of maintenance, permit requirements, water quality monitoring, reporting, costs/billing.	SAWPA	1,8	E	104	0	104	Staff is developing a customer satisfaction survey to distribute to Brine Line Permit holders.
39	Establish and maintain Brine Line performance metrics and indicators. Present to Commission and agencies.	SAWPA	3,5-6	B	156	120	36	
40	Meet regularly with OCSD (Joint Policy Committee, Joint Operations Committee) to exchange information, discuss planning, budgeting, and costs.	SAWPA	3, 6-8	A	260	260	0	SAWPA staff continues to meet regularly with OCSD.
41	Develop/use web-based tools for discharge permit applications, permit management, and billing.	SAWPA	1,7	E	520	240	280	Tool to allow dischargers to view their permit and water quality data has been developed and is under review.
	<b>TOTALS</b>				<b>18,408</b>	<b>14,360</b>	<b>4,048</b>	

**OPERATIONS**

Process, Activity, or Task		Owner	CSFs	Grade	FTE	Note	Update
	<b>Marketing Plan</b>				<b>0.5</b>	<b>1</b>	
1	Prepare plan – ID target audiences.	SAWPA	3-Feb	E	0.1		
2	Implement plan	SAWPA	3-Feb	E	0.15		
3	Identify potential customers and promote	SAWPA	3-Feb	E	0.1		
4	Help capacity holders market their unused capacity in the Brine Line.	SAWPA	3-Feb	E	0.075		
5	Streamline information exchange, application, permit issuance process, complete physical connection	SAWPA	3-Feb	B	0.075		
	<b>Business Plan</b>				<b>0.5</b>	<b>2</b>	
6	Update Plan.	SAWPA	8-Jan	B	0.125		
7	Investigate financing options for customer capacity investment, physical connection cost for Commission consideration	SAWPA	1,5-6,8	E	0.05		
8	Investigate financing options for the protection and/or relocation of the Brine Line.	SAWPA	1,5-6,8	A	0.05		
9	Evaluate options for streamlining Collection Station operations and minimizing source control risk.	SAWPA	2-3,5-6	B	0.1		
10	Conduct workshop to review forecasted costs for operations and maintenance.	SAWPA	3,6	B	0.025		Part of budgeting process (budget workshop with Member Agencies).
11	Evaluate all aspects of the Brine Line rate and TSS Formation Billing Formula	SAWPA	3,6	In work	0.125		On-going.
12	Establish and maintain repair and replacement reserve targets.	SAWPA	3,6	A	0.025		
	<b>Sewer System Management Plan</b>				<b>7.5</b>	<b>3</b>	
13	Continue to update, implement & audit a comprehensive maintenance management program.	SAWPA	1,4-8	A	0.15		Completed successfully and on-going as required.
14	Update Overflow Emergency Response Plan. Conduct response team training.	SAWPA	1,6,8	A	0.05		Completed successfully and on-going on an annual basis.
15	Ensure availability of Emergency Response resources	SAWPA	1	B	0.025		Available through on-call contracts, WMWD, IEUA, and EMWD.
16	Implement spill prevention measures as part of system maintenance practices.	SAWPA	1,6,8	A	0.025		On-going AV maintenance has significantly reduced SSOs. DigAlert response and contractor coordination has reduced contractor caused SSOs.
17	Implement a source control program as the Delegated Control Authority. Prepare and approve an Ordinance, Enforcement Response Plan, Policies and Procedures Manual,	SAWPA	1,7-8	A	0.5		
18	Implement the four components of a Source Control Program: permitting, monitoring, enforcement, reporting	SAWPA	1,7-8	B	2		
19	Water Quality Sampling - Database updates	SAWPA	1,7-8	A	0.25		iPacs was implemented, training provided.
20	Operations – perform monthly flow meter readings, monitor/record data on operations performance.	SAWPA	6-May	A	0.1		Completed successfully and on-going on an annual basis.
21	Maintenance – perform activities – line cleaning, CCTV pipe inspection, MAS inspection, R/W maintenance, valve exercising, etc. Prepare bid documents, scope of	SAWPA	6-May	A	0.5		Completed successfully and on-going on an annual basis.
22	Repair – perform one time and recurring repairs – T-Lok liner, erosion, sink holes	SAWPA	42496	B	0.5		Completed successfully and on-going on an annual basis.



**OPERATIONS**

Process, Activity, or Task		Owner	CSFs	Grade	FTE	Note	Update
23	Repair – recurring, a/v valves, high frequency to reduce SSOs	SAWPA	5-6,8	B	0.5		Completed successfully and on-going on an annual basis.
24	Repair – recurring – MASs, raise lid, erosion	SAWPA	6-May	A	0.25		Completed successfully and on-going on an annual basis.
25	Utility locating and marking – perform as required by state law, document.	SAWPA	6-May	A	0.5		Completed successfully and on-going on an annual basis.
26	Potholing - As-built drawing update	SAWPA	6-May	C	0.25		Completed successfully and on-going on an annual basis.
27	MAS inspection	SAWPA	6-May	A	0.25		Completed successfully and on-going on an annual basis.
28	Storm inspection	SAWPA	6-May	A	0.075		Completed successfully and on-going on an annual basis.
29	Safety meetings, equipment maintenance/calibration	SAWPA	4	A	0.05		Completed successfully and on-going on an annual basis.
30	Construction in proximity to pipe – review plans for adequate spacing/ protection, observe construction	SAWPA	5	A	0.25		
31	Automate system operations, data collection, and use of remote sensing	SAWPA	6-May	E	0.25		Pending
32	Implement a prioritized repair and capital improvement program.	SAWPA	6	B	0.75		
33	Prepare design/construction docs for minor relocations, addition of MASs, etc. Bid/present results to Commission for award, manage construction	SAWPA	3,5-6	A	0.25		
34	Maintain computer based hydraulic model of system, confirm calibration, run scenarios	SAWPA	6	A	0.15		Completed successfully and on-going on an annual basis.
35	Evaluate other export concepts and opportunities.	SAWPA	6	B	0.15		
36	Develop comprehensive risk management program.	SAWPA	3, 5-6	A	0.05		
37	Establish personnel positions to allow for career progression while recognizing the diverse skill set required.	SAWPA	4	B	0.025		
	<b>Communications</b>				<b>0.5</b>	4	
38	Survey customer satisfaction regarding all aspects of customer interface - notifications and scheduling of maintenance, permit requirements, water quality	SAWPA	1,8	E	0.05		
39	Establish and maintain Brine Line performance metrics and indicators. Present to Commission and agencies.	SAWPA	3,5-6	B	0.075		Activity breakdown analysis performed, including cost per activity.
40	Meet regularly with OCS D (Jt Policy Comm, Jt Operations Comm) to exchange information, discuss planning, budgeting, and costs.	SAWPA	3, 6-8	A	0.125		
41	Develop/use web-based tools for discharge permit applications, permit management, and billing.	SAWPA	1,7	E	0.25		

Santa Ana Watershed Project Authority  
Cash Transaction Report  
Month of October 2019

Below is a summary of cash transactions completed during the month in the Authority's checking account with US Bank. Attached are summaries by major revenue and expense classifications.

Cash Receipts and Deposits to Account	\$ 1,033,372.31
Net Investment Transfers	17,223.26
Cash Disbursements	<u>(2,379,886.26)</u>
Net Change for Month	\$ (1,329,290.69)
Balance at Beginning of Month	<u>3,370,143.01</u>
Balance at End of Month per General Ledger	<u><u>\$ 2,040,852.32</u></u>
Collected Balance per Bank Statement	\$ 2,169,150.64

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**ACCOUNTS PAYABLE RECONCILIATION**

Accounts Payable Balance @ 09/30/19	\$ 21,216,711.64
Invoices Received for October 2019	2,419,571.65
Invoices Paid by check/wire during October 2019 (see attached register)	<u>(2,132,080.08)</u>
Accounts Payable Balance @ 10/31/19	<u><u>\$ 21,504,203.21</u></u>

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**CASH RECEIPTS**

Brine Line Operating Revenues	\$ 675,524.97
Participant Fees	263,038.45
LESJWA Admin Reimbursement	11,448.63
Grant Proceeds - Prop 84	18,578.12
Grant Proceeds - Prop 84 Pass-throughs	64,751.04
Other	<u>31.10</u>
Total Receipts and Deposits	\$ 1,033,372.31

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**INVESTMENT TRANSFERS**

Transfer of Funds:	
From (to) LAIF	\$ -
From (to) Legal Defense Fund	-
From (to) LESJWA	-
From (to) Investments	<u>17,223.26</u>
Total Investment Transfers	\$ 17,223.26

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**CASH DISBURSEMENTS**

By Check:	
Payroll	
Operations	<u>2,132,080.08</u>
Total Checks Drawn	\$ 2,132,080.08
By Cash Transfer:	
Payroll	\$ 172,793.66
Payroll Taxes	73,612.32
Take Care (AFLAC)	<u>1,400.20</u>
Total Cash Transfers	\$ 247,806.18
Total Cash Disbursements	<u><u>\$ 2,379,886.26</u></u>

Santa Ana Watershed Project Authority  
Check Detail  
Oct-19

Category	Check #	Check Date	Type	Vendor	Check Amount
Accrued Volumetric Costs	EFT02932	10/11/2019	CHK	Orange County Sanitation District	\$ 661,977.41
<b>Accrued Volumetric Costs Total</b>					<b>\$ 661,977.41</b>
Asset Clearing	EFT02929	10/3/2019	CHK	Total Plan Business Interiors	\$ 404.55
Asset Clearing	EFT02948	10/11/2019	CHK	Total Plan Business Interiors	\$ 3,654.00
Asset Clearing	EFT02985	10/31/2019	CHK	Custom Coatings and Construction	\$ 7,045.00
<b>Asset Clearing Total</b>					<b>\$ 11,103.55</b>
Auto Expenses	3929	10/3/2019	CHK	County of Riverside/Transportation	\$ 397.27
Auto Expenses	3941	10/11/2019	CHK	County of Riverside	\$ 214.70
Auto Expenses	3955	10/25/2019	CHK	Riverside Transmission Center	\$ 1,653.86
Auto Expenses	3967	10/31/2019	CHK	County of Riverside	\$ 423.13
Auto Expenses	3971	10/31/2019	CHK	County of Riverside/Transportation	\$ 543.38
<b>Auto Expenses Total</b>					<b>\$ 3,232.34</b>
Benefits	3922	10/3/2019	CHK	Cal PERS Long Term Care Program	\$ 102.04
Benefits	3934	10/11/2019	CHK	ACWA/JPIA	\$ 48,594.06
Benefits	3938	10/11/2019	CHK	Cal PERS Long Term Care Program	\$ 102.04
Benefits	3947	10/17/2019	CHK	AFLAC	\$ 639.92
Benefits	3948	10/17/2019	CHK	WageWorks	\$ 140.00
Benefits	3952	10/25/2019	CHK	Cal PERS Long Term Care Program	\$ 102.04
Benefits	3970	10/31/2019	CHK	Mutual Of Omaha	\$ 2,998.54
Benefits	EFT02934	10/11/2019	CHK	Vantagepoint Transfer Agents	\$ 4,267.62
Benefits	EFT02941	10/11/2019	CHK	Vantagepoint Transfer Agents	\$ 392.83
Benefits	EFT02966	10/25/2019	CHK	Vantagepoint Transfer Agents	\$ 4,267.62
Benefits	EFT02971	10/25/2019	CHK	Vantagepoint Transfer Agents	\$ 392.83
Benefits	P037226	10/11/2019	WDL	Public Employees' Retirement System	\$ 22,095.91
Benefits	P037227	10/11/2019	WDL	CalPERS Supplemental Income	\$ 5,135.69
Benefits	P037330	10/25/2019	WDL	CalPERS Supplemental Income	\$ 4,674.19
Benefits	P037331	10/25/2019	WDL	Public Employees' Retirement System	\$ 21,964.09
Benefits	WDL000004951	10/3/2019	WDL	Takecare	\$ 384.60
Benefits	WDL000004958	10/16/2019	WDL	Takecare	\$ 613.30
Benefits	WDL000004959	10/17/2019	WDL	Takecare	\$ 110.00
Benefits	WDL000004966	10/9/2019	WDL	Takecare	\$ 100.00
Benefits	WDL000004969	10/29/2019	WDL	Takecare	\$ 192.30
<b>Benefits Total</b>					<b>\$ 117,269.62</b>
Building Lease	3959	10/25/2019	CHK	Wilson Property Services, Inc	\$ 1,530.00
<b>Building Lease Total</b>					<b>\$ 1,530.00</b>
Consulting	3931	10/3/2019	CHK	Somach, Simmons & Dunn	\$ 3,381.00
Consulting	3932	10/7/2019	CHK	WEKA Inc	\$ 12,200.00
Consulting	3969	10/31/2019	CHK	Project Partners	\$ 2,583.82
Consulting	3972	10/31/2019	CHK	The Technology Depot	\$ 123.75
Consulting	EFT02911	10/2/2019	VOID	WEKA Inc	\$ (12,200.00)
Consulting	EFT02924	10/3/2019	CHK	Integrated Systems Solutions	\$ 1,782.50
Consulting	EFT02925	10/3/2019	CHK	Accent Computer Solutions Inc	\$ 1,575.00
Consulting	EFT02926	10/3/2019	CHK	Dudek	\$ 11,748.21
Consulting	EFT02928	10/3/2019	CHK	Sol Media	\$ 7,280.00
Consulting	EFT02943	10/11/2019	CHK	Trussell Technologies, Inc.	\$ 1,169.11
Consulting	EFT02944	10/11/2019	CHK	Woodard & Curran Inc.	\$ 8,191.05
Consulting	EFT02956	10/17/2019	CHK	CDM Smith, Inc.	\$ 63,089.84
Consulting	EFT02957	10/17/2019	CHK	Woodard & Curran Inc.	\$ 13,333.98
Consulting	EFT02959	10/17/2019	CHK	GEI Consultants	\$ 18,970.04
Consulting	EFT02960	10/17/2019	CHK	Water Systems Consulting	\$ 47,437.49
Consulting	EFT02961	10/17/2019	CHK	Marisa Perez-Reyes	\$ 2,937.50
Consulting	EFT02967	10/25/2019	CHK	Risk Sciences	\$ 6,491.77
Consulting	EFT02969	10/25/2019	CHK	West Coast Advisors	\$ 9,750.00
Consulting	EFT02973	10/25/2019	CHK	Accent Computer Solutions Inc	\$ 2,730.00
Consulting	EFT02974	10/25/2019	CHK	WEKA Inc	\$ 14,640.00
Consulting	EFT02977	10/25/2019	CHK	DeGrave Communications	\$ 3,028.00
Consulting	EFT02988	10/31/2019	CHK	Dudek	\$ 29,445.00
Consulting	EFT02990	10/31/2019	CHK	Marisa Perez-Reyes	\$ 5,441.34
<b>Consulting Total</b>					<b>\$ 255,129.40</b>
Contributions	3945	10/11/2019	CHK	Multi-State Salinity Coalition	\$ 1,000.00
<b>Contributions Total</b>					<b>\$ 1,000.00</b>
Credit Cards	P037270	10/10/2019	WDL	US Bank	\$ 10,076.24
<b>Credit Cards Total</b>					<b>\$ 10,076.24</b>
Debt Service	3933	10/10/2019	CHK	State Water Resources Control Board	\$ 899,095.55
<b>Debt Service Total</b>					<b>\$ 899,095.55</b>
Director Costs	EFT02964	10/25/2019	CHK	Denis R Bilodeau	\$ 80.04
Director Costs	EFT02965	10/25/2019	CHK	Eastern Municipal Water District	\$ 505.84

Santa Ana Watershed Project Authority  
Check Detail  
Oct-19

Category	Check #	Check Date	Type	Vendor	Check Amount
Director Costs	EFT02968	10/25/2019	CHK	Western Municipal Water District	\$ 508.16
Director Costs	EFT02975	10/25/2019	CHK	Jasmin Hall	\$ 30.16
Director Costs	EFT02978	10/25/2019	CHK	Kati Parker	\$ 93.96
Director Costs	EFT02980	10/25/2019	CHK	June Hayes	\$ 25.52
Director Costs	EFT02981	10/25/2019	CHK	T. Milford Harrison	\$ 156.02
<b>Director Costs Total</b>					<b>\$ 1,399.70</b>
Employee Reimbursement	EFT02927	10/3/2019	CHK	Kelly Berry	\$ 54.68
Employee Reimbursement	EFT02931	10/3/2019	CHK	Halley Mullay	\$ 0.58
Employee Reimbursement	EFT02935	10/11/2019	CHK	Mark Norton	\$ 564.45
Employee Reimbursement	EFT02936	10/11/2019	CHK	Jerry Oldenburg II	\$ 233.99
Employee Reimbursement	EFT02939	10/11/2019	CHK	Marie Jauregui	\$ 125.00
Employee Reimbursement	EFT02945	10/11/2019	CHK	Ian Achimore	\$ 57.13
Employee Reimbursement	EFT02946	10/11/2019	CHK	Michael Plasencia	\$ 498.98
Employee Reimbursement	EFT02949	10/11/2019	CHK	Karen Breucop	\$ 35.32
Employee Reimbursement	EFT02958	10/17/2019	CHK	Alison L Lewis	\$ 289.19
Employee Reimbursement	EFT02962	10/25/2019	CHK	Richard Whetsel	\$ 321.29
Employee Reimbursement	EFT02972	10/25/2019	CHK	Karen Williams	\$ 50.90
Employee Reimbursement	EFT02976	10/25/2019	CHK	Kelly Berry	\$ 26.10
Employee Reimbursement	EFT02983	10/25/2019	CHK	Katie Lucht	\$ 70.24
<b>Employee Reimbursement Total</b>					<b>\$ 2,327.85</b>
Employment Recruitment	3973	10/31/2019	CHK	ASCE Los Angeles	\$ 200.00
<b>Employment Recruitment Total</b>					<b>\$ 200.00</b>
Equipment Leased	3956	10/25/2019	CHK	GreatAmerica Financial Services	\$ 1,452.56
Equipment Leased	EFT02922	10/3/2019	CHK	Konica Minolta Business Solutions	\$ 764.77
<b>Equipment Leased Total</b>					<b>\$ 2,217.33</b>
Facility Repair & Maintenance	3928	10/3/2019	CHK	TNT Elevator Inc	\$ 250.00
Facility Repair & Maintenance	3949	10/17/2019	CHK	United Rentals	\$ 7,116.98
Facility Repair & Maintenance	3957	10/25/2019	CHK	RivCo Mechanical Services	\$ 1,867.02
Facility Repair & Maintenance	3968	10/31/2019	CHK	Trench Shoring, Inc.	\$ 3,204.50
Facility Repair & Maintenance	EFT02938	10/11/2019	CHK	Custom Coatings and Construction	\$ 5,900.00
Facility Repair & Maintenance	EFT02942	10/11/2019	CHK	A Cone Zone Inc	\$ 424.92
Facility Repair & Maintenance	EFT02947	10/11/2019	CHK	Riverside Cleaning	\$ 1,500.00
Facility Repair & Maintenance	EFT02952	10/17/2019	CHK	Western Exterminator Co.	\$ 123.00
Facility Repair & Maintenance	EFT02954	10/17/2019	CHK	Green Meadows Landscape	\$ 625.00
Facility Repair & Maintenance	EFT02979	10/25/2019	CHK	Washburn Grove Management Inc	\$ 3,500.00
<b>Facility Repair &amp; Maintenance Total</b>					<b>\$ 24,511.42</b>
Insurance Expense	3942	10/11/2019	CHK	Zenith Insurance Company	\$ 4,262.00
<b>Insurance Expense Total</b>					<b>\$ 4,262.00</b>
Lab Costs	EFT02940	10/11/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 2,409.00
Lab Costs	EFT02953	10/17/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 1,072.00
Lab Costs	EFT02970	10/25/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 366.00
Lab Costs	EFT02986	10/31/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 5,701.00
<b>Lab Costs Total</b>					<b>\$ 9,548.00</b>
Legal	3943	10/11/2019	CHK	Payne & Fears	\$ 4,511.22
Legal	3961	10/25/2019	CHK	Payne & Fears	\$ 2,737.00
Legal	3962	10/25/2019	CHK	Stream Kim Hicks Wrage & Alfaro	\$ 391.98
<b>Legal Total</b>					<b>\$ 7,640.20</b>
Office Expense	3924	10/3/2019	CHK	Staples Business Advantage	\$ 7,253.64
Office Expense	3940	10/11/2019	CHK	Awards & Specialties	\$ 535.05
Office Expense	3946	10/17/2019	CHK	Aramark Corporation Refreshments	\$ 139.15
Office Expense	3953	10/25/2019	CHK	Printing Connection, Inc.	\$ 43.50
Office Expense	3966	10/31/2019	CHK	Staples Business Advantage	\$ 1,191.93
Office Expense	EFT02951	10/17/2019	CHK	Konica Minolta Business Solutions	\$ 1,027.75
Office Expense	EFT02955	10/17/2019	CHK	Iron Mountain	\$ 175.60
<b>Office Expense Total</b>					<b>\$ 10,366.62</b>
Other Contract Services	EFT02923	10/3/2019	CHK	Western Municipal Water District	\$ 7,652.34
Other Contract Services	EFT02930	10/3/2019	CHK	Lazar Translation & Interpreting	\$ 780.00
Other Contract Services	EFT02968	10/25/2019	CHK	Western Municipal Water District	\$ 13,784.14
Other Contract Services	EFT02982	10/25/2019	CHK	Lazar Translating & Interpreting	\$ 323.50

Santa Ana Watershed Project Authority  
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Category	Check #	Check Date	Type	Vendor	Check Amount
Other Contract Services	EFT02989	10/31/2019	CHK	Lazar Translating & Interpreting	\$ 849.10
<b>Other Contract Services Total</b>					<b>\$ 23,389.08</b>
Other Expense	3927	10/3/2019	CHK	California Newspaper Service	\$ 299.25
<b>Other Expense Total</b>					<b>\$ 299.25</b>
Payroll	WDL000004952	10/11/2019	WDL	Direct Deposit 10/11/2019	\$ 83,209.89
Payroll	WDL000004953	10/11/2019	WDL	PR Tax - Federal	\$ 29,162.88
Payroll	WDL000004954	10/11/2019	WDL	PR Tax - State	\$ 6,754.21
Payroll	WDL000004955	10/18/2019	WDL	Direct Deposit 10/18/2019	\$ 776.23
Payroll	WDL000004956	10/17/2019	WDL	PR Tax - Federal	\$ 183.99
Payroll	WDL000004957	10/17/2019	WDL	PR Tax - State	\$ 16.71
Payroll	WDL000004960	10/25/2019	WDL	Direct Deposit 10/25/2019	\$ 88,807.54
Payroll	WDL000004961	10/25/2019	WDL	PR Tax - Federal	\$ 30,350.63
Payroll	WDL000004962	10/25/2019	WDL	PR Tax - State	\$ 7,143.90
<b>Payroll Total</b>					<b>\$ 246,405.98</b>
Prop84	3958	10/25/2019	CHK	US Forest Service	\$ 9,276.17
Prop84	EFT02933	10/11/2019	CHK	ESRI Inc.	\$ 5,000.00
Prop84	EFT02950	10/17/2019	CHK	ESRI Inc.	\$ 3,500.00
Prop84	EFT02963	10/25/2019	CHK	Inland Empire Utilities Agency	\$ 5,474.87
Prop84	EFT02984	10/31/2019	CHK	Western Municipal Water District	\$ 50,000.00
<b>Prop84 Total</b>					<b>\$ 73,251.04</b>
Safety	3926	10/3/2019	CHK	Cintas Corporation	\$ 500.03
Safety	EFT02937	10/11/2019	CHK	Underground Service Alert	\$ 392.59
Safety	EFT02987	10/31/2019	CHK	Golden State Fire Protection	\$ 650.00
<b>Safety Total</b>					<b>\$ 1,542.62</b>
Security	3954	10/25/2019	CHK	SafeT	\$ 350.55
<b>Security Total</b>					<b>\$ 350.55</b>
Shipping/Postage	3937	10/11/2019	CHK	Golden State Overnight	\$ 13.04
Shipping/Postage	3950	10/25/2019	CHK	Golden State Overnight	\$ 9.13
<b>Shipping/Postage Total</b>					<b>\$ 22.17</b>
Software	EFT02973	10/25/2019	CHK	Accent Computer Solutions Inc	\$ 892.00
<b>Software Total</b>					<b>\$ 892.00</b>
Training	3944	10/11/2019	CHK	Global Environmental Network	\$ 885.00
<b>Training Total</b>					<b>\$ 885.00</b>
Utilities	3920	10/3/2019	CHK	AT&T	\$ 1,018.26
Utilities	3921	10/3/2019	CHK	AT&T	\$ 809.13
Utilities	3923	10/3/2019	CHK	Southern California Edison	\$ 17.10
Utilities	3925	10/3/2019	CHK	Burrtec Waste Industries Inc	\$ 83.92
Utilities	3930	10/3/2019	CHK	Verizon Wireless	\$ 1,436.23
Utilities	3935	10/11/2019	CHK	Riverside, City of	\$ 134.72
Utilities	3936	10/11/2019	CHK	Riverside, City of	\$ 2,452.32
Utilities	3939	10/11/2019	CHK	Southern California Edison	\$ 105.51
Utilities	3951	10/25/2019	CHK	AT&T	\$ 309.35
Utilities	3960	10/25/2019	CHK	DIRECTV	\$ 66.99
Utilities	3963	10/31/2019	CHK	AT&T	\$ 1,018.26
Utilities	3964	10/31/2019	CHK	AT&T	\$ 811.95
Utilities	3965	10/31/2019	CHK	Southern California Edison	\$ 15.24
Utilities	3974	10/31/2019	CHK	Verizon Wireless	\$ 1,282.95
Utilities	3975	10/31/2019	CHK	Verizon Wireless	\$ 268.80
Utilities	3976	10/31/2019	CHK	Verizon Wireless	\$ 130.61
<b>Utilities Total</b>					<b>\$ 9,961.34</b>
<b>Grand Total</b>					<b>\$ 2,379,886.26</b>

Accounts Payable

Checks	\$ 2,068,133.96
Wire Transfers	\$ 63,946.12
	<u>\$ 2,132,080.08</u>

Take Care	\$ 1,400.20
Other	
Payroll	\$ 246,405.98
	<u>\$ 2,379,886.26</u>

Total Disbursements for October 2019

Santa Ana Watershed Project Authority  
 Consulting  
 Oct-19

Check #	Check Date	Task #	Task Description	Vendor Name	Total Contract	Check Amount	Remaining Contract Amount	Notes/Comments
EFT02925	10/3/2019	ACS100-12	IT Support	Accent Computer Solutions	\$ 7,750.00	\$ 1,575.00	\$ 3,625.00	
EFT02973	10/25/2019	ACS100-11	IT Support	Accent Computer Solutions	\$ 186,800.00	\$ 2,730.00	\$ 99,800.68	
EFT02956	10/17/2019	CDM386-14	SAR Bacteria Monitoring Program	CDM Smith	\$ 373,715.00	\$ 63,089.84	\$ 242,582.64	
EFT02977	10/25/2019	DEGR392-05	Social Media Support	DeGrave Communications	\$ 30,000.00	\$ 3,028.00	\$ 20,526.86	
EFT02926	10/3/2019	DUDK373-06	Prop1 Round 1 Grant App	Dudek	\$ 91,310.00	\$ 11,748.21	\$ 24,276.90	
EFT02988	10/31/2019	DUDK373-06	Prop1 Round 1 Grant App	Dudek	\$ 91,310.00	\$ 23,030.00	\$ 24,276.90	
EFT02988	10/31/2019	DUDK320-03-01	Reach 4D Maintenance Access Structure Rehabilitation Project	Dudek	\$ 38,560.00	\$ 6,415.00	\$ 30,315.00	
EFT02959	10/17/2019	GEI384-01	MSAR TMDL Synoptic Study	GEI Consultants	\$ 200,000.00	\$ 18,970.04	\$ 170,031.12	
EFT02924	10/3/2019	INSOL100-14	Great Plains and Journyx Tech Support	Integrated Systems Solutions	\$ 4,750.00	\$ 1,782.50	\$ 2,251.50	
EFT02961	10/17/2019	MPR398-01	Disadvantaged Communities Program Support	Marisa Perez-Reyes	\$ 12,000.00	\$ 2,937.50	\$ 3,621.16	
EFT02990	10/31/2019	MPR398-01	Disadvantaged Communities Program Support	Marisa Perez-Reyes	\$ 12,000.00	\$ 5,441.34	\$ 3,621.16	
3969	10/31/2019	PRO240-01	Pretreatment Program Support Services	Project Partners	\$ 5,000.00	\$ 2,583.82	\$ 2,416.18	
EFT02967	10/25/2019	RISK374-08	Basin Monitoring TF Regulatory Support	Risk Sciences	\$ 74,400.00	\$ 6,491.77	\$ 49,262.08	
EFT02928	10/3/2019	SOL100-02	Website Support and Hosting	Sol Media	\$ 7,280.00	\$ 7,280.00	\$ -	
3931	10/3/2019	SOMA384-01	MSAR TMDL Task Force	Somach, Simmons & Dunn	\$ 119,790.00	\$ 517.50	\$ 119,272.50	
3931	10/3/2019	SOMA374-01	Basin Monitoring TF Regulatory Support	Somach, Simmons & Dunn	\$ 112,380.00	\$ 2,863.50	\$ 109,516.50	
3972	10/31/2019	TTD100-05	Phone System Support	The Technology Depot	\$ 5,000.00	\$ 123.75	\$ 4,685.00	
EFT02943	10/11/2019	TRU240-22	Monthly County Line Solids Analysis	Trussell Technologies Inc	\$ 9,664.00	\$ 1,169.11	\$ -	



Santa Ana Watershed Project Authority  
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Check #	Check Date	Task #	Task Description	Vendor Name	Total Contract	Check Amount	Remaining Contract Amount	Notes/Comments
EFT02960	10/17/2019	WSC374-01	Recomputation of Ambient Water Quality	Water Systems Consulting	\$ 373,973.00	\$ 47,437.49	\$ 239,492.12	
3932	10/7/2019	WEKA240-02	IEBL Replacement Value Assessment	WEKA	\$ 50,000.00	\$ 12,200.00	\$ 10,635.00	
EFT02974	10/25/2019	WEKA240-02	IEBL Replacement Value Assessment	WEKA	\$ 50,000.00	\$ 14,640.00	\$ 10,635.00	
EFT02969	10/25/2019	WCA100-03-03	State Legislative Consulting Services	West Coast Advisors	\$ 235,000.00	\$ 9,750.00	\$ 137,500.00	
EFT02944	10/11/2019	RMC327-02	IEBL Reach IV-D Near Term Inspection Work	Woodard & Curran	\$ 50,000.00	\$ 8,191.05	\$ 4,074.78	
EFT02957	10/17/2019	RMC504-401-06	SARCCUP Program Management Services	Woodard & Curran	\$ 229,046.00	\$ 13,333.98	\$ 215,712.02	
						<b>\$ 267,329.40</b>		

Santa Ana Watershed Project Authority  
Cash Transaction Report  
Month of November 2019

Below is a summary of cash transactions completed during the month in the Authority's checking account with US Bank. Attached are summaries by major revenue and expense classifications.

Cash Receipts and Deposits to Account	\$ 977,370.64
Net Investment Transfers	8,750.42
Cash Disbursements	<u>(718,226.01)</u>
Net Change for Month	\$ 267,895.05
Balance at Beginning of Month	<u>2,040,852.32</u>
Balance at End of Month per General Ledger	<u>\$ 2,308,747.37</u>
Collected Balance per Bank Statement	\$ 2,401,445.51

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**ACCOUNTS PAYABLE RECONCILIATION**

Accounts Payable Balance @ 10/31/19	\$ 21,504,203.21
Invoices Received for November 2019	4,371,335.65
Invoices Paid by check/wire during November 2019 (see attached register)	<u>(470,614.07)</u>
Accounts Payable Balance @ 11/30/19	<u>\$ 25,404,924.79</u>

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**CASH RECEIPTS**

Brine Line Operating Revenues	\$ 914,867.80
Participant Fees	15,000.00
LESJWA Admin Reimbursement	16,115.86
Other	<u>31,386.98</u>
Total Receipts and Deposits	\$ 977,370.64

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**INVESTMENT TRANSFERS**

Transfer of Funds:	
From (to) LAIF	\$ -
From (to) Legal Defense Fund	-
From (to) LESJWA	-
From (to) Investments	<u>8,750.42</u>
Total Investment Transfers	\$ 8,750.42

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**CASH DISBURSEMENTS**

By Check:	
Payroll	\$ 3,715.36
Operations	<u>470,614.07</u>
Total Checks Drawn	\$ 474,329.43
By Cash Transfer:	
Payroll	\$ 170,470.61
Payroll Taxes	71,167.07
Take Care (AFLAC)	<u>2,258.90</u>
Total Cash Transfers	\$ 243,896.58
Total Cash Disbursements	<u><u>\$ 718,226.01</u></u>

Santa Ana Watershed Project Authority  
Check Detail  
Nov-19

Category	Check #	Check Date	Type	Vendor	Check Amount
Asset Clearing	4008	11/22/2019	CHK	SPC Building Services	\$ 6,767.50
Asset Clearing	4010	11/22/2019	CHK	Affordable Awnings Company of California	\$ 3,490.00
Asset Clearing	EFT02999	11/8/2019	CHK	Total Plan Business Interiors	\$ 11,244.96
Asset Clearing	EFT03010	11/14/2019	CHK	Total Plan Business Interiors	\$ 630.75
Asset Clearing	EFT03011	11/14/2019	CHK	Pasco Doors	\$ 12,289.00
Asset Clearing	EFT03029	11/22/2019	CHK	Total Plan Business Interiors	\$ 15,924.26
<b>Asset Clearing Total</b>					<b>\$ 50,346.47</b>
Auto Expenses	3988	11/8/2019	CHK	Riverside Transmission Center	\$ 1,711.44
Auto Expenses	4002	11/22/2019	CHK	County of Riverside	\$ 866.91
<b>Auto Expenses Total</b>					<b>\$ 2,578.35</b>
Benefits	3977	11/8/2019	CHK	ACWA/JPIA	\$ 50,578.18
Benefits	3981	11/8/2019	CHK	Cal PERS Long Term Care Program	\$ 102.04
Benefits	3995	11/14/2019	CHK	AFLAC	\$ 639.92
Benefits	4001	11/22/2019	CHK	Cal PERS Long Term Care Program	\$ 152.04
Benefits	4003	11/22/2019	CHK	WageWorks	\$ 140.00
Benefits	4004	11/22/2019	CHK	Mutual Of Omaha	\$ 3,043.80
Benefits	EFT02991	11/8/2019	CHK	Vantagepoint Transfer Agents	\$ 4,267.62
Benefits	EFT02996	11/8/2019	CHK	Vantagepoint Transfer Agents	\$ 392.83
Benefits	EFT03015	11/22/2019	CHK	Vantagepoint Transfer Agents	\$ 4,267.62
Benefits	EFT03018	11/22/2019	CHK	Vantagepoint Transfer Agents	\$ 392.83
Benefits	P037455	11/8/2019	WDL	Public Employees' Retirement	\$ 21,218.81
Benefits	P037456	11/8/2019	WDL	CalPERS Supplemental Income	\$ 5,174.19
Benefits	P037563	11/22/2019	WDL	CalPERS Supplemental Income	\$ 5,175.19
Benefits	P037564	11/22/2019	WDL	Public Employees' Retirement	\$ 21,161.98
Benefits	WDL000004973	11/1/2019	WDL	Takecare	\$ 100.00
Benefits	WDL000004985	11/13/2019	WDL	Takecare	\$ 192.30
Benefits	WDL000004986	11/13/2019	WDL	Takecare	\$ 1,161.00
Benefits	WDL000004987	11/14/2019	WDL	Takecare	\$ 100.00
Benefits	WDL000004995	11/22/2019	WDL	Takecare	\$ 24.88
Benefits	WDL000004996	11/26/2019	WDL	Takecare	\$ 38.50
Benefits	WDL000004997	11/27/2019	WDL	Takecare	\$ 237.80
Benefits	WDL000004998	11/8/2019	WDL	Takecare	\$ 404.42
<b>Benefits Total</b>					<b>\$ 118,965.95</b>
Building Lease	4013	11/27/2019	CHK	Wilson Property Services, Inc	\$ 1,530.00
<b>Building Lease Total</b>					<b>\$ 1,530.00</b>
Consulting	3991	11/8/2019	CHK	Somach, Simmons & Dunn	\$ 2,932.50
Consulting	3997	11/14/2019	CHK	The Technology Depot	\$ 206.25
Consulting	EFT02998	11/8/2019	CHK	GEI Consultants	\$ 29,837.58
Consulting	EFT03004	11/14/2019	CHK	CDM Smith, Inc.	\$ 40,923.43
Consulting	EFT03005	11/14/2019	CHK	Dudek	\$ 1,800.00
Consulting	EFT03009	11/14/2019	CHK	Water Systems Consulting	\$ 25,794.65
Consulting	EFT03019	11/22/2019	CHK	Integrated Systems Solutions	\$ 115.50
Consulting	EFT03020	11/22/2019	CHK	Accent Computer Solutions Inc	\$ 2,520.00
Consulting	EFT03021	11/22/2019	CHK	Woodard & Curran Inc.	\$ 24,955.86
Consulting	EFT03034	11/27/2019	CHK	Risk Sciences	\$ 8,603.23
Consulting	EFT03035	11/27/2019	CHK	West Coast Advisors	\$ 9,750.00
Consulting	EFT03038	11/27/2019	CHK	Dudek	\$ 21,741.25
Consulting	EFT03039	11/27/2019	CHK	DeGrave Communications	\$ 2,856.08
Consulting	EFT03041	11/27/2019	CHK	GeoScience Support Services	\$ 14,303.75
Consulting	EFT03042	11/27/2019	CHK	GEI Consultants	\$ 9,801.03
Consulting	EFT03044	11/27/2019	CHK	Marisa Perez-Reyes	\$ 3,462.50
<b>Consulting Total</b>					<b>\$ 199,603.61</b>
Credit Cards	P037679	11/8/2019	WDL	US Bank	\$ 16,465.93
<b>Credit Cards Total</b>					<b>\$ 16,465.93</b>
Director Costs	EFT03012	11/22/2019	CHK	Denis R Bilodeau	\$ 26.68
Director Costs	EFT03013	11/22/2019	CHK	Eastern Municipal Water District	\$ 505.84
Director Costs	EFT03016	11/22/2019	CHK	Western Municipal Water District	\$ 552.24
Director Costs	EFT03022	11/22/2019	CHK	Jasmin Hall	\$ 60.32
Director Costs	EFT03025	11/22/2019	CHK	Kati Parker	\$ 62.64
Director Costs	EFT03027	11/22/2019	CHK	June Hayes	\$ 25.52
Director Costs	EFT03028	11/22/2019	CHK	T. Milford Harrison	\$ 73.08
<b>Director Costs Total</b>					<b>\$ 1,306.32</b>
Employee Reimbursement	EFT02997	11/8/2019	CHK	Karen Williams	\$ 70.69
Employee Reimbursement	EFT03006	11/14/2019	CHK	Ian Achimore	\$ 59.98
Employee Reimbursement	EFT03007	11/14/2019	CHK	Michael Plasencia	\$ 11.83
Employee Reimbursement	EFT03024	11/22/2019	CHK	Alison L Lewis	\$ 74.71
Employee Reimbursement	EFT03026	11/22/2019	CHK	Benjamin Wilson	\$ 290.00
Employee Reimbursement	EFT03031	11/22/2019	CHK	Haley Mullay	\$ 4.30
Employee Reimbursement	EFT03043	11/27/2019	CHK	Katie Lucht	\$ 342.24

Santa Ana Watershed Project Authority  
Check Detail  
Nov-19

Category	Check #	Check Date	Type	Vendor	Check Amount
<b>Employee Reimbursement Total</b>					<b>\$ 853.75</b>
Equipment Leased	4005	11/22/2019	CHK	GreatAmerica Financial Services	\$ 1,452.56
Equipment Leased	EFT02992	11/8/2019	CHK	Konica Minolta Business Solutions	\$ 764.77
<b>Equipment Leased Total</b>					<b>\$ 2,217.33</b>
Facility Repair & Maintenance	3984	11/8/2019	CHK	O G Supply Inc.	\$ 307.89
Facility Repair & Maintenance	3985	11/8/2019	CHK	Innerline Engineering	\$ 4,752.00
Facility Repair & Maintenance	3986	11/8/2019	CHK	TNT Elevator Inc	\$ 250.00
Facility Repair & Maintenance	3987	11/8/2019	CHK	Tripac Marketing Inc.	\$ 649.38
Facility Repair & Maintenance	3998	11/14/2019	CHK	Sims Tree Health Specialists	\$ 480.00
Facility Repair & Maintenance	EFT02995	11/8/2019	CHK	Green Meadows Landscape	\$ 625.00
Facility Repair & Maintenance	EFT03002	11/14/2019	CHK	Western Exterminator Co.	\$ 123.00
Facility Repair & Maintenance	EFT03008	11/14/2019	CHK	Riverside Cleaning	\$ 1,500.00
Facility Repair & Maintenance	EFT03023	11/22/2019	CHK	Hamm's Tree Service	\$ 1,125.00
<b>Facility Repair &amp; Maintenance Total</b>					<b>\$ 9,812.27</b>
Insurance Expense	3990	11/8/2019	CHK	Zenith Insurance Company	\$ 4,262.00
<b>Insurance Expense Total</b>					<b>\$ 4,262.00</b>
Lab Costs	EFT02994	11/8/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 1,296.00
Lab Costs	EFT03017	11/22/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 1,137.00
Lab Costs	EFT03036	11/27/2019	CHK	E. S. Babcock & Sons, Inc.	\$ 1,168.00
Lab Costs	EFT03037	11/27/2019	CHK	Camet Research	\$ 1,357.50
<b>Lab Costs Total</b>					<b>\$ 4,958.50</b>
Legal	4006	11/22/2019	CHK	Varner & Brandt	\$ 6,300.00
Legal	4009	11/22/2019	CHK	Payne & Fears	\$ 53.22
<b>Legal Total</b>					<b>\$ 6,353.22</b>
Office Expense	4000	11/22/2019	CHK	Aramark Corporation Refreshments	\$ 144.12
Office Expense	EFT03001	11/14/2019	CHK	Konica Minolta Business Solutions	\$ 1,364.16
Office Expense	EFT03003	11/14/2019	CHK	Iron Mountain	\$ 175.60
<b>Office Expense Total</b>					<b>\$ 1,683.88</b>
Other Contract Services	EFT03000	11/8/2019	CHK	Lazar Translating & Interpreting	\$ 276.80
Other Contract Services	EFT03030	11/22/2019	CHK	Lazar Translating & Interpreting	\$ 85.00
Other Contract Services	EFT03032	11/22/2019	CHK	Larry Walker Associates	\$ 607.75
Other Contract Services	EFT03040	11/27/2019	CHK	EcoTech Services Inc	\$ 3,875.00
<b>Other Contract Services Total</b>					<b>\$ 4,844.55</b>
Other Expense	WDL000004979	11/6/2019	WDL	LESJWA	\$ 30,774.00
<b>Other Expense Total</b>					<b>\$ 30,774.00</b>
Payroll	*3993	11/13/2019	VOID	Payroll Check	\$ -
Payroll	3994	11/13/2019	CHK	Payroll Check	\$ 3,715.36
Payroll	*3999	11/20/2019	VOID	Payroll Check	\$ -
Payroll	WDL000004972	11/8/2019	WDL	Direct Deposit 11/8/2019	\$ 83,218.96
Payroll	WDL000004975	11/8/2019	WDL	PR Tax - Federal	\$ 27,694.63
Payroll	WDL000004976	11/8/2019	WDL	PR Tax - State	\$ 6,683.16
Payroll	WDL000004983	11/22/2019	WDL	Direct Deposit 11/22/2019	\$ 87,251.65
Payroll	WDL000004988	11/15/2019	WDL	PR Tax - Federal	\$ 2,116.14
Payroll	WDL000004989	11/15/2019	WDL	PR Tax - State	\$ 527.55
Payroll	WDL000004990	11/22/2019	WDL	PR Tax - Federal	\$ 27,256.87
Payroll	WDL000004991	11/22/2019	WDL	PR Tax - State	\$ 6,888.72
<b>Payroll Total</b>					<b>\$ 245,353.04</b>
Permit Fees	3996	11/14/2019	CHK	State Water Resources Control Board	\$ 2,625.00
<b>Permit Fees Total</b>					<b>\$ 2,625.00</b>
Prop84	EFT03014	11/22/2019	CHK	ESRI Inc.	\$ 3,500.00
<b>Prop84 Total</b>					<b>\$ 3,500.00</b>
Safety	EFT02993	11/8/2019	CHK	Underground Service Alert	\$ 418.99
<b>Safety Total</b>					<b>\$ 418.99</b>
Shipping/Postage	3980	11/8/2019	CHK	Golden State Overnight	\$ 6.52
Shipping/Postage	4011	11/27/2019	CHK	General Logistics Systems US	\$ 6.52
<b>Shipping/Postage Total</b>					<b>\$ 13.04</b>
Software	3989	11/8/2019	CHK	Sensaphone	\$ 299.40
Software	EFT03020	11/22/2019	CHK	Accent Computer Solutions Inc	\$ 942.00
Software	EFT03033	11/22/2019	CHK	L3Harris Technologies, Inc.	\$ 2,375.00
<b>Software Total</b>					<b>\$ 3,616.40</b>
Training	3992	11/8/2019	CHK	Global Environmental Network	\$ 849.00
<b>Training Total</b>					<b>\$ 849.00</b>

Santa Ana Watershed Project Authority  
 Check Detail  
 Nov-19

Category	Check #	Check Date	Type	Vendor	Check Amount
Utilities	3978	11/8/2019	CHK	Riverside, City of	\$ 76.78
Utilities	3979	11/8/2019	CHK	Riverside, City of	\$ 2,429.08
Utilities	3982	11/8/2019	CHK	Southern California Edison	\$ 96.15
Utilities	3983	11/8/2019	CHK	Burrtec Waste Industries Inc	\$ 83.92
Utilities	4007	11/22/2019	CHK	DIRECTV	\$ 66.99
Utilities	4012	11/27/2019	CHK	AT&T	\$ 906.37
Utilities	4014	11/27/2019	CHK	Verizon Wireless	\$ 130.61
Utilities	4015	11/27/2019	CHK	Verizon Wireless	\$ 268.80
Utilities	4016	11/27/2019	CHK	Verizon Wireless	\$ 1,235.71
<b>Utilities Total</b>					<b>\$ 5,294.41</b>
<b>Grand Total</b>					<b>\$ 718,226.01</b>

Accounts Payable

Checks	\$ 370,643.97
Wire Transfers	\$ 99,970.10
	<u>\$ 470,614.07</u>

Take Care	\$ 2,258.90
Other	
Payroll	\$ 245,353.04
	<u>\$ 718,226.01</u>

Total Disbursements for November 2019

Santa Ana Watershed Project Authority  
 Consulting  
 Nov-19

Check #	Check Date	Task #	Task Description	Vendor Name	Total Contract	Check Amount	Remaining Contract Amount	Notes/Comments
EFT03020	11/22/2019	ACS100-11	IT Support	Accent Computer Solutions	\$ 186,800.00	\$ 2,520.00	\$ 96,338.68	
EFT03004	11/14/2019	CDM386-13	SAR Bacteria Monitoring Program	CDM Smith	\$ 353,748.00	\$ 3,868.75	\$ 63,913.53	
EFT03004	11/14/2019	CDM386-14	SAR Bacteria Monitoring Program	CDM Smith	\$ 373,715.00	\$ 37,054.68	\$ 205,527.96	
EFT03039	11/27/2019	DEGR392-05	Social Media Support	DeGrave Communications	\$ 30,000.00	\$ 2,856.08	\$ 17,670.78	
EFT03005	11/14/2019	DUDK320-03-01	Reach 4D Maintenance Access Structure Rehabilitation Project	Dudek	\$ 38,530.00	\$ 1,800.00	\$ 30,315.00	
EFT03038	11/27/2019	DUDK373-06	Prop1 Round 1 Grant App	Dudek	\$ 91,310.00	\$ 21,741.25	\$ 2,535.65	
EFT02998	11/8/2019	GEI384-01	MSAR TMDL Synoptic Study	GEI Consultants	\$ 200,000.00	\$ 29,837.58	\$ 130,364.78	
EFT03042	11/27/2019	GEI384-01	MSAR TMDL Synoptic Study	GEI Consultants	\$ 200,000.00	\$ 9,801.03	\$ 130,364.78	
EFT03041	11/27/2019	GEOS374-01	SAR WLA Model Update	GeoScience Support Services	\$ 361,216.00	\$ 14,303.75	\$ 3,007.25	
EFT03019	11/22/2019	INSOL100-14	Great Plains and Journyx Tech Support	Integrated Systems Solutions	\$ 4,750.00	\$ 115.50	\$ 2,136.00	
EFT03044	11/27/2019	MPR398-01	Disadvantaged Communities Program Support	Marisa Perez-Reyes	\$ 22,000.00	\$ 3,462.50	\$ 10,158.66	
EFT03034	11/27/2019	RISK374-08	Basin Monitoring TF Regulatory Support	Risk Sciences	\$ 74,400.00	\$ 4,174.41	\$ 45,087.67	
EFT03034	11/27/2019	RISK384-09	MSAR TMDL Task Force	Risk Sciences	\$ 49,340.00	\$ 2,529.41	\$ 17,641.59	
EFT03034	11/27/2019	RISK386-10	Compliance Expert	Risk Sciences	\$ 46,820.00	\$ 1,899.41	\$ 33,411.27	
3991	11/8/2019	SOMA384-01	MSAR TMDL Task Force	Somach, Simmons & Dunn	\$ 119,790.00	\$ 103.50	\$ 119,169.00	
3991	11/8/2019	SOMA374-01	Basin Monitoring TF Regulatory Support	Somach, Simmons & Dunn	\$ 112,380.00	\$ 2,829.00	\$ 106,687.50	
3997	11/14/2019	TTD100-05	Phone System Support	The Technology Depot	\$ 5,000.00	\$ 206.25	\$ 4,478.75	
EFT03009	11/14/2019	WSC374-01	Recomputation of Ambient Water Quality	Water Systems Consulting	\$ 373,973.00	\$ 25,794.65	\$ 213,697.47	



*Santa Ana Watershed Project Authority*  
*Consulting*  
*Nov-19*

Check #	Check Date	Task #	Task Description	Vendor Name	Total Contract	Check Amount	Remaining Contract Amount	Notes/Comments
EFT03035	11/27/2019	WCA100-03-03	State Legislative Consulting Services	West Coast Advisors	\$ 235,000.00	\$ 9,750.00	\$ 127,750.00	
EFT03021	11/22/2019	RMC504-401-06	SARCCUP Program Management Services	Woodard & Curran	\$ 229,046.00	\$ 24,955.86	\$ 190,756.16	
						<b>\$ 199,603.61</b>		

**COMMISSION MEMORANDUM NO. 2019.121**

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Inter-Fund Borrowing – October 2019  
**PREPARED BY:** Karen Williams, DGM/CFO

**RECOMMENDATION**

It is recommended that the Commission receive and file the informational report on short-term, cash-flow inter-fund borrowing.

**DISCUSSION**

On December 13, 2005, the Commission approved Resolution No. 452, Inter-Fund and Inter-Project Loan Policy. Staff was directed to bring back an accounting of the loans each month for review when the total exceeded \$250,000 in aggregate.

The following projects, with negative cash flow, are listed below with the amounts borrowed from SAWPA General Fund Reserves in October 2019. The total amount borrowed is over the aggregate \$250,000 amount recommended in Resolution No. 452, Inter-Fund and Inter-Project Loan Policy. The Commission has requested that this item be brought back each month as an informational item when the loan amount is over the \$250,000 aggregate amount.

Fund	Fund Name	09/30/19 Balance	Loan Receipts	New Charges	10/31/19 Balance
130	Proposition 84 Admin R1	\$70,041.96	(\$0.00)	\$0.00	\$70,041.96
135	Proposition 84 Admin R2	91,995.85	(18,578.12)	5,044.62	78,462.35
140	Proposition 84 Admin R3	131,554.12	(0.00)	23,539.30	155,093.42
145	Proposition 84 Admin R4	141,441.30	(0.00)	15,988.28	157,429.58
398	Proposition 1 – DACI Grant	228,815.67	(0.00)	54,346.47	283,162.14
477	LESJWA Administration	10,117.54	(11,448.63)	16,115.86	14,784.77
504	Prop 84 - Drought Projects	179,686.36	(0.00)	17,283.86	196,970.22
	<b>Total Funds Borrowed</b>	<b>\$853,652.80</b>	<b>(\$30,026.75)</b>	<b>\$132,318.39</b>	<b>\$955,944.44</b>
	General Fund Reserves Balance		\$3,026,306.85		
	Less Amount Borrowed		<u>955,944.44</u>		
	Balance of General Fund Reserves		\$2,070,362.41		

The following table lists each fund that has a negative cash flow, the source of funding for the fund, how often the fund is billed, and the projected rate of payment for the fund.

**NEGATIVE CASH-FLOW FUNDS**

<b>Fund No.</b>	<b>Source of Funding</b>	<b>Billing Frequency</b>	<b>Projected Payment Time</b>
130,135,140, 145 – Proposition 84 Admin	DWR – Prop 84 Grant	Monthly/Quarterly	Up to 4 months
398 – Proposition 1 – DACI Grant	DWR – Prop 1 Grant	Monthly	Up to 4 months
477 – LESJWA Admin	Reimbursement from LESJWA	Monthly	2 to 4 weeks
504 - Proposition 84 Drought Projects	DWR – Prop 84 Grant	Monthly	Up to 4 months
504 – Proposition 84 SARCCUP Projects	DWR – Prop 84 Grant	Monthly/Quarterly	Up to 4 months

**Fund 130**

The outstanding balance of the funds due from DWR is the mandatory 10% retention from each invoice billed. Retention funds will not be released until the Proposition 84 Round I contract is completed in 2018.

**Fund 135**

This fund is for the administration of Proposition 84 Round II grant funds. These funds will be billed quarterly and 10% will be withheld for retention.

**Fund 140**

This fund is for the administration of Proposition 84 Drought Round grant funds. These funds will be billed monthly and 10% will be withheld for retention.

**Fund 145**

This fund is for the administration of Proposition 84 Round 2015 grant funds. These funds will be billed quarterly and 10% will be withheld for retention.

**Fund 398**

This fund is for the Proposition 1 DACI grant project. These funds will be billed monthly once the contracts with DWR have been signed.

**Fund 477**

Each month LESJWA is billed the cost for administering the JPA. Once the bill is received, LESJWA submits payment within two weeks.

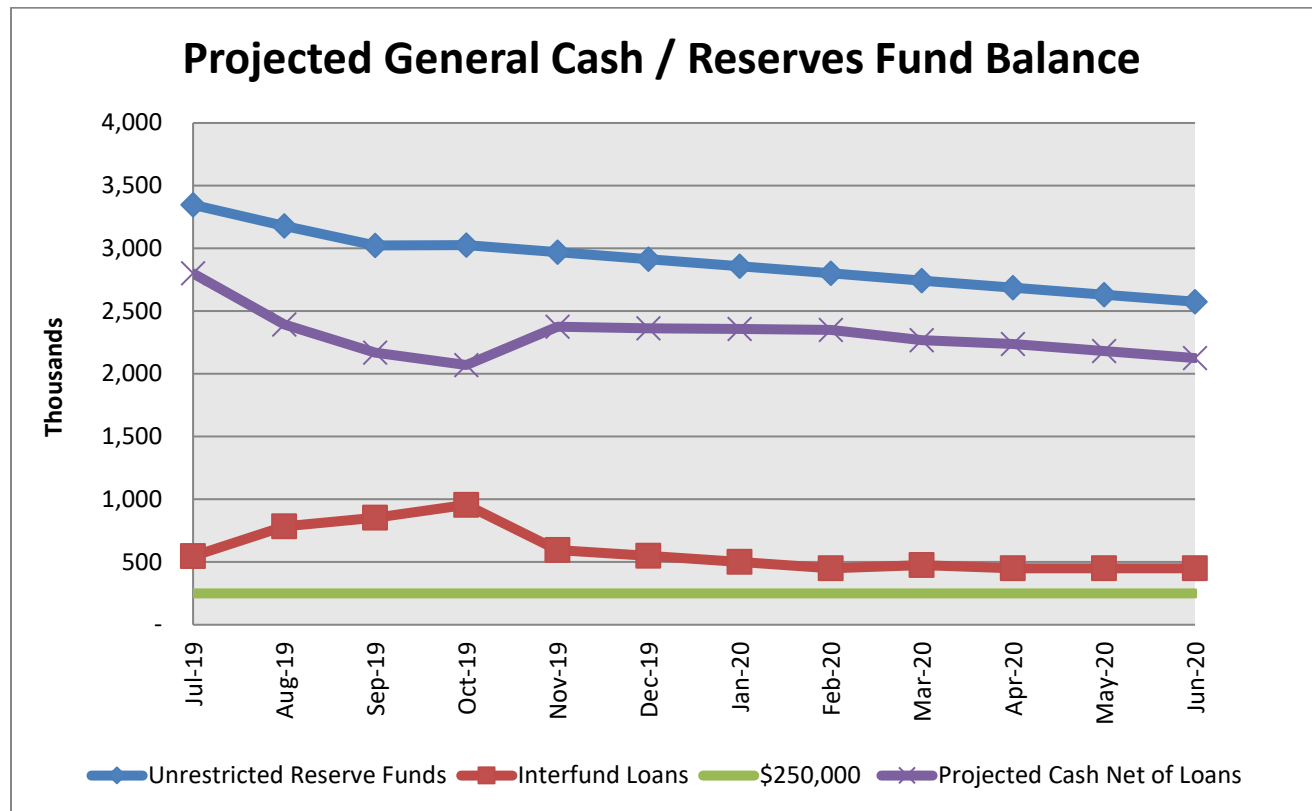
**Fund 504**

This fund is for the implementation of drought related projects and SARCCUP projects which are administered through PA22 and PA23.

The following graph shows the total budget, total project costs to date, and the amount remaining on each grant.

Fund	Fund Name	Total Budget	Project Costs Through 10/31/19	Remaining Grant Budget
130	Proposition 84 Admin R1	\$660,004	(\$571,491)	\$88,513
135	Proposition 84 Admin R2	627,405	(512,237)	115,168
140	Proposition 84 Admin R3	887,860	(784,563)	103,297
145	Proposition 84 Admin R4	3,213,384	(664,870)	2,548,514
373	OWOW Planning Grant	250,000	(250,000)	0
397	Energy Water DAC Grant (WECAN)	2,339,824	(2,339,824)	0
398	Proposition 1 – DACI Grant	6,300,000	(2,384,936)	3,915,064
504	Prop 84 - Drought Projects	5,547,816	(3,425,407)	2,122,409
504	Prop 84 – 2015 Round (SARCCUP)	1,543,810	(524,403)	1,019,407
Totals		\$21,370,103	(\$11,457,731)	\$9,912,372

The following graph shows projected inter-fund loan balances, total unrestricted General Fund Reserves available for loans, and projected cash net of loans through June 2020. The projected loan balance is expected to remain over the \$250,000 aggregate limit through June 2020 because of Proposition 1 and 84 grants but can be covered by General Fund Reserves without a major impact on cash flow.



**RESOURCE IMPACTS**

The funds borrowed from the General Fund Reserves will be paid back with interest when the funding is received. Interfund loans for grants are not charged interest unless the grant contracts specifically states

that interest is eligible for reimbursement. There is sufficient cash available to cover proposed borrowings and to pay budgeted expenditures for the General Fund.

Attachments:

1. Resolution No. 452 | Amending the Inter-Fund, Inter-Project and Inter-Agency Loan Policy

## RESOLUTION NO. 452

### **A RESOLUTION OF THE COMMISSION OF THE SANTA ANA WATERSHED PROJECT AUTHORITY AMENDING THE INTER-FUND, INTER-PROJECT AND INTER-AGENCY LOAN POLICY**

**WHEREAS**, the Commission of the Santa Ana Watershed Project Authority (hereafter "SAWPA") previously adopted, by minute action taken on August 3, 1996, an "Inter-Fund/Inter-Project Loan Policy" to regulate loans from one SAWPA Fund or Project to another SAWPA Fund or Project; and

**WHEREAS**, the Commission desires to amend the "Inter-Fund Fund/Project Loan Policy" by formally adopting such Policy, by way of this Resolution, regulating how and in what manner such inter-fund or inter-project loans are to take place and mandating that all such loans require Commission approval in advance as contemplated by the policy adopted on August 3, 1996.


**NOW, THEREFORE, BE IT RESOLVED** that the Commission of the Santa Ana Watershed Project Authority hereby amends the following Loan Policy for any loan from one SAWPA Fund or Project to another SAWPA Fund or Project:

1. Loans from any SAWPA Fund or Project to another SAWPA Fund, Project or another public agency shall be approved in advance by the SAWPA Commission. The approval shall be in written format and include documentation of the specifics of the transaction. The approval shall include a finding that the loan will not expose the lending SAWPA Fund or Project to significant financial or operational risk.
2. Unless otherwise provided for by the Commission, the borrowing Fund, Project or public agency shall be required to repay the loan within a specific period of time and at a rate of interest as determined by the Commission. For the purposes of this policy, SAWPA's calculated quarterly rate of return may be used as the basis for interest payable on the outstanding principal for any loan. The period for repayment of the loan shall be determined by the Commission, but shall be no longer than the life of the lending Fund or Project.
3. The borrowing Fund's, Project's or public agency's repayment source shall be identified and included in the approval action by the Commission and the "loan documentation". The "loan documentation" shall include a written agreement, resolution or other document approved by the Commission setting forth all of the foregoing terms and conditions.

4. Loans to reimbursable SAWPA grant contract projects and related efforts for short-term (i.e., current fiscal year) operating cash flow purposes may be borrowed from the SAWPA General Fund Reserve without prior Commission approval. But all such loans shall be reported to the Commission within 30 days of each such loan. Such loans shall be paid off on a continuous basis. The total funds loaned for all such grant contract projects and related efforts shall not exceed \$250,000.00 in the aggregate for each fiscal year, without prior written approval by the Commission. Payment of interest will be based on the actual interest that would have been earned by the SAWPA General Fund Reserve had those funds not been borrowed. Cash flow and receivables will be reported at least quarterly to forecast needs and demonstrate compliance.
5. Prior to June 30<sup>th</sup> of each year, staff shall provide to the Commission an annual written report of all such Inter-fund, Inter-project or Inter-agency loans, amounts repaid and any outstanding loan balances.

**ADOPTED** this 13th day of December 2005.

SANTA ANA WATERSHED PROJECT AUTHORITY

By:   
Mark Bulot, Chair





## COMMISSION MEMORANDUM NO. 2019.122

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Performance Indicators and Financial Reporting – October 2019  
**PREPARED BY:** Karen Williams, DGM/CFO

### RECOMMENDATION

It is recommended that the Commission receive and file staff's report.

### DISCUSSION

The attached reports have been developed to keep the Commission informed as to SAWPA's business and budget performance. These reports are categorized into the following groups: financial reporting, cash and investments, and performance indicators. They are explained in detail below. As new reports are developed, they will be added for the Commission's review.

#### Financial Reporting

Balance Sheet by Fund Type	Lists total assets, liabilities, and equity by fund type for a given period.
Revenue & Expense by Fund Type	Lists total revenue and expenses by fund type for a given period.
Receivables Management	Shows total outstanding accounts receivable by age.
Open Task Order Schedule	Shows SAWPA's total outstanding obligation for open task orders.
List of SAWPA Funds	Shows each SAWPA Fund with the fund description and fund group.
Debt Service Funding Analysis	Shows total annual income by source used to make debt service payments through debt maturity at FYE 2048.
Debt Service Payment Schedule	Shows total debt service interest and principal payments through debt maturity at FYE 2048.

#### Cash and Investments

Total Cash and Investments (chart)	Shows the changes in cash and investments balance for the last twelve months.
Cash Balance & Source of Funds	Shows total cash and investments for all SAWPA funds and the types of investments held for each fund.
Cash & Investments (pie chart)	Shows total cash and investments for all SAWPA funds and the percentage of each investment type.
Reserve Account Analysis	Shows changes to each reserve account for the year and projected ending balance for each.
Twelve Month Security Schedule (chart)	Shows the maturity dates for securities held and percentage of securities in each category.

Treasurer's Report	Shows book and market value for both Treasury strips and securities held by the Agency.
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**Performance Indicators**

Average Daily Flow by Month	Shows total flow in the Brine Line System by month compared to total treatment capacity owned. This is an indicator of the available capacity in the line. As we add yearly flows, it will show trends in flow throughout the year.
Summary of Labor Multipliers	Summarizes the information generated from the following two reports and compares the actual benefit and Indirect Cost Allocation rates to the total budgeted rates.
General Fund Costs	Lists total Fund No. 100 costs to date and the amount of those costs recovered through the Indirect Cost Allocation and member contributions.
Benefit Summary	Lists total employee benefit costs actual to budget and projects them through the end of the year. This report compares how the actual benefit rate compares to the budgeted rate.
Labor Hours Budget vs. Actual	Shows total budgeted hours for each project and compares them to the actual hours charged to each.

**RESOURCE IMPACTS**

Staff expects minimal impacts to SAWPA or its member agencies related to this effort.

Attachments:

- |                                       |   |
|---------------------------------------|---|
| 1. Balance Sheet by Fund Type         | 10. Reserve Account Analysis                    |
| 2. Revenue & Expense by Fund Type     | 11. Twelve-Month Maturity Schedule - Securities |
| 3. Accounts Receivable Aging Report   | 12. Treasurer's Report                          |
| 4. Open Task Order Schedule           | 13. Average Daily Flow by Month                 |
| 5. List of SAWPA Funds                | 14. Summary of Labor Multipliers                |
| 6. Debt Service Funding Analysis      | 15. General Fund Costs                          |
| 7. Debt Service Payment Schedule      | 16. Benefits                                    |
| 8. Total Cash and Investments (chart) | 17. Labor Hours Budgeted vs. Actual             |
| 9. Cash Balance & Source of Funds     |   |

Santa Ana Watershed Project Authority  
Balance Sheet by Fund Type  
For the Three Months Ending Monday, September 30, 2019

	General Fund	Brine Line Enterprise	Capital Projects	OWOW Projects	Roundtable Projects	Fund Totals
<b>Assets</b>						
<b>Current Assets</b>						
Cash and Investments	\$3,771,626.16	\$53,533,253.53	(\$86,990.15)	\$808,591.45	\$2,723,884.95	\$60,750,365.94
Accounts Receivable	0.00	1,911,540.08	0.00	20,712,264.74	385,323.63	23,009,128.45
Prepays and Deposits	34,859.67	131,590.80	0.00	0.00	0.00	166,450.47
<b>Total Current Assets</b>	<u>3,806,485.83</u>	<u>55,576,384.41</u>	<u>(86,990.15)</u>	<u>21,520,856.19</u>	<u>3,109,208.58</u>	<u>83,925,944.86</u>
<b>Fixed Assets</b>						
Property, Plant & Equipment less accum depreciation	1,123,223.10	83,486,609.78	0.00	0.00	0.00	84,609,832.88
Work In Process	0.00	0.00	389,251.35	0.00	0.00	389,251.35
<b>Total fixed assets</b>	<u>1,123,223.10</u>	<u>83,486,609.78</u>	<u>389,251.35</u>	<u>0.00</u>	<u>0.00</u>	<u>84,999,084.23</u>
<b>Other Assets</b>						
Wastewater treatment/disposal rights, net of amortization	244,266.76	25,815,020.67	0.00	0.00	0.00	26,059,287.43
Inventory - Mitigation Credits	0.00	0.00	0.00	0.00	1,910,560.00	1,910,560.00
<b>Total Other Assets</b>	<u>244,266.76</u>	<u>25,815,020.67</u>	<u>0.00</u>	<u>0.00</u>	<u>1,910,560.00</u>	<u>27,969,847.43</u>
<b>Total Assets</b>	<u><u>\$5,173,975.69</u></u>	<u><u>\$164,878,014.86</u></u>	<u><u>\$302,261.20</u></u>	<u><u>\$21,520,856.19</u></u>	<u><u>\$5,019,768.58</u></u>	<u><u>\$196,894,876.52</u></u>
<b>Liabilities and Fund Equity</b>						
<b>Current Liabilities</b>						
Accounts Payable/Accrued Expenses	\$707,526.36	\$1,327,140.08	\$16,406.05	\$20,810,385.61	\$241,973.88	\$23,103,431.98
Accrued Interest Payable	0.00	287,504.12	0.00	0.00	0.00	287,504.12
Customer Deposits	0.00	8,825.59	0.00	0.00	458,596.40	467,421.99
<b>Noncurrent Liabilities</b>						
Long-term Debt	4,195,263.00	29,632,922.66	0.00	0.00	0.00	33,828,185.66
Deferred Revenue	0.00	67,698,979.50	0.00	0.00	0.00	67,698,979.50
<b>Total Liabilities</b>	<u>4,902,789.36</u>	<u>98,955,371.95</u>	<u>16,406.05</u>	<u>20,810,385.61</u>	<u>700,570.28</u>	<u>125,385,523.25</u>
<b>Fund Equity</b>						
Contributed Capital	0.00	20,920,507.03	0.00	0.00	0.00	20,920,507.03
Retained Earnings	1,262,226.64	44,876,099.57	296,366.31	1,088,747.36	3,613,861.29	51,137,301.17
Revenue Over/Under Expenditures	(991,040.31)	126,036.31	(10,511.16)	(378,276.78)	705,337.01	(548,454.93)
<b>Total Fund Equity</b>	<u>271,186.33</u>	<u>65,922,642.91</u>	<u>285,855.15</u>	<u>710,470.58</u>	<u>4,319,198.30</u>	<u>71,509,353.27</u>
<b>Total Liabilities &amp; Fund Equity</b>	<u><u>\$5,173,975.69</u></u>	<u><u>\$164,878,014.86</u></u>	<u><u>\$302,261.20</u></u>	<u><u>\$21,520,856.19</u></u>	<u><u>\$5,019,768.58</u></u>	<u><u>\$196,894,876.52</u></u>

**Santa Ana Watershed Project Authority**  
**Revenue & Expenses by Fund Type**  
**For the Three Months Ending Monday, September 30, 2019**

	General Fund	Brine Line Enterprise	Capital Projects	OWOW Projects	Roundtable Projects	Fund Totals
<b>Operating Revenue</b>						
Discharge Fees	\$0.00	\$2,885,261.47	\$0.00	\$0.00	\$0.00	\$2,885,261.47
Grant Proceeds	0.00	0.00	0.00	(5,161,885.35)	0.00	(5,161,885.35)
Financing Proceeds	0.00	0.00	0.00	0.00	46,644.05	46,644.05
Total Operating Revenue	0.00	2,885,261.47	0.00	(5,161,885.35)	46,644.05	(2,229,979.83)
<b>Operating Expenses</b>						
Labor	487,421.67	245,603.34	775.47	143,245.91	26,637.49	903,683.88
Benefits	165,482.45	111,995.11	353.61	65,320.13	12,146.71	355,298.01
Indirect Costs	0.00	369,633.03	1,167.08	215,585.10	40,089.43	626,474.64
Education & Training	7,265.66	941.00	0.00	0.00	0.00	8,206.66
Consulting & Professional Services	77,206.52	38,200.68	8,215.00	763,853.37	315,058.67	1,202,534.24
Operating Costs	5,340.43	621,890.93	0.00	0.00	0.00	627,231.36
Repair & Maintenance	20,177.89	17,568.27	0.00	0.00	0.00	37,746.16
Phone & Utilities	14,888.33	1,890.88	0.00	0.00	0.00	16,779.21
Equipment & Computers	70,708.87	32,202.57	0.00	104.99	0.00	103,016.43
Meeting & Travel	9,344.92	1,384.26	0.00	1,495.72	256.74	12,481.64
Other Administrative Costs	60,295.80	16,317.44	0.00	5,822.92	10,000.00	92,436.16
Benefits Applied	172,951.66	0.00	0.00	0.00	0.00	172,951.66
Indirect Costs Applied	(627,435.78)	0.00	0.00	0.00	0.00	(627,435.78)
Other Expenses	10,793.31	55,271.97	0.00	0.00	0.00	66,065.28
Construction	0.00	0.00	0.00	(5,146,060.26)	0.00	(5,146,060.26)
Total Operating Expenses	474,441.73	1,512,899.48	10,511.16	(3,950,632.12)	404,189.04	(1,548,590.71)
Operating Income (Loss)	(474,441.73)	1,372,361.99	(10,511.16)	(1,211,253.23)	(357,544.99)	(681,389.12)
<b>Nonoperating Income (Expense)</b>						
Member Contributions	676,965.00	0.00	0.00	830,000.00	20,000.00	1,526,965.00
Other Agency Contributions	0.00	0.00	0.00	2,976.45	1,042,882.00	1,045,858.45
Interest Income	0.00	32,611.37	0.00	0.00	0.00	32,611.37
Interest Expense - Debt Service	0.00	(12,624.77)	0.00	0.00	0.00	(12,624.77)
Other Income	456.75	166.91	0.00	0.00	0.00	623.66
Use of Reserves	(29,939.64)	0.00	0.00	0.00	0.00	(29,939.64)
Total Nonoperating Income (Expense)	647,482.11	20,153.51	0.00	832,976.45	1,062,882.00	2,563,494.07
Excess Rev over (under) Exp	<u>\$173,040.38</u>	<u>\$1,392,515.50</u>	<u>(\$10,511.16)</u>	<u>(\$378,276.78)</u>	<u>\$705,337.01</u>	<u>\$1,882,104.95</u>

Aging Report  
Santa Ana Watershed Project Authority  
Receivables as of October 31, 2019

Customer Name	Project	Total	0-30 Days	31-60 Days	61 and Over
Beaumont Cherry Valley Water District	Basin Monitoring	16,796.00			16,796.00
Chino Basin Desalter Authority	Brine Line	210,607.84	210,607.84		
Department of Water Resources	Prop 84, Prop 1	21,608,754.32	67,788.66	1,015,405.27	20,525,560.39
Eastern Municipal Water District	Brine Line	184,837.73	184,837.73		
Inland Empire Utilities Agency	Brine Line, Emerging Constituents	95,554.94	95,554.94		
Riverside County Flood Control	RWQ Monitoring	118,703.00			118,703.00
Riverside, City of	SA Sucker Conservation	4,000.00	4,000.00		
San Bernardino Valley Municipal Water District	Brine Line	103,334.95	103,334.95		
Western Municipal Water District	Brine Line	426,685.16	426,685.16		
Total Accounts Receivable		22,769,273.94	1,092,809.28	1,015,405.27	20,661,059.39

Santa Ana Watershed Project Authority  
Open Task Orders Schedule  
Oct-19  
(Reflects Invoices Received as of 11/12/19)

Task Order No. Project Contracts	Fund No.	Vendor Name	Task Description	Begin Date	End Date	Original Contract	Change Orders	Total Contract	Billed To Date	Contract Balance	SAWPA Manager	Comments
ACS100-11	100-00	Accent Computer Solutions	IT Support	08/08/2018	06/30/2020	\$ 186,800.00	\$ -	\$ 186,800.00	\$ 90,461.32	\$ 96,338.68	Dean Unger	
HAMM100-240-01	100/240	Hammons Strategies	Technical Writing - SAWPA/BL	07/01/2018	12/31/2019	\$ 10,000.00	\$ 10,000.00	\$ 20,000.00	\$ 13,255.00	\$ 6,745.00	Rich Haller	
INSOL100-14	100-00	Integrated Systems Solutions	Great Plains & Journyx Tech Support	07/01/2019	06/30/2020	\$ 4,200.00	\$ 550.00	\$ 4,750.00	\$ 2,498.50	\$ 2,251.50	Dean Unger	
TEAM100-07	100-00	Teaman, Ramirez, & Smith	Auditing Services	06/05/2018	06/30/2021	\$ 79,500.00	\$ -	\$ 79,500.00	\$ 34,069.00	\$ 45,431.00	Karen Williams	
TTD100-05	100-00	The Technology Depot	Phone Support	07/01/2019	06/30/2020	\$ 5,000.00	\$ -	\$ 5,000.00	\$ 521.25	\$ 4,478.75	Dean Unger	
WCA100-03-03	100-03	West Coast Advisors	State Legislative Consulting FY19-20	01/01/2019	12/31/2020	\$ 235,000.00	\$ -	\$ 235,000.00	\$ 107,250.00	\$ 127,750.00	Larry McKenney	
CALV240-03	240	Calvada Surveying	BL On Call Land Surveying Services	06/05/2018	06/30/2020	\$ 28,970.00	\$ -	\$ 28,970.00	\$ -	\$ 28,970.00	Carlos Quintero	On Call
DOUG240-03	240	Douglas Environmental	Brine Line Meter Calibration	07/01/2018	06/30/2020	\$ 25,620.00		\$ 25,620.00	\$ 16,046.06	\$ 9,573.94	Carlos Quintero	On Call
WO2020-02	240	E S Babcock	Brine Line Sample Collection & Analysis	07/01/2019	06/30/2020	\$ 91,949.00	\$ -	\$ 91,949.00	\$ 17,202.00	\$ 74,747.00	Carols Quintero	
HAZ240-09	240	Haz Mat Trans Inc	On Call Draining & Emergency Clean Up	07/01/2018	06/30/2020	\$ 96,665.00	\$ -	\$ 96,665.00	\$ 2,714.01	\$ 93,950.99	Carlos Quintero	On Call
HAZ240-10	240	Haz Mat Trans Inc	BL Debris Hauling & Disposal services	07/01/2018	06/30/2020	\$ 34,800.00	\$ -	\$ 34,800.00	\$ 7,120.00	\$ 27,680.00	Carlos Quintero	On Call
HOU240-04	240	Houston Harris PCS Inc	Brine Line On Call Inspection Services	07/01/2018	06/30/2020	\$ 96,448.00	\$ -	\$ 96,448.00	\$ 2,131.50	\$ 94,316.50	Carlos Quintero	On Call
WO2020-31	240	Inland Empire Utilities Agency	Reach 4A Upper - BL Maintenance	07/01/2019	06/30/2020	\$ 10,000.00	\$ -	\$ 10,000.00	\$ -	\$ 10,000.00	Carlos Quintero	
INN240-03	240	Innerline Engineering Inc	Brine Line On-Call Line Cleaning	07/01/2018	06/30/2020	\$ 151,020.00	\$ -	\$ 151,020.00	\$ 51,649.50	\$ 99,370.50	Carlos Quintero	On Call
LWA240-01	240	Larry Walker Associates	Pretreatment Program Support Services	08/19/2019	06/30/2020	\$ 25,506.00	\$ -	\$ 25,506.00	\$ 607.75	\$ 24,898.25	David Ruhl	
PRO240-01	240	Project Partners	Pretreatment Program Support Services	07/30/2019	06/30/2020	\$ 5,000.00	\$ -	\$ 5,000.00	\$ 2,583.82	\$ 2,416.18	David Ruhl	
TRU240-24	240	Trussell Technologies	BL Sampling Support	09/12/2019	06/30/2021	\$ 23,590.00	\$ -	\$ 23,590.00	\$ 1,605.00	\$ 21,985.00	Carlos Quintero	
WEKA240-02	240	WEKA	IEBL Replacement Value Assessment	05/27/2019	10/31/2019	\$ 50,000.00	\$ -	\$ 50,000.00	\$ 39,365.00	\$ 10,635.00	David Ruhl	
WO2020-01	240	WMWD	Sample Collection & Analysis	07/01/2019	06/30/2020	\$ 75,000.00	\$ -	\$ 75,000.00	\$ -	\$ 75,000.00	David Ruhl	
WO2020-03	240	WMWD	Brine Line Operations & Maintenance	07/01/2019	06/30/2020	\$ 25,000.00	\$ -	\$ 25,000.00	\$ 3,078.02	\$ 21,921.98	Carlos Quintero	
DUDK320-03-01	320	Dudek	Reach 4D Maintenance Acc Rehabilitation	05/30/2019	06/30/2020	\$ 38,530.00	\$ -	\$ 38,530.00	\$ 8,215.00	\$ 30,315.00	David Ruhl	
DUDK320-03-02	320	Dudek	Alcoa Dike - Brine Line Protection/Relocation	10/28/2019	11/30/2019	\$ 3,920.00	\$ -	\$ 3,920.00	\$ -	\$ 3,920.00	David Ruhl	
STAN320-02	320	Stantec	Alcoa Dike - Brine Line Protection/Relocation	10/31/2019	12/31/2019	\$ 10,958.00	\$ -	\$ 10,958.00	\$ -	\$ 10,958.00	David Ruhl	
W&C327-02	327	Woodard & Curran	IEBL Reach IV-D Near Term Inspection Work	04/03/2019	12/31/2019	\$ 50,000.00	\$ -	\$ 50,000.00	\$ 45,925.22	\$ 4,074.78	David Ruhl	404

Santa Ana Watershed Project Authority  
Open Task Orders Schedule  
Oct-19  
(Reflects Invoices Received as of 11/12/19)

Task Order No. Project Contracts	Fund No.	Vendor Name	Task Description	Begin Date	End Date	Original Contract	Change Orders	Total Contract	Billed To Date	Contract Balance	SAWPA Manager	Comments
BLAIS370-02	370-01	Blais & Associates	Grant Needs Assessment & Grant Monitoring	10/01/2018	12/31/2019	\$ 24,700.00	\$ -	\$ 24,700.00	\$ 8,818.47	\$ 15,881.53	Ian Achimore	
DUDK373-06	373	Dudek	Prop1 Round 1 Grant Application	03/07/2019	12/31/2019	\$ 91,310.00	\$ -	\$ 91,310.00	\$ 88,774.35	\$ 2,535.65	Ian Achimore	
SWWG373-01	373	Sierra Water Workgroup	Roundtable of Regions network coordinator	04/01/2019	06/30/2020	\$ 84,454.00	\$ -	\$ 84,454.00	\$ 12,000.00	\$ 72,454.00	Ian Achimore	
GEOS374-01	374	GeoScience Support Service	SAR WLA Model Update	02/01/2017	12/31/2019	\$ 249,800.00	\$ 111,416.00	\$ 361,216.00	\$ 358,208.75	\$ 3,007.25	Mark Norton	
RISK374-08	374	Risk Sciences	Basin Monitoring TF Regulatory Support	03/21/2019	06/30/2020	\$ 74,400.00	\$ -	\$ 74,400.00	\$ 29,312.33	\$ 45,087.67	Mark Norton	
SOMA374-01	374	Somach, Simmons, & Dunn	Basin Monitoring TF Regulatory Support	08/06/2019	07/01/2021	\$ 112,380.00	\$ -	\$ 112,380.00	\$ 5,692.50	\$ 106,687.50	Mark Norton	
WSC374-01	374	Water Systems Consulting	Recomputation of Ambient Water Quality	04/02/2019	06/30/2020	\$ 373,973.00	\$ -	\$ 373,973.00	\$ 160,275.53	\$ 213,697.47	Mark Norton	
SAWA381-01	381	Santa Ana Watershed Association	Van Buren Bridge Sucker Restoration	09/26/2018	12/31/2019	\$ 15,130.20	\$ -	\$ 15,130.20	\$ 5,961.40	\$ 9,168.80	Ian Achimore	
SCH381-01	381	Scheevel Engineering	S.A. Sucker - Beneficial Use Project	04/18/2017	06/30/2020	\$ 96,725.00	\$ 7,275.00	\$ 104,000.00	\$ 99,529.00	\$ 4,471.00	Ian Achimore	
SCH381-02	381	Scheevel Engineering	S.A. Sucker - Habitat Construction Management	09/17/2018	12/31/2019	\$ 12,300.00	\$ -	\$ 12,300.00	\$ 5,025.00	\$ 7,275.00	Ian Achimore	
GEI384-01	384-01	GEI Consultants	MSAR TMDL Synoptic Study	05/21/2019	06/30/2020	\$ 200,000.00	\$ -	\$ 200,000.00	\$ 69,635.22	\$ 130,364.78	Rick Whetsel	
RISK384-09	384-01	Risk Sciences	MSAR TMDL Task Force	07/01/2018	06/30/2020	\$ 49,340.00	\$ -	\$ 49,340.00	\$ 31,698.41	\$ 17,641.59	Rick Whetsel	
SOMA384-01	384-01	Somach, Simmons & Dunn	MSAR TMDL Regulatory Support	08/06/2019	07/01/2021	\$ 119,790.00	\$ -	\$ 119,790.00	\$ 621.00	\$ 119,169.00	Mark Norton	
CDM386-14	386	CDM Smith	SAR Bacteria Monitoring Program	02/27/2019	06/30/2020	\$ 362,865.00	\$ 10,850.00	\$ 373,715.00	\$ 168,187.04	\$ 205,527.96	Rick Whetsel	
RISK386-10	386	Risk Sciences	Compliance Expert - RWQM TF	07/01/2018	06/30/2020	\$ 46,820.00	\$ -	\$ 46,820.00	\$ 13,408.73	\$ 33,411.27	Rick Whetsel	
SAWA387-06	387	Santa Ana Watershed Association	Arundo Surveying	07/17/2018	08/31/2021	\$ 23,000.00	\$ -	\$ 23,000.00	\$ -	\$ 23,000.00	Ian Achimore	
DEGR392-05	392	DeGrave Communications	Social Media Support - EC TF	07/01/2019	06/30/2020	\$ 30,000.00	\$ -	\$ 30,000.00	\$ 12,329.22	\$ 17,670.78	Mark Norton	
RISK392-05	392	Risk Sciences	Emerging Constituents Sampling Program 2019	02/20/2019	06/30/2020	\$ 28,250.00	\$ -	\$ 28,250.00	\$ 8,994.04	\$ 19,255.96	Mark Norton	
ECOT397-02	397	Ecotech Services	WECAN Landscaping Services	04/04/2017	12/31/2019	\$ 612,000.00	\$ -	\$ 612,000.00	\$ 611,500.00	\$ 500.00	Ian Achimore	
PO3466	398	California Rural Water Association	Disadvantaged Communities Grant	07/19/2017	04/30/2020	\$ 240,000.00	\$ -	\$ 240,000.00	\$ 169,797.57	\$ 70,202.43	Rick Whetsel	
GEI398-01	398	GEI Consultants	Assess Homelessness Impacts on Water Quality	02/05/2019	12/31/2019	\$ 74,441.00	\$ -	\$ 74,441.00	\$ 15,089.26	\$ 59,351.74	Rick Whetsel	
IEW398-03	398	Inland Empire Waterkeeper	Disadvantaged Communities Grant	09/03/2018	04/30/2021	\$ 7,200.00	\$ -	\$ 7,200.00	\$ 6,584.75	\$ 615.25	Rick Whetsel	
IUG398-01	398	IU Group	On Call Translation Services	04/18/2019	04/30/2020	\$ 10,000.00	\$ -	\$ 10,000.00	\$ 1,968.09	\$ 8,031.91	Rick Whetsel	
LTI398-01	398	Lazar Translation & Interpreting	On Call Translation Services	04/16/2019	04/30/2020	\$ 10,000.00	\$ -	\$ 10,000.00	\$ 8,096.00	\$ 1,904.00	Rick Whetsel	405



Santa Ana Watershed Project Authority  
Open Task Orders Schedule  
Oct-19  
(Reflects Invoices Received as of 11/12/19)

Task Order No. Project Contracts	Fund No.	Vendor Name	Task Description	Begin Date	End Date	Original Contract	Change Orders	Total Contract	Billed To Date	Contract Balance	SAWPA Manager	Comments
PO3463	398	Local Government Commission	Disadvantaged Communities Grant	07/19/2017	04/30/2020	\$ 442,000.00	\$ -	\$ 442,000.00	\$ 365,802.96	\$ 76,197.04	Rick Whetsel	
PO3879	398	Marisa Perez-Reyes	Disadvantaged Communities Program Support	08/05/2019	12/31/2019	\$ 12,000.00	\$ 10,000.00	\$ 22,000.00	\$ 11,841.34	\$ 10,158.66	Rick Whetsel	
PO3551	398	UC Irvine	Disadvantaged Communities Grant	11/06/2017	04/30/2020	\$ 105,000.00	\$ 277,000.00	\$ 382,000.00	\$ 370,044.64	\$ 11,955.36	Rick Whetsel	
PO3465	398	University Enterprises Corporation	Disadvantaged Communities Grant	07/19/2017	04/30/2020	\$ 1,290,500.00	\$ -	\$ 1,290,500.00	\$ 682,573.39	\$ 607,926.61	Rick Whetsel	
PO3464	398	Water Education Foundation	Disadvantaged Communities Grant	07/19/2017	04/30/2020	\$ 150,000.00	\$ -	\$ 150,000.00	\$ 92,628.59	\$ 57,371.41	Rick Whetsel	
RMC504-401-06	504-04	Woodard & Curran	SARCCUP Program Mgmt. Services	07/01/2019	06/30/2020	\$ 229,046.00	\$ -	\$ 229,046.00	\$ 48,346.48	\$ 180,699.52	Ian Achimore	
RMC504-401-05	504-04	Woodard & Curran	Technical Writing & Outreach Support	10/24/2018	06/30/2020	\$ 37,411.00	\$ -	\$ 37,411.00	\$ 22,645.95	\$ 14,765.05	Mark Norton	
										<u>\$ 3,073,714.24</u>		

## LIST OF SAWPA FUNDS

Fund No.	Fund Description	Fund Group
100-00	General Fund	General
100-03	State Lobbying	General
100-04	Federal Lobbying	General
100-05	Grant Applications	General
130	Proposition 84 – Program Management - Round 1	OWOW
135	Proposition 84 – Program Management – Round 2	OWOW
140	Proposition 84 – Program Management – Drought Round	OWOW
145	Proposition 84 – Program Management – 2015 Round	OWOW
240	Brine Line Enterprise	Brine Line
320-01	Brine Line Protection – Downstream Prado	Capital Projects
320-03	Brine Line Protection Above Prado	Capital Projects
320-04	Brine Line Protection D/S Prado in Riverside County	Capital Projects
326	Reach V Capital Repairs	Capital Projects
327	Reach IV-D Corrosion Repair	Capital Projects
370-01	Basin Planning General	OWOW
370-02	USBR Partnership Studies	OWOW
372	Imported Water Recharge Work Group	Roundtable
373	Watershed Management (OWOW)	OWOW
374	Basin Monitoring Program Task Force	Roundtable
381	Santa Ana River Fish Conservation	Roundtable
384-01	MSAR TMDL Task Force	Roundtable
386	Regional Water Quality Monitoring Task Force	Roundtable
387	Arundo Management & Habitat Restoration	Roundtable
392	Emerging Constituents Task Force	Roundtable
396	Forest First	Roundtable
397	Energy – Water DAC Grant Project	OWOW
398	Proposition 1 - DACI	OWOW
477	LESJWA Administration	Roundtable
504-01	Proposition 84 – Capital Projects Round 1 & 2	OWOW
504-00	Proposition 84 – Drought Capital Projects	OWOW
504-04	Proposition 84 – Final Round SARCCUP	OWOW

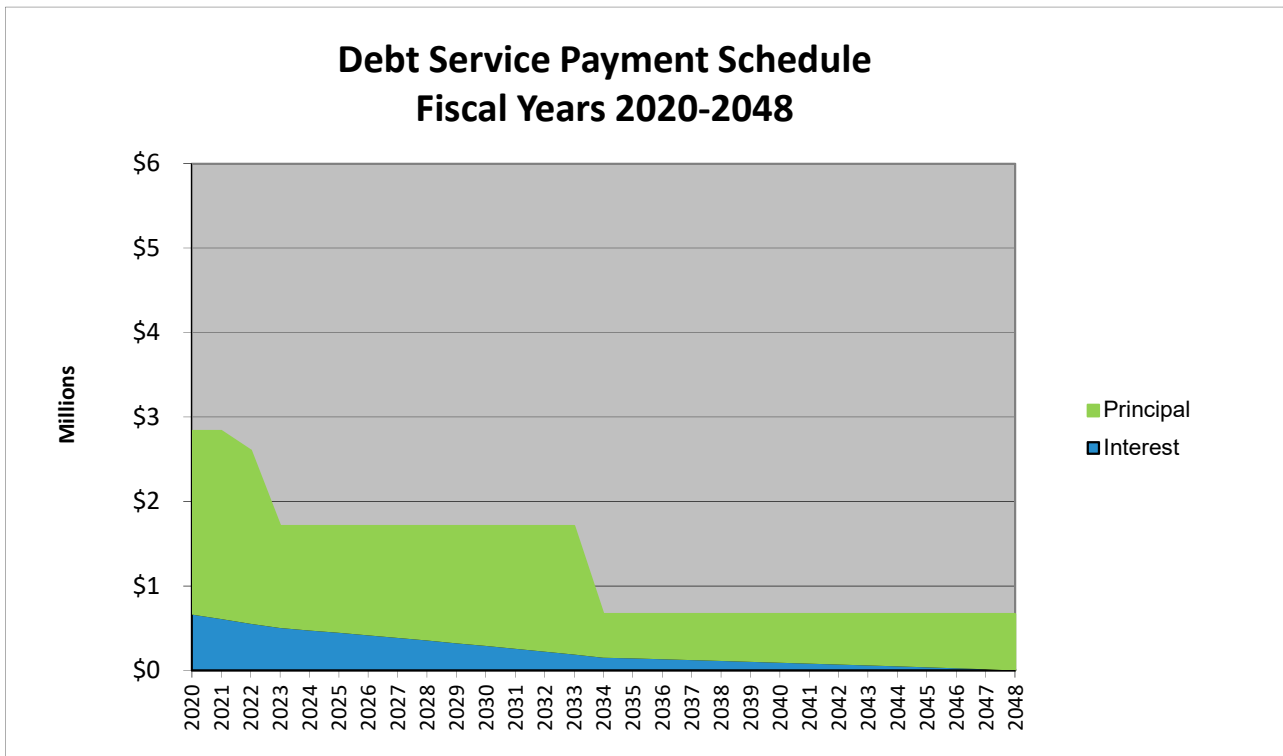
Santa Ana Watershed Project Authority  
 Brine Line Debt Service Funding Analysis  
 October 31, 2019

FYE	T-Strip Maturity	Capacity Loan Receipts	Rates	Loan Pymts	Interest Earned *	Excess Cash	Ending Cash Balance
	Beginning Balance						4,808,151
2020	395,000	-	1,709,476	(2,835,753)	96,163	(635,115)	4,173,037
2021	-	-	1,709,476	(2,835,753)	83,461	(1,042,817)	3,130,220
2022	-	-	1,709,476	(2,608,439)	62,604	(836,359)	2,293,861
2023	-	-	1,709,476	(1,709,476)	45,877	45,877	2,339,738
2024	-	-	1,709,476	(1,709,476)	46,795	46,795	2,386,533
2025	-	-	1,709,476	(1,709,476)	47,731	47,731	2,434,264
2026	-	-	1,709,476	(1,709,476)	48,685	48,685	2,482,949
2027	-	-	1,709,476	(1,709,476)	49,659	49,659	2,532,608
2028	-	-	1,709,476	(1,709,476)	50,652	50,652	2,583,260
2029	-	-	1,709,476	(1,709,476)	51,665	51,665	2,634,925
2030	-	-	1,709,476	(1,709,476)	52,699	52,699	2,687,624
2031	-	-	1,709,476	(1,709,476)	53,752	53,752	2,741,376
2032	-	-	1,709,476	(1,709,476)	54,828	54,828	2,796,204
2033	-	-	1,709,476	(1,709,476)	55,924	55,924	2,852,128
2034	-	-	665,203	(665,203)	57,043	57,043	2,909,171
2035	-	-	665,203	(665,203)	58,183	58,183	2,967,355
2036	-	-	665,203	(665,203)	59,347	59,347	3,026,701
2037	-	-	665,203	(665,203)	60,534	60,534	3,087,236
2038	-	-	665,203	(665,203)	61,745	61,745	3,148,980
2039	-	-	665,203	(665,203)	62,980	62,980	3,211,959
2040	-	-	665,203	(665,203)	64,239	64,239	3,276,199
2041	-	-	665,203	(665,203)	65,524	65,524	3,341,723
2042	-	-	665,203	(665,203)	66,834	66,834	3,408,557
2043	-	-	665,203	(665,203)	68,171	68,171	3,476,728
2044	-	-	665,203	(665,203)	69,535	69,535	3,546,263
2045	-	-	665,203	(665,203)	70,925	70,925	3,617,188
2046	-	-	665,203	(665,203)	72,344	72,344	3,689,532
2047	-	-	665,203	(665,203)	73,791	73,791	3,763,322
2048	-	-	665,203	(665,203)	75,266	75,266	3,838,589
	395,000	-	33,910,698	(37,062,216)	1,786,956	(969,562)	-

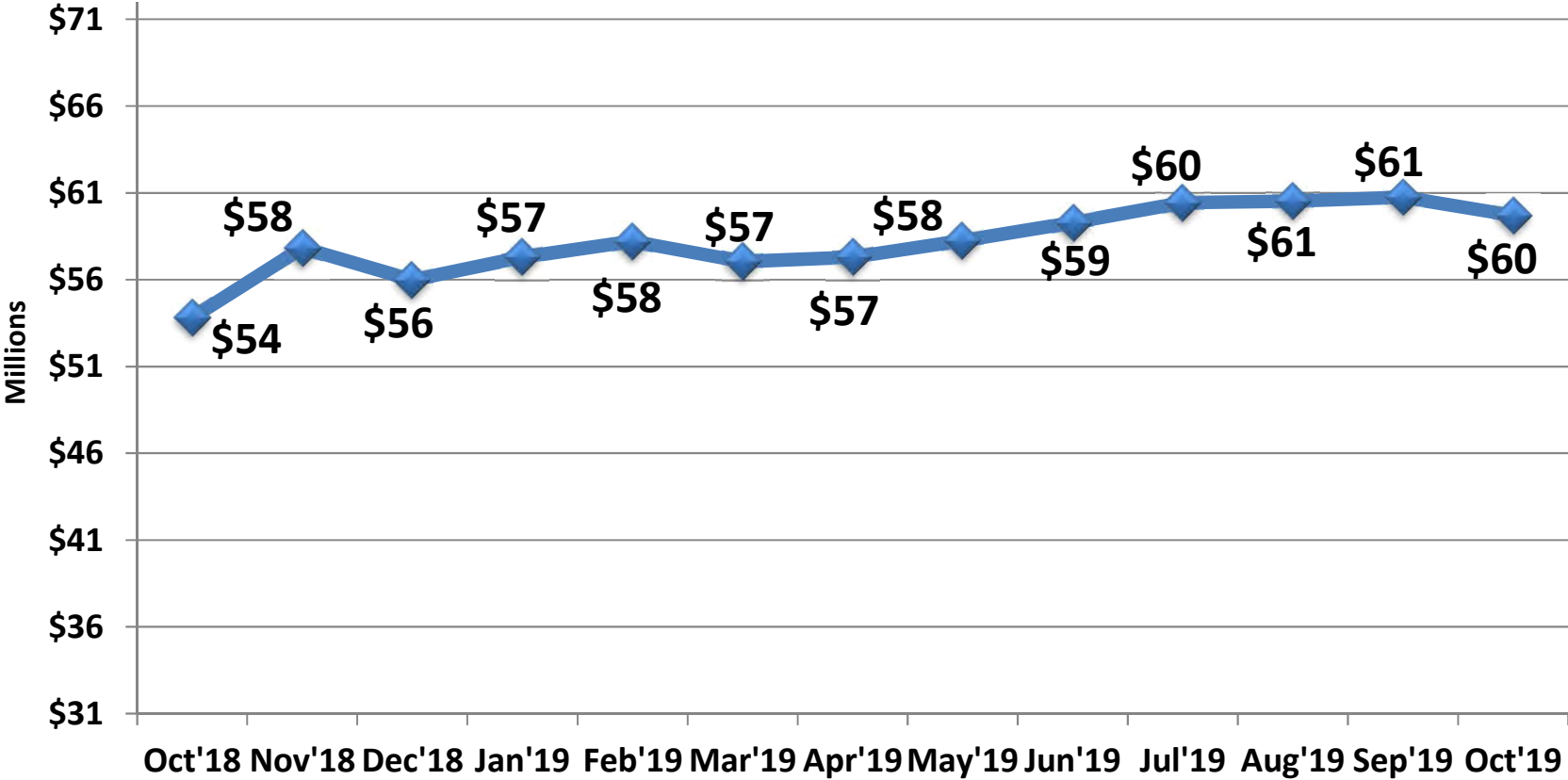
\*Interest earned is based on a conservative 2.00% average return over the period

Santa Ana Watershed Project Authority  
 Brine Line Debt Service Payment Schedule  
 October 31, 2019

FYE	Interest	Principal	Total Payment	New SRF Loan	Remaining Principal
2019	673,477	2,162,276	2,835,753	-	29,847,480
2020	675,214	2,160,539	2,835,753	-	27,686,941
2021	620,782	2,214,971	2,835,753	-	25,471,969
2022	564,959	2,043,480	2,608,439	-	23,428,489
2023	514,301	1,195,175	1,709,476	-	22,233,314
2024	486,080	1,223,395	1,709,476	-	21,009,919
2025	457,181	1,252,295	1,709,476	-	19,757,624
2026	427,585	1,281,891	1,709,476	-	18,475,734
2027	397,276	1,312,199	1,709,476	-	17,163,534
2028	366,237	1,343,239	1,709,476	-	15,820,295
2029	334,449	1,375,027	1,709,476	-	14,445,268
2030	301,894	1,407,582	1,709,476	-	13,037,686
2031	268,553	1,440,923	1,709,476	-	11,596,763
2032	234,407	1,475,068	1,709,476	-	10,121,695
2033	199,437	1,510,039	1,709,476	-	8,611,656
2034	163,621	501,581	665,203	-	8,110,075
2035	154,091	511,111	665,203	-	7,598,964
2036	144,380	520,822	665,203	-	7,078,142
2037	134,485	530,718	665,203	-	6,547,424
2038	124,401	540,801	665,203	-	6,006,622
2039	114,126	551,077	665,203	-	5,455,546
2040	103,655	561,547	665,203	-	4,893,999
2041	92,986	572,217	665,203	-	4,321,782
2042	82,114	583,089	665,203	-	3,738,693
2043	71,035	594,167	665,203	-	3,144,526
2044	59,746	605,457	665,203	-	2,539,069
2045	48,242	616,960	665,203	-	1,922,109
2046	36,520	628,682	665,203	-	1,293,427
2047	24,575	640,627	665,203	-	652,799
2048	12,403	652,799	665,203	-	0



# Total Cash & Investments





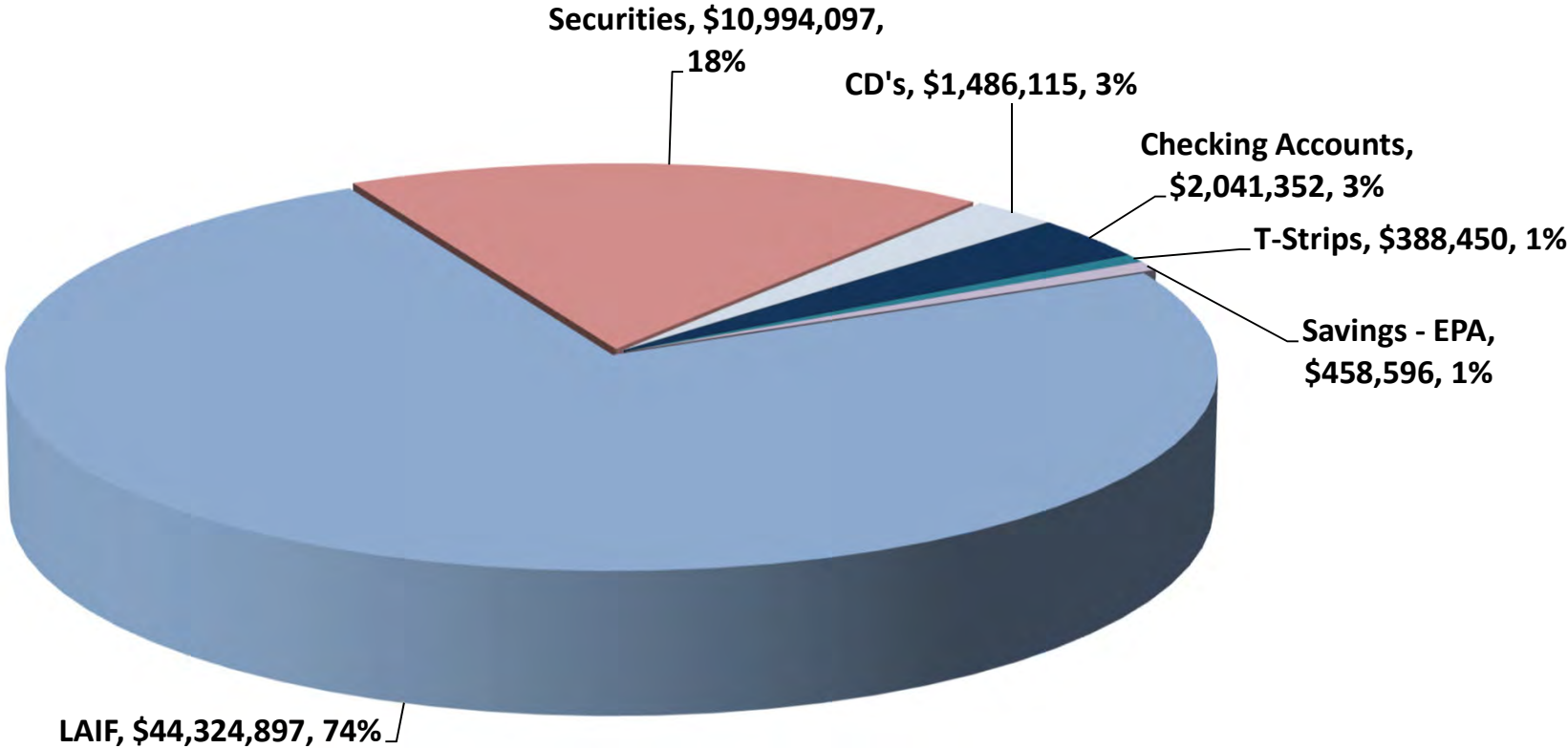
# CASH BALANCE & SOURCE OF FUNDS

October 31, 2019

Reserve Accounts		Cash and Investments							
	Total	Checking (Cash)	LAIF Account	Savings EPA	Investment Securities	Certificates of Deposit	Treasury Strips	Total	
100	General Fund	\$ 2,070,362	2,041,352	29,010	-	-	-	\$ 2,070,362	
100	Building Reserve	\$ 751,887	-	751,887	-	-	-	\$ 751,887	
370	Basin Planning General	\$ 468,067	-	468,067	-	-	-	\$ 468,067	
370	USBR Partnership Studies	\$ 56,207	-	56,207	-	-	-	\$ 56,207	
373	Watershed Management Plan	\$ 550,114	-	550,114	-	-	-	\$ 550,114	
240	Self Insurance Reserve	\$ 4,246,322	-	4,246,322	-	-	-	\$ 4,246,322	
240	Brine Line Debt Retirement	\$ 4,292,763	-	3,904,313	-	-	388,450	\$ 4,292,763	
240	Brine Line - Pipeline Replacement	\$ 21,535,390	-	9,055,178	-	10,994,097	1,486,115	\$ 21,535,390	
240	Brine Line - OCSD Rehabilitation	\$ 3,669,572	-	3,669,572	-	-	-	\$ 3,669,572	
240	Brine Line - Capacity Management	\$ 11,751,304	-	11,751,304	-	-	-	\$ 11,751,304	
240	Brine Line - OCSD Future Capacity	\$ 1,799,163	-	1,799,163	-	-	-	\$ 1,799,163	
240	Brine Line - Flow Imbalance Reserve	\$ 86,957	-	86,957	-	-	-	\$ 86,957	
240	Brine Line - Rate Stabilization Reserve	\$ 1,008,202	-	1,008,202	-	-	-	\$ 1,008,202	
240	Brine Line - Operating Reserve	\$ 4,071,852	-	4,071,852	-	-	-	\$ 4,071,852	
401	Legal Defense Fund	\$ 458,596	-	-	458,596	-	-	\$ 458,596	
374	Basin Monitoring Program TF	\$ 494,523	-	494,523	-	-	-	\$ 494,523	
381	SAR Fish Conservation	\$ 121,806	-	121,806	-	-	-	\$ 121,806	
384	Middle SAR TMDL TF	\$ 370,020	-	370,020	-	-	-	\$ 370,020	
386	RWQ Monitoring TF	\$ 398,206	-	398,206	-	-	-	\$ 398,206	
387	Mitigation Bank Credits	\$ 961,342	-	961,342	-	-	-	\$ 961,342	
392	Emerging Constituents TF	\$ 43,810	-	43,810	-	-	-	\$ 43,810	
397	Energy - Water DAC Grant	\$ 44,244	-	44,244	-	-	-	\$ 44,244	
504	Prop 84 - SARCCUP Projects	\$ 442,799	-	442,799	-	-	-	\$ 442,799	
		\$ 59,693,508	\$ 2,041,352	\$ 44,324,897	\$ 458,596	\$ 10,994,097	\$ 1,486,115	\$ 388,450	\$ 59,693,508

# Cash & Investments - October 2019

## \$59,693,508

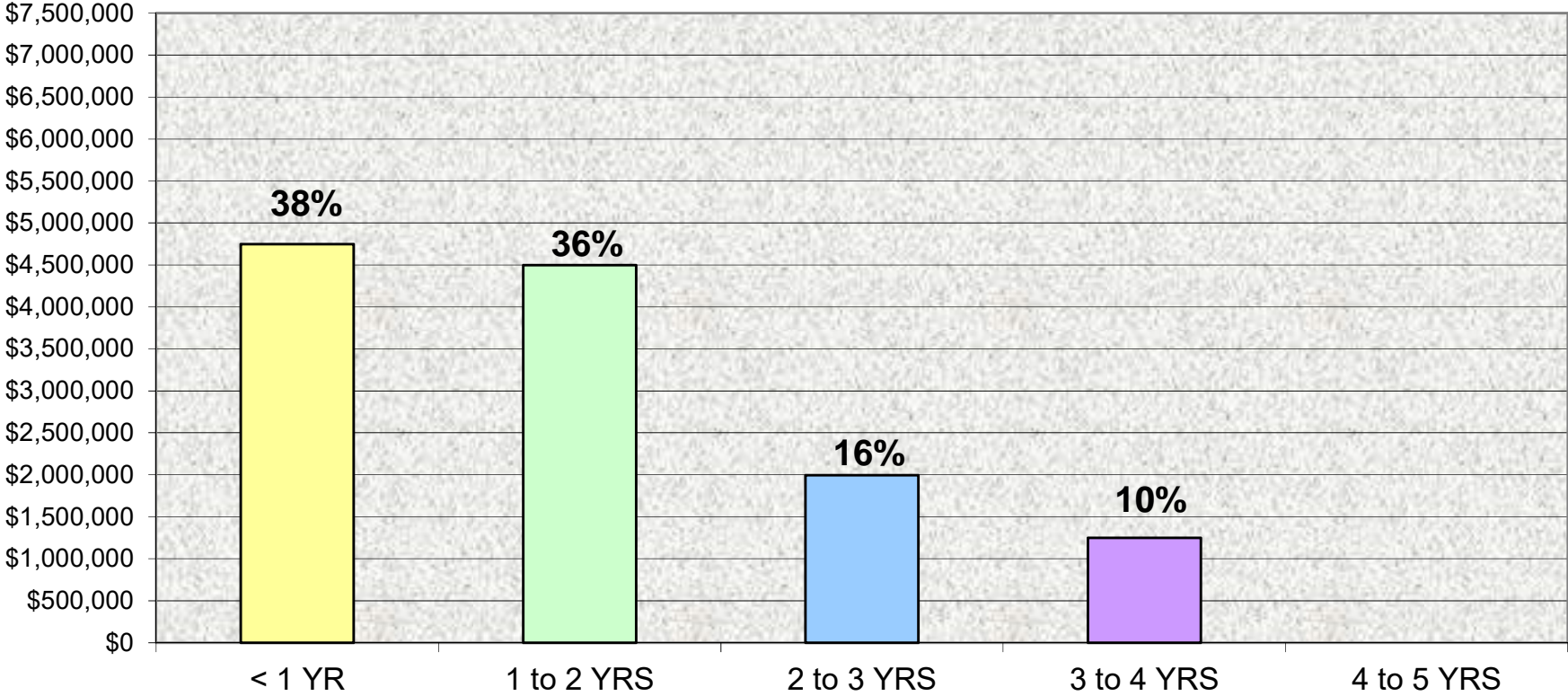




Santa Ana Watershed Project Authority  
Reserve Account Analysis  
October 31, 2019

Reserve Account	Balance @ 6/30/2019	Interest Earned	Fund Contributions	Loan/T-Strip Receipts	Debt Service Payments	Inter-Fund Loans	Fund Expenses	Balance @ 10/31/2019	Estimated Fund Changes	Balance @ 6/30/2020
Brine Line Operating Reserve	4,512,993	45,591	3,578,204				(4,064,936)	4,071,852	-	4,071,852
Flow Imbalance Reserve	85,989	968						86,957	-	86,957
OCSD Future Capacity	1,779,127	20,036						1,799,163	-	1,799,163
Capacity Management	11,620,440	130,863						11,751,304	-	11,751,304
Rate Stabilization Reserve	1,000,000	8,202						1,008,202	-	1,008,202
Pipeline Replacement	21,015,512	153,785	478,493			(112,399)		21,535,390	(4,048,750)	17,486,640
OCSD Rehabilitation	3,628,707	40,865						3,669,572	-	3,669,572
Debt Retirement	4,413,151	47,856	569,583		(1,126,278)			3,904,313	2,217,589	6,121,902
Self Insurance	4,166,085	46,904	33,333					4,246,322	66,667	4,312,989
General Fund	2,418,254	33,976	677,580			(955,944)	(103,503)	2,070,362	-	2,070,362
Building Reserve	684,110	8,639	100,000				(40,862)	751,887	-	751,887
	<u>55,324,368</u>	<u>537,685</u>	<u>5,437,193</u>	-	(1,126,278)	(1,068,344)	(4,209,301)	<u>54,895,324</u>	<u>(1,764,494)</u>	<u>53,130,830</u>

# Twelve Month Maturity Schedule Securities



**SAWPA**  
**TREASURER'S REPORT**  
As of October 31, 2019

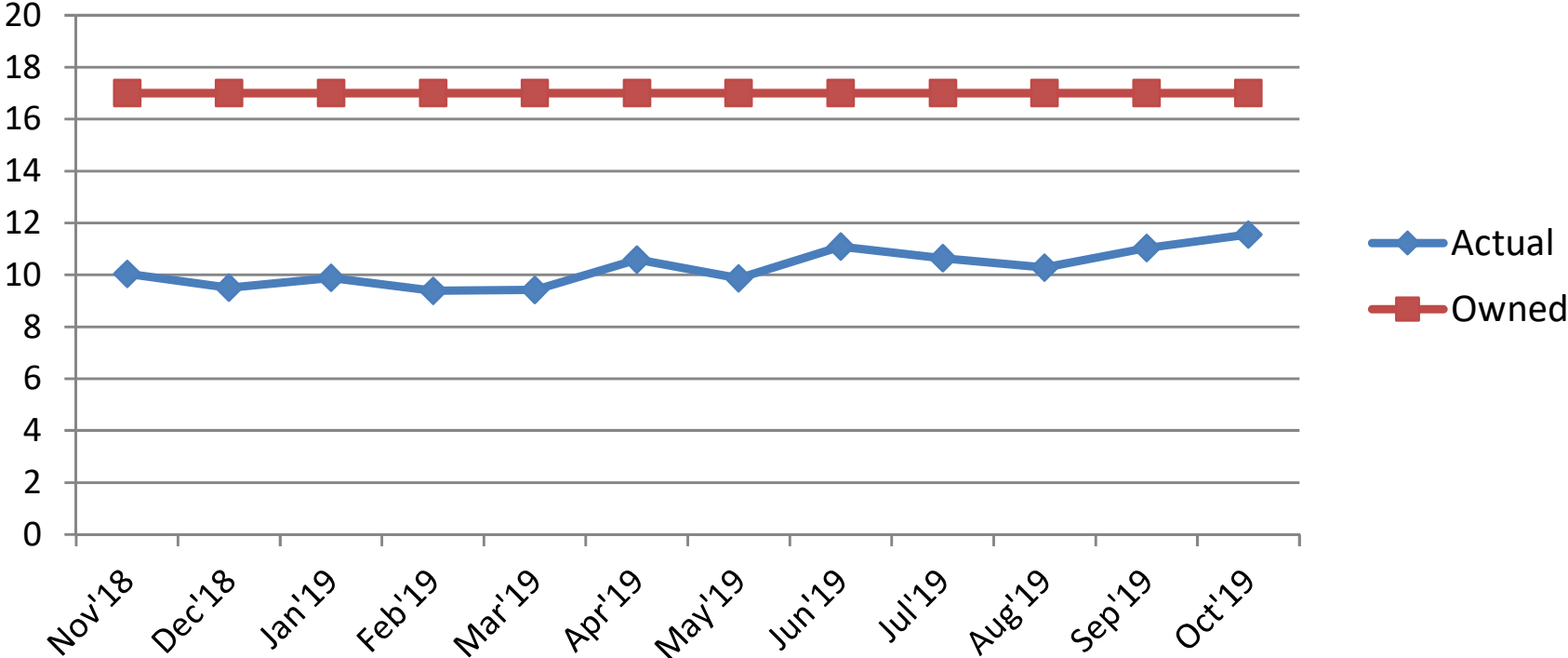
Investment T-Strips  
Safekeeping US Bank

T-STRIPS	Debt	Purchase Date	Maturity Date	PAR	Cost	Initial Discount	Current Discount	Book Value	Market Value	Interest Rate
USB	TVRI	02/11/2000	05/15/2020	395,000.00	111,030.55	283,969.45	40,451.91	354,548.09	391,525.98	6.36%
				\$ 395,000.00	\$ 111,030.55	\$ 283,969.45	\$ 40,451.91	354,548.09	\$ 391,525.98	6.36%

Investment Commercial  
Safekeeping US Bank

Type	Security	Purchase Date	Maturity Date	Unit Cost	Cost	Principal	Current Value	Market Value	Interest Rate
Agency	FHLMC	9/16/2016	8/12/2021	100.00	\$ 990,060.00	\$ 1,000,000.00	\$ 1,000,000.00	990,210.00	1.125%
Agency	FHLMC	4/17/2017	1/13/2022	102.55	\$ 512,767.00	\$ 500,000.00	\$ 500,000.00	507,300.00	2.375%
Agency	FHLB	6/16/2016	6/12/2020	102.61	\$ 1,026,088.00	\$ 1,000,000.00	\$ 1,000,000.00	1,000,907.00	1.750%
Agency	FHLB	12/14/2017	6/10/2022	99.89	\$ 998,930.00	\$ 1,000,000.00	\$ 1,000,000.00	1,011,316.00	2.125%
Agency	FNMA	12/28/2015	12/28/2020	100.21	\$ 1,002,140.00	\$ 1,000,000.00	\$ 1,000,000.00	1,001,993.00	1.875%
Agency	FNMA	6/16/2016	11/30/2020	101.52	\$ 1,015,157.00	\$ 1,000,000.00	\$ 1,000,000.00	998,120.00	1.500%
Agency	USTN	11/17/2015	10/31/2020	100.00	\$ 1,005,312.50	\$ 1,000,000.00	\$ 1,000,000.00	1,001,367.00	1.750%
Agency	USTN	11/17/2015	11/30/2019	100.00	\$ 1,001,210.94	\$ 1,000,000.00	\$ 1,000,000.00	999,679.00	1.500%
Agency	USTN	6/17/2016	8/31/2020	101.13	\$ 507,070.31	\$ 500,000.00	\$ 500,000.00	499,062.50	1.375%
Agency	USTN	6/16/2016	9/30/2020	101.12	\$ 506,992.19	\$ 500,000.00	\$ 500,000.00	498,886.50	1.375%
Agency	USTN	6/16/2016	10/31/2020	101.12	\$ 506,914.06	\$ 500,000.00	\$ 500,000.00	498,808.50	1.375%
Agency	USTN	12/14/2017	7/31/2021	96.91	\$ 969,062.50	\$ 1,000,000.00	\$ 1,000,000.00	992,266.00	1.125%
CORP	Apple Inc.	10/15/2018	5/3/2023	95.98	\$ 479,898.50	\$ 500,000.00	\$ 500,000.00	507,436.00	2.400%
CORP	Toyota Motor Credit Corp.	10/15/2018	9/20/2023	99.55	\$ 497,747.50	\$ 500,000.00	\$ 500,000.00	527,532.00	3.450%
CD	Ally Bank	4/20/2017	4/20/2020	100.00	\$ 248,000.00	\$ 248,000.00	\$ 248,000.00	248,325.61	1.800%
CD	American Exp Centurion	4/19/2017	4/19/2021	100.00	\$ 248,000.00	\$ 248,000.00	\$ 248,000.00	248,000.00	2.250%
CD	American Express BK FSB	5/10/2017	5/10/2021	100.00	\$ 248,000.00	\$ 248,000.00	\$ 248,000.00	248,000.00	2.200%
CD	Sallie Mae BK SLT	7/1/2019	6/27/2022	100.00	\$ 247,000.00	\$ 247,000.00	\$ 247,000.00	247,000.00	2.250%
CD	Morgan Stanley Bank NA	7/5/2019	7/5/2022	100.00	\$ 247,000.00	\$ 247,000.00	\$ 247,000.00	247,000.00	2.200%
CD	Goldman Sachs Bank USA	12/20/2017	12/20/2022	100.00	\$ 248,000.00	\$ 248,000.00	\$ 248,000.00	248,000.00	2.500%
					\$12,505,350.50	\$ 12,486,000.00	\$ 12,486,000.00	12,521,209.11	1.915%

# Average Daily Flow by Month





## SUMMARY OF LABOR MULTIPLIERS

		Benefit Rate
Total Employee Benefits	464,646	0.339
Total Payroll	1,370,780	
Gross Indirect Costs	1,284,603	
Less: Member Contributions & Other Revenue	(150,000)	
Indirect Costs for Distribution	1,134,603	
		Indirect Rate
Direct Labor	752,876	1.507
Indirect Costs	1,134,603	
<b>FY 2019-20 Labor multiplier - thru 10/31/19</b>		<b>1.846</b>
FY 2019-20 Budgeted Labor multiplier		<u>1.961</u>
FY 2018-19 Labor multiplier		<u>2.059</u>
FY 2017-18 Labor multiplier		<u>1.990</u>
FY 2016-17 Labor multiplier		<u>1.901</u>
FY 2015-16 Labor multiplier		<u>2.073</u>



## INDIRECT COSTS

*( to be Distributed )*

<u>G/L Acct.</u>	<u>Description</u>	<u>Actual thru</u> <u>10/31/19</u>
51000	Salaries - Regular	\$ 617,904
52000	Benefits	\$ 281,764
60111	Tuition Reimbursement	\$ -
60112	Training	\$ 1,791
60113	Education	\$ 805
60114	Other Training & Education	\$ 4,809
60120	Audit Fees	\$ 7,500
60121	Consulting	\$ 57,861
60126	Temporary Services	\$ 5,839
60128	Other Professional Services	\$ 700
60129	Other Contract Services	\$ -
60130	Legal Fees	\$ 16,975
60133	Employment Recruitment	\$ 986
60153	Materials & Supplies	\$ -
60154	Safety	\$ 5,340
60155	Security	\$ 923
60156	Custodial Contract Services	\$ 6,513
60157	Landscaping Maintenance	\$ 2,980
60158	HVAC	\$ 4,868
60159	Facility Repair & Maintenance	\$ 15,907
60160	Telephone	\$ 4,710
60161	Cellular / Paging Services	\$ 4,036
60163	Electricity	\$ 7,097
60164	Water Services	\$ 3,662
60170	Equipment Expensed	\$ 3,070
60171	Equipment Rented	\$ 13,801

(Continued - next column)

<u>G/L Acct.</u>	<u>Description</u>	<u>Actual thru</u> <u>10/31/19</u>
60172	Equipment Repair / Maintenance	\$ 950
60180	Computer Hardware	\$ 542
60181	Software / Updates / Licensing	\$ 55,204
60182	Internet Services	\$ 4,073
60183	Computer Supplies	\$ 1,963
60184	Computer Repair / Maintenance	\$ -
60190	Offsite Meeting / Travel Expense	\$ 520
60191	In House Meetings	\$ 420
60192	Conference Expense	\$ 8,476
60193	Car, Repair, Maint	\$ 126
60200	Dues	\$ 25,031
60202	Subscriptions	\$ 3,223
60203	Contributions	\$ 11,000
60210	Bank Charges	\$ -
60211	Shipping / Postage	\$ 202
60212	Office Supplies	\$ 4,130
60213	Offsite Storage	\$ 689
60220	Commission Fees	\$ 11,760
60221	Commission Mileage Reimb.	\$ 1,801
60222	Other Commission Expense	\$ 26
60230	Other Expense	\$ 3,974
60240	Building Lease	\$ 3,060
81010	Retiree Medical Expense	\$ 29,940
80001	Insurance Expense	\$ 14,318
80000	Building Repair/Replacement Reserve	\$ 33,333
13005	Fixed Assets	\$ -

**Total Costs**      \$ 1,284,603

Direct Costs Paid by Projects	\$ 849,981
Member Contribution Offset	\$ 150,000
	\$ 999,981

Over allocation %	-25.1%
Over (Under) Allocation of General Fund Costs	\$ (284,622)



## BENEFITS SUMMARY

*(Distributed based on Actual Labor)*

<u>G/L Acct</u>	<u>Description</u>	<u>Budget</u>	<u>Actual @ 10/31/19</u>	<u>Projected FYE 2020</u>
70101	FICA Expense	200,498 \$	52,249 \$	156,747
70102	Medicare Expense	56,208 \$	16,080 \$	48,240
70103	State Unemployment Insurance	4,900 \$	457 \$	4,000
70104	Worker's Compensation Insurance	43,068 \$	15,271 \$	45,813
70105	State Disability Insurance	29,183 \$	7,025 \$	21,075
70106	PERS Pension Plan	701,014 \$	191,735 \$	575,205
70111	Medical Expense	578,078 \$	142,689 \$	428,067
70112	Dental Expense	34,765 \$	8,809 \$	26,427
70113	Vision Insurance	8,268 \$	2,271 \$	6,813
70114	Life Insurance Expense	15,871 \$	4,862 \$	14,586
70115	Long Term Disability	18,502 \$	5,486 \$	16,458
70116	Wellness Program Expense	3,500 \$	712 \$	3,500
70117	401a Profit Sharing - Employers Contribution	- \$	- \$	-
70120	Car Allowance	51,000 \$	17,000 \$	51,000
	<b>Total Benefits</b>	1,744,854	464,646	1,397,931
	<b>Total Payroll</b>	3,825,402 \$	1,370,780 \$	3,750,000
	<b>Benefits Rate</b>	45.6%	33.9%	37.3%



Santa Ana Watershed Project Authority  
 Labor Hours Budget vs Actual  
 Month Ending October 31, 2019

	Fund	Budget	Actual	%
100	General & Administrative	25,622	10,083	39.35%
135	Prop 84 Round 2 Administration	320	142	44.38%
140	Prop 84 2014 Drought Administration	685	603	87.99%
145	Prop 84 Final Round Administration	2,020	232	11.50%
240	Brine Line Enterprise	21,925	5,567	25.39%
320	Brine Line Protection	695	54	7.77%
327	Reach IV-D Corrosion Repairs	320	7	2.03%
370-01	General Basin Planning	1,715	329	19.17%
370-02	USBR Partnership Studies	90	31	34.44%
373	Watershed Management Plan	1,945	448	23.05%
374	Basin Monitoring Program	443	131	29.57%
381	SAR Fish Conservation	220	52	23.52%
384-01	Chino TMDL Facilitation	175	43	24.29%
386MONIT	Storm Water Quality Standards TF	155	44	28.39%
387	Arundo Removal & Habitat Restoration	175	2	0.86%
392	Emerging Constituents	45	33	73.89%
397EXPAN	Water-Energy WVWD Administration	-	2	100.00%
398ADMIN	DACI Grant	3,650	765	20.97%
477-02	LESJWA - Administration	320	138	42.97%
477TMDL	LESJWA - TMDL Task Force	625	235	37.60%
504-301A	Prop 84 2014 Drought Implementation	100	45	44.75%
504-301C	Prop 84 2014 Drought Implementation	110	168	152.27%
504-4011	Prop 84 Final Round Implementation	335	27	7.91%
504-401PA23	Prop 84 Final Round Implementation	660	27	4.13%
504-401WUEAMDIN	Prop 84 Final Round Implementation	295	-	0.00%
504-402RATES	Prop 84 Final Round Implementation	-	-	0.00%
504-402SMART	Prop 84 Final Round Implementation	395	-	0.00%
		63,040	19,204	30.46%

Note: Should be at 33.33% of budget for 4 months

## COMMISSION MEMORANDUM NO. 2019.118

**DATE:** December 17, 2019  
**TO:** SAWPA Commission  
**SUBJECT:** Budget vs. Actual Variance Report  
FYE 2020 First Quarter – September 30, 2019  
**PREPARED BY:** Karen Williams, DGM/CFO

### RECOMMENDATION

It is recommended that the Commission receive and file the informational report on FYE 2020 First Quarter Budget vs. Actual Variance Report.

### DISCUSSION

Staff has developed a Budget vs. Actual Variance Report and presents this report on a quarterly basis. Attached is the FYE 2020 Budget vs. Actual Variance Report through September 30, 2019. The Agency's net revenue was \$1,540,826, which was \$831,848 more favorable than budgeted. Several significant items comprise the majority of this favorable variance:

Operating Revenue was \$2,236 more than budgeted. This favorable variance is due to higher truck discharge than budgeted.

Operating Expense was \$2,295,239 less than budgeted. This favorable variance is due to a not having received invoices for Proposition 1 and 84 projects and the delayed start of the OCSD Rock Removal Project.

Non-Operating Revenue/Expense was \$1,465,628 less than budgeted. This unfavorable variance is due to not having received invoices for Proposition 1 and 84 projects and the delayed start of the OCSD Rock Removal Project.

### Favorable Revenue Variances

Listed below are explanations of favorable variances of \$150,000 or more for individual revenue categories:

Interest & Investments – The 714% variance of \$267,651 is due to receiving higher interest earnings than was projected in the budget.

### Unfavorable Revenue Variances

Listed below are explanations of unfavorable variances of \$150,000 or more for individual revenue categories:

Participant Fees – The 14% variance of \$166,715 is due to not having billed participants fees for Proposition 84 SARCCUP and the Emerging Constituents Task Force. Participant Fees will be billed later in the year.

Grant Proceeds – The 28% variance of \$315,897 is due to the delay of receiving invoices for Proposition 1 and 84 projects from the project proponents.

Use of Reserves – The 98% variance of \$1,258,941 is due to the delayed start of the Rock Removal project which is funded by reserves.

**Favorable Expense Variances**

Listed below are explanations of favorable variances of \$150,000 or more for individual expense categories:

Consulting & Professional Services – The 26% variance of \$330,094 is due to slower implementation of the Proposition 84 Drought, SARCCUP, and Proposition 1 DACI projects.

Operating Costs – The 29% variance of \$258,475 is due to Brine Line permitting/pre-treatment and maintenance activities. The process of updating our ordinance, policy and procedures manual and conducting an audit of the pre-treatment program will occur toward the last half of the year. Maintenance activities are also billed at the end of the year by SAWPA member agencies.

Construction – The 100% variance of \$1,175,000 is due to the delayed start of the Rock Removal project. The project is being done by Orange County Sanitation District and will begin in the fall. Invoices are not projected to be received until late Spring.

**Unfavorable Expense Variances**

There are no unfavorable expenses variance of \$150,000 or more.

**RESOURCE IMPACTS**

None.

Attachment:

1. Variance Report

Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019

*Consolidated*

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Discharge Fees	\$11,532,103	\$2,883,026	\$2,885,262	\$2,236	0.08%
Total Operating Revenue	11,532,103	2,883,026	2,885,262	2,236	0.08%
<b>Operating Expenses</b>					
Labor	3,825,400	956,350	904,322	52,028	5.44%
Benefits	1,744,855	436,214	355,589	80,625	18.48%
Education & Training	61,800	15,450	8,207	7,243	46.88%
Consulting & Professional Services	5,001,458	1,250,365	920,271	330,094	26.40%
Operating Costs	3,546,000	886,500	628,025	258,475	29.16%
Repair & Maintenance	572,100	143,025	36,953	106,072	74.16%
Phone & Utilities	80,150	20,038	16,779	3,258	16.26%
Equipment & Computers	372,900	93,225	103,017	-9,792	-10.50%
Meeting & Travel	112,650	28,163	12,481	15,681	55.68%
Other Administrative Costs	308,013	77,003	76,086	917	1.19%
Other Expense	334,500	128,626	56,741	71,885	55.89%
Program Expenses	707,903	104,442	34,024	70,418	67.42%
Construction	4,700,000	1,175,000	0	1,175,000	100.00%
Operating Transfers	132,344	132,344	132,344	0	0.00%
Indirect Costs	0	0	-133,334	133,334	-100.00%
Total Operating Expenses	21,500,075	5,446,743	3,151,505	2,295,239	42.14%
Net Operating Revenue / (Deficit)	-9,967,972	-2,563,718	-266,243	-2,293,002	89.44%
<b>Non-Operating Revenue (Expense)</b>					
Member Agency Contributions	1,526,966	1,526,966	1,526,966	0	0.00%
Participant Fees	1,751,232	1,212,573	1,045,858	-166,715	-13.75%
Grant Proceeds	4,658,908	1,112,060	796,163	-315,897	-28.41%
Debt Service	-2,835,027	-1,126,577	-1,126,278	299	-0.03%
Interest & Investments	1,045,000	37,500	305,151	267,651	713.74%
Other Income	205,186	51,297	47,268	-4,029	-7.85%
Contributions to Reserves	-3,512,001	-953,000	-940,997	12,004	1.26%
Operating Transfers	132,344	132,344	132,344	0	0.00%
Use of Reserves	6,908,161	1,279,534	20,593	-1,258,941	98.39%
Net Non-Operating Revenue / (Deficit)	9,880,769	3,272,695	1,807,069	-1,465,628	-44.78%
Net Revenue / (Deficit)	-\$87,203	\$708,978	\$1,540,826	\$831,848	

Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019  
*General Fund*

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Total Operating Revenue	\$0	\$0	\$0	\$0	0.00%
<b>Operating Expenses</b>					
Labor	1,639,599	409,900	487,422	-77,522	-18.91%
Benefits	747,858	186,965	165,482	21,482	11.49%
Education & Training	49,800	12,450	7,266	5,184	41.64%
Consulting & Professional Services	433,200	108,300	77,057	31,243	28.85%
Operating Costs	6,400	1,600	5,913	-4,313	-269.54%
Repair & Maintenance	122,100	30,525	19,606	10,919	35.77%
Phone & Utilities	69,150	17,288	14,888	2,399	13.88%
Equipment & Computers	210,900	52,725	70,709	-17,984	-34.11%
Meeting & Travel	77,000	19,250	9,345	9,905	51.45%
Other Administrative Costs	207,113	51,778	53,332	-1,554	-3.00%
Other Expense	135,250	33,813	17,757	16,056	47.48%
Indirect Costs	-3,289,177	-822,294	-760,770	-61,524	7.48%
Total Operating Expenses	409,193	102,298	168,006	-65,708	-64.23%
Net Operating Revenue / (Deficit)	-409,193	-102,298	-168,006	65,708	-64.23%
<b>Non-Operating Revenue (Expense)</b>					
Member Agency Contributions	676,966	676,966	676,966	0	0.00%
Interest & Investments	0	0	19,159	19,159	100.00%
Other Income	0	0	457	457	100.00%
Building Reserve	-100,000	-100,000	-100,000	0	0.00%
Retiree Medical Reserve	-167,773	-41,943	-29,940	12,004	-28.62%
Net Non-Operating Revenue / (Deficit)	409,193	535,023	566,642	31,619	5.91%
Net Revenue / (Deficit)	\$0	\$432,725	\$398,636	-\$34,089	

Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019  
*Brine Line Enterprise Fund*

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Discharge Fees	\$11,532,103	\$2,883,026	\$2,885,262	\$2,236	0.08%
Total Operating Revenue	11,532,103	2,883,026	2,885,262	2,236	0.08%
<b>Operating Expenses</b>					
Labor	1,206,933	301,733	245,603	56,130	18.60%
Benefits	550,510	137,628	111,995	25,633	18.62%
Education & Training	12,000	3,000	941	2,059	68.63%
Consulting & Professional Services	265,000	66,250	35,988	30,262	45.68%
Operating Costs	3,537,600	884,400	622,112	262,288	29.66%
Repair & Maintenance	450,000	112,500	17,347	95,153	84.58%
Phone & Utilities	11,000	2,750	1,891	859	31.24%
Equipment & Computers	156,500	39,125	32,203	6,922	17.69%
Meeting & Travel	10,000	2,500	1,384	1,116	44.64%
Other Administrative Costs	72,900	18,225	12,726	5,499	30.17%
Other Expense	199,250	94,813	33,189	61,624	65.00%
Indirect Costs	1,816,182	454,046	369,633	84,413	18.59%
Total Operating Expenses	8,287,875	2,116,969	1,485,012	631,957	29.85%
Net Operating Revenue / (Deficit)	3,244,228	766,057	1,400,250	-634,193	-82.79%
<b>Non-Operating Revenue (Expense)</b>					
Interest & Investments	1,045,000	37,500	269,351	231,851	618.27%
Other Income	0	0	167	167	100.00%
Debt Service	-2,835,027	-1,126,577	-1,126,278	299	-0.03%
Use of Reserves	1,790,027	0	0	0	0.00%
Contributions to Reserves	-3,244,228	-811,057	-811,057	0	0.00%
Net Non-Operating Revenue / (Deficit)	-3,244,228	-1,900,134	-1,667,817	232,317	-12.23%
Net Revenue / (Deficit)	\$0	-\$1,134,078	-\$267,567	\$866,510	

Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019  
 OWOW Fund

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Total Operating Revenue	\$0	\$0	\$0	\$0	0.00%
<b>Operating Expenses</b>					
Labor	752,282	188,071	143,246	44,825	23.83%
Benefits	343,135	85,784	65,320	20,464	23.85%
Consulting & Professional Services	3,157,114	789,279	519,243	270,036	34.21%
Equipment & Computers	500	125	105	20	16.01%
Meeting & Travel	24,100	6,025	1,496	4,529	75.17%
Other Administrative Costs	14,350	3,588	28	3,560	99.22%
Other Expense	0	0	5,795	-5,795	-100.00%
Program Expenses	697,903	101,942	34,024	67,918	66.62%
Operating Transfer	0	0	0	0	-100.00%
Indirect Costs	1,132,032	283,008	215,585	67,423	23.82%
Total Operating Expenses	6,121,416	1,457,821	984,841	472,980	32.44%
Net Operating Revenue / (Deficit)	-6,121,416	-1,457,821	-984,841	-472,980	32.44%
<b>Non-Operating Revenue (Expense)</b>					
Member Agency Contributions	830,000	830,000	830,000	0	0.00%
Participant Fees	664,657	125,998	2,976	-123,022	-97.64%
Grant Proceeds	4,658,908	1,112,060	796,163	-315,896	-28.41%
Interest & Investments	0	0	5,944	5,944	100.00%
Net Non-Operating Revenue / (Deficit)	6,153,565	2,068,058	1,635,084	-432,974	-20.94%
Net Revenue / (Deficit)	\$32,149	\$610,237	\$650,242	\$40,005	
Project Reimbursement (Prop 84 Capital)	\$19,877,081	\$4,969,270	\$0	\$4,969,270	



Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019  
*Roundtable Fund*

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Total Operating Revenue	\$0	\$0	\$0	\$0	0.00%
<b>Operating Expenses</b>					
Labor	149,369	37,342	26,637	10,705	28.67%
Benefits	68,131	17,033	12,147	4,886	28.69%
Consulting & Professional Services	961,144	240,286	271,578	-31,292	-13.02%
Operating Costs	0	0	0	0	-100.00%
Equipment & Computers	5,000	1,250	0	1,250	100.00%
Meeting & Travel	1,550	388	257	131	33.74%
Other Administrative Costs	11,150	2,788	10,000	-7,213	-258.74%
Program Expenses	10,000	2,500	0	2,500	100.00%
Operating Transfer	132,344	132,344	132,344	0	0.00%
Indirect Costs	224,769	56,192	40,089	16,103	28.66%
Total Operating Expenses	1,563,457	490,123	493,053	-2,930	-0.60%
Net Operating Revenue / (Deficit)	-1,563,457	-490,123	-493,053	2,930	-0.60%
<b>Non-Operating Revenue (Expense)</b>					
Member Agency Contributions	20,000	20,000	20,000	0	0.00%
Participant Fees	1,086,575	1,086,575	1,042,882	-43,693	-4.02%
Other Income	205,186	51,297	46,644	-4,652	-9.07%
Operating Transfer	132,344	132,344	132,344	0	0.00%
Interest & Investments	0	0	10,697	10,697	100.00%
Net Non-Operating Revenue / (Deficit)	1,444,105	1,290,216	1,252,567	-37,649	-2.92%
Net Revenue / (Deficit)	-\$119,352	\$800,092	\$759,514	-\$40,578	

Santa Ana Watershed Project Authority  
 FYE 2020 Budget vs. Actual  
 for the Period Ending September 30, 2019  
*Capital Fund*

	FYE 2020 Budget	3-Month Budget	YTD Actual	Favorable (Unfavorable) Variance	
<b>Operating Revenue</b>					
Total Operating Revenue	\$0	\$0	\$0	\$0	0.00%
<b>Operating Expenses</b>					
Labor	77,217	19,304	1,414	17,890	92.67%
Benefits	35,221	8,805	645	8,160	92.68%
Consulting & Professional Services	185,000	46,250	16,406	29,844	64.53%
Operating Costs	2,000	500	0	500	100.00%
Other Administrative Costs	2,500	625	0	625	100.00%
Construction	4,700,000	1,175,000	0	1,175,000	100.00%
Indirect Costs	116,196	29,049	2,128	26,921	92.67%
Total Operating Expenses	5,118,134	1,279,534	20,593	1,258,941	98.39%
Net Operating Revenue / (Deficit)	-5,118,134	-1,279,534	-20,593	-1,258,941	98.39%
<b>Non-Operating Revenue (Expense)</b>					
Use of Reserves	5,118,134	1,279,534	20,593	1,258,941	98.39%
Net Non-Operating Revenue / (Deficit)	5,118,134	1,279,534	20,593	1,258,941	98.39%
Net Revenue / (Deficit)	\$0	\$0	\$0	\$0	

The background of the slide is a collage of financial documents and charts. It includes a bar chart with blue bars, a line graph, a pie chart, and various tables with columns for 'DR' and 'CR'. The text 'WORLD MARKET SALES IN BILLIONS' is visible on several documents. The overall color scheme is blue and white.

## Santa Ana Watershed Project Authority

### Financial Report for the Inland Empire Brine Line Enterprise/CIP for the 1<sup>st</sup> Quarter Ending September 30, 2019

1

## Agenda

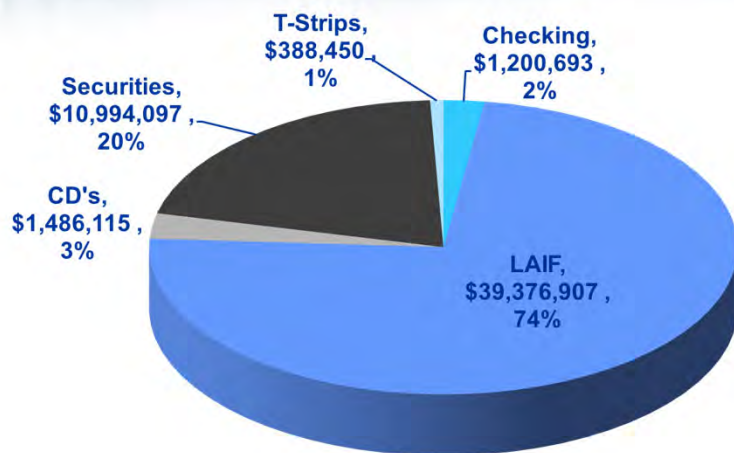
- Cash & Investments
- Reserve Account Balances
- Transfer, Uses & Contributions from/to Reserves
- Enterprise Revenues
- Enterprise Expenses
- Enterprise Performance
- Capital Improvement Program

2



## Cash & Investments

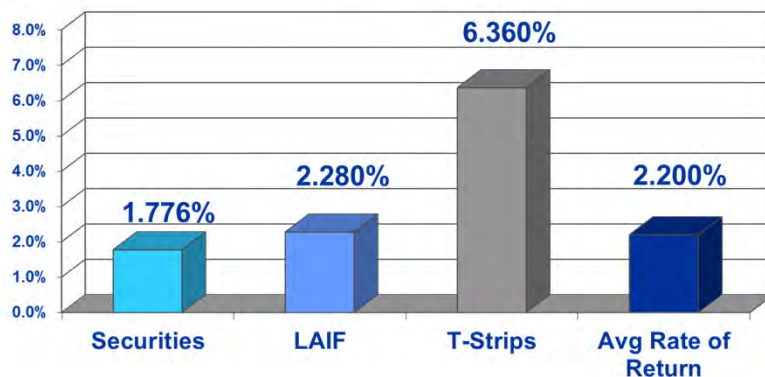
**\$53,446,263**



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## Cash & Investments

### Interest Rate Analysis



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## Reserve Account Balances

Reserve Account	Balance
Self Insurance	\$4,216,433
Debt Retirement	5,025,902
Pipeline Replacement	21,332,328
OCSD Rehabilitation	3,650,852
Capacity Management	11,691,357
OCSD Future Capacity	1,789,985
Flow Imbalance Reserve	86,513
Rate Stabilization Reserve	1,003,055
Operating Reserve	4,649,837
<b>Total Reserves</b>	<b>\$53,446,263</b>

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## Reserve Account Balances Trends

Reserve	Balance @ 12/31/18	Balance @ 03/31/19	Balance @ 06/30/19	Balance @ 09/30/19
Self Insurance	\$4,074,343	\$4,123,066	\$4,166,085	\$4,216,433
Debt Retirement	4,424,871	4,254,145	4,801,601	5,025,902
Pipeline Replacement	20,125,979	20,567,851	21,015,512	21,332,328
OCSD Rehabilitation	3,591,892	3,612,870	3,628,707	3,650,852
Capacity Mgmt	11,502,545	11,569,724	11,620,440	11,691,357
OCSD Future Capacity	1,761,077	1,771,363	1,779,127	1,789,985
Flow Imbalance Reserve	85,103	85,613	85,989	86,513
Rate Stabilization Reserve	0	0	1,000,000	1,003,055
Operating Reserve	3,133,547	3,836,117	4,512,993	4,649,837
<b>Total</b>	<b>\$48,699,357</b>	<b>\$49,820,749</b>	<b>\$52,610,454</b>	<b>\$53,446,263</b>

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## Transfers, Use and Contributions To/From Reserves

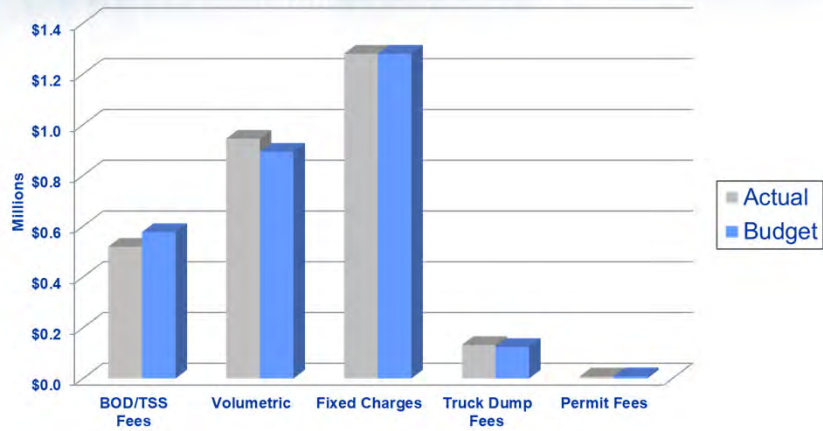
- **Pipeline Replacement Reserve**
  - Contribution of \$358,870
  - Use of \$47,365 Fund 320 Brine Line Protection
  - Use of \$39,625 Fund 327 Reach IV-D Corrosion Repairs
- **Self Insurance Reserve**
  - Contribution of \$25,000
- **Debt Service Reserve**
  - Contribution of \$427,187

## Total Operating Revenues

Source	Actual	Budget	Variance Positive/(Negative)
BOD/TSS Fees	\$519,641	\$577,050	(\$57,409)
Volumetric Fees	945,041	893,338	51,703
Fixed Charges	1,279,632	1,279,632	0
Truck Discharge	132,448	124,000	8,448
Permit Fees	8,500	9,006	(506)
<b>Total Operating Revenues</b>	<b>\$2,885,262</b>	<b>\$2,883,026</b>	<b>\$2,236</b>

## Operating Revenues vs. Budget

Budget vs. Actual



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## Total Operating Expenses

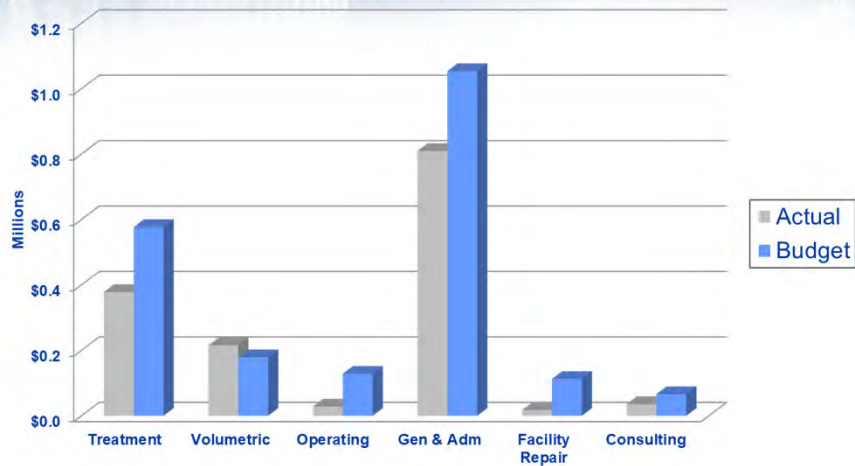
Source	Actual	Budget	Variance Positive/(Negative)
Treatment Costs	(\$378,319)	(\$577,050)	\$198,731
Volumetric Costs	(215,411)	(178,850)	(36,561)
Operating Costs	(28,382)	(128,500)	100,118
General & Administration	(809,565)	(1,053,820)	244,255
Facility Repair & Maintenance	(17,347)	(112,500)	95,153
Consulting & Prof. Services	(35,988)	(66,250)	30,262
<b>Total Operating Expenses</b>	<b>(\$1,485,012)</b>	<b>(\$2,116,969)</b>	<b>\$631,957</b>

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## Operating Expenses vs. Budget

Budget vs. Actual



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## Non Operating Revenues and Expense

Source	Actual	Budget	Variance Positive/(Negative)
Use of Reserves (Debt Service)	\$0	\$0	\$0
Interest & Investments	269,351	37,500	231,851
Other Income	167	0	167
Debt Service Payments	(1,126,278)	(1,126,577)	299
Contributions to Reserves	(811,057)	(811,057)	0
<b>Total Non Operating</b>	<b>(\$1,667,817)</b>	<b>(\$1,900,134)</b>	<b>\$232,317</b>

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## Enterprise Performance

### Flow, BOD, TSS Actual vs. OCSD Billing

	SAWPA Billed	OCSD Billing	Difference
Total Flow (MG)	969.9202	974.580	(4.6598)
Total BOD (1,000 lbs)	225.253	235.712	(10.459)
Total TSS (1,000 lbs)	1,014.618	642.112	(372.506)
BOD cost per 1,000 lbs	\$316.00	\$319.73	(\$3.73)
TSS cost per 1,000 lbs	\$442.00	\$471.81	(\$29.81)

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## Enterprise Performance

### OCSD Flow, BOD & TSS Charges vs. Revenue Billed

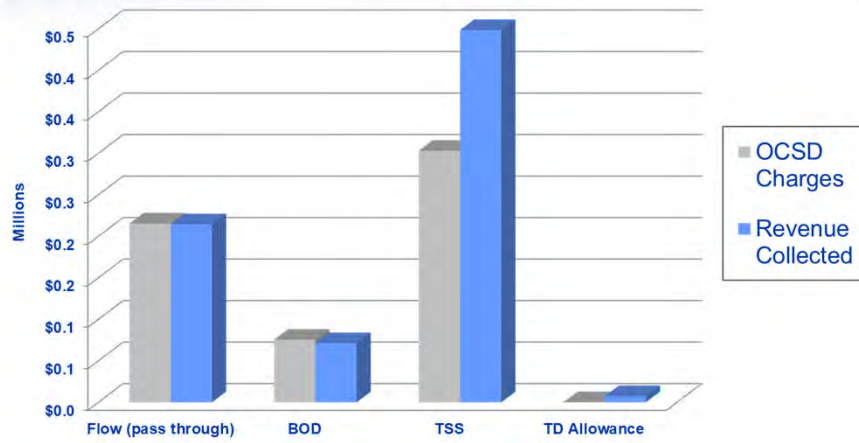
	Revenue Billed	OCSD Charges	Difference
Flow (pass through)	\$214,381	\$215,411	(\$1,030)
BOD	71,180	75,364	(4,184)
TSS	448,461	302,955	145,506
TD Allowance	7,278	0	7,278
<b>Total</b>	<b>\$741,300</b>	<b>\$593,730</b>	<b>\$147,570</b>

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## Enterprise Performance

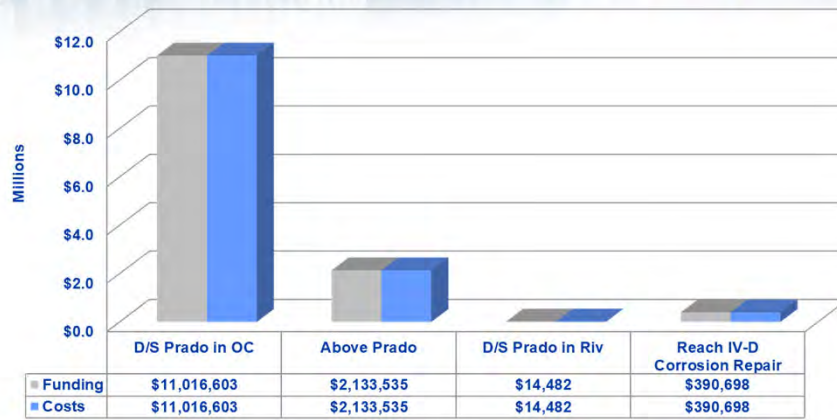
### OCSD Flow, BOD & TSS Charges vs. Revenue Collected



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## Capital Project Fund

### Costs (Project to Date) vs. Funding

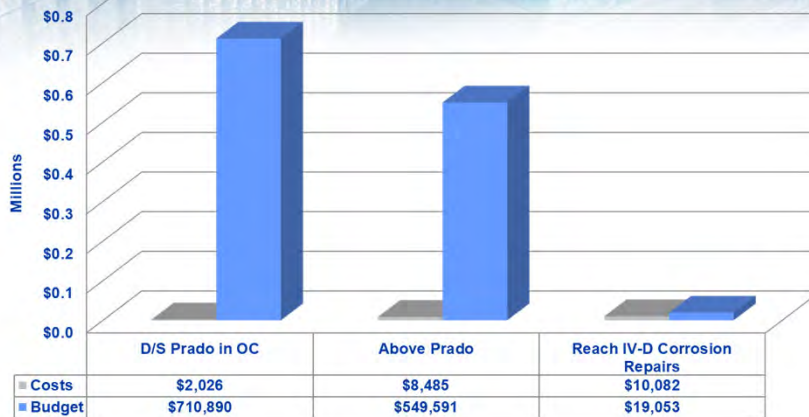


Funding = Reserves and SRF Loans

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## Capital Project Fund

### Costs vs. Budget



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## Capital Project Fund (320)

### Brine Line Protection / Relocation Projects

- **D/S Prado in OC** – emergency protection work, pipeline relocation
- **Above Prado** - pipeline relocation and manhole lid adjustments – when required
- **D/S Prado in Riv County** – bank armoring

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# Questions ?





**Santa Ana Watershed  
Project Authority**

**Financial Report for the 1st Quarter  
Ending September 30, 2019**

1

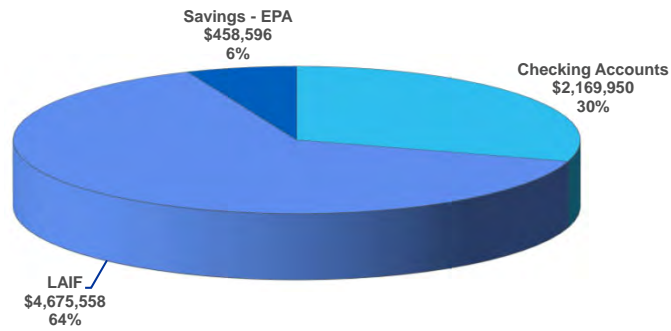
**Agenda**

- **Cash & Investments**
- **Fund Overview**
- **General Fund**
- **OWOW Funds**
- **Roundtable Funds**

2

## Cash & Investments

**\$7,304,104**



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## Cash & Investments

### Total by Fund

General Fund	\$2,917,973
OWOW Fund	1,652,127
Roundtable Fund	2,275,408
Fiduciary Fund	458,596
<b>Total</b>	<b>\$7,304,104</b>

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## Cash & Investments

### General Funds

Fund	Checking (Cash)	LAIF Account	Total
General Fund	\$2,169,950	\$0	\$2,169,950
Building Reserve	0	748,023	748,023
<b>Total</b>	<b>\$2,169,950</b>	<b>\$748,023</b>	<b>\$2,917,973</b>

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## Cash & Investments

### OWOW Funds

Fund	LAIF Account
General Basin Planning	\$483,838
USBR Partnership Studies	56,469
Watershed Mgmt Plan	607,550
Water – Energy DAC Grant	43,420
Prop 84 SARCCUP Projects	460,850
<b>Total</b>	<b>\$1,652,127</b>

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## Cash & Investments

### Roundtable Funds

Fund	LAIF Account
Basin Monitoring	\$555,556
RWQ Monitoring TF	417,559
SAR Fish Conservation	122,588
Middle SAR TMDL TF	173,664
Emerging Constituents TF	49,279
Mitigation Banking	956,762
<b>Total</b>	<b>\$2,275,408</b>

## Cash & Investments

### Fiduciary Funds

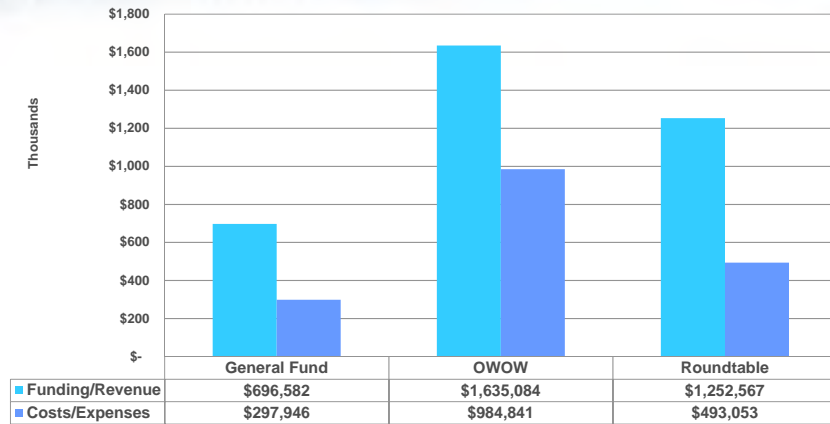
Fund	Savings EPA
Legal Defense Fund	\$458,596
<b>Total</b>	<b>\$458,596</b>





## Analysis by Fund Type

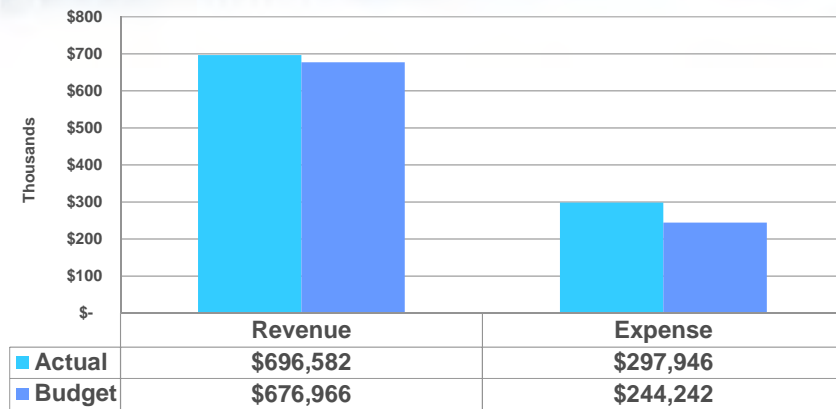
### Revenues and Expenses



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## General Fund

### Budget vs. Actual

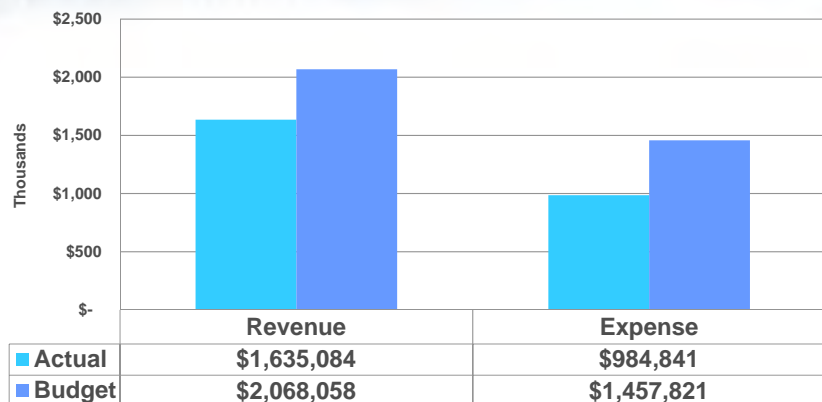


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## OWOW Funds

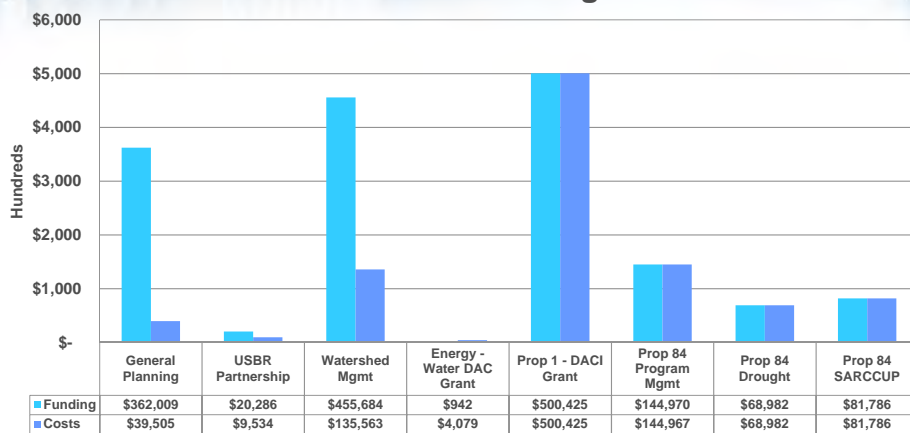
### Budget vs. Actual



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## OWOW Funds

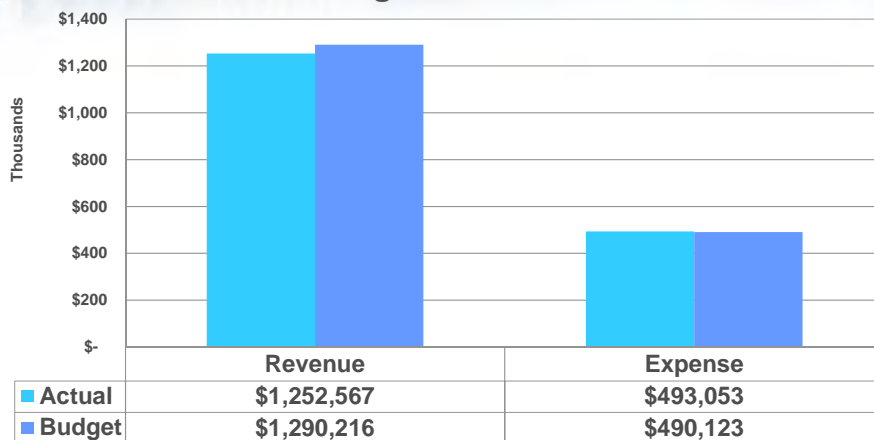
### Costs vs. Funding



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## Roundtable Funds

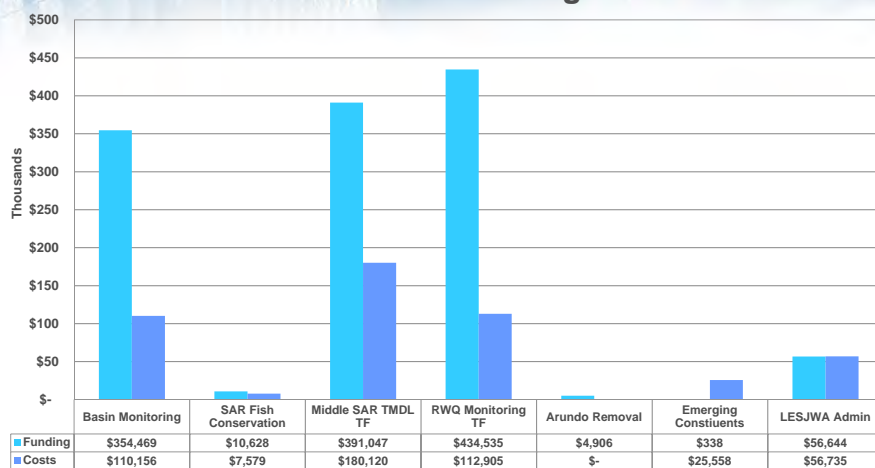
### Budget vs. Actual



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## Roundtable Funds

### Costs vs. Funding



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Santa Ana Watershed Project Authority  
 General Manager - Expense Report  
 1st Quarter FYE 2020

Staff	Haller
-------	--------

Sum of Amount		Expn Type				
Posting Date	Activity	Airfare	Hotel	Meals	Registration	Grand Total
07/31/2019	ACWA Fall Conference				725.00	725.00
	Water Solutions 4 Event				40.00	40.00
<b>07/31/2019 Total</b>					<b>765.00</b>	<b>765.00</b>
08/31/2019	CASA Conference Hotel		327.03			327.03
	CASA Conference Registration				595.00	595.00
<b>08/31/2019 Total</b>			<b>327.03</b>		<b>595.00</b>	<b>922.03</b>
09/30/2019	CSDA, Orange County Coastkeeper, & WEF Water Summit				1,713.67	1,713.67
	Rich & Kelly Lunch			35.89		35.89
	WEF Water Summit	147.97				147.97
<b>09/30/2019 Total</b>		<b>147.97</b>		<b>35.89</b>	<b>1,713.67</b>	<b>1,897.53</b>
<b>Grand Total</b>		<b>147.97</b>	<b>327.03</b>	<b>35.89</b>	<b>3,073.67</b>	<b>3,584.56</b>



## Santa Ana Watershed Project Authority

### Staff - Expense Report

1st Quarter FYE 2020

Sum of Amount			Expn Type							
Staff	Posting Date	Activity	Airfare	Hotel	Meals	Mileage	Misc	Parking	Registration	Grand Total
Achimore	07/31/2019	Meeting With San Bernardino National Forest Service					24.65			24.65
		SARCCUP Meetings					17.81			17.81
	08/31/2019	Metrolink						17.50		17.50
	09/30/2019	SARCCUP Meetings					57.13			57.13
<b>Achimore Total</b>						<b>99.59</b>	<b>17.50</b>			<b>117.09</b>
Berry	07/31/2019	Goods for OCS Open House							100.03	100.03
	09/17/2019	Candy for OCS Open House							22.76	22.76
<b>Berry Total</b>								<b>122.79</b>		<b>122.79</b>
Blancas	07/31/2019	Commission Meeting					17.52			17.52
		Consultant Interviews			158.67					158.67
		Orange County Sanitation District Open House				42.46				42.46
	09/17/2019	OWOW Steering Committee Meeting			606.29		17.52			623.81
	09/17/2019	Commission Meeting Goods						36.06		36.06
<b>Blancas Total</b>					<b>764.96</b>	<b>77.50</b>	<b>36.06</b>			<b>878.52</b>
Breucop	08/28/2019	Lake Elsinore/Canyon Lake TMDL					7.37			7.37
	09/24/2019	Lake Elsinore Fishery Management					30.85			30.85
	09/30/2019	Lake Elsinore Fishery Management					35.32			35.32
<b>Breucop Total</b>						<b>73.54</b>				<b>73.54</b>
Gilbert	07/31/2019	Tri-State Seminar Flight	227.96							227.96
		Tri-State Seminar Registration for Lucas & Mike							198.00	198.00
	08/31/2019	Tri-State Conference			21.39			145.40		166.79
		Tri-State Pretreatment Conference Hotel		252.26						252.26
	08/31/2019	Tri-State Pretreatment Conference Meals			48.30				48.30	
<b>Gilbert Total</b>			<b>227.96</b>	<b>252.26</b>	<b>69.69</b>		<b>145.40</b>		<b>198.00</b>	<b>893.31</b>
Jauregui	08/31/2019	Meet With SBVWCD					11.14			11.14
<b>Jauregui Total</b>							<b>11.14</b>			<b>11.14</b>
Lewis	07/31/2019	CSMFO Chapter Meeting							30.00	30.00
		Orange County Sanitation District Open House					29.12			29.12
	09/30/2019	CSMFO Conference Deposit		285.48						285.48
	09/30/2019	Trip to Post Office					3.71			3.71
<b>Lewis Total</b>				<b>285.48</b>			<b>32.83</b>		<b>30.00</b>	<b>348.31</b>
Lucht	07/31/2019	Commission Meeting Goods						36.55		36.55
		Legal Interview Panel			43.88					43.88
	08/31/2019	Commission Meeting Goods						40.07		40.07
<b>Lucht Total</b>					<b>43.88</b>			<b>76.62</b>		<b>120.50</b>
McKenney	07/31/2019	Cab Ride						92.70		92.70
	09/30/2019	Floodplain Management Conference							36.00	36.00
<b>McKenney Total</b>							<b>92.70</b>	<b>36.00</b>		<b>128.70</b>
Mullay	07/31/2019	Orange County Sanitation District Open House					42.46			42.46
	08/31/2019	Travel to Dry Cleaners					4.27			4.27
	09/30/2019	Travel to Awards & Specialties					0.58			0.58

<b>Mullay Total</b>				<b>47.31</b>				<b>47.31</b>						
Norton	08/31/2019	ASCE Conference Registration					425.00	425.00						
<b>Norton Total</b>								<b>425.00</b>	<b>425.00</b>					
Oldenburg	09/30/2019	MISAC Conference		19.97	214.02			233.99						
<b>Oldenburg Total</b>				<b>19.97</b>				<b>214.02</b>	<b>233.99</b>					
Plasencia	08/31/2019	Retrieve SAWPA Van from WMWD						11.83						
		Tri-State Conference	167.96	78.23			99.00	345.19						
	09/30/2019	Retrieve SAWPA Van from WMWD					153.79	153.79						
<b>Plasencia Total</b>				<b>167.96</b>				<b>78.23</b>	<b>165.62</b>	<b>99.00</b>	<b>510.81</b>			
Ruhl	08/31/2019	Lunch With DWR and EMWD					18.06	18.06						
<b>Ruhl Total</b>								<b>18.06</b>	<b>18.06</b>					
Unger	07/31/2019	ESRI Conference Hotel Stay		732.34				732.34						
		ESRI Conference Meals			179.23			179.23						
		ESRI Conference Transportation				12.00		12.00						
		John & Dean Lunch			20.29			20.29						
		MISAC Conference Registration for Dean & Jerry					1,100.00	1,100.00						
	09/30/2019	MISAC Presentation Discussion Lunch - Dean & Doug				20.79		20.79						
<b>Unger Total</b>				<b>732.34</b>				<b>220.31</b>	<b>12.00</b>	<b>1,100.00</b>	<b>2,064.65</b>			
Villa	07/31/2019	GM Meeting Goods					27.32	27.32						
	08/31/2019	Commission Meeting Goods					110.82	110.82						
		DWR Prop 1 Workshop		562.81				562.81						
		GM Meeting Goods					25.32	25.32						
	09/30/2019	Commission Meeting Goods					100.29	100.29						
		SAWPA/OCSA Meeting		192.03			192.03							
<b>Villa Total</b>				<b>754.84</b>				<b>263.75</b>	<b>1,018.59</b>					
Vitt	07/18/2019	GIS User Conference	830.01	43.25	114.84		20.00	1,008.10						
<b>Vitt Total</b>				<b>830.01</b>				<b>43.25</b>	<b>114.84</b>	<b>20.00</b>	<b>1,008.10</b>			
Whetsel	07/31/2019	CivicSpark/SAWPA Site Visit					24.24	24.24						
	09/30/2019	DCI Program Misc Travel					181.77	181.77						
		Lake Elsinore Fishery Management					24.53	24.53						
<b>Whetsel Total</b>								<b>230.54</b>	<b>230.54</b>					
Williams	07/31/2019	Breakfast for Karen & Ron Sullivan		32.19				32.19						
		State Lobbying				18.00	18.00							
		Taxi - Karen & Ron Sullivan			41.50			41.50						
	08/31/2019	Parking					20.00	20.00						
		Toll Fees for BI360 Training				10.45		10.45						
	09/17/2019	CSMFO Chapter Meeting					40.00	40.00						
	09/24/2019	Toll Fees for Regional Board Meeting				9.15		9.15						
09/30/2019	ACWA Regulatory Summit	147.97				290.00	437.97							
		Toll Fees for CSDA Conference				50.90	50.90							
<b>Williams Total</b>				<b>147.97</b>				<b>32.19</b>	<b>112.00</b>	<b>38.00</b>	<b>330.00</b>	<b>660.16</b>		
<b>Grand Total</b>				<b>543.89</b>				<b>2,178.32</b>	<b>1,967.15</b>	<b>1,066.93</b>	<b>878.82</b>	<b>94.00</b>	<b>2,182.00</b>	<b>8,911.11</b>

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# General Manager's Report

December 2019

Santa Ana Watershed Project Authority | 11615 Sterling Avenue, Riverside, CA 92503 | www.sawpa.org

## INSIDE THE DECEMBER REPORT

- 1 Pretreatment Program Ordinance Update
- 2 2019 Santa Ana Riverwalk
- 3 Rain Assessment on Brine Line Facilities
- 4 SAWPA Office Holiday Closure

## Pretreatment Program Ordinance Update

Orange County Sanitation District (OCSD) has completed the process of updating and revising their Sewer User Ordinance, Ordinance OCSD-53. As Delegated Control Authority to OCSD, SAWPA is required to update their Ordinance to include relevant OCSD revisions. SAWPA has developed draft Ordinance No. 9 which has been revised to incorporate the updates within the new OCSD Ordinance. These updates include a new prohibition on hydrolysate, a new prohibition on discharge via non-domestic surface or floor drains, and clarification of existing language for facility reports of changed conditions and notifications for sale of change of ownership. Additionally, SAWPA has proposed additional revisions to update the definition of an Industrial User to standardize it with the OCSD definition. Furthermore, SAWPA has proposed creation of a new classification of Non-Industrial User for Brine Line dischargers that do not meet the definition of an Industrial User.

SAWPA submitted the draft Ordinance to OCSD for their review and concurrence on October 17, 2019. To date SAWPA has received no comments from OCSD on the submittal. It is anticipated that SAWPA should be in receipt of any OCSD comments, if any, by early 2020. Following resolution of any OCSD comments in the draft Ordinance, SAWPA would then continue with the Ordinance adoption process by releasing the document for public review. After the forty-five (45) day public review period has ended, the Ordinance would be brought to the SAWPA Project Agreement 24 Committee for a public hearing and then possible adoption.

## 2019 Santa Ana Riverwalk

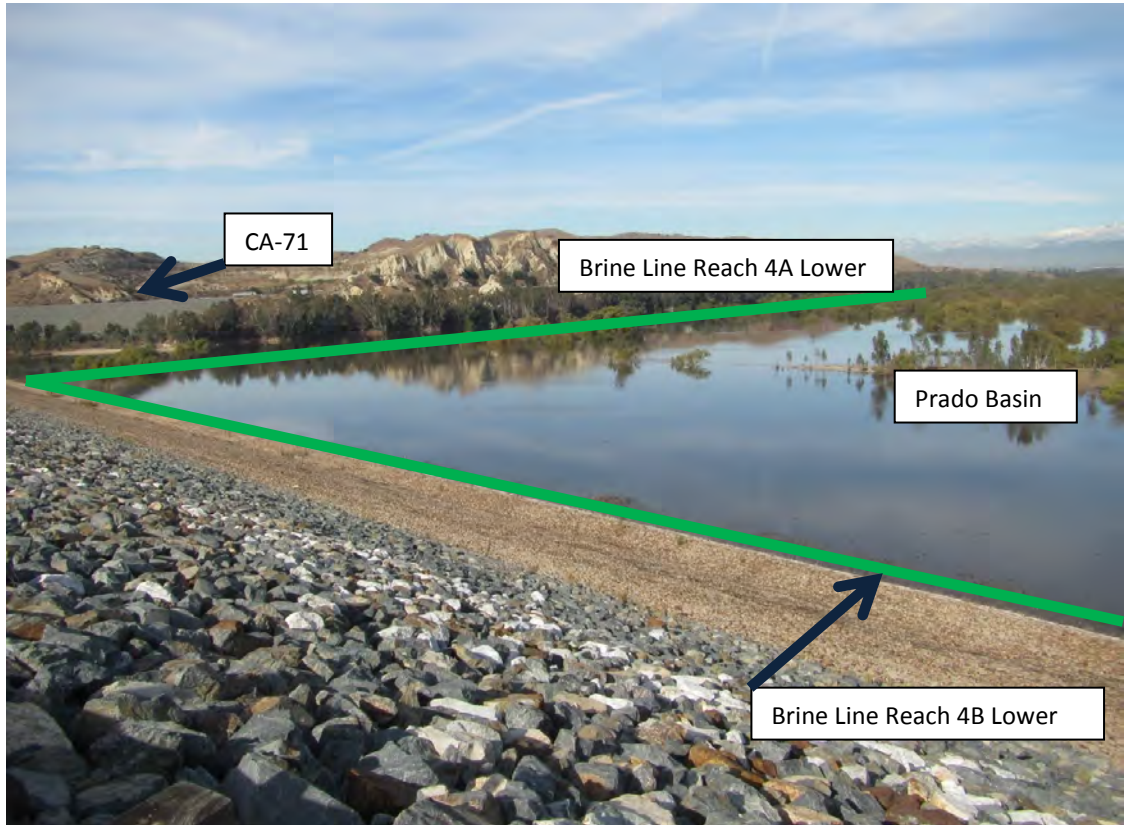
On November 7th, SAWPA, with support from Orange County Water District, hosted one of the longest running Southern California annual Habitat Assessments, the Santa Ana Riverwalk. A group of 38 volunteers collected data from approximately 118 location points within the Santa Ana River. SAWPA will be uploading the results into the annually updated Riverwalk Atlas, which provides a map-based summary of the data collected in the last 13 years.





## Rain Assessment on Brine Line Facilities

The SAWPA Operations Department performed an assessment on Brine Line facilities after the storm events from November 27 and 28<sup>th</sup>. There was no damage to Brine Line facilities. The water level behind the Prado Basin (as of December 3, 2019) is approximately 496-ft. A total of four maintenance access structures on Reach 4A Lower and a total of four on Reach 4B Lower are no longer accessible due to flooding.



## SAWPA Office Holiday Closure

In our continuing efforts to reduce our carbon footprint, SAWPA will be closed from Monday, December 23rd through Wednesday, January 1st. Our offices will re-open on Thursday, January 2nd.

The Brine Line emergency telephone line will be available - (951) 324-8680.

*From all of us at SAWPA*



Santa Ana Watershed Project Authority  
11615 Sterling Avenue, Riverside, CA 92503 | [www.sawpa.org](http://www.sawpa.org)



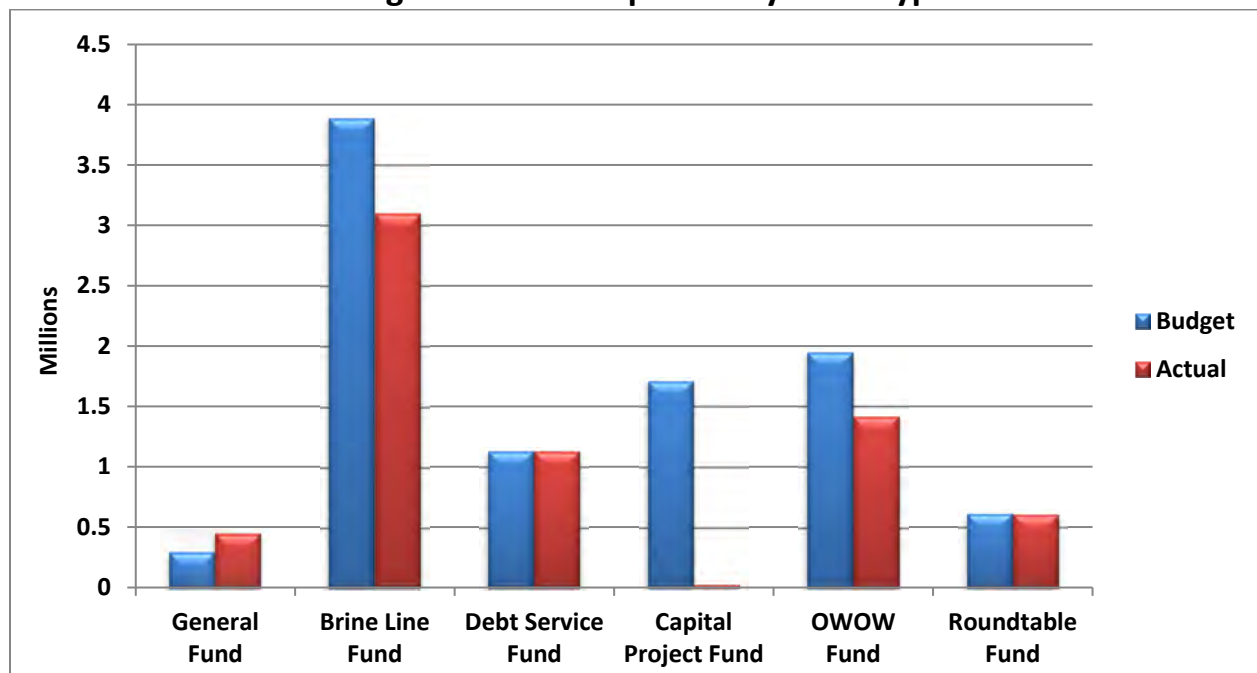
**Santa Ana Watershed Project Authority  
Executive Financial Information Report  
October 2019**

*Staff comments provided on the last page are an integral part of this report.*

<b>Overview</b>	This report highlights the agency's key financial indicators for the Fiscal Year-to-Date (FYTD) through October 2019 unless otherwise noted.
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Budget to Actual Expenses by Fund Type	<span style="color: green; font-size: 2em;">✔</span> <b>Favorable</b>			
	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
General Fund	\$676,966	\$292,322	\$442,287	(\$149,965)
Brine Line Enterprise	11,532,103	3,884,034	3,097,474	786,560
Debt Service Fund	2,835,027	1,126,577	1,126,278	299
Capital Project Fund	5,118,134	1,706,045	31,396	1,674,649
OWOW Fund	6,121,416	1,943,761	1,412,713	531,048
Roundtable Fund	1,563,457	609,381	602,245	7,136
<b>Total</b>	<b>\$27,847,103</b>	<b>\$9,562,120</b>	<b>\$6,712,393</b>	<b>\$2,849,727</b>

**Budget to Actual Expenses by Fund Type**



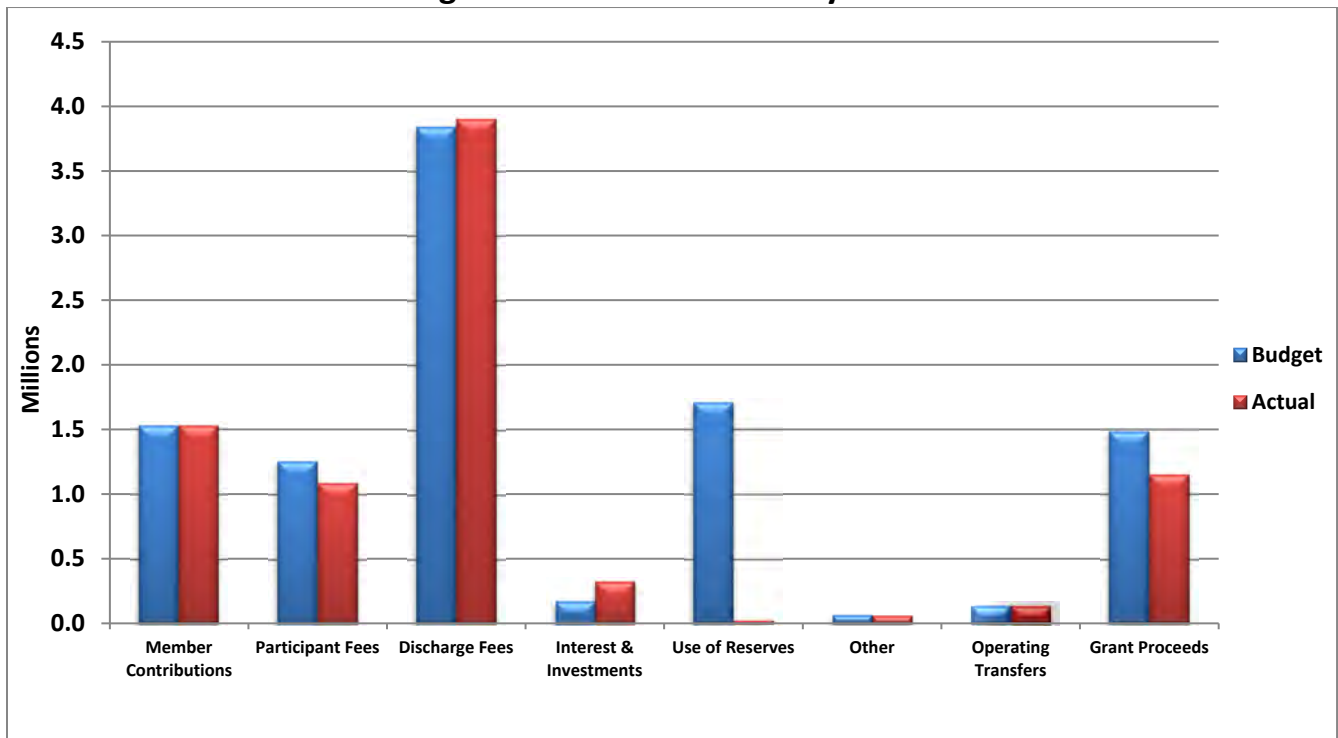
## Budget to Actual Revenues by Source



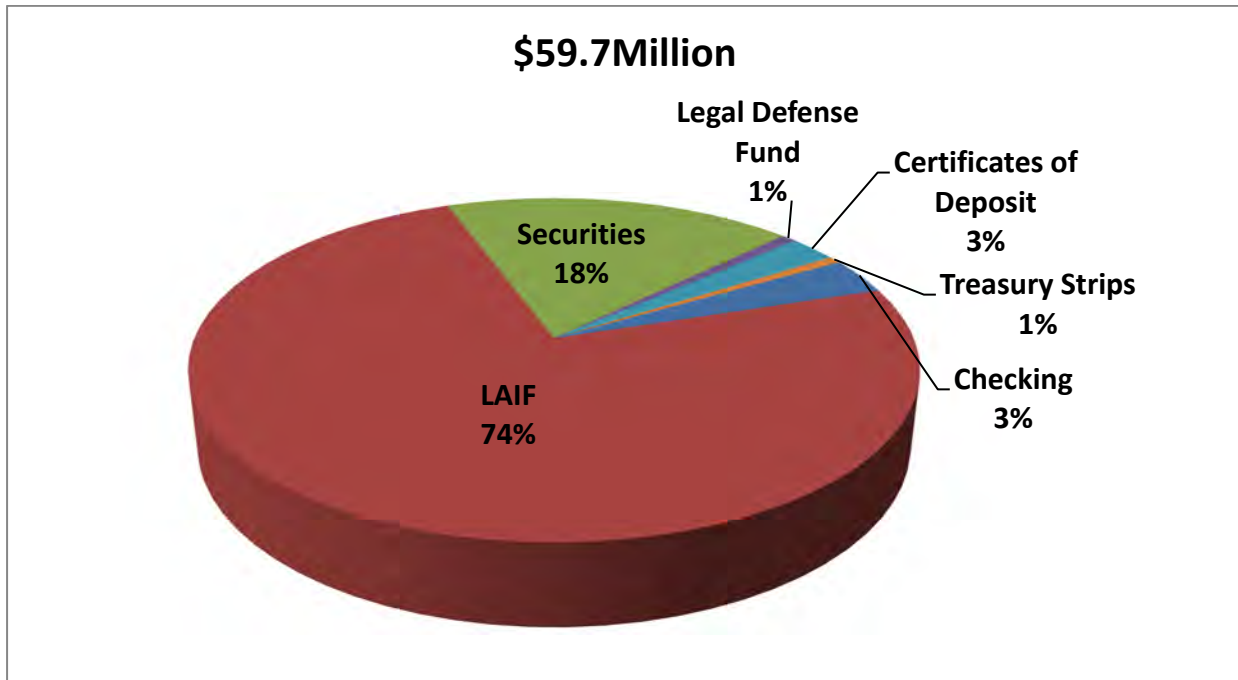
**Concern**

	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Member Contributions	\$1,526,966	\$1,526,966	\$1,526,966	\$-
Participant Fees	1,751,232	1,254,572	1,086,544	(168,028)
Discharge Fees	11,532,103	3,844,033	3,906,281	62,248
Interest & Investments	1,045,000	175,000	322,374	147,374
Use of Reserves	6,908,161	1,706,045	31,396	(1,674,649)
Other	205,186	68,396	63,417	(4,979)
Operating Transfers	132,344	132,344	132,344	-
Grant Proceeds	4,658,908	1,482,746	1,150,597	(332,149)
<b>Total</b>	<b>\$27,759,900</b>	<b>\$10,190,102</b>	<b>\$8,219,919</b>	<b>(\$1,970,183)</b>

### Budget to Actual Revenues by Source



## Total Cash & Investments - October







## Reserve Fund Balance - October

	Amount
General Fund	\$2,070,362
Building Fund	751,887
OWOW Fund	1,561,432
Roundtable Fund	2,848,303
Self Insurance	4,246,322
Debt Retirement	4,292,763
Pipeline Replacement	21,535,390
OCSD Rehabilitation	3,669,572
Capacity Management	11,751,304
Future Capacity	1,799,163
Rate Stabilization	1,008,202
Flow Imbalance	86,957
Brine Line Operating	4,071,852
<b>Total Reserves</b>	<b>\$59,693,509</b>

## Legend

### Compared to Budget

	Ahead or Favorable	Above +5% Favorable Revenue or Expense Variance
	On Track	+5% to -2% Variance
	Behind	-3% to -5% Variance
	Concern	Below -5% Variance

## Staff Comments

For this month's report, the item(s) explained below are either "behind", a "concern", or have changed significantly from the prior month.


- 1) Total revenues are 19% below budget. Proposition 84 Projects and the OCSD Rock Removal Project have had a slow start and are anticipated to be on track with the budget at the end of the fiscal year.

**Santa Ana Watershed Project Authority  
PA24 - Brine Line - Financial Report  
October 2019**

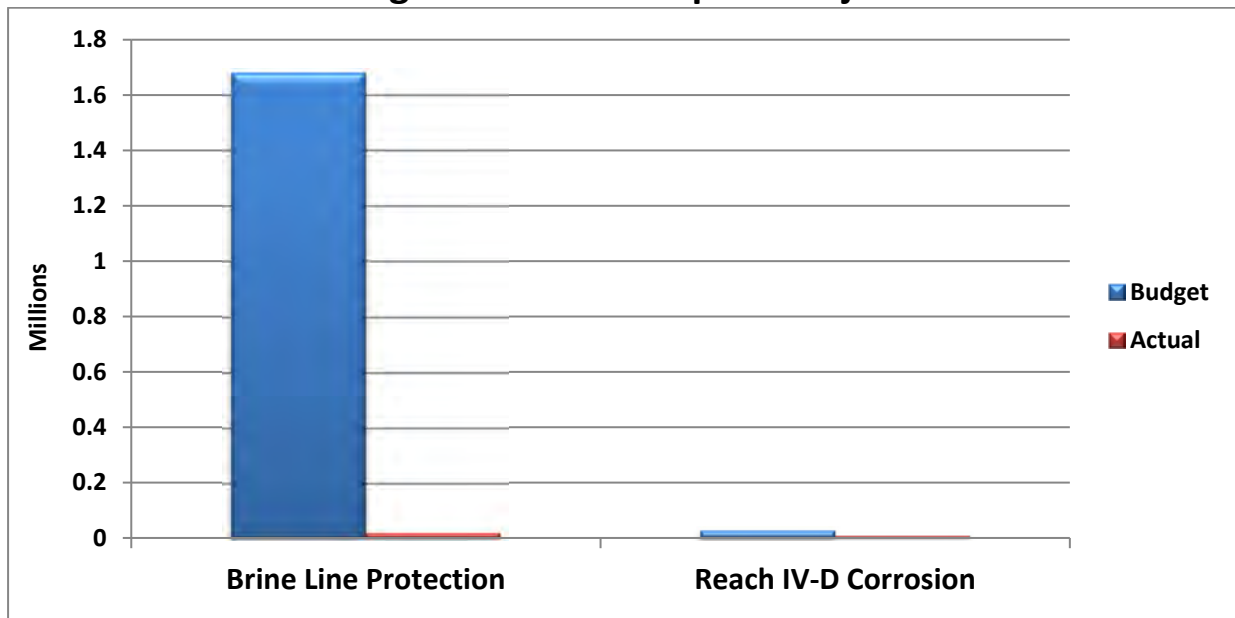
*Staff comments provided on the last page are an integral part of this report.*

<b>Overview</b>	This report highlights the Brine Line’s key financial indicators for the Fiscal Year-to-Date (FYTD) through October 2019 unless otherwise noted.
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**Brine Line - Capital Projects**

Budget to Actual – Capital Projects				Favorable
	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Brine Line Protection	\$5,041,923	\$1,680,641	\$21,314	\$1,659,327
Reach IV-D Corrosion	76,211	25,404	10,082	15,322
<b>Total Capital Costs</b>	<b>\$5,118,134</b>	<b>\$1,706,045</b>	<b>\$31,396</b>	<b>\$1,674,649</b>

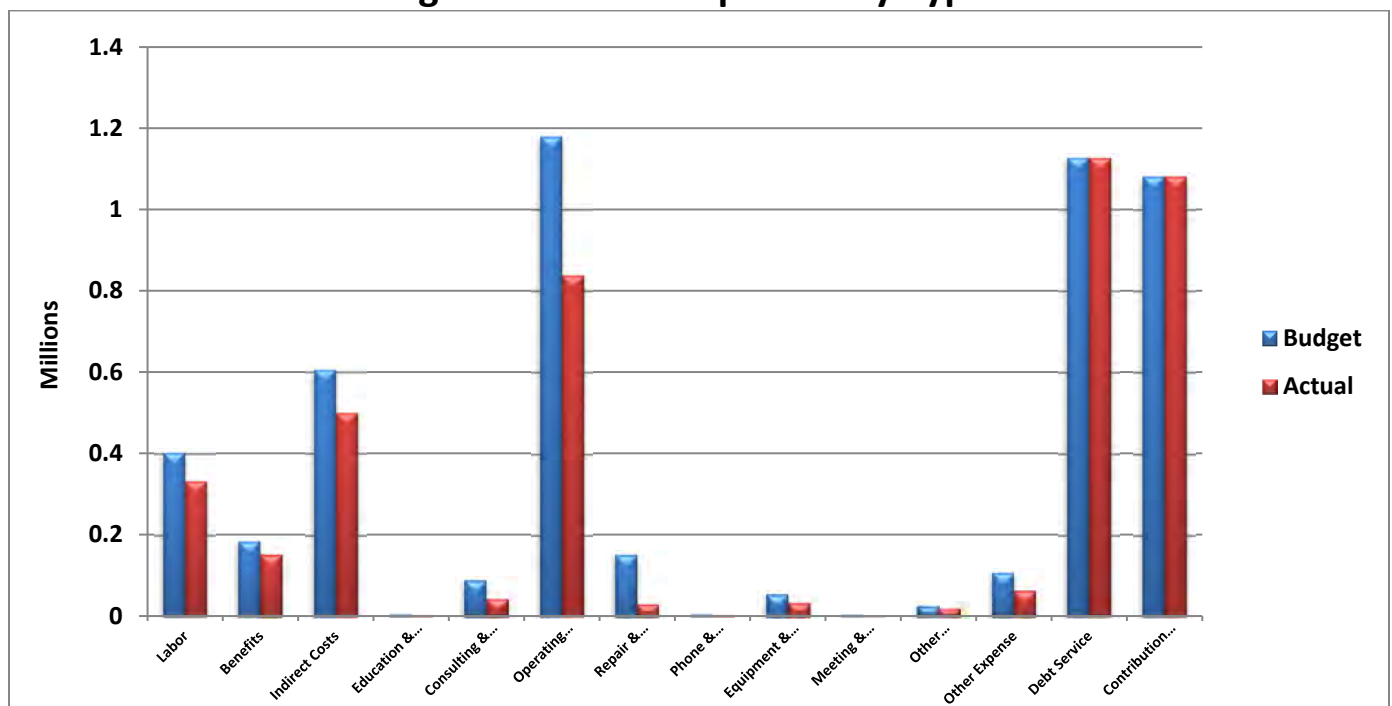
**Budget to Actual - Capital Projects**



## Brine Line – Operating

Budget to Actual - Expenses by Type				 Favorable
	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Labor	\$1,206,933	\$402,311	\$332,163	\$70,148
Benefits	550,510	183,503	151,467	32,036
Indirect Costs	1,816,182	605,394	499,906	105,488
Education & Training	12,000	4,000	1,790	2,210
Consulting & Prof Svcs	265,000	88,333	44,035	44,298
Operating Costs	3,537,600	1,179,200	837,578	341,622
Repair & Maintenance	450,000	150,000	30,982	119,018
Phone & Utilities	11,000	3,667	2,491	1,176
Equip & Computers	156,500	52,167	32,550	19,617
Meeting & Travel	10,000	3,333	1,396	1,937
Other Admin Costs	72,900	24,300	18,589	5,711
Other Expense	199,250	106,417	63,116	43,301
Debt Service	2,835,027	1,126,577	1,126,278	299
Contribution to Reserves	3,244,227	1,081,409	1,081,409	-
<b>Total</b>	<b>\$14,367,130</b>	<b>\$5,010,611</b>	<b>\$4,223,750</b>	<b>\$786,861</b>

## Budget to Actual - Expenses by Type



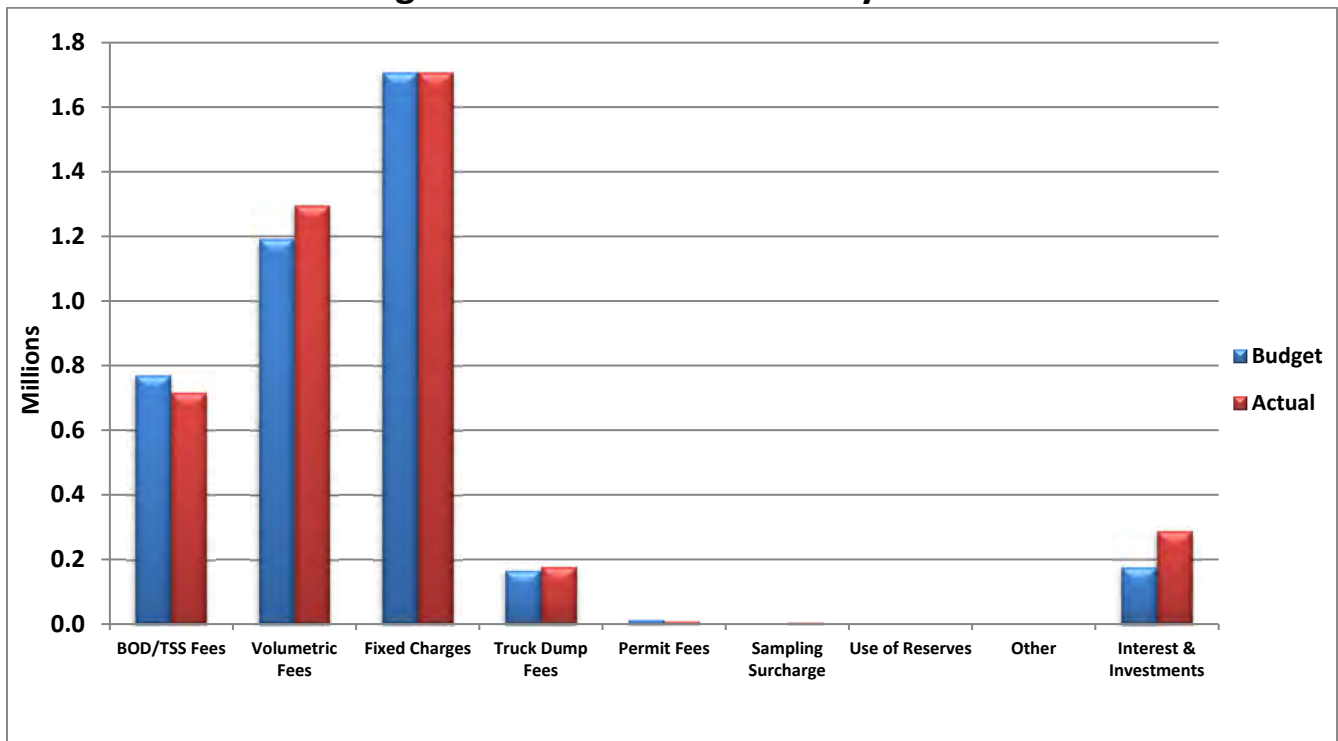
## Budget to Actual - Revenues by Source



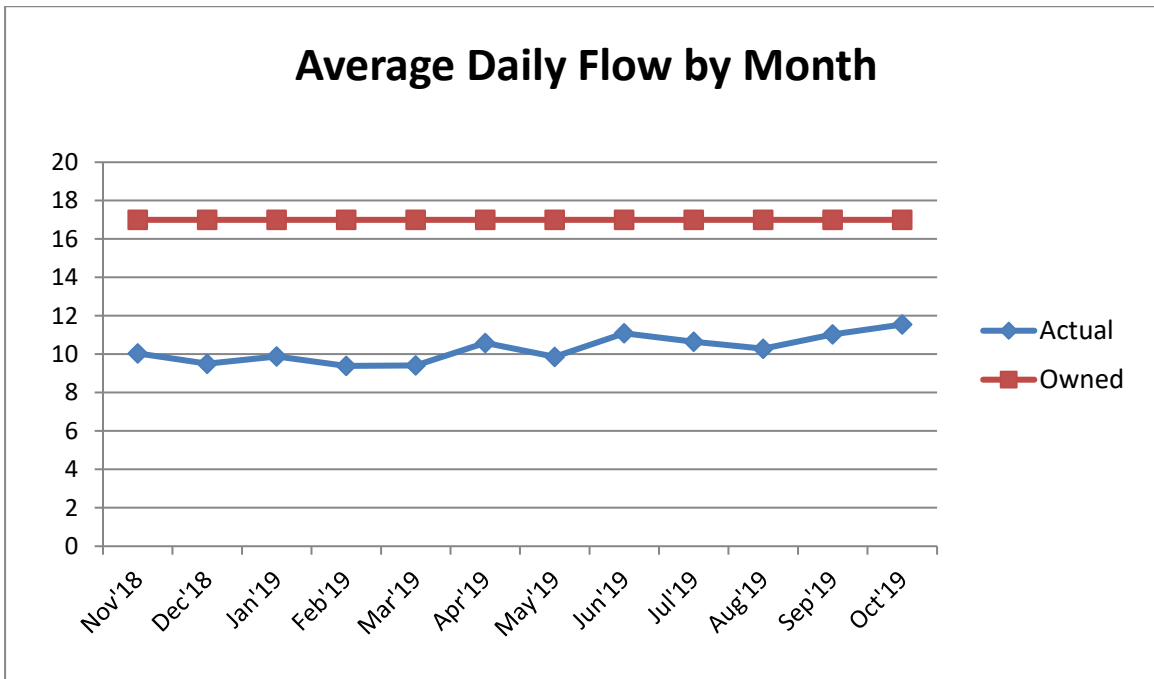
**On Track**

	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
BOD/TSS Fees	\$2,308,200	\$769,400	\$716,412	(\$52,988)
Volumetric Fees	3,573,350	1,191,117	1,294,151	103,034
Fixed Charges	5,118,528	1,706,176	1,706,176	-
Truck Dump Fees	496,000	165,333	177,828	12,495
Permit Fees	36,025	12,008	8,500	(3,508)
Sampling Surcharge	-	-	3,214	3,214
Use of Reserves	1,790,027	-	-	-
Other Revenue	-	-	200	200
Interest & Investments	1,045,000	175,000	286,574	111,574
<b>Total</b>	<b>\$14,367,130</b>	<b>\$4,019,034</b>	<b>\$4,193,055</b>	<b>\$174,021</b>

## Budget to Actual - Revenues by Source



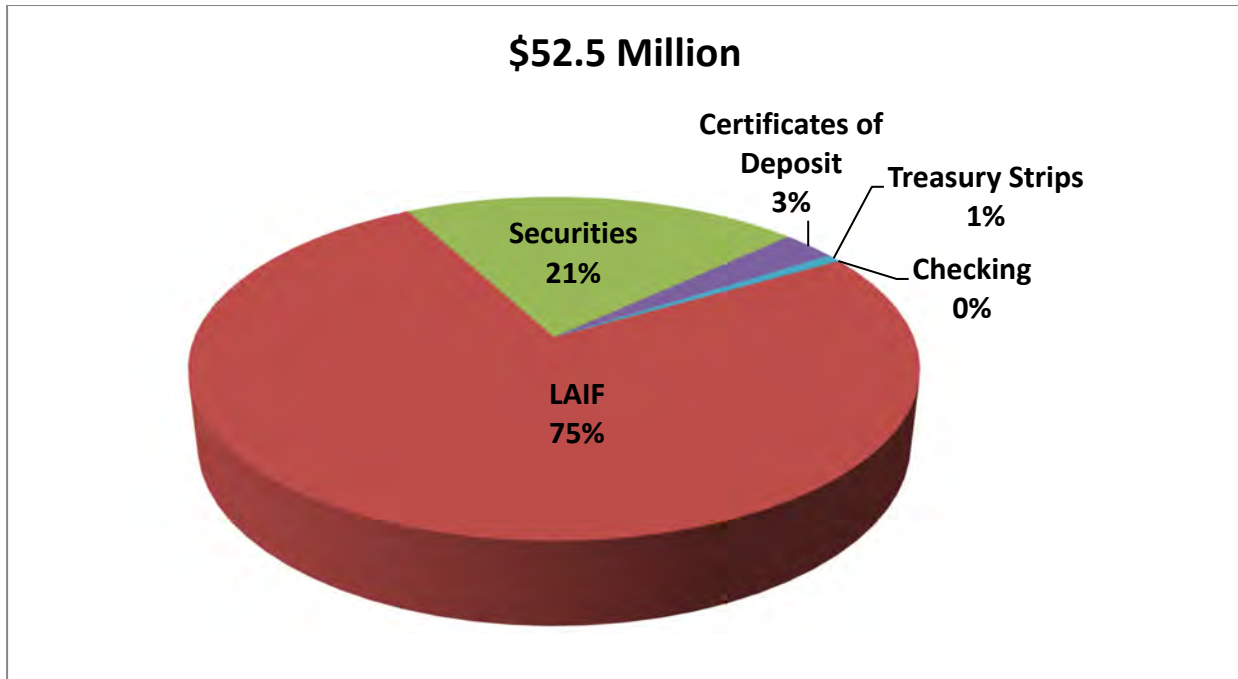




### Total Discharge by Agency (in million gallons)

Discharger	Jul '19	Aug'19	Sep'19	Oct'19	Total
Chino Desalter Authority	76.3642	81.0245	108.2049	125.7369	391.3305
Eastern Municipal Water District	70.8916	70.0966	71.9713	76.8378	289.7973
Inland Empire Utilities Agency	17.618	17.8426	16.2993	18.5452	70.3051
San Bernardino Valley MWD	26.1114	25.6140	24.3135	25.5259	101.5648
Western Municipal Water District	125.6778	111.3223	118.5591	108.7548	464.3140
Truck Discharge	2.708	2.6838	2.6175	2.7303	10.7396
<b>Total</b>	<b>319.371</b>	<b>308.5838</b>	<b>341.9656</b>	<b>358.1309</b>	<b>1,328.0513</b>





## Total Cash & Investments - October



## Reserve Fund Balance - October

	Amount
Self Insurance	\$4,292,763
Debt Retirement	4,246,322
Pipeline Replacement	21,535,390
OCSD Rehabilitation	3,669,572
Capacity Management	11,751,304
Future Capacity	1,799,163
Rate Stabilization	1,008,202
Flow Imbalance	86,957
Brine Line Operating	4,071,852
<b>Total Reserves</b>	<b>\$52,461,525</b>

## Legend

		<u>Compared to Budget</u>
	Ahead or Favorable	Above +5% Favorable Revenue or Expense Variance
	On Track	+5% to -2% Variance
	Behind	-3% to -5% Variance
	Concern	Below -5% Variance

## Staff Comments


For this month's report, the item(s) explained below are either "behind", a "concern", or have changed significantly from the prior month.

- 1) Capital Projects are 98% below budget. The OCSD Rock Removal Project has had a slow start. It is anticipated that all projects will be on track with the budget at the end of the fiscal year.

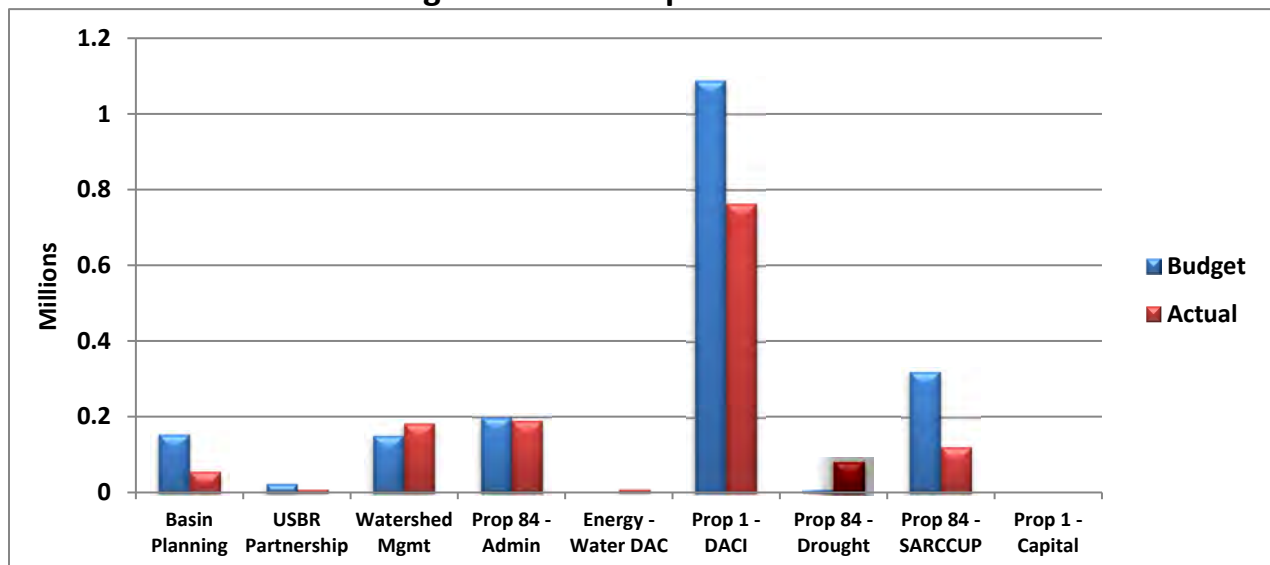
**Santa Ana Watershed Project Authority  
PA25 - OWOW Fund - Financial Report  
October 2019**

*Staff comments provided on the last page are an integral part of this report.*

<b>Overview</b>	This report highlights the agency's key financial indicators for the Fiscal Year-to-Date (FYTD) through October 2019 unless otherwise noted.
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<b>Budget to Actual Expenses - OWOW</b>				 <b>Favorable</b>
	<b>Annual Budget</b>	<b>FYTD Budget</b>	<b>FYTD Actual</b>	<b>Favorable (Unfavorable) Variance</b>
Basin Planning General	\$459,373	\$153,124	\$57,356	\$95,768
USBR Partnership Studies	70,097	23,366	10,082	13,283
Watershed Mgmt. (OWOW)	449,583	149,861	181,580	(31,719)
Prop 84 - Administration	597,237	199,079	189,539	9,540
Energy – Water DAC	-	-	8,072	(8,072)
Prop 1 – DACI	3,264,263	1,088,088	763,302	324,786
Prop 84 – Drought Projects	31,595	10,532	81,266	(70,734)
Prop 84 – SARCCUP & Other	959,134	319,711	121,516	198,195
Prop 1 – Capital Projects	290,134	-	-	-
<b>Total</b>	<b>\$6,121,416</b>	<b>\$1,943,761</b>	<b>\$1,412,713</b>	<b>\$531,048</b>

**Budget to Actual Expenses - OWOW**



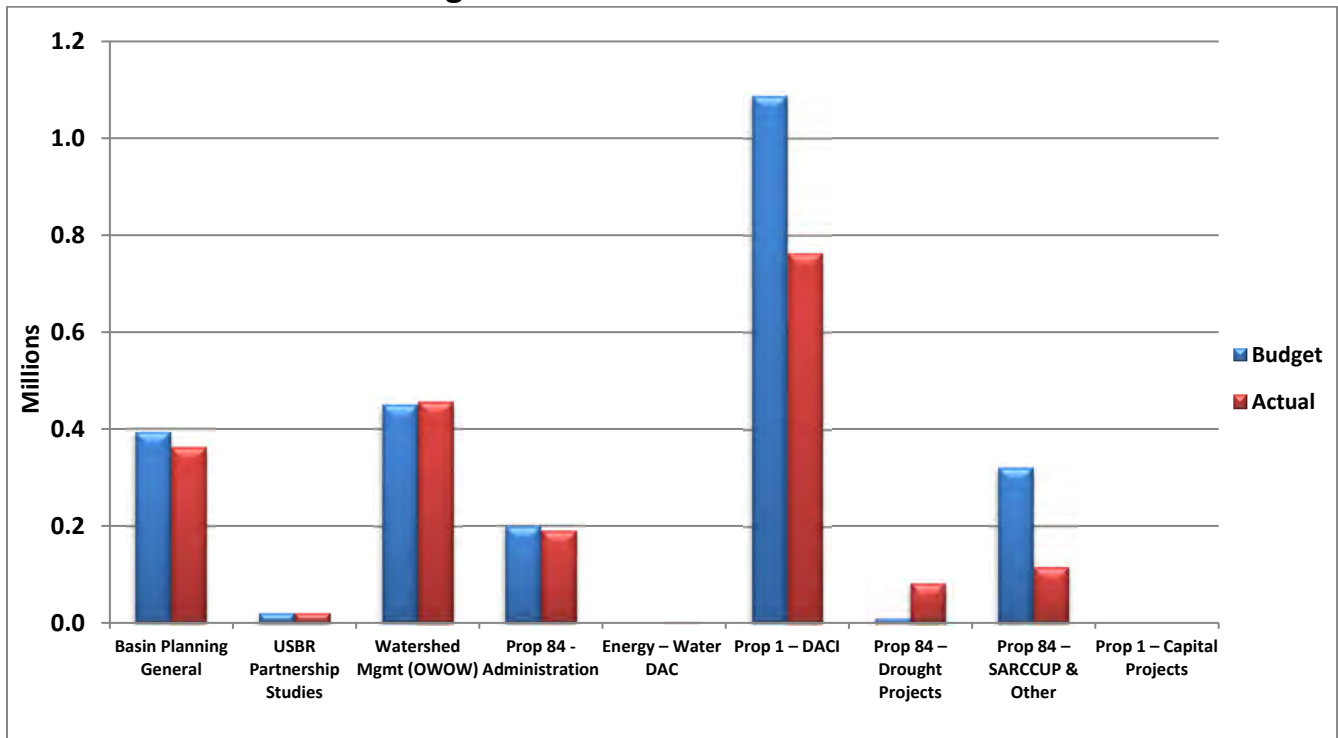
## Budget to Actual Revenues - OWOW



**Concern**

	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Basin Planning General	\$460,000	\$393,333	\$362,009	(\$31,324)
USBR Partnership Studies	70,000	20,000	20,286	286
Watershed Mgmt. (OWOW)	450,000	450,000	455,684	5,684
Prop 84 - Administration	597,237	199,079	189,543	(9,536)
Energy – Water DAC	-	-	942	942
Prop 1 – DACI	3,264,263	1,088,088	763,302	(324,786)
Prop 84 – Drought Projects	31,595	10,532	81,266	70,734
Prop 84 – SARCCUP & Other	959,134	319,711	116,487	(203,224)
Prop 1 – Capital Projects	321,334	-	-	-
<b>Total</b>	<b>\$6,153,565</b>	<b>\$2,480,743</b>	<b>\$1,989,519</b>	<b>(\$491,224)</b>

### Budget to Actual Revenues - OWOW







## Reserve Fund Balance - October

	Amount
Basin Planning General	\$468,067
USBR Partnership Studies	56,207
Watershed Management (OWOW)	550,114
Energy – Water DAC	44,244
Proposition 84 – SARCCUP & Other	442,799
<b>Total Reserves</b>	<b>\$1,561,432</b>

### Legend

#### Compared to Budget

	Ahead or Favorable	Above +5% Favorable Revenue or Expense Variance
	On Track	+5% to -2% Variance
	Behind	-3% to -5% Variance
	Concern	Below -5% Variance

## Staff Comments


For this month's report, the item(s) explained below are either "behind", a "concern", or have changed significantly from the prior month.

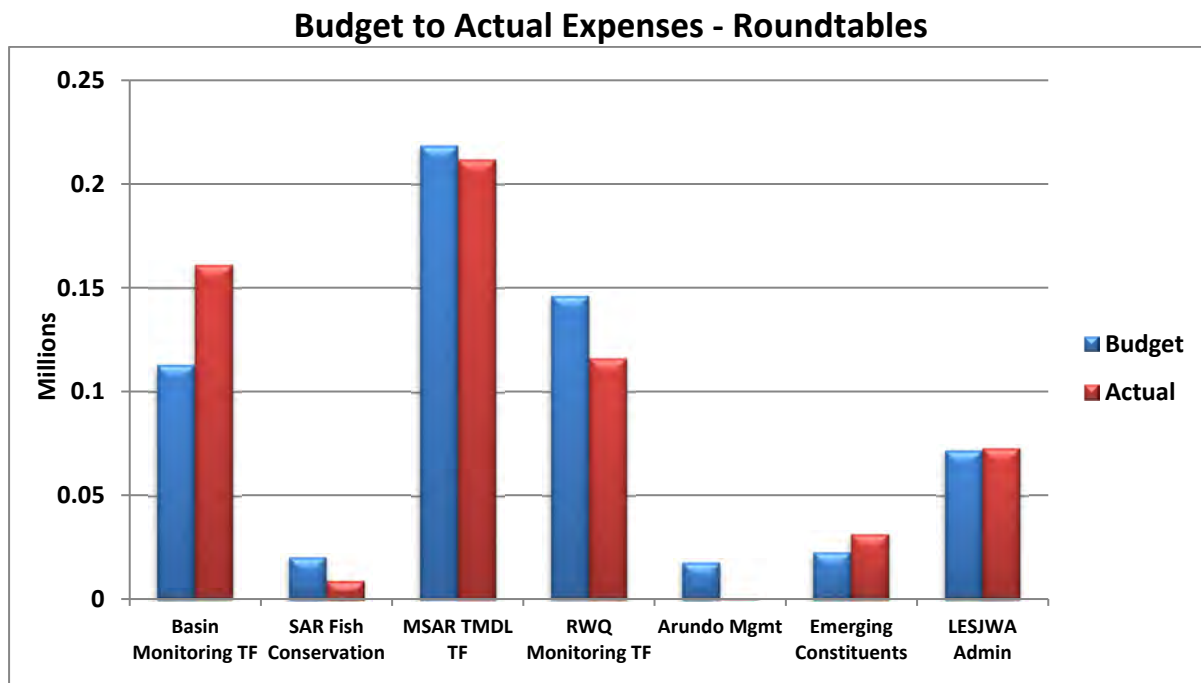
- 1) Total revenues are 20% below budget. The Proposition 1 DACI and Proposition 84 – SARCCUP projects have had a slow start and invoices from project proponents are coming in slowly. It is anticipated that all projects will be on track with the budget at the end of the fiscal year.

**Santa Ana Watershed Project Authority  
PA26 - Roundtable Fund - Financial Report  
October 2019**

*Staff comments provided on the last page are an integral part of this report.*

<b>Overview</b>	This report highlights the agency's key financial indicators for the Fiscal Year-to-Date (FYTD) through October 2019 unless otherwise noted.
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Budget to Actual Expenses - Roundtables				 <b>On Track</b>
	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Basin Monitoring TF	\$338,708	\$112,903	\$161,122	(\$48,219)
SAR Fish Conservation	60,155	20,052	9,005	11,047
MSAR TMDL TF	391,042	218,576	211,851	6,726
RWQ Monitoring TF	437,963	145,988	115,942	30,045
Arundo Mgmt.	52,760	17,587	340	17,246
Emerging Constituents	67,643	22,548	31,193	(8,645)
LESJWA Admin	215,185	71,729	72,791	(1,062)
Total	\$1,563,457	\$609,381	\$602,245	\$7,136





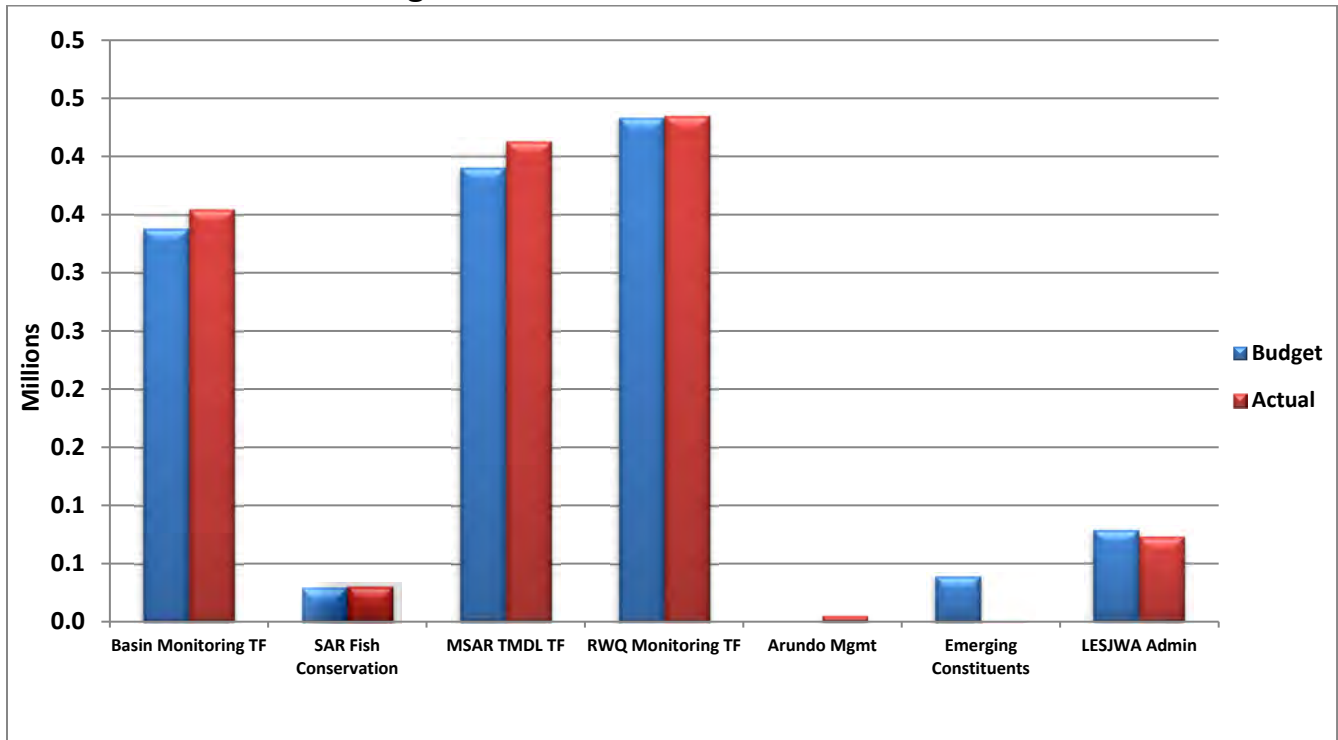
## Budget to Actual Revenues - Roundtables



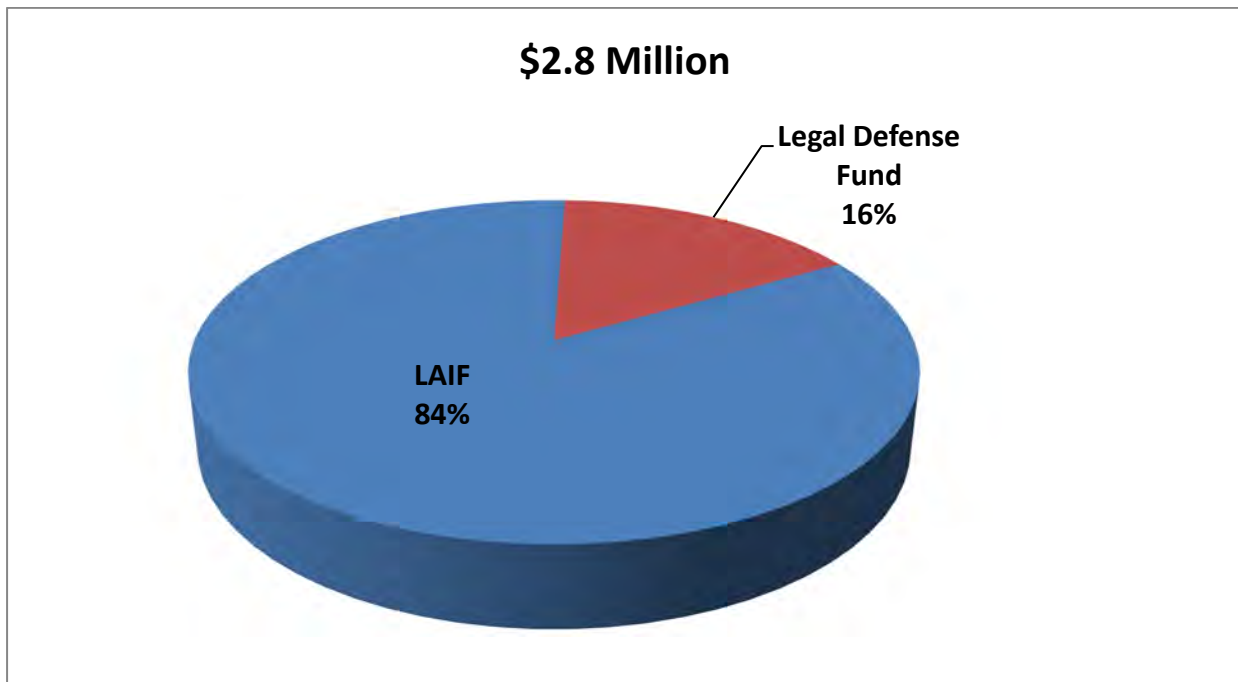
**On Track**

	Annual Budget	FYTD Budget	FYTD Actual	Favorable (Unfavorable) Variance
Basin Monitoring TF	\$338,000	\$338,000	\$354,469	\$16,469
SAR Fish Conservation	29,000	29,000	29,628	628
MSAR TMDL TF	390,344	390,344	412,733	22,389
RWQ Monitoring TF	432,864	432,864	434,535	1,671
Arundo Mgmt.	-	-	4,906	4,906
Emerging Constituents	38,711	38,711	338	(38,373)
LESJWA Admin	215,186	78,395	72,760	(5,635)
<b>Total</b>	<b>\$1,444,105</b>	<b>\$1,307,314</b>	<b>\$1,309,369</b>	<b>\$2,055</b>

## Budget to Actual Revenues - Roundtables



## Total Cash & Investments - October







## Reserve Fund Balance - October

	Amount
Basin Monitoring Task Force	\$494,523
SAR Fish Conservation	121,806
Middle SAR TMDL Task Force	370,020
Regional Water Quality Monitoring Task Force	398,206
Arundo Management & Habitat	961,342
Emerging Constituents Task Force	43,810
LESJWA Administration	-
Legal Defense Fund	458,596
<b>Total Reserves</b>	<b>\$2,848,303</b>

## Legend

### Compared to Budget

	Ahead or Favorable	Above +5% Favorable Revenue or Expense Variance
	On Track	+5% to -2% Variance
	Behind	-3% to -5% Variance
	Concern	Below -5% Variance

## Staff Comments

For this month's report, the item(s) explained below are either "behind", a "concern", or have changed significantly from the prior month.

- 1) All projects are on track through October 2019.

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**December 9, 2019**

**To:** Santa Ana Watershed Project Authority

**From:** Michael Boccadoro  
Beth Olhasso  
Maddie Munson

**RE:** November Report

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Overview:

California enters the holiday season with over 85 percent of the state experiencing abnormally dry conditions. Water managers remain hopeful that the recent patterns of larger late winter/spring storms will arrive to provide the snowpack needed. Above average reservoir storage is also helping keep worries and concerns from reaching a “panic” level among water managers. A series of storms have blanketed the Sierras with more snow than this time last year.

The state announced that they will be suing the federal government over the Biological Opinions (BiOps) on the grounds that the BiOps will fail to adequately protect ESA listed species affected by CVP operations. The 2008 and 2009 BiOps were also mired in years of litigation, so lawsuits over the most recent BiOps do not come as a surprise. The state has not yet formally filed the lawsuit, so it is unclear whether or not they will be seeking an injunction on the federal government’s new operating rules that could go into effect for the current water year.

The Office of Environmental Health Hazard Assessment (OEHHA) recently released an online mapping tool designed to help implement the state’s “human right to water” policy. The tool, and associated report, are the first step toward developing a baseline “from which to comprehensively track challenges in water quality, accessibility, and affordability that individual California water systems face,” according to the report. ACWA and CMUA have raised some concerns with the tool and report and hope to work on some changes before final action is taken.

The Senate Energy, Utilities and Communications Committee recently held a marathon eight-hour hearing on Public Safety Power Shutoffs (PSPS). The hearing was well attended by legislators, including the President pro Tem. All three IOUs testified as did the Governor’s new Energy Czar Ana Matosantos. Members voiced frustrations with all the IOUs, particularly PG&E.

The Public Policy Institute of California (PPIC) recently released a report titled “[A Path Forward for California’s Freshwater Ecosystems](#).” The report highlights that while the Endangered Species Act (ESA) has been successful at protecting extinctions, it places an emphasis on reducing harm to listed species, rather than improving overall ecosystem conditions necessary to recover their populations.

November and December are the two quietest months in the Capitol. Final bill action was taken by Governor Newsom in October and members remain in their districts until January. Some work is being done in preparation for the second year of the two-year session, but work will begin in earnest in January. It is believed that the Governor’s Water Resilience Portfolio will be released in early December, at which time discussions on a water bond will likely intensify.

# Santa Ana Watershed Project Authority Status Report – November 2019

## *Water Supply Conditions*

A high-pressure ridge has kept any significant precipitation away from California throughout the fall. As has been the case over the past several years, California entered the holiday season with over 90 percent of the state experiencing abnormally dry conditions. Water managers remain hopeful that the recent patterns of larger late winter/spring storms will arrive to provide the snowpack needed. Above average reservoir storage is also helping keep worries and concerns among water managers at bay for now.

## **U.S. Drought Monitor California**

**December 3, 2019**  
(Released Thursday, Dec. 5, 2019)  
Valid 7 a.m. EST



*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	14.74	85.26	0.01	0.00	0.00	0.00
<b>Last Week</b> <small>11-26-2019</small>	9.22	90.78	3.31	0.01	0.00	0.00
<b>3 Months Ago</b> <small>09-03-2019</small>	90.94	9.06	1.09	0.00	0.00	0.00
<b>Start of Calendar Year</b> <small>01-01-2019</small>	7.77	92.23	75.17	14.12	2.10	0.00
<b>Start of Water Year</b> <small>10-01-2019</small>	95.29	4.71	2.06	0.00	0.00	0.00
<b>One Year Ago</b> <small>12-04-2018</small>	7.77	92.23	79.69	18.34	3.78	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

Author:

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National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

### ***Newsom Administration Responds to BiOps***

The [Newsom Administration has finally responded](#) to the federal government's proposed operational rules for the State Water Project (SWP) and Central Valley Project (CVP). The federal government last month released the update to the 10-year old rules and associated environmental documents that dictate how the massive water projects can be operated. Since their release, environmentalists have been highly critical of the federal government's announcement, saying that the new rules are less protective of endangered species such as Chinook salmon and Delta smelt.

Because both the SWP and CVP projects go through endangered and threatened Chinook salmon and Delta smelt habitat, the federal Endangered Species Act (ESA) requires in depth scientific review of how proposed project operations will affect these species. This review is detailed in lengthy documents called Biological Opinions (BiOps). Water users have been calling for an updated review incorporating more recent scientific studies of the Sacramento-San Joaquin Delta ecosystem since the adoption of the 2008 and 2009 BiOps.

Traditionally, the U.S. Bureau of Reclamation and the California Department of Water Resources (DWR) have used the same rules to operate the CVP and SWP, which run parallel to each other and each have pumping facilities in the South Delta. For the first time ever, [DWR is developing their own operating rules](#) to run the SWP as they are unhappy with the Bureau's new rules. Governor Newsom and DWR had hinted at this unprecedented action earlier this year, but made it official last week when they released a 600 page [draft environmental impact report](#) that begins to lay out how DWR proposes to operate the SWP in a way that will meet the requirements of the California Endangered Species Act and the Porter-Cologne Water Quality Control Act. Most are still reviewing the lengthy technical document to determine exactly how DWR's plan will differ from Bureau's plan, but SWP water users are concerned that DWR could develop more stringent operational rules that will over compensate for Bureau's differing approach, resulting in greatly reduced water deliveries for SWP contractors. For now, however, there are some key notes to be taken from the Draft EIR, most notably that the proposed project is proposed to be very similarly operated as the federal CVP and would "result in less than significant impacts" on aquatic biological resources and water quality. Some are starting to wonder why the Newsom Administration is so distraught by the BiOps when their own Draft EIR is so similar. More to come as the details emerge.

In addition to this announcement, the state also announced that they will be suing the federal government over the Biological Opinions on the grounds that the BiOps will fail to adequately protect ESA listed species affected by CVP operations. The 2008 and 2009 BiOps were also mired in years of litigation, so lawsuits over the most recent BiOps do not come as a surprise. The state has not yet formally filed the lawsuit, so it is unclear whether or not they will be seeking an injunction on the federal government's new operating rules that could go into effect for the current water year.

In the wake of these two actions by the Newsom Administration, many have called into question the viability of the voluntary agreements that the state has been attempting to broker with water users and other stakeholders affected by the State Water Resources Control Board's ongoing efforts to update the Bay Delta Water Quality Control Plan. The parties to the voluntary agreements are both CVP and SWP contractors, and so there is speculation that the uncertainty created by the state's actions against the federal government will be too much to overcome as negotiations continue.



### ***OEHHA “Human Right to Water” Mapping Tool Causing Concern***

The Office of Environmental Health Hazard Assessment (OEHHA) recently released an online mapping tool designed to help implement the state’s “human right to water” policy. The tool, and associated report, are the first step toward developing a baseline “from which to comprehensively track challenges in water quality, accessibility, and affordability that individual California water systems face,” according to the report.

ACWA and CMUA have raised concerns that the tool and report have technical issues and have urged OEHHA hold a public meeting to discuss comments prior to finalization of the report. Additionally, they would like the raw data used in the creation of the tool, and an ongoing collaboration process to address future changes. Finally, they raised significant concern about the “exposure subcomponent” indicator in the tool. They note that the indicator “does not accurately represent water quality contamination at the household tap.”

### ***PSPS Hearing***

The Senate Energy, Utilities and Communications Committee recently held a marathon eight hour hearing on Public Safety Power Shutoffs (PSPS). In a rare move underscoring the issue’s importance, the leader of the Senate pro Tem Toni Atkins, attended the hearing and made opening comments, even though she does not sit on the Senate Energy Committee. Additionally, she published an op-ed prior to the hearing titled “[California needs an action plan to confront wildfires and provide reliable electricity.](#)” The committee hearing was also open to all Senators, even those who do not sit on the committee and was well attended by numerous Senators and even a few Assemblymembers. In addition, the Governor sent his top advisors to testify — again demonstrating that this is one of — if not his top — priorities.

The most captivating moment of the hearing was when PG&E’s CEO, Bill Johnson, faced the panel of Senators. While several of the Senators grilled him on the company’s handling of PSPSs, the panel of Senators didn’t appear to have a consistent set of thoughts about what to do next. Most explicit was Senate Pro Tem Atkins, who urged the development of a comprehensive action plan.

State officials — including high-level members of the Governor’s team — outlined a host of problems stemming from PSPS events, especially poor stakeholder coordination. It was plainly clear all impacted stakeholders — ranging from local governments to businesses — have a very dim view of a utility choosing to utilize a PSPS. Senator Mike McGuire summarized it nicely: People are exhausted, and they deserve better. There was not much positive said about using PSPSs. There appeared to be broad agreement that PSPSs cannot be a long-term solution.

Several themes emerged as potential legislation for 2020.

- ***Grid hardening as a long-term solution.*** Legislators were eager to talk about and ask questions about grid hardening efforts. The IOUs each discussed their hardening efforts, such as targeted undergrounding, installing covered conductors and new sectionalizing equipment, and positioned them as long-term solutions that will help avoid the need to initiate PSPS events. The Senate Pro Tem said a realistic timeline for grid hardening is needed. It wouldn’t be surprising to see legislation to hold IOUs accountable for their grid hardening efforts.
- ***Legislators are highly interested in backup generation, particularly distributed energy resources (DERs) and microgrids.*** The issue of customer backup generation was brought up time and time again, and each IOU said it is open to looking at microgrids and DERs as solutions.

Edison senior VP of transmission and distribution defended use of PSPS and system upgrades. Like SDG&E's COO, the Edison executive discussed the utility's sectionalizing devices and grid hardening efforts. In particular, Edison is installing more than 10,000 fast-acting fuses and has four sectionalizing devices on each circuit, so the utility doesn't have to shut off the entire line. At the height of the PSPS event that Southern California Edison (SCE) initiated, only two percent of customers were without power. The Edison executive defended PSPS, saying that it serves a vital purpose: Safety patrols after the PSPS revealed branches on lines that could have sparked fires.

There are expected to be more hearings when the legislature comes back in January.

### ***PPIC Report on Ecosystem Management***

The Public Policy Institute of California (PPIC) recently released a report titled "[A Path Forward for California's Freshwater Ecosystems](#)." The report highlights that while the Endangered Species Act (ESA) has been successful at protecting extinctions, it places an emphasis on reducing harm to listed species, rather than improving overall ecosystem conditions necessary to recover their populations. It also notes that the ESA is not forward-looking enough to respond to change and reduce future species listings. They recommend a new ecosystem-based management system that emphasizes the simultaneous management of water, land and species to improve ecosystem condition for native biodiversity and human uses.

The report includes three "reform" initiatives:

**Reform 1: Promote inclusive planning and governance:** establish ecosystem-based management that relies on collaborative planning and governance:

- Identify the desired ecosystem condition
- Establish metrics
- Provide strong scientific support
- Set up transparent governance
- Ensure reliable funding

**Reform 2: Employ multiple ecosystem management tools that go beyond traditional project of agency-specific approaches:**

- Establish ecosystem water budgets
- Employ functional flows
- Manage flow and quality together
- Manage native and non-native species
- Manage at the appropriate scale

**Reform 3: Encourage sustainable watershed management plans.**

- Align agency actions
- Promote comprehensive agreements
- Set timelines and backstops
- Update water quality control plans
- Incentivize or mandate plans.

### *Legislative Update*

November was a quiet month in the Capitol. With members back in their districts and all final action on bills taken by the Governor in October, there isn't much to report on the legislative front. Attention is slowly turning to new bill ideas for January. Discussions of a water bond continue, but remain very general as stakeholders await the release of the Water Resilience Portfolio, which will likely serve as an outline for water bond discussions.

# **GENERAL MANAGERS MEETING NOTES**

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TUESDAY, December 10, 2019

## **PARTICIPANTS PRESENT**

Paul Jones  
Shivaji Deshmukh  
Michael Markus  
Doug Headrick  
Craig Miller  
Rich Haller  
Karen Williams  
Larry McKenney (Via Conference Call)  
Mark Norton  
David Ruhl  
Carlos Quintero  
Katie Lucht

## **REPRESENTING**

Eastern Municipal Water District  
Inland Empire Utilities Agency  
Orange County Water District  
San Bernardino Valley Municipal Water District  
Western Municipal Water District  
Santa Ana Watershed Project Authority  
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## **1. CALL TO ORDER**

Paul Jones called the meeting to order at 7:31 a.m. at SAWPA, 11615 Sterling Avenue, Riverside, California.

## **2. FUTURE SAWPA COMMISSION AGENDA ITEMS**

Rich Haller provided and reviewed the Agenda Planning Matrix (SAWPA Commission, OWOW Steering Committee, PA 22, PA 23, and PA 24). Haller is providing an update to the Commission on the Strategic Plan at the December 17, 2019 Commission Meeting looking for input and direction from the Commission on the next steps.

## **3. 2017 GM REPORT**

Rich Haller gave a brief update on the 2017 SAWPA GM Facilitated Process Report that was provided at the November 12, 2019 General Managers Meeting. Haller will meet individually with each member agency General Manager to review this report.

## **4. OWOW UPDATE**

Mark Norton shared that SAWPA is still waiting for a response from DWR on the Prop 1 IRWM Round 1 grant application submitted on November 1, 2019. The award is a three-step process: 1) draft announcement of the award, 2) 30-day comment period, and 3) DWR finalizes and develops an agreement with each of the Regions that have been awarded the grant funding. SAWPA is also working with the Roundtable of Regions to continue to advocate SAWPA's support for IRWM funding.

## **5. ROUNDTABLES/TASK FORCES UPDATE**

Mark Norton gave a brief update on the presentations that will be provided at the December 17, 2019 Commission Meeting. These include: the Santa Ana River Wasteload Allocation study by Geoscience Support Services Inc.; the voluntary PFAS and Emerging Constituents preliminary findings of the sampling report SAWPA conducted this past August; and the potential feasibility study of cloud seeding. The consensus of the General Managers is that the feasibility study should be done and were supportive of recommending to the Commission that each SAWPA member agency contribute an equal share for the cost of the study.

## **6. DCI TECHNICAL ASSISTANCE PROPOSED PROJECTS**

Mark Norton provided a handout of the proposed Recommendations for Technical Assistance Funding and Support for the SAWPA Disadvantaged Communities Involvement (DCI) Program. The project planning activities must be completed in one and half years (June 2021). There are three program elements in the DWR Proposition 1 DCI Funding: 1) strengths and needs assessment, 2) education and engagement, and 3) technical assistance. The current funding selection is for the third element, technical assistance. SAWPA provided an early submittal to DWR to ensure qualification of projects. DWR staff recommended prioritization of technical assistance grant funding be given to failing infrastructure in the disadvantaged communities. SAWPA was looking to spread the funding to where it is needed most and not necessarily evenly across the watershed. The General Managers requested that SAWPA staff review the selection and

ranking process, evaluate and once complete, share the process improvements with the General Managers to enhance transparency and an open process for future IRWM grant funding awards.

## **7. BRINE LINE UPDATE**

David Ruhl provided updates on the following:

- a. Pretreatment Program Update – Ordinance #9 has been submitted to OCSD for review. Upon receipt of comments back from OCSD in early 2020, there will be a public hearing at a PA 24 Committee meeting and possible approval. Following PA 24 Committee approval, member agency Board approval is required (not applicable to OCWD). SAWPA staff look forward to receiving an update from OCSD at their meeting this week. The collection station permits are no longer needed per OCSD, however, an SOP must be in place. SAWPA is working with member agency staff to develop a collection station SOP and look to have a draft complete by Monday for comments.
- b. Infrequent Dischargers – SAWPA is working on plans regarding the handling of planned and unplanned infrequent dischargers to provide to OCSD. A draft of these plans will be provided to agency staff by early next week prior to submission to OCSD. A discussion ensued about the change in practice of infrequent discharges and this potentially being a solution looking for a problem. The General Managers requested Rich Haller to call Jim Herberg directly to discuss and SAWPA staff to provide additional push back to OCSD about the removal of the infrequent discharge permits.
- c. OCSD – Rock Removal – The OCSD Rock Removal continues with anticipation of completion in early 2020.
- d. Alcoa Dike Brine Line Protection/Relocation – Stantec has updated their report to include the comments received on the workshop held at SAWPA on November 6, 2019.
- e. Brine Line Treatment and Disposal Capacity – SAWPA staff is working on a draft agreement to kick off a Capacity Utilization Program.

## **8. OPERATIONS UPDATE**

Carlos Quintero provided updates on the following:

- a. Brine Line O&M Activities – SAWPA staff found significant corrosion on one of the structures during their structure inspection at PRADO and are developing a plan to repair it. Carlos provided a handout showing the corrosion with a map inset showing the location of the structure. SAWPA staff is coordinating with EMWD for an extended shut down of the Railroad Canyon connection for the installation of manways by EMWD. SAWPA staff will replace non-functional valves on Reach V during the shutdown to avoid a second shut down in the future.
- b. Parking Lot Status – The parking lot project has been delayed, pending receipt of a permit from the City of Riverside with an updated completion date now at the end of February 2020.

Rich Haller noted that SAWPA is renting a warehouse adjacent to the BLOC to keep SAWPA vehicles in a secured location.

Paul Jones noted that today will be San Bernardino Valley Municipal Water District General Manager, Doug Headrick's last General Managers meeting, as he is retiring.

## **9. SCHEDULING – NEXT GM MEETING**

The next General Managers meeting is scheduled for January 14, 2020, at 7:30 a.m. at SAWPA. The meeting adjourned at 8:32 a.m.