REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE FLORIN RESOURCE CONSERVATION DISTRICT

Agenda

Wednesday, December 14, 2016

6:30 PM

9257 Elk Grove Blvd.
Elk Grove, CA 95624

Compliance with Government Code Section 54957.5

Public records, including writings related to an agenda item for an open session of a regular meeting of the Florin Resources Conservation District that are distributed less than 72 hours before the meeting, are available for public inspection during normal business hours at the Administration building of Elk Grove Water District, located at 9257 Elk Grove Blvd. Elk Grove, California. In addition, such writings may be posted, whenever possible, on the Elk Grove Water District website at www.egwd.org.

The Board will discuss all items on the agenda, and may take action on any item listed as an "Action" item. The Board may discuss items that do not appear on the agenda, but will not act on those items unless there is a need to take immediate action and the Board determines by a two-thirds (2/3) vote that the need for action arose after posting of the agenda.

If necessary, the Meeting will be adjourned to Closed Session to discuss items on the agenda listed under "Closed Session." At the conclusion of the Closed Session, the meeting will reconvene to "Open Session."

CALL TO ORDER, ROLL CALL AND PLEDGE OF ALLEGIANCE

Public Comment – Please complete a Request to Speak Form if you wish to address the Board. Members of the audience may comment on matters that are not included on the agenda. Each person will be allowed three (3) minutes, or less if a large number of requests are received on a particular subject. No action may be taken on a matter raised under "Public Comment" until the matter has been specifically included on an agenda as an action item. Items listed on the agenda will be opened for public comment as they are considered by the Board of Directors.

1. Oath of Office (Stefani Phillips, Board Secretary)

Associate Director Comment

Public Comment

2. Proclamations and Announcements

a. Recognition of Bruce Kamilos for five years of service
b. Recognition of David Frederick for five years of service

Associate Director Comment

Public Comment

3. Florin Resource Conservation District 2017 Election of Officers

(Stefani Phillips, Board Secretary)

Associate Director Comment

Public Comment

Recommended Action: Elect a Chairperson, Vice-Chairperson for the remainder of the 2016 calendar year and the 2017 calendar year, and appoint the Finance Manager as Treasurer

4. Consent Calendar (Stefani Phillips, Secretary and Jim Malberg, Treasurer)

a. Minutes of Regular Board Meeting of October 26, 2016
b. FRCD Cash Flow Worksheet – October, 2016
c. FRCD Cash Flow Worksheet – November, 2016
d. Warrants Paid – October, 2016
e. Warrants Paid – November, 2016
f. Active Accounts – October, 2016
g. Active Accounts – November, 2016
h. Bond Covenant Status for FY 2016-17 – October, 2016
i. Bond Covenant Status for FY 2016-17 – November, 2016
j. Revenues and Expenses – Actual vs Budget FY 2016-17 – October, 2016
k. Revenues and Expenses – Actual vs Budget FY 2016-17 – November, 2016
l. Cash Accounts – October, 2016
m. Cash Accounts – November, 2016
n. Consultants Expenses – October, 2016
o. Consultants Expenses – November, 2016
p. Major Capital Improvement Projects – October, 2016
q. Major Capital Improvement Projects – November, 2016

Associate Director Comment

Public Comment

Recommended Action: Approve Florin Resource Conservation District Consent Calendar items a-q

5. Florin Resource Conservation District 2017 Committee Appointments and Outside Agency Representation (Stefani Phillips, Board Secretary)

Associate Director Comment

Public Comment

Recommended Action: Appoint Directors to the following Standing Committees: Finance, Conservation, Infrastructure, and Planning Committees; and for outside agency representation; and that the Board ratify these appointments

6. Committee Meetings (Stefani Phillips, Board Secretary)

Associate Director Comment

Public Comment

7. Florin Resource Conservation District Conservation Activities Report
(Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

8. Water Usage and Conservation Report (Sarah Jones, Program Manager)

Associate Director Comment

Public Comment

9. Elk Grove Water District Operations Report – October and November 2016
(Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

10. Elk Grove Water District Fiscal Year 2016-17 Water Revenue Adjustment Deferral and Operating Budget Amendment (Jim Malberg, Finance Manager)

Associate Director Comment

Public Comment

Recommended Action: Adopt Ordinance No. 12.14.16.01 and Resolution No. 12.14.16.01 deferring one-half percent of the water revenue adjustment scheduled on January 1, 2017 and amending the Elk Grove Water District Fiscal Year 2016-17 Operating Budget

11. Legislative Update (Sarah Jones, Program Manager)

Associate Director Comment

Public Comment

12. General Manager's Report (Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

13. Florin Resource Conservation District Regular Board Meeting Schedule
(Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

Recommended Action: **Discuss and provide direction to staff on the desired dates and times of the regularly scheduled Florin Resource Conservation District meeting beginning in January 2017.**

14. Directors Comments

Adjourn to Regular Meeting – to be determined.

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary

SUBJECT: **OATH OF OFFICE**

RECOMMENDATION

No action is required for this item.

Summary

The Board Secretary will administer the Oath of Office to the newly elected Florin Resource Conservation District Board of Directors Lisa Medina and Sophia Scherman.

DISCUSSION

Background

Every two years following an election, the Board Secretary administers the Oath of Office to the newly elected Florin Resource Conservation District (FRCD) Board of Directors. The Oath of Office may be given any time following the fourth Friday at noon in November.

Directors Chuck Dawson and Elliot Mulberg held seats for two terms (2008-2016) as Directors for the FRCD. These two seats were up for election in November 2016.

Present Situation

Three individuals ran in the election for the FRCD Board of Directors: Incumbent Director Elliot Mulberg, Associate Director Lisa Medina and Sophia Scherman. Lisa Medina and Sophia Scherman were elected to the FRCD Board of Directors on November 8, 2016 and will be sworn into office on December 14, 2016.

FINANCIAL SUMMARY

There is no financial impact associated with this item.

STRATEGIC PLAN CONFORMITY

For operations of the District the Board By-Laws stipulates that the Board of Directors is comprised of five Board members.

Respectfully Submitted,

STEFANI PHILLIPS, BOARD SECRETARY

December 14, 2016

TO: Chairperson and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary

SUBJECT: **FLORIN RESOURCE CONSERVATION DISTRICT ELECTION OF OFFICERS**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors elect a Chairperson, Vice-Chairperson for the remainder of the 2016 calendar year and the 2017 calendar year, and appoint the Finance Manager as Treasurer.

Summary

Each year, a Chairperson and Vice-Chairperson are elected by the Board to serve as officers of the Florin Resource Conservation District (FRCD). The Board is also responsible for appointing a Treasurer.

By this action, the Board will elect and appoint the officers who will lead and serve the Board of Directors of the FRCD.

DISCUSSION

Background

The FRCD Board By-Laws state that the Board shall elect a Chairperson and Vice-Chairperson at the regular board meeting in January. The term of office in each case shall begin upon election and shall continue for the period of one year or until successors are elected.

The Board treasurer has been served by the District Finance Manager and is responsible for keeping complete and accurate records of District expenditures, issuing receipts for money received by the District, paying District bills, completing monthly financial reports, completing annual financial reports, depositing checks into the District account, and completing financial audits when required.

For the last two years, Director Chuck Dawson served as Chairperson and Director Tom Nelson served as Vice-Chairperson.

Present Situation

At this time, the FRCD Board of Directors should elect a Chairperson and Vice-Chairperson for the remainder of the 2016 calendar year and the 2017 calendar year, and appoint the Finance Manager as Treasurer.

FINANCIAL SUMMARY

There is no financial impact associated with this agenda item.

Respectfully submitted,

STEFANI PHILLIPS
BOARD SECRETARY

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary and Jim Malberg, Treasurer

SUBJECT: **CONSENT CALENDAR**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors approve Florin Resource Conservation District Consent Calendar items a – q.

Summary

Consent Calendar items a – q are standing items on the Regular Board Meeting agenda.

By this action, the Board will approve Florin Resource Conservation District Consent Calendar items a – q.

DISCUSSION

Background

Consent Calendar items are standing items on the Regular Board Meeting agenda.

Present Situation

Consent Calendar items a – q are standing items on the Regular Board Meeting agenda.

FINANCIAL SUMMARY

N/A

Respectfully Submitted,

Stefani Phillips and Jim Malberg

STEFANI PHILLIPS, BOARD SECRETARY AND
JIM MALBERG, TREASURER

Attachments

MINUTES OF THE REGULAR MEETING OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS

Wednesday, October 26, 2016

The regular meeting of the Florin Resource Conservation District Board of Directors was called to order at 6:30 p.m. by Chuck Dawson, Chair, at 9257 Elk Grove Blvd, Elk Grove CA.

Call to Order, Roll Call, and Pledge of Allegiance.

Directors Present:	Chuck Dawson, Bob Gray, Tom Nelson
Directors Absent:	Elliot Mulberg, Jeanne Sabin
Staff Present:	Mark J. Madison, General Manager; Bruce Kamilos, Assistant General Manager; Stefani Phillips, Board Secretary; Jim Malberg, Finance Manager; Donella Murrillo, Finance Manager; Sarah Jones, Program Manager
Associate Directors Present:	Mike Schmitz, Lisa Medina
General Counsel Present:	Ann Siprelle, Best Best & Krieger (BB&K)
Consultants Present:	Ahmed Badawi, Badawi & Associates CPA; Mitesh Desai, Badawi & Associates CPA

Public Comment
None

1. Proclamations and Announcements
Mark Madison, General Manager, introduced Sarah Jones, Program Manager to the Board.

Mr. Madison recognized Wilfredo Quintero, Water Treatment Operator II, for his ten years of service (2006-2016) with the District.

2. Consent Calendar
a. Minutes of Special Meeting of September 28, 2016
b. Minutes of Regular Board Meeting of September 28, 2016
c. FRCD Cash Flow Worksheet – September, 2016
d. Warrants Paid – September, 2016
e. Active Accounts – September, 2016
f. Bond Covenant Status for FY 2016-17 – September, 2016
g. Revenues and Expenses – Actual vs Budget FY 2016-17 – September, 2016
h. Cash Accounts – September, 2016
i. Consultants Expenses – September, 2016
j. Major Capital Improvement Projects – September, 2016

MSC (Nelson/Dawson) to approve FRCD Consent Calendar items a. - j. 3/0: Ayes: Dawson, Gray, and Nelson.

3. Fiscal Year 2015-16 Comprehensive Annual Financial Report
Jim Malberg, Finance Manager, provided background on the Fiscal Year 2015-16 Comprehensive Annual Financial (CAFR) Report to the Board. He commented that this was the smoothest audit he had ever participated in.

Ahmed Badawi, Consultant with Badawi & Associates, and Mitesh Desai, Consultant with Badawi & Associates, handed out and presented a power point covering the CAFR to the Board.

Mr. Madison stated that this is the first time the CAFR has been completed so early in the year. He thanked Mr. Malberg and Donella Murrillo, Finance Supervisor for their efforts on getting the CAFR completed on-time and ahead of schedule.

Chuck Dawson, Chairman, thanked all staff involved in the process of getting the CAFR completed. He also thanked the Board for their involvement which has positioned the District to be in the place they are today.

Lisa Medina, Associate Board Member, commented that she was impressed with the customer service staff for being so responsive to the District's customers. She stated that the District's customer service representatives are the first face customers see and being able to see the representative in action and being so responsive to the District's customers is great.

MSC (Dawson/Nelson) to approve a motion accepting the Fiscal Year 2015-16 Comprehensive Annual Financial Report 3/0: Ayes: Dawson, Gray, and Nelson.

4. Committee Meetings

Stefani Phillips, Board Secretary, presented the Committee Meetings to the Board. There was no committee meetings held in the month of September.

5. Florin Resource Conservation District Conservation Activities Report

Mr. Madison presented the Florin Resource Conservation District Conservation Activities Report to the Board. In summary, most of the work conducted for FRCD related matters involved the research of urban farming potential in Elk Grove and the research of potential grant opportunities. Mr. Madison commented that a new strategic plan is in the development stage and he will be engaging with the California Association of Resource Conservation Districts – Central Region in the development of a statewide 3-year Strategic Direction. The document is proposing to incorporate three broad goals to assist RCD's statewide. The goals include:

- Build the capacity of individual RCD's
- Increase the reach and influence of RCD's statewide
- Increase the impact and sustainability of CARCD

6. Water Usage Report

Mr. Madison presented the Water Usage Report to the Board. In summary, for the month of September, service area 1 reduced its waters consumption by 16.05% in comparison to September 2013 usage. Service area 2 reduced by 17.56% for the same period. The combined reduction for both service areas was 16.63%.

Bob Gray, Director, inquired how the R-GPCP are calculated.

A discussion followed regarding customer usage versus commercial usage.

Bruce Kamilos, Assistant General Manager, stated he will check into it and get back to Mr. Gray.

7. Elk Grove Water District Operations Report – September 2016

Mr. Madison presented summary points of the Elk Grove Water District Operations Report – September 2016 to the Board.

Comments and inquiries included:

- Door hangers and shutoffs remained high in September
- We have continued to do a lot of hydrant maintenance and valve exercising
- Wells 11D, 14D, and 3 have been the main source of supply for Service Area 1
- Total production for Service Area 1 dropped some – about 140 million gallons
- Total customer usage for EGWD (SA1 and SA2) is about the same as it was in 2014 (about 230 million gallons, and this is down about 17% from 2013
- The static and pumping water level data includes the third quarter measurements. The statics levels still show that the water table remains stable
- There have been no problems with water quality or regulatory compliance
- There have been no wastewater discharges from either the Railroad Plant of the Hampton Well & Plant
- All preventative maintenance activities have been performed in compliance with our standard operating procedures
- We have had 5 formal safety meetings and it has been 251 days since we have had a reportable injury
- We had 1 main line leak and this was a shear break near Elk Crest Drive
- No service line replacements have been completed – our utility crews have continued to work on the CSD and Railroad water line projects
- Pressures in both Service Areas 1 and 2 have remained sufficient and balanced

Ms. Medina inquired what the last recorded arsenic level was at the Hampton Treatment Plant. Mr. Madison responded stating that last spot sample was around 8 and then provided Ms. Medina with some history of the Hampton Treatment Plant.

8. Hampton Village Water Treatment Plant Improvements Project Contract

Mr. Kamilos presented the Hampton Village Water Treatment Plant Improvements Project Contract. In summary, the Hampton Village Water Treatment Plant (WTP) improvements project adds chemical treatment to the Hampton Village WTP for the purpose of removing arsenic from its groundwater supply. The project was bid and the Elk Grove Water District (EGWD) received and opened five (5) bids on October 13, 2016. The lowest responsive, responsible bidder was Division 5-15 with a bid amount of $252,515.

Tom Nelson, Vice-Chairman, is concerned about the cost associated with running the Hampton Village WTP. Mr. Madison responded to Mr. Nelson's concern and explained that the District's practices on how the wells are ran and he also stated that the District set aside $100,000 in the Operations budget for chemicals and other operational needs anticipated for this well site.

Associate Director Medina inquired if there is a projected cost for maintenance at the Hampton Village WTP. Mr. Kamilos responded stating the Hampton Village WTP was placed in the Asset Management Program and media replacement are monitored by staff and projected to have a 10 year life.

Associate Director Medina inquired about the process of notifying the public regarding arsenic levels. Mr. Madison responded stating the public would be notified by the District's newsletter or through bill insert. Sophia Scherman, member of the public, commented stating when the District notifies their customers of arsenic levels, they should do it in a way that it causes no panic.

MSC (Nelson/Gray) to approve a motion authorizing the General Manager to execute a construction contract, in the amount $252,515, with Division 5-15 for the Hampton Village Water Treatment Plant Improvements project, and transfer $72,515 of approved FY 16/17 CIP funds from the RRWTF Tanks & Vessels Recoating project to the Hampton Village Water Treatment Improvements project 3/0: Ayes: Dawson, Gray, and Nelson.

9. Florin Resource Conservation District/Elk Grove Water District GIS Classification and Salary Study

Stefani Phillips, Human Resources Administrator, presented the Florin Resource Conservation District/Elk Grove Water District GIS Classification and Salary Study to the Board. In summary, the GIS Classification and Salary Study was initiated due to a concern that the District may be using the GIS Technician I in ways not consistent to the duties and responsibilities listed in the job description. Staff initiated the classification and salary study with CPS HR Consulting in June and they evaluated the duties being performed by the GIS Technician I and made a determination that the individual is working higher than the level of duties contained in the job description. CPR HR performed a comparison of positions from other organizations to determine the difference between the GIS Technician I and II and concluded that the duties currently being performed are consistent with a GIS Technician II.

Staff is recommended the following:

- Create a new position of GIS Technician II
- Eliminate the GIS Technician I from the Florin Resource Conservation District Organization Chart
- Modify the Florin Resource Conservation District Organization Chart to add the position of GIS Technician II
- Amend the Florin Resource Conservation District/Elk Grove Water District Salary Schedule to incorporate the GIS Technician II position

MSC (Dawson/Gray) to adopt Resolution No. 10.26.16.01 approving the Florin Resource Conservation District/Elk Grove Water District GIS Classification and Salary Study authorizing changes to the Florin Resource Conservation District's Organization Chart and the Elk Grove Water District Salary Schedule 3/0: Ayes: Dawson, Gray, and Nelson.

10. Elk Grove Water District Fiscal Year 2016-17 Quarterly Operating Budget

Mr. Malberg presented the Elk Grove Water District Fiscal Year 2016-17 Quarterly Operating Budget to the Board.

Comments and inquiries include:

- There is an error on page 280. The Net Operations percentage should be at 38% vs. 4.17%
- CalPERS Retirement benefits were paid via lump sum to save the District about 4% of this benefit
- Repairs & Maintenance and Materials percentages are a little on the high side due to replacing items used throughout the summer. Staff will be keeping a track on the Repairs & Maintenance - Automotive and Repairs & Maintenance - Computer.
- Overall the District is tracking fine.

Director Gray inquired what is included in other income. Mr. Malberg responded stating it is the salary benefit from the FRCD to EGWD.

11. Elk Grove Water District Fiscal Year 2016-17 Quarterly Capital Reserve Status

Mr. Malberg presented the Elk Grove Water District Fiscal Year 2016-17 Quarterly Capital Reserve Status to the Board. In summary, the total amount available reserves at July 1, 2016 was $11,295,772. Based on Board policy adopted circa August 22, 2012, the reserves are allocated first to the Operating Reserve (120 days of expenses), then to the Fiscal Year 2016-17 capital budget, followed by elections/special studies, with the balance allocated to future capital improvements and capital replacements in the ratio of 75:25, respectively. During the first quarter of FY 2016-17, the District utilized $203,443 for capital projects leaving a remaining total reserve balance at September 30, 2016 of $11,092,329.

12. General Manager's Report

Mr. Madison presented the General Manager's Report to the Board. He reviewed the lists of FRCD activities and EGWD activities.

13. RRWTF Tanks and Vessels Recoating Project Contract

Bruce Kamilos, Assistant General Manager, presented the RRWTF Tanks and Vessels Recoating Project Contract to the Board. In summary, the RRWTF Tanks and Vessels Recoating project externally recoats the two 2 million-gallon storage tanks, the backwash tank, and six filter vessels at the Railroad Water Treatment Facility. The project was laid out for bid and EGWD received and opened seven (7) bids. The lowest bidder was River City Painting. River City Painting then mailed EGWD two letters. One indicating that they had made a clerical error in their bid and were requesting that their bid be rejected. The second letter consisted of River City Painting specifying in detail that the clerical error consisted of two transposed numbers on their bid sheet.

There was a brief discussion between staff and the Board members with questions and answers.

MSC (Dawson/Nelson) to approve a motion rejecting the low bid received from River City Painting for the recoating of the storage tanks and filter vessels at the Railroad Water Treatment Facility (RRWTF), and authorizing the General Manager to award and execute the attached construction contract to the next low bidder, Cal Sierra Construction, in the amount $168,200 for this project 3/0: Ayes: Dawson, Gray, and Nelson.

14. Directors Comments and Information

The board agreed to adjourn to the regular board meeting on December 14, 2016.

The board agreed to schedule the Strategic Planning session after the first of the year.

Director Gray stated he would recommend a 3% rate increase versus a 3.5% rate increase come January 1, 2017. A discussion occurred regarding the affects it would propose to the District. Staff recommended to return this item to the board at the regular board meeting on December 14, 2016.

The EGWD Holiday luncheon is scheduled for Friday, December 9, 2016 at the Elk Grove Water District Water Treatment & Storage Facility (MOC Building).

Sophia Scherman thanked staff for fixing the gate at Well 6.

Adjourn to Regular Meeting on December 14, 2016.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Board Secretary

SP/CR

Consent Calendar
Item # b

Florin Resource Conservation District

FRCD Cash Flow
For the Month Ended October 31, 2016

Cash in Bank – Beginning	**$ 88,681.25**
Receipts:	**$ 35.89**
Interest Earned	
Disbursements:	
Check # 1001-Best Best & Kierger	**-$ 338.00**
Check # 1002-ACWA/JPIA Property/General Liability	**-$ 2,861.60**
Check # 1003-EGWD Reimbursement of General Manager's time	**-$ 2,217.76**
Check # 1004-EGWD Reimbursement of General Manager's time	**-$ 2,217.76**
Cash in Bank – Ending	**$ 81,082.02**

9257 Elk Grove Blvd. Elk Grove, CA 95624 (916) 685-3556 Fax (916) 685-5376

Consent Calendar
Item # C

Florin Resource Conservation District

FRCD Cash Flow
For the Month Ended Nov 30, 2016

Cash in Bank – Beginning	**$ 81,082.02**
Receipts:	
Interest Earned	
Disbursements:	
Check # 1005-Elk Grove Water District GM 10% Salary	**-$ 2,217.76**
Cash in Bank – Ending	**$ 78,864.26**

9257 Elk Grove Blvd. Elk Grove, CA 95624 (916) 685-3556 Fax (916) 685-5376

Check History Report

10/1/2016 to 10/31/2016
Elk Grove Water District

Check Number	Check Date	Vendor Number	Name	Check	Explanation
043000	10/13/2016	A. TEIC	A. TEICHERT & SON, INC	141.48	
043001	10/13/2016	A. TEIC	A. TEICHERT & SON, INC	144.22	
043002	10/13/2016	A. TEIC	A. TEICHERT & SON, INC	142.85	
043003	10/13/2016	A. TEIC	A. TEICHERT & SON, INC	83.19	
043004	10/13/2016	A. TEIC	A. TEICHERT & SON, INC	74.27	
043005	10/13/2016	ACWAJPI	CB&T/ ACWA-JPIA	54,134.99	
043006	10/13/2016	ARC	ARC	84.32	
043007	10/13/2016	B WAGNE	BRANDON WAGNER	86.37	Clothing Reimbursement
043008	10/13/2016	BEST	BEST, BEST & KRIEGER	4,279.19	Legal
043009	10/13/2016	BEST	BEST, BEST & KRIEGER	4,134.68	Legal
043010	10/13/2016	BG SOLU	SOLUTIONS BY BG INC.	5,000.92	Daily Tasks/Help Tickets
043011	10/13/2016	BSK4	BSK ASSOCIATES	840.00	Sampling-Treatment
043012	10/13/2016	BSK4	BSK ASSOCIATES	85.00	Sampling-Treatment
043013	10/13/2016	BSK4	BSK ASSOCIATES	56.00	Sampling-Treatment
043014	10/13/2016	BSK4	BSK ASSOCIATES	120.00	Sampling-Treatment
043015	10/13/2016	BSK4	BSK ASSOCIATES	120.00	Sampling-Treatment
043016	10/13/2016	BSK4	BSK ASSOCIATES	12.00	Sampling-Treatment
043017	10/13/2016	BSK4	BSK ASSOCIATES	120.00	Sampling-Treatment
043018	10/13/2016	BSK4	BSK ASSOCIATES	120.00	Sampling-Treatment
043019	10/13/2016	CAP AIR	CAPITAL AIR TOOL, LLC.	234.12	
043020	10/13/2016	CAP RUB	CAPITAL RUBBER	543.98	Materials/Supplies-Distribution
043021	10/13/2016	CONSOLI	CONSOLIDATED	237.44	Ethernet Service
043022	10/13/2016	CONSOLI	CONSOLIDATED	1,252.47	Phones-MOC/ADMIN
043023	10/13/2016	COUNTY4	SACRAMENTO COUNTY	30.09	
043024	10/13/2016	CRWA	CALIFORNIA RURAL WATER	1,146.00	
043025	10/13/2016	DATAPRO	DATAPROSE LLC	6,672.66	Monthly Billing
043026	10/13/2016	EDWARD	EDWARD R. BACON COMPANY,	48.96	
043027	10/13/2016	EFFECT	EFFECTIVE PHONE SOLUTIONS	1,303.83	Disaster Recovery
043028	10/13/2016	FASTENA	FASTENAL COMPANY	23.67	
043029	10/13/2016	FREDER	DAVID FREDERICK	214.99	Clothing Reimbursement
043030	10/13/2016	HALING	CINDY HALING	240.00	
043031	10/13/2016	HANFORD	HANDFORD SAND & GRAVEL,	436.47	
043032	10/13/2016	HOPKINS	HOPKINS TECHNICAL	346.04	
043033	10/13/2016	JAN PRO	JAN-PRO CLEANING SYSTEMS	245.00	Janitorial
043034	10/13/2016	JAN PRO	JAN-PRO CLEANING SYSTEMS	270.00	Janitorial
043035	10/13/2016	JAYS	JAY'S TRUCKING SERVICE	6,053.49	Materials/Supplies-Business Center/CSD
043036	10/13/2016	JAYS	JAY'S TRUCKING SERVICE	1,418.59	Materials/Supplies-Business Center/CSD
043037	10/13/2016	JPIA	ACWA/JOINT POWERS	54,370.40	
043038	10/13/2016	NTS	NTS MIKEDON. LLC	35.00	

043039	10/13/2016	NTS	NTS MIKEDON. LLC	220.50	
043040	10/13/2016	NTS	NTS MIKEDON. LLC	529.20	Materials/Supplies-Business Center/CSD
043041	10/13/2016	NTU	NTU TECHNOLOGIES, INC	1,080.00	Pro Pac 9600-Supplies for Treatment
043042	10/13/2016	OREILLY	O'REILLY AUTO PARTS	146.31	
043043	10/13/2016	OREILLY	O'REILLY AUTO PARTS	20.48	
043044	10/13/2016	PACE	PACE SUPPLY CORP	682.67	Materials/Supplies-Business Center/CSD
043045	10/13/2016	PACE	PACE SUPPLY CORP	796.98	Materials/Supplies-Distribution
043046	10/13/2016	PACE	PACE SUPPLY CORP	264.60	
043047	10/13/2016	PACE	PACE SUPPLY CORP	2,253.29	Materials/Supplies-Distribution
043048	10/13/2016	PACE	PACE SUPPLY CORP	321.75	
043049	10/13/2016	PAPE'	PAPE'S MATERIAL HANDLING.	156.60	
043050	10/13/2016	PAPE'	PAPE'S MATERIAL HANDLING.	922.03	Maintenance-Bobcat
043051	10/13/2016	PEST	PEST CONTROL CENTER INC	80.00	
043052	10/13/2016	PLATT2	PLATT	26.13	
043053	10/13/2016	RADIAL	RADIAL TIRE OF ELK GROVE	638.67	Maintenance-Truck #417
043054	10/13/2016	RADIAL	RADIAL TIRE OF ELK GROVE	226.47	
043055	10/13/2016	RADIAL	RADIAL TIRE OF ELK GROVE	284.17	
043056	10/13/2016	RCB DO	CARD SERVICE CENTER	997.98	Materials/Supplies-ADMIN
043057	10/13/2016	RCB MM	CARD SERVICE CENTER	1,139.83	Flights (ACWA), contracted services, meals
043058	10/13/2016	RCB SH	CARD SERVICE CENTER	263.75	Materials/Supplies-Treatment
043059	10/13/2016	RCB SP	CARD SERVICE CENTER	1,441.54	Training, Employee appreciation, Health exam, Advertising
043060	10/13/2016	REED GR	REED & GRAHAM, INC	403.62	
043061	10/13/2016	REPUBLI	REPUBLIC SERVICES #922	876.33	
043062	10/13/2016	ROOCO	ROOCO RENTS	835.55	Materials/Supplies-Distribution
043063	10/13/2016	ROTH	ROTH STAFFING COMPANIES,	908.89	Temporary Customer Service Help
043064	10/13/2016	SAC TAX	SACRAMENTO COUNTY DEPT	124.22	
043065	10/13/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	
043066	10/13/2016	SIERRA	SIERRA OFFICE SUPPLIES	11.87	
043067	10/13/2016	SIERRA	SIERRA OFFICE SUPPLIES	154.88	
043068	10/13/2016	SMUD	SMUD	891.51	
043069	10/13/2016	SMUD	SMUD	1,947.56	
043070	10/13/2016	SMUD	SMUD	6,149.24	
043071	10/13/2016	SMUD	SMUD	240.06	
043072	10/13/2016	SMUD	SMUD	17,949.86	
043073	10/13/2016	SMUD	SMUD	783.19	
043074	10/13/2016	SMUD	SMUD	5,000.29	
043075	10/13/2016	SMUD	SMUD	506.76	
043076	10/13/2016	SMUD	SMUD	1,454.08	
043077	10/13/2016	TEMPLE	TEMPLE ASSOCIATES	232.75	
043078	10/13/2016	TOSHIBA	TOSHIBA FINANCIAL SERVICES	528.93	Copier-ADMIN
043079	10/13/2016	TRAFF S	TRAFFIC SIGN SPECIALTIES	32.40	
043080	10/13/2016	ULTRA	ULTRA TRUCK WORKS, INC	124.04	
043081	10/13/2016	UNITED	UNITED SITE SERVICES	262.85	
043082	10/13/2016	VANCE	JOHN VANCE	473.60	Prudential Reimbursement
043083	10/13/2016	VERIZON	VERIZON WIRELESS	413.20	
043084	10/13/2016	WATKINS	ERICK WATKINS	4,750.00	Safety Consultant
043085	10/19/2016	AFLAC	AFLAC	1,511.99	
043086	10/19/2016	BACK PR	BACKFLOW PREVENTION	2,340.00	Backflow protection on fire services
043087	10/19/2016	BAY ALA	BAY ALARM COMPANY	95.00	
043088	10/19/2016	BRINKS	BRINK'S INCORPORATED	274.99	

043089	10/19/2016	BSK4	BSK ASSOCIATES	115.00	
043090	10/19/2016	CAP AIR	CAPITAL AIR TOOL, LLC.	407.63	
043091	10/19/2016	CCPPM	CCPPM	44.16	
043092	10/19/2016	CFFNT	FIDELITY NATIONAL TITLE	55.23	Account Closed-Credit Refund
043093	10/19/2016	COUNTY3	COUNTY OF SACRAMENTO	66.70	
043094	10/19/2016	CRAP	AN PHAM	15.99	Account Closed-Credit Refund
043095	10/19/2016	CRBJT	BARBARA JO THURMAN	24.26	Account Closed-Credit Refund
043096	10/19/2016	CRCHIC	CHICAGO TITLE	9.60	Account Closed-Credit Refund
043097	10/19/2016	CRCJ	CARLA JUAREZ	6.46	Account Closed-Credit Refund
043098	10/19/2016	CRCM	CONNIE MERKINS	26.35	Account Closed-Credit Refund
043099	10/19/2016	CRCN	CATHREEN NAIDU	3.96	Account Closed-Credit Refund
043100	10/19/2016	CRDK	DONNA KENFIELD	23.77	Account Closed-Credit Refund
043101	10/19/2016	CRF FN	FIDELITY NATIONAL TITLE	44.76	Account Closed-Credit Refund
043102	10/19/2016	CRF FT	FIRST AMERICAN TITLE	10.55	Account Closed-Credit Refund
043103	10/19/2016	CRF MLC	MICHAEL & LAURIE CRAIN	1.31	Account Closed-Credit Refund
043104	10/19/2016	CRF NE	NEXT GENERATION CAPITAL	216.61	Account Closed-Credit Refund
043105	10/19/2016	CRF NT	NORTH AMERICAN TITLE	69.05	Account Closed-Credit Refund
043106	10/19/2016	CRF OC	OLD REPUBLIC TITLE COMPANY	20.87	Account Closed-Credit Refund
043107	10/19/2016	CRF RGR	RICHARD GAUSE REVOCABLE	89.48	Account Closed-Credit Refund
043108	10/19/2016	CRFCO	CHRIS OSTRANDER	4.34	Account Closed-Credit Refund
043109	10/19/2016	CRFF	FIDELITY NATIONAL TITLE	78.55	Account Closed-Credit Refund
043110	10/19/2016	CRFFNTO	FIDELITY NATIONAL TITLE CO	4.11	Account Closed-Credit Refund
043111	10/19/2016	CRFH	FRANK HOMEN	2.65	Account Closed-Credit Refund
043112	10/19/2016	CRFIDT	FIDELITY NATIONAL TITLE	381.03	Account Closed-Credit Refund
043113	10/19/2016	CRFSEC	SELECT PROPERTY	62.84	Account Closed-Credit Refund
043114	10/19/2016	CRGA	GARY ALMOND	183.42	Account Closed-Credit Refund
043115	10/19/2016	CRJS	JACK SPEARMAN	106.26	Account Closed-Credit Refund
043116	10/19/2016	CRPLAC	PLACER TITLE	14.00	Account Closed-Credit Refund
043117	10/19/2016	CRSM	SANDRA MARGULLIS	8.45	Account Closed-Credit Refund
043118	10/19/2016	CRSY	SANDRA YOUNGEN	102.80	Account Closed-Credit Refund
043119	10/19/2016	DOWNEY	DOWNEY BRAND, LLP	38.00	
043120	10/19/2016	EFFECT	EFFECTIVE PHONE SOLUTIONS	1,303.83	Disaster Recovery
043121	10/19/2016	EG FORD	ELK GROVE FORD	94.00	
043122	10/19/2016	EG FORD	ELK GROVE FORD	94.00	
043123	10/19/2016	EG FORD	ELK GROVE FORD	94.00	
043124	10/19/2016	ESRI	ESRI	26,998.00	ARC GIS-Year 1 of 3
043125	10/19/2016	FASTENA	FASTENAL COMPANY	3.76	
043126	10/19/2016	FASTENA	FASTENAL COMPANY	52.59	
043127	10/19/2016	GOLDEN	GOLDEN STATE FLOW	25,405.53	(2) invoices-Materials/Supplies-Distribution
043128	10/19/2016	HANFORD	HANDFORD SAND & GRAVEL,	179.55	
043129	10/19/2016	HERBURG	HERBURGER PUBLICATIONS,	590.00	Advertising-Associate Civil Engineer
043130	10/19/2016	INLAND	INLAND BUSINESS SYSTEMS	984.09	Copier-MOC
043131	10/19/2016	INT STA	INTERSTATE OIL COMPANY	1,081.88	Fuel
043132	10/19/2016	INT STA	INTERSTATE OIL COMPANY	1,358.23	Fuel
043133	10/19/2016	JOBS	JOBS AVAILABLE	45.00	
043134	10/19/2016	NTS	NTS MIKEDON. LLC	34.06	
043135	10/19/2016	PACE	PACE SUPPLY CORP	247.95	
043136	10/19/2016	PACE	PACE SUPPLY CORP	205.61	
043137	10/19/2016	PACE	PACE SUPPLY CORP	839.96	Materials/Supplies-RR Corridor
043138	10/19/2016	PACE	PACE SUPPLY CORP	863.82	Materials/Supplies-RR Corridor
043139	10/19/2016	PACE	PACE SUPPLY CORP	132.94	

043140	10/19/2016	PACE	PACE SUPPLY CORP	453.50	Materials/Supplies-RR Corridor
043141	10/19/2016	PACE	PACE SUPPLY CORP	530.88	Materials/Supplies-RR Corridor
043142	10/19/2016	PEST	PEST CONTROL CENTER INC	80.00	
043143	10/19/2016	PG&E	PACIFIC GAS & ELECTRIC	4.20	
043144	10/19/2016	PIT 4	PURCHASE POWER	520.99	Postage-ADMIN
043145	10/19/2016	PLACER	RIVER CITY RENTALS	271.26	
043146	10/19/2016	RADIAL	RADIAL TIRE OF ELK GROVE	278.29	
043147	10/19/2016	RADIAL	RADIAL TIRE OF ELK GROVE	101.50	
043148	10/19/2016	RADIAL	RADIAL TIRE OF ELK GROVE	260.41	
043149	10/19/2016	RCB RS	CARD SERVICE CENTER	815.83	Materials/Supplies-Utility Crew
043150	10/19/2016	RCBJC	CARD SERVICE CENTER	370.04	Materials/Supplies-Distribution
043151	10/19/2016	ROOCO	ROOCO RENTS	38.56	
043152	10/19/2016	ROOCO	ROOCO RENTS	237.66	
043153	10/19/2016	ROOCO	ROOCO RENTS	35.64	
043154	10/19/2016	ROTH	ROTH STAFFING COMPANIES,	1,149.96	Temporary Customer Service Help
043155	10/19/2016	ROTH	ROTH STAFFING COMPANIES,	897.12	Temporary Customer Service Help
043156	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Elk way
043157	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-1st Ave
043158	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	11.92	Annual Property Taxes-9076 Locust Street
043159	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Emerald Oak Drive
043160	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Ranch Park Way
043161	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Dino Drive
043162	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Webb Street
043163	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Webb Street
043164	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-9257 Elk Grove Blvd
043165	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-9721 Railroad Street
043166	10/19/2016	SAC TAX	SACRAMENTO COUNTY DEPT	100.00	Annual Property Taxes-Elk Grove Florin
043167	10/19/2016	SIERRA	SIERRA OFFICE SUPPLIES	283.91	
043168	10/19/2016	SIERRA	SIERRA OFFICE SUPPLIES	355.60	
043169	10/19/2016	SIERRA	SIERRA OFFICE SUPPLIES	141.07	
043170	10/19/2016	TEAMVIE	TEAMVIEWER GmbH	499.00	
043171	10/26/2016	AWWA	AMERICAN WATER WORKS	255.00	2016-Membership-Aaron Hewitt
043172	10/26/2016	AWWA	AMERICAN WATER WORKS	255.00	2016-Membership-Bruce Kamilos
043173	10/26/2016	AWWA	AMERICAN WATER WORKS	255.00	2016- Membership-Mark J. Madison
043174	10/26/2016	AWWA	AMERICAN WATER WORKS	255.00	2016-Membership-Sarah Jones
043175	10/26/2016	AWWA	AMERICAN WATER WORKS	255.00	2016-Membership-Steve Shaw
043176	10/26/2016	BATTER	BATTERIES PLUS	23.22	
043177	10/26/2016	BG SOLU	SOLUTIONS BY BG INC.	5,044.53	Daily Tasks/Help Tickets
043178	10/26/2016	BSK4	BSK ASSOCIATES	795.00	Sampling-Treatment
043179	10/26/2016	BSK4	BSK ASSOCIATES	115.00	Sampling-Treatment
043180	10/26/2016	BSK4	BSK ASSOCIATES	164.00	Sampling-Treatment
043181	10/26/2016	C&T	C & T SPECIALTIES	81.43	
043182	10/26/2016	CAP RUB	CAPITAL RUBBER	140.51	
043183	10/26/2016	CDW	CDW GOVERNMENT	419.00	Printer-ADMIN
043184	10/26/2016	CDW	CDW GOVERNMENT	419.49	Monitors-OPS/ADMIN
043185	10/26/2016	COUNTY4	SACRAMENTO COUNTY	109.71	
043186	10/26/2016	CRF NRH	NATHAN & RANDY HOGGE	2,545.46	Audit on customers account-Credit Refund
043187	10/26/2016	CSDS	CSDS SACRAMENTO	91.74	

043188	10/26/2016	DWYER	DYWER INSTRUMENTS, INC	766.64	Digital pressure gauge for booster #4
043189	10/26/2016	ELK LOC	ELK GROVE LOCK AND SAFE	6.03	
043190	10/26/2016	ELK LOC	ELK GROVE LOCK AND SAFE	376.70	
043191	10/26/2016	FED EX	FEDERAL EXPRESS	41.45	
043192	10/26/2016	FRONT C	FRONTIER COMMUNICATIONS	221.38	Well site communications-Alarm and Security
043193	10/26/2016	FRONT C	FRONTIER COMMUNICATIONS	169.36	Well site communications-Alarm and Security
043194	10/26/2016	FRONT C	FRONTIER COMMUNICATIONS	174.74	Well site communications-Alarm and Security
043195	10/26/2016	GRAINGE	GRAINGER	227.57	
043196	10/26/2016	INT STA	INTERSTATE OIL COMPANY	1,735.12	Fuel-Oct 1 through Oct 15
043197	10/26/2016	JAYS	JAY'S TRUCKING SERVICE	190.00	
043198	10/26/2016	JAYS	JAY'S TRUCKING SERVICE	1,094.29	Materials/Supplies-Distribution
043199	10/26/2016	MONTIEL	MICHAEL MONTIEL	54.46	Clothing Reimbursement
043200	10/26/2016	NEWEGG	NEWEGG BUSINESS, INC	20.93	
043201	10/26/2016	NEWEGG	NEWEGG BUSINESS, INC	115.82	
043202	10/26/2016	NEWEGG	NEWEGG BUSINESS, INC	22.09	
043203	10/26/2016	NEWEGG	NEWEGG BUSINESS, INC	66.28	
043204	10/26/2016	NTS	NTS MIKEDON. LLC	173.25	
043205	10/26/2016	PACE	PACE SUPPLY CORP	571.54	Materials/Supplies-Distribution
043206	10/26/2016	PACE	PACE SUPPLY CORP	129.83	
043207	10/26/2016	RADIAL	RADIAL TIRE OF ELK GROVE	218.18	Repairs and Maintenance-Truck #401
043208	10/26/2016	ROTH	ROTH STAFFING COMPANIES,	879.81	Temporary Customer Service Help
043209	10/26/2016	SEN 2	SENSUS USA	1,736.78	Auto read annual renewal
043210	10/26/2016	SIERRA	SIERRA OFFICE SUPPLIES	12.96	
043211	10/26/2016	SIERRA	SIERRA OFFICE SUPPLIES	798.66	
043212	10/26/2016	SIERRA	SIERRA OFFICE SUPPLIES	395.39	
043213	10/26/2016	SIERRA	SIERRA OFFICE SUPPLIES	122.83	
043214	10/26/2016	UNITED	UNITED SITE SERVICES	262.85	
043215	10/26/2016	WHITE	HDS WHITE CAP CONST	40.29	
043216	10/26/2016	WIL	WILFREDO QUINTERO	317.11	Clothing Reimbursement
043217	10/26/2016	WILL SC	WILLIAM SCOTSMAN, INC.	205.28	
043218	10/26/2016	WILL SC	WILLIAM SCOTSMAN, INC.	174.07	
043219	10/26/2016	ZOOM	ZOOM IMAGING SOLUTIONS,	230.11	
043220	10/27/2016	CFFNT	FIDELITY NATIONAL TITLE	3.78	Account Closed-Credit Refund
043221	10/27/2016	CFNT	FIDELITY NATIONAL TITLE	178.96	Account Closed-Credit Refund
043222	10/27/2016	CR FT	FIDELITY NATIONAL TITLE	49.89	Account Closed-Credit Refund
043223	10/27/2016	CR TSQ	THACH NGUYEN & SYDNE	6.27	Account Closed-Credit Refund
043224	10/27/2016	CRCC	CHRISTINE CHASE	68.76	Account Closed-Credit Refund
043225	10/27/2016	CRCHI	CHICAGO TITLE CO	175.22	Account Closed-Credit Refund
043226	10/27/2016	CRDBG	DOUGLAS & BARBARA GRANT	253.74	Account Closed-Credit Refund
043227	10/27/2016	CRF ASB	AARON & SHAWNA BLANDFORD	16.97	Account Closed-Credit Refund
043228	10/27/2016	CRF BER	BETTY RHOADES	42.45	Account Closed-Credit Refund
043229	10/27/2016	CRF DEJ	DENNIS JONES	24.67	Account Closed-Credit Refund
043230	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	17.98	Account Closed-Credit Refund
043231	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	118.05	Account Closed-Credit Refund
043232	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	17.37	Account Closed-Credit Refund
043233	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	119.81	Account Closed-Credit Refund
043234	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	283.37	Account Closed-Credit Refund
043235	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	123.52	Account Closed-Credit Refund
043236	10/27/2016	CRF FN	FIDELITY NATIONAL TITLE	6.23	Account Closed-Credit Refund
043237	10/27/2016	CRF FWE	FRANK WEBER	66.65	Account Closed-Credit Refund

043238	10/27/2016	CRF GH	GARY HUIZAR	104.28	Account Closed-Credit Refund
043239	10/27/2016	CRF JDH	JENNIFER DONG & HIEP	1.55	Account Closed-Credit Refund
043240	10/27/2016	CRF RCR	RACHEL CRANE	69.65	Account Closed-Credit Refund
043241	10/27/2016	CRF RCU	RENEE CUNHA	6.54	Account Closed-Credit Refund
043242	10/27/2016	CRF RFK	RICHARD FAGAN & KATHLEEN	22.85	Account Closed-Credit Refund
043243	10/27/2016	CRFANR	ANTHONY ROMANO	96.88	Account Closed-Credit Refund
043244	10/27/2016	CRFFTC	FIRST AMERICAN TITLE	3.56	Account Closed-Credit Refund
043245	10/27/2016	CRJAR	JANEEN RICH	127.75	Account Closed-Credit Refund
043246	10/27/2016	SOUTH	SOUTH GRADING INC	1,592.49	Account Closed-Credit Refund
043247	10/27/2016	W SADLE	WILLIAM SADLER	70.00	Certification renewal reimbursement
043248	10/31/2016	SAC SHE	SACRAMENTO COUNTY	2,296.21	Employee garnishment final payment
043249	10/31/2016	ATT&T	AT&T MOBILITY	313.40	
043250	10/31/2016	ATT&T	AT&T MOBILITY	311.73	
043251	10/31/2016	BAY ALA	BAY ALARM COMPANY	664.45	
043252	10/31/2016	BSK4	BSK ASSOCIATES	85.00	Sampling-Treatment
043253	10/31/2016	BSK4	BSK ASSOCIATES	85.00	Sampling-Treatment
043254	10/31/2016	BSK4	BSK ASSOCIATES	85.00	Sampling-Treatment
043255	10/31/2016	BSK4	BSK ASSOCIATES	85.00	Sampling-Treatment
043256	10/31/2016	COUNTY4	SACRAMENTO COUNTY	109.70	
043257	10/31/2016	COUNTY5	COUNTY OF SACRAMENTO	2,400.00	WEBGIS-Annual renewal
043258	10/31/2016	CPS	COOPERATIVE PERSONNAL	375.50	
043259	10/31/2016	CR QLS	QUALITY LOAN SERVICE	270.10	Account Closed-Credit Refund
043260	10/31/2016	DITCH	DITCH WITCH EQUIPMENT CO.,	741.53	Repairs-Ditch witch
043261	10/31/2016	EG FORD	ELK GROVE FORD	94.00	
043262	10/31/2016	EG FORD	ELK GROVE FORD	94.00	
043263	10/31/2016	EG FORD	ELK GROVE FORD	7,182.38	Repairs-Truck #417
043264	10/31/2016	EG FORD	ELK GROVE FORD	635.68	Repairs-Truck #407
043265	10/31/2016	FASTENA	FASTENAL COMPANY	22.87	
043266	10/31/2016	HALING	CINDY HALING	180.00	
043267	10/31/2016	PACE	PACE SUPPLY CORP	18.16	
043268	10/31/2016	PACE	PACE SUPPLY CORP	1,799.28	Materials/Supplies-Distribution
043269	10/31/2016	PIRTEK	PIRTEK POWER INN	238.33	
043270	10/31/2016	POWER S	POWER SERVICES, INC	4,750.00	Maintenance-Railroad Treatment Facility
043271	10/31/2016	ROTH	ROTH STAFFING COMPANIES,	891.58	Temporary Customer Service Help
043272	10/31/2016	SAC 5	SACRAMENTO COUNTY	19.00	Release of Lien
043273	10/31/2016	SAC 5	SACRAMENTO COUNTY	19.00	Release of Lien
043274	10/31/2016	SAC 5	SACRAMENTO COUNTY	19.00	Release of Lien
043275	10/31/2016	SAC 5	SACRAMENTO COUNTY	19.00	Release of Lien
043276	10/31/2016	SIERR C	SIERRA CHEMICAL COMPANY	111.10	
043277	10/31/2016	SIERRA	SIERRA OFFICE SUPPLIES	6.47	
043278	10/31/2016	SWRCB	SWRCB	4,541.51	Large System Fees from 7/01/2015-06/30/2016
043279	10/31/2016	WATKINS	ERICK WATKINS	3,250.00	Safety Consultant
043280	10/31/2016	WWTS	WAYNE'S WATER TRUCK	75.00	VOID
043280	10/31/2016	WWTS	WAYNE'S WATER TRUCK	75.00-	
			Total:	**336,116.73**	

Check History Report

Activity From: 11/1/2016 to 11/30/2016
Elk Grove Water District

Check Number	Check Date	Vendor Number	Name	Check Amount	Explanation
043281	11/9/2016	ALAN AR	ALAN ARAGON	36.22	Clothing Reimbursement
043282	11/9/2016	ARC	ARC	10.80	
043283	11/9/2016	ARC	ARC	11.16	
043284	11/9/2016	BAY ALA	BAY ALARM COMPANY	36.75	
043285	11/9/2016	BEST	BEST, BEST & KRIEGER	8,242.68	Legal-October
043286	11/9/2016	BG SOLU	SOLUTIONS BY BG INC.	5,000.92	Daily Tasks/Help Tickets
043287	11/9/2016	BSK4	BSK ASSOCIATES	85.00	
043288	11/9/2016	BSK4	BSK ASSOCIATES	85.00	
043289	11/9/2016	BSK4	BSK ASSOCIATES	85.00	
043290	11/9/2016	CAP AIR	CAPITAL AIR TOOL, LLC.	331.89	
043291	11/9/2016	CITY EG	CITY OF ELK GROVE	77.85	
043292	11/9/2016	COEG	CITY OF ELK GROVE	958.82	Inspection fees
043293	11/9/2016	COEG	CITY OF ELK GROVE	4,095.70	Inspection fees
043294	11/9/2016	CONSOLI	CONSOLIDATED	237.44	Ethernet Service
043295	11/9/2016	CONSOLI	CONSOLIDATED	1,251.58	Phones-MOC/ADMIN
043296	11/9/2016	COUNTY3	COUNTY OF SACRAMENTO	186.20	
043297	11/9/2016	CSDA	CALIF SPECIAL DISTRICTS	6,485.00	2017-Member Dues
043298	11/9/2016	DATAPRO	DATAPROSE LLC	6,678.97	Monthly Billing
043299	11/9/2016	DITCH	DITCH WITCH EQUIPMENT CO.,	266.28	
043300	11/9/2016	EGCOC	ELK GROVE CHAMBER OF	700.00	Membership Dues
043301	11/9/2016	FASTENA	FASTENAL COMPANY	19.43	
043302	11/9/2016	HANFORD	HANDFORD SAND & GRAVEL,	423.45	
043303	11/9/2016	INT STA	INTERSTATE OIL COMPANY	1,458.57	Fuel
043304	11/9/2016	JAN PRO	JAN-PRO CLEANING SYSTEMS	245.00	
043305	11/9/2016	JAN PRO	JAN-PRO CLEANING SYSTEMS	270.00	
043306	11/9/2016	JAYS	JAY'S TRUCKING SERVICE	2,013.54	Materials/Supplies-OPS
043307	11/9/2016	JOE'S	JOE'S WORK WEAR	1,119.47	Clothing-OPS
043308	11/9/2016	OREILLY	O'REILLY AUTO PARTS	15.10	
043309	11/9/2016	OREILLY	O'REILLY AUTO PARTS	8.63	
043310	11/9/2016	PAC EXC	PACIFIC EXCAVATION INC	1,182.80	Water Permit Refund
043311	11/9/2016	PACE	PACE SUPPLY CORP	1,164.32	Materials/Supplies-Bullheads
043312	11/9/2016	PACE	PACE SUPPLY CORP	651.87	Materials/Supplies-Distribution
043313	11/9/2016	PACE	PACE SUPPLY CORP	407.48	
043314	11/9/2016	PACE	PACE SUPPLY CORP	555.66	Materials/Supplies-Bullheads
043315	11/9/2016	PACE	PACE SUPPLY CORP	1,778.11	Materials/Supplies-Distribution
043316	11/9/2016	PEST	PEST CONTROL CENTER INC	80.00	
043317	11/9/2016	PEST	PEST CONTROL CENTER INC	80.00	
043318	11/9/2016	RADIAL	RADIAL TIRE OF ELK GROVE	134.90	Meals, Parking

043319	11/9/2016	RCB BK	CARD SERVICE CENTER	25.00	Bank Fees
043320	11/9/2016	RCB MM	CARD SERVICE CENTER	176.05	
043321	11/9/2016	RCB SP	CARD SERVICE CENTER	608.74	Airfare, Employee Appreciation, Meals
043322	11/9/2016	RCB SS	CARD SERVICE CENTER	1,348.50	Materials/Supplies-Treatment
043323	11/9/2016	RDO 1	RDO TRUST # 80-5800	706.90	Materials/Supplies-Vermeer Vactor
043324	11/9/2016	REPUBLI	REPUBLIC SERVICES #922	878.42	
043325	11/9/2016	SIERRA	SIERRA OFFICE SUPPLIES	675.97	
043326	11/9/2016	SMUD	SMUD	826.93	
043327	11/9/2016	SMUD	SMUD	5,425.58	
043328	11/9/2016	SMUD	SMUD	3,283.84	
043329	11/9/2016	SMUD	SMUD	246.45	
043330	11/9/2016	SMUD	SMUD	8,029.00	
043331	11/9/2016	SMUD	SMUD	747.11	
043332	11/9/2016	SMUD	SMUD	4,306.09	
043333	11/9/2016	SMUD	SMUD	511.98	
043334	11/9/2016	SMUD	SMUD	3,027.58	
043335	11/9/2016	SUMMIT	AIR WORKS INC	121.00	
043336	11/9/2016	SYSTEM	SYSTEM PAVERS	4,300.00	Pavers for Community Garden
043337	11/9/2016	TEICH3	TEICHERT CONSTRUCTION	362.74	
043338	11/9/2016	TERRACA	TERRACARE ASSOCIATES	3,500.00	CSD Water line State Farms Lawn
043339	11/9/2016	TOSHIBA	TOSHIBA FINANCIAL SERVICES	528.93	
043340	11/9/2016	ULTRA	ULTRA TRUCK WORKS, INC	143.00	
043341	11/9/2016	VERIZON	VERIZON WIRELESS	416.22	
043342	11/9/2016	WILL SC	WILLIAM SCOTSMAN, INC.	205.28	
043343	11/17/2016	RCB BK	CARD SERVICE CENTER	287.68	Airfare, meals
043344	11/17/2016	RCB SS	CARD SERVICE CENTER	401.31	Materials, Supplies-Treatment
043345	11/17/2016	RCBJC	CARD SERVICE CENTER	1,509.20	Materials, Supplies-Distribution
043346	11/22/2016	A. TEIC	A. TEICHERT & SON, INC	515.28	Materials/Supplies-Distribution
043347	11/22/2016	ACWAJPI	CB&T/ ACWA-JPIA	56,498.97	
043348	11/22/2016	BG SOLU	SOLUTIONS BY BG INC.	5,000.90	Daily Tasks/Help Tickets
043349	11/22/2016	BRINKS	BRINK'S INCORPORATED	274.99	
043350	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043351	11/22/2016	BSK4	BSK ASSOCIATES	120.00	
043352	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043353	11/22/2016	BSK4	BSK ASSOCIATES	120.00	
043354	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043355	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043356	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043357	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043358	11/22/2016	BSK4	BSK ASSOCIATES	24.00	
043359	11/22/2016	BSK4	BSK ASSOCIATES	120.00	
043360	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043361	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043362	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043363	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043364	11/22/2016	BSK4	BSK ASSOCIATES	120.00	
043365	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043366	11/22/2016	BSK4	BSK ASSOCIATES	12.00	
043367	11/22/2016	CAP RUB	CAPITAL RUBBER	160.04	

043368	11/22/2016	DMV	DMV	4.00	
043369	11/22/2016	EG FORD	ELK GROVE FORD	1,188.75	Repairs & Maintenance-Truck #407
043370	11/22/2016	EGPOWER	ELK GROVE POWER EQUIPMENT	53.52	
043371	11/22/2016	EMPLOYE	EMPLOYEE BASED SYSTEMS	200.00	
043372	11/22/2016	GOLDEN	GOLDEN STATE FLOW	782.87	Materials/Supplies-Distribution
043373	11/22/2016	HOLT	HOLT OF CALIFORNIA	636.85	Repairs & Maintenance-Back Hoe
043374	11/22/2016	JOE'S	JOE'S WORK WEAR	83.35	
043375	11/22/2016	NTS	NTS MIKEDON. LLC	88.20	
043376	11/22/2016	PACE	PACE SUPPLY CORP	5,958.10	Materials/Supplies-Distribution
043377	11/22/2016	PACE	PACE SUPPLY CORP	1,089.89	Materials/Supplies-RR Corridor
043378	11/22/2016	PACE	PACE SUPPLY CORP	382.08	
043379	11/22/2016	PACE	PACE SUPPLY CORP	1,331.87	Materials/Supplies-RR Corridor
043380	11/22/2016	PAULA M	PAULA MAITA & COMPANY	501.26	Shirts-OPS
043381	11/22/2016	PG&E	PACIFIC GAS & ELECTRIC	11.22	
043382	11/22/2016	PIT 4	PURCHASE POWER	16.20	
043383	11/22/2016	PLACER	RIVER CITY RENTALS	600.00	Forklift Rental
043384	11/22/2016	ROTH	ROTH STAFFING COMPANIES,	1,076.22	Temporary Customer Service Help
043385	11/22/2016	ROTH	ROTH STAFFING COMPANIES,	888.46	Temporary Customer Service Help
043386	11/22/2016	SAC BEE	THE SACRAMENTO BEE	11,939.84	Advertising for Hampton and RRWTF
043387	11/22/2016	SIERR C	SIERRA CHEMICAL COMPANY	20.97	
043388	11/22/2016	SIERR C	SIERRA CHEMICAL COMPANY	672.70	Materials-RR Corridor
043389	11/22/2016	SIERRA	SIERRA OFFICE SUPPLIES	122.44	
043390	11/22/2016	SIERRA	SIERRA OFFICE SUPPLIES	91.79	
043391	11/22/2016	SUMMIT	AIR WORKS INC	181.50	
043392	11/22/2016	SWRCB2	SWRCB-DWOCP	60.00	
043393	11/22/2016	ULTRA	ULTRA TRUCK WORKS, INC	23.64	
043394	11/22/2016	UPHOLST	UPHOLSTERY TECH	354.80	
043395	11/22/2016	UPHOLST	UPHOLSTERY TECH	508.00	Repairs & Maintenance-Truck #409
043396	11/22/2016	UPHOLST	UPHOLSTERY TECH	662.00	Repairs & Maintenance-Truck #303
043397	11/22/2016	W RODRI	WAYNE RODRIQUES	195.00	
043398	11/22/2016	WILL SC	WILLIAM SCOTSMAN, INC.	174.07	
043399	11/22/2016	WILSON	MARCELL WILSON	810.29	Reimbursement of AFLAC Premiums
043400	11/23/2016	ACWA	ACWA	16,030.00	2017 Annual Agency Dues
043401	11/23/2016	BAY ALA	BAY ALARM COMPANY	229.45	
043402	11/23/2016	BSK4	BSK ASSOCIATES	115.00	
043403	11/23/2016	FASTENA	FASTENAL COMPANY	9.72	
043404	11/23/2016	FASTENA	FASTENAL COMPANY	44.99	
043405	11/23/2016	FASTENA	FASTENAL COMPANY	23.48	
043406	11/23/2016	FRONT C	FRONTIER COMMUNICATIONS	220.81	Well site communications-Alarm and Security
043407	11/23/2016	FRONT C	FRONTIER COMMUNICATIONS	169.00	Well site communications-Alarm and Security
043408	11/23/2016	FRONT C	FRONTIER COMMUNICATIONS	174.38	Well site communications-Alarm and Security
043409	11/23/2016	GOLDEN	GOLDEN STATE FLOW	129.60	
043410	11/23/2016	GRAINGE	GRAINGER	71.70	
043411	11/23/2016	HEWITT	Aaron Hewitt	79.81	
043412	11/23/2016	INT STA	INTERSTATE OIL COMPANY	1,507.51	Fuel
043413	11/23/2016	NTS	NTS MIKEDON. LLC	31.50	
043414	11/23/2016	PACE	PACE SUPPLY CORP	340.80	
043415	11/23/2016	PACE	PACE SUPPLY CORP	58.74	
043416	11/23/2016	PACE	PACE SUPPLY CORP	480.51	

043417	11/23/2016	PACE	PACE SUPPLY CORP	1,600.58	Materials/Supplies-Distribution
043418	11/23/2016	PACE	PACE SUPPLY CORP	189.00	
043419	11/23/2016	PACE	PACE SUPPLY CORP	124.64	
043420	11/23/2016	PACE	PACE SUPPLY CORP	145.16	
043421	11/23/2016	PETTY	PETTY CASH	282.00	
043422	11/23/2016	ROOCO	ROOCO RENTS	37.64	
043423	11/23/2016	SIERRA	SIERRA OFFICE SUPPLIES	20.79	
043424	11/23/2016	TRENCH	TRENCH PLATE RENTAL CO	81.00	
043425	11/23/2016	UNITED	UNITED SITE SERVICES	262.85	
043426	11/23/2016	WHITE	HDS WHITE CAP CONST SUPPLY	99.80	
043427	11/23/2016	ZOOM	ZOOM IMAGING SOLUTIONS, INC	374.38	
043428	11/30/2016	BG SOLU	SOLUTIONS BY BG INC.	5,000.90	Daily Tasks/Help Tickets
043429	11/30/2016	COEG	CITY OF ELK GROVE	2,000.00	Annual Encroachment Permit
043430	11/30/2016	COUNTY	COUNTY OF SACRAMENTO	446,385.60	Water Billings-June-July 2016
043431	11/30/2016	COUNTY	COUNTY OF SACRAMENTO	94,330.37	Water Billings-June-July 2016
043432	11/30/2016	COUNTY	COUNTY OF SACRAMENTO	475,751.51	Water Billings-Aug-Sept 2016
043433	11/30/2016	CPHILLI	CHRIS PHILLIPS	184.90	
043434	11/30/2016	CRF ARR	ARROW CONSTRUCTION	957.37	Water Permit Refund
043435	11/30/2016	EFFECT	EFFECTIVE PHONE SOLUTIONS	1,303.83	Disaster Recovery
043436	11/30/2016	EG FORD	ELK GROVE FORD	265.55	
043437	11/30/2016	ELK LOC	ELK GROVE LOCK AND SAFE CO	4.54	
043438	11/30/2016	GRAINGE	GRAINGER	530.89	Materials/Supplies-Treatment
043439	11/30/2016	HANFORD	HANDFORD SAND & GRAVEL,	309.42	
043440	11/30/2016	PACE	PACE SUPPLY CORP	173.58	
043441	11/30/2016	PACE	PACE SUPPLY CORP	185.72	
043442	11/30/2016	PAULA M	PAULA MAITA & COMPANY	601.29	Shirts/Sweatshirts-OPS
043443	11/30/2016	PG&E 3	PG&E	934.58	Water Permit Refund
043444	11/30/2016	ROTH	ROTH STAFFING COMPANIES,	900.24	Temporary Customer Service Help
043445	11/30/2016	ROTH	ROTH STAFFING COMPANIES,	897.12	Temporary Customer Service Help
043446	11/30/2016	SIERRA	SIERRA OFFICE SUPPLIES	229.94	
043447	11/30/2016	SIERRA	SIERRA OFFICE SUPPLIES	48.49	
043448	11/30/2016	SIERRA	SIERRA OFFICE SUPPLIES	433.57	
			Total:	**1,237,243.40**	

Elk Grove Water District
Active Account Information
10/31/2016

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	11,670	11,674	11,671	11,800								
Commercial	520	521	523	525								
Fire Service	174	174	175	175								
Total Accounts	12,364	12,369	12,369	12,500	-	-	-	-	-	-	-	-

Elk Grove Water District
Active Account Information
FY 2015/2016

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	11,669	11,658	11,647	11,637	11,643	11,656	11,649	11,632	11,654	11,666	11,659	11,665
Commercial	513	517	518	521	519	519	521	522	521	521	521	519
Fire Service	121	122	122	124	122	122	122	122	122	123	122	174
Total Accounts	12,303	12,297	12,287	12,282	12,284	12,297	12,292	12,276	12,297	12,310	12,302	12,358

Elk Grove Water District
Active Account Information
11/30/2016

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	11,670	11,674	11,671	11,800	11,784							
Commercial	520	521	523	525	524							
Fire Service	174	174	175	175	175							
Total Accounts	12,364	12,369	12,369	12,500	12,483	-	-	-	-	-	-	-

Elk Grove Water District
Active Account Information
FY 2015/2016

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	11,669	11,658	11,647	11,637	11,643	11,656	11,649	11,632	11,654	11,666	11,659	11,665
Commercial	513	517	518	521	519	519	521	522	521	521	521	519
Fire Service	121	122	122	124	122	122	122	122	122	123	122	174
Total Accounts	12,303	12,297	12,287	12,282	12,284	12,297	12,292	12,276	12,297	12,310	12,302	12,358

Consent Calendar
Item # h

Elk Grove Water District

Bond Covenant Status

For Fiscal Year 2016-17

As of Oct. 31, 2016

Operating Revenues:		
Charges for Services	$	5,475,964
Operating Expenses:		
Salaries & Benefits		1,228,283
Seminars, Conventions and Travel		9,002
Office & Operational		413,315
Purchased Water		1,152,749
Outside Services		194,840
Equipment Rent, Taxes, an Utilities		129,760
Total Operating Expenses		3,127,949
Income From Operations	$	2,348,015
Interest & Principal Payments 1,757,900+1,440,000		1,065,967 *
Debt Service Coverage Ratio:		
Actual		**2.20**
Required		**1.15**

* Note: The calculation for the period = the percentage of the year completed.

Consent Calendar
Item # i

Elk Grove Water District

Bond Covenant Status

For Fiscal Year 2016-17

As of Nov. 30, 2016

Operating Revenues:		
Charges for Services	$	6,530,621
Operating Expenses:		
Salaries & Benefits		1,490,078
Seminars, Conventions and Travel		10,583
Office & Operational		480,207
Purchased Water		1,353,437
Outside Services		234,804
Equipment Rent, Taxes, an Utilities		160,064
Total Operating Expenses		3,729,173
Income From Operations	$	2,801,448
Interest & Principal Payments 1,757,900+1,440,000		1,332,458 *
Debt Service Coverage Ratio:		
Actual		**2.10**
Required		**1.15**

* Note: The calculation for the period = the percentage of the year completed.

Elk Grove Water District
Revenues and Expenses Actual to Budget
October 31, 2016

	General Ledger Reference	October Activity	October Budget	Variance	%	YTD Activity	Annual Budget	4/12=33.33% Variance	% Realized
Revenues	4100 - 4900	1,288,806	1,145,472	143,335	12.51%	$5,475,964	$13,745,658	($8,269,694)	39.84%
Salaries & Benefits (1)	5100 - 5280	292,015	299,617	(7,602)	-2.54%	$1,228,283	$3,595,403	($2,367,120)	34.16%
Seminars, Conventions and Travel	5300 - 5350	1,618	3,714	(2,096)	-56.43%	$9,002	$44,570	($35,568)	20.20%
Office & Operational	5410 - 5494	170,811	87,132	83,679	96.04%	413,315	$1,045,589	($632,274)	39.53%
Purchased Water (2)	5495 - 5495	265,234	243,561	21,673	8.90%	$1,152,749	$2,922,734	($1,769,985)	39.44%
Outside Services	5505 - 5580	50,871	71,150	(20,279)	-28.50%	194,840	$853,800	($658,960)	22.82%
Equipment Rent, Taxes, Utilities	5620 - 5760	39,620	32,068	7,552	23.55%	129,760	$384,813	($255,053)	33.72%
Total Operational Expenses		820,169	737,242	82,927	11.25%	$3,127,949	$8,846,909	($5,718,960)	35.36%
Net Operations		468,637				$2,348,016	$4,898,749	($2,550,733)	47.93%
Non-Operating Revenue									
Interest Earned	9910 - 9910	9,290	8,333	956		10,626	100,000	(89,374)	10.63%
Other Income	9920 - 9973	4,642	2,214	2,429		13,078	26,566	(13,488)	49.23%
						23,704	126,566	(102,862)	18.73%
Non-Operating Expenses									
Capital Equipment & Expenditures	1705 - 1760	141,667	141,667	0		566,667	1,700,000	(1,133,333)	33.33%
Bond Interest Accrued	7300 - 7300	146,492	146,492	0		585,967	1,757,900	(1,171,933)	33.33%
						1,152,633	3,457,900	(2,305,267)	33.33%
Revenues in Excess of Expenditures (Net Revenues)		194,411				1,219,086	1,567,415	(348,329)	77.78%
Capital Contributions						566,667	1,700,000	(1,133,333)	33.33%
Capital Expenses									
Capital Improvements						176,753	1,384,000	(1,207,247)	12.77%
Capital Replacements						5,720	1,044,000	(1,038,280)	0.55%
Equipment						41,063	120,000	(78,937)	34.22%
Bond Retirement:						480,000	1,440,000	(960,000)	33.33%
Total Capital And Debt Retirement Expenditures						703,536	3,988,000	(3,284,464)	17.64%
Net Position after Capital and Debt Retirement Expenditures						1,082,217	(720,585)	1,802,802	-150.19%

(1) Approximately $82,481 of the budgeted $528,352 of salary & benefit expenses has been capitalized to various capital projects.
(2) Estimated Expenditures: Purchased Water $302,506.77 in July; $299,200.08 in Aug.; $285,807.56 in Sept. & $265,234.29 in Oct.

Elk Grove Water District
Revenues and Expenses Actual to Budget
November 30, 2016

	General Ledger Reference	October Activity	October Budget	Variance	%	YTD Activity	Annual Budget	5/12=41.67% Variance	% Realized
Revenues	4100 - 4900	1,054,656	1,145,472	(90,815)	-7.93%	$6,530,621	$13,745,658	($7,215,037)	47.51%
Salaries & Benefits (1)	5100 - 5280	280,744	299,617	(18,873)	-6.30%	$1,490,078	$3,595,403	($2,105,325)	41.44%
Seminars, Conventions and Travel	5300 - 5350	1,581	3,714	(2,133)	-57.43%	$10,583	$44,570	($33,987)	23.75%
Office & Operational	5410 - 5494	66,892	87,132	(20,240)	-23.23%	480,207	$1,045,589	($565,382)	45.93%
Purchased Water (2)	5495 - 5495	202,165	243,561	(41,396)	-17.00%	$1,353,437	$2,922,734	($1,569,297)	46.31%
Outside Services	5505 - 5580	39,964	71,150	(31,186)	-43.83%	234,804	$853,800	($618,996)	27.50%
Equipment Rent, Taxes, Utilities	5620 - 5760	30,304	32,068	(1,764)	-5.50%	160,064	$384,813	($224,749)	41.60%
Total Operational Expenses		621,650	737,242	(115,592)	-15.68%	$3,729,172	$8,846,909	($5,117,737)	42.15%
Net Operations		433,006				$2,801,448	$4,898,749	($2,097,301)	57.19%
Non-Operating Revenue									
Interest Earned	9910 - 9910	0	8,333	(8,333)		10,631	100,000	(89,369)	10.63%
Other Income	9920 - 9973	343	2,214	(1,871)		13,421	26,566	(13,145)	50.52%
						24,052	126,566	(102,514)	19.00%
Non-Operating Expenses									
Capital Equipment & Expenditures	1705 - 1760	141,667	141,667	0		708,333	1,700,000	(991,667)	41.67%
Bond Interest Accrued	7300 - 7300	146,492	146,492	0		732,458	1,757,900	(1,025,442)	41.67%
						1,440,792	3,457,900	(2,017,108)	41.67%
Revenues in Excess of Expenditures (Net Revenues)		145,191				1,384,709	1,567,415	(182,706)	88.34%
Capital Contributions						708,333	1,700,000	(991,667)	41.67%
Capital Expenses									
Capital Improvements						218,534	1,384,000	(1,165,466)	15.79%
Capital Replacements						11,701	1,044,000	(1,032,299)	1.12%
Equipment						41,063	120,000	(78,937)	34.22%
Bond Retirement:						600,000	1,440,000	(840,000)	41.67%
Total Capital And Debt Retirement Expenditures						871,298	3,988,000	(3,116,702)	21.85%
Net Position after Capital and Debt Retirement Expenditures						1,221,744	(720,585)	1,942,329	-169.55%

(1) Approximately $101,430 of the budgeted $528,352 of salary & benefit expenses has been capitalized to various capital projects.
(2) Estimated Expenditures: Purchased Water 109,256.13 in Aug/Sept; $265,234.29 in Oct.; & $202,165.24 in Nov.

Florin Resource Conservation District
CASH - Detail Schedule of Investments
10/31/2016

G/L Account Fund		Account number / name	Investment Name	Investment Type			Restrictions	C	Market Value
HELD BY BOND TRUSTEE:									
1103-000-20	Water	BNY 113757 FRCD 2002 INST PMT SER B	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		2.00
	Water	BNY 113759 FRCD 2002 INST PMT SER B	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		1.01
1102-000-20	Water	BNY 113756 FRCD INST PMT SER A	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		3.47
1123-000-20	Water	BNY 113585 FRCD 2005 A INST PM	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		192,434.84
	Water	BNY 113587 FRCD 2005 A RES FD	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		1.00
1111-000-20	Water	BNY 743849 FRCD 2016A COI	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		23,350.04
1112-000-20	Water	BNY 743850 FRCD 2016A DEBT SERVICE	Dreyfus Inst Treasury	MM Mutual Fund			Restricted		0.00
							Subtotal		**$ 215,792.36**
1001-000-20	Water	Cash on Hand					Unrestricted		**$ 300.00**
HELD BY RIVER CITY BANK:									
1010-000-10	FRCD	RCB 1111057982 CHECKING ACCOUNT					Unrestricted		0.00
1011-000-10	FRCD	F&M 08-032009-01 CHECKING ACCOUNT					Unrestricted		81,082.02
1010-000-20	Water	RCB 1111063486 GENERAL CHECKING					Unrestricted		9,976.15
1011-000-20	Water	F&M 08-032017-01 OPERATING ACCOUNT					Unrestricted		1,006,517.76
1020-000-20	Water	RCB 1111028001 MONEY MARKET					Unrestricted		17.75
1030-000-20	Water	RCB 1111025851 CHARGE CARD ACCOUNT					Unrestricted		0.00
1031-000-20	Water	F&M 08-032912-01 CREDIT CARD ACCOUNT					Unrestricted		236,139.96
1040-000-20	Water	RCB 1111096589 HIGH YIELD MONEY MARKET					Unrestricted		378.66
1050-000-20	Water	RCB 1111099502 DEBT SERVICE ACCOUNT					Unrestricted		0.00
1060-000-20	Water	RCB 1111097844 PAYROLL ACCOUNT					Unrestricted		6.94
1061-000-20	Water	F&M 08-032890-01 PAYROLL ACCOUNT					Unrestricted		92,869.91
1070-000-20	Water	RCB 1111097933 WEB PAYMENT RECEIPTS					Unrestricted		0.00
1071-000-20	Water	F&M 08-032920-01 DRAFTS ACCOUNT					Unrestricted		187,553.20
							Subtotal		**$ 1,614,542.35**
INVESTMENTS									
1080-000-20	Water	Office of the Treasurer - Sacramento California	LAIF	Investment Pool	0.58%		Unrestricted		**$ 500,759.82**
1081-000-20	Water	CALTrust Short Term		Investment	0.73%	$ 753,520.54			**$ 1,754,561.25**
1081-000-20	Water	CALTrust Medium Term		Investment	1.01%	$ 503,561.81			**$ 503,817.38**

1082-000-20 Water

PURCHASE DATE	CUSIP	ISSUED BY	CALL DATE	MATURITY DATE	INTEREST RATE	YTM	COST	MARKET VALUE
9/30/2016	N/A	Union Bank of California	N/A	N/A	0.02%	0.02%	$ 1,014,978.96	$ 1,014,978.96
6/14/2016	3130A8AZ6	Federal Home Loan Bank (FHLB)	6/14/17 - one time	12/14/2018	1.150%	1.090%	$ 500,745.00	$ 500,245.00
6/28/2016	3134G9VN4	Federal Home Loan Mortgage Corp. (FHLMC)	9/28/16 - qrtly	6/28/2019	1.00%-2.00%	1.371%	$ 1,000,000.00	1,000,020.00
6/30/2016	3136G3SR7	Federal National Mortgage Association (FNMA)	12/30/16 - qrtly	12/30/2019	1.375%	1.375%	$ 1,000,000.00	999,740.00
9/30/2016	3136G4DB6	Federal National Mortgage Association (FNMA)	3/30/17 - qrtly	3/30/2020	1.250%	1.250%	$ 1,000,000.00	997,690.00
6/9/2016	3133EGCP8	Federal Farm Credit Banks (FFCB)	9/1/16 - cont.	12/1/2020	1.625%	1.625%	$ 1,000,000.00	998,740.00
6/16/2016	3136G3PY5	Federal National Mortgage Association (FNMA)	12/16/16 - qrtly	12/16/2020	1.550%	1.550%	$ 1,000,000.00	996,720.00
9/30/2016	3134GHY3	Federal Home Loan Mortgage Corp. (FHLMC)	3/30/17 - qrtly	9/30/2021	1.00%-3.00%	1.930%	$ 1,000,000.00	997,550.00
9/30/2016	3136G4CY7	Federal National Mortgage Association (FNMA)	3/30/17 - qrtly	9/30/2021	1.50%	1.500%	$ 500,000.00	496,450.00
							$ 8,015,723.96	**$ 8,002,133.96**

YTM = Yield to Maturity
qtrly = quarterly
cont. = continuous

Total	**$ 12,591,907.12**
Total Restricted	**$ 215,792.36**
Total Unrestricted	**$ 12,376,114.76**

Call Date	CUSIP	Issued by:	Call Date	Maturity Date	Interest Rate	YTM	Price	Market Value
10/28/2016	3134G8YZ6	Federal Home Loan Mortgage Corp. (FHLMC)	10/28/16 - qrtly	4/28/2021	1.50%-3.00%	1.790%	$ 1,000,000.00	1,000,000.00
							$ 1,000,000.00	$ 1,000,000.00

Florin Resource Conservation District
CASH - Detail Schedule of Investments
11/30/2016

G/L Account Fund	Account number / name	Investment Name	Investment Type		Restrictions	C	Market Value
HELD BY BOND TRUSTEE:							
1103-000-20 Water	BNY 113757 FRCD 2002 INST PMT SER B	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		2.00
Water	BNY 113759 FRCD 2002 INST PMT SER B	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		1.01
1102-000-20 Water	BNY 113756 FRCD INST PMT SER A	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		3.47
1123-000-20 Water	BNY 113585 FRCD 2005 A INST PM	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		192,434.84
Water	BNY 113587 FRCD 2005 A RES FD	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		1.00
1111-000-20 Water	BNY 743849 FRCD 2016A COI	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		23,350.04
1112-000-20 Water	BNY 743850 FRCD 2016A DEBT SERVICE	Dreyfus Inst Treasury	MM Mutual Fund		Restricted		0.00
					Subtotal		**$ 215,792.36**
1001-000-20 Water	Cash on Hand				Unrestricted		**$ 300.00**
HELD BY RIVER CITY BANK:							
1011-000-10 FRCD	F&M 08-032009-01 CHECKING ACCOUNT				Unrestricted		81,082.02
1010-000-20 Water	RCB 1111063486 GENERAL CHECKING				Unrestricted		10,005.30
1011-000-20 Water	F&M 08-032017-01 OPERATING ACCOUNT				Unrestricted		1,652,361.90
1031-000-20 Water	F&M 08-032912-01 CREDIT CARD ACCOUNT				Unrestricted		235,221.84
1061-000-20 Water	F&M 08-032890-01 PAYROLL ACCOUNT				Unrestricted		128,257.05
1071-000-20 Water	F&M 08-032920-01 DRAFTS ACCOUNT				Unrestricted		278,525.45
					Subtotal		**$ 2,385,453.56**
INVESTMENTS							
1080-000-20 Water	Office of the Treasurer - Sacramento California	LAIF	Investment Pool	0.58%	Unrestricted		**$ 500,759.82**
1081-000-20 Water	CALTrust Short Term		Investment	0.73%	$ 1,003,478.35		**$ 1,004,355.35**
1081-000-20 Water	CALTrust Medium Term		Investment	1.01%	$ 1,252,255.33		**$ 1,254,759.89**

1082-000-20 Water

PURCHASE DATE	CUSIP	ISSUED BY	CALL DATE	MATURITY DATE	INTEREST RATE	YTM	COST	MARKET VALUE
9/30/2016	N/A	Union Bank of California	N/A	N/A	0.02%	0.02%	$ 14,870.09	$ 14,870.09
6/14/2016	3130A8AZ6	Federal Home Loan Bank (FHLB)	6/14/17 - one time	12/14/2018	1.150%	1.090%	$ 500,745.00	$ 498,130.00
6/28/2016	3134G9VN4	Federal Home Loan Mortgage Corp. (FHLMC)	9/28/16 - qrtly	6/28/2019	1.00%-2.00%	1.371%	$ 1,000,000.00	996,120.00
6/30/2016	3136G3SR7	Federal National Mortgage Association (FNMA)	12/30/16 - qrtly	12/30/2019	1.375%	1.375%	$ 1,000,000.00	989,930.00
9/30/2016	3136G4DB6	Federal National Mortgage Association (FNMA)	3/30/17 - qrtly	3/30/2020	1.250%	1.250%	$ 1,000,000.00	985,110.00
6/9/2016	3133EGCP8	Federal Farm Credit Banks (FFCB)	9/1/16 - cont.	12/1/2020	1.625%	1.625%	$ 1,000,000.00	982,430.00
6/16/2016	3136G3PY5	Federal National Mortgage Association (FNMA)	12/16/16 - qrtly	12/16/2020	1.550%	1.550%	$ 1,000,000.00	976,470.00
9/30/2016	3134GHY3	Federal Home Loan Mortgage Corp. (FHLMC)	3/30/17 - qrtly	9/30/2021	1.00%-3.00%	1.930%	$ 1,000,000.00	993,420.00
9/30/2016	3136G4CY7	Federal National Mortgage Association (FNMA)	3/30/17 - qrtly	9/30/2021	1.50%	1.500%	$ 500,000.00	484,500.00
11/2/2016	3130A9RZ6	Federal Home Loan Bank (FHLB)	4/28/17 - qrtly	10/28/2021	1.00%-6.00%	2.157%	$ 1,000,000.00	985,730.00
							$ 8,015,615.09	**$ 7,906,710.09**

YTM = Yield to Maturity
qtrly = quarterly
cont. = continuous

Total	**$ 13,268,131.07**
Total Restricted	**$ 215,792.36**
Total Unrestricted	**$ 13,052,338.71**

Call Date	CUSIP	Issued by:	Call Date	Maturity Date	Interest Rate	YTM	Price	Market Value
10/28/2016	3134G8YZ6	Federal Home Loan Mortgage Corp. (FHLMC)	10/28/16 - qrtly	4/28/2021	1.50%-3.00%	1.790%	$ 1,000,000.00	1,000,000.00
							$ 1,000,000.00	$ 1,000,000.00

Consultant Expenses
October 31, 2016

Fiscal Retainer Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of year (33%)
Best Best, & Krieger	Task orders	8,414	16,730	130,000	12.87%
Solutions by BG, Inc.	Task orders	10,045	40,443	130,100	31.09%

Project Specific Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of Contract Amount
Downey Brand LLP	Task orders	38	28,560	75,000	38.08%

Consultant Expenses
November 30, 2016

Fiscal Retainer Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of year (42%)
Best Best, & Krieger	Task orders	8,243	24,973	130,000	19.21%
Solutions by BG, Inc.	Task orders	15,003	55,446	130,100	42.62%

Project Specific Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of Contract Amount
Downey Brand LLP	Task orders		28,522	75,000	38.03%

Consent Calendar
Item # O

Elk Grove Water District
Major Capital Improvement Project
Budget vs Actuals
October 31, 2016

Capital Project	Total Project Budget	Expenditures to Date *	Percent Spent
Service Line Replacements	$500,000	$281,311	56.26%
Railroad Corridor Water Line	304,000	370,912	122.01%
Hampton WTP Improvements	252,515	84	0.03%
Business Center/CSD Bldg. Water Main Looping	175,000	136,959	78.26%
Truck Replacements	120,000	41,063	34.22%
RRWTF Modular Meeting Room & IT Center	125,000	10,382	8.31%
Well Rehabilitation Program (one-per year)	90,000	4,703	5.23%
RRWTF Tanks and Vessels Recoating	350,000	10,247	2.93%
Sub-Total	$1,916,515	$855,661	44.65%

*Includes $82,481 of capitalized labor in FY 2016-17

Elk Grove Water District
Major Capital Improvement Project
Budget vs Actuals
November 30, 2016

Capital Project	Total Project Budget	Expenditures to Date *	Percent Spent
Service Line Replacements	$500,000	$289,298	57.86%
Railroad Corridor Water Line	304,000	396,808	130.53%
Hampton WTP Improvements	252,515	6,065	2.40%
Business Center/CSD Bldg. Water Main Looping	175,000	140,859	80.49%
Truck Replacements	120,000	41,063	34.22%
RRWTF Modular Meeting Room & IT Center	125,000	10,382	8.31%
Well Rehabilitation Program (one-per year)	90,000	4,703	5.23%
RRWTF Tanks and Vessels Recoating	350,000	16,228	4.64%
Sub-Total	$1,916,515	$905,405	47.24%

*Includes $101,430 of capitalized labor in FY 2016-17

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary

SUBJECT: **FLORIN RESOURCE CONSERVATION DISTRICT 2017 COMMITTEE APPOINTMENTS AND OUTSIDE AGENCY REPRESENTATION**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Chair appoint Directors to the following Standing Committees: Finance, Conservation, Infrastructure, and Planning Committees; and for outside agency representation; and that the Board ratify these appointments.

Summary

Every year, typically January, Directors are assigned to sit on previously established standing Board committees. The Florin Resource Conservation District bylaws cite that the Chair may appoint the Directors to these committees, and then these appointments be ratified by the Board. Appointments are also made for outside agency representation.

By this action, the Chair will appoint directors to sit on the Conservation, Infrastructure, and Planning Committees of the Florin Resource Conservation District and the Board will ratify appointments made for outside agency representation.

DISCUSSION

Background

The Florin Resource Conservation District Board By-Laws state that “the Chair may, following election in January, appoint Board members to Standing Committees of the District and Ad-hoc Committees as necessary. The committee appointments shall be ratified by a majority of the Board.”

At the Regular Board Meeting on January 22, 2014, the Board directed staff to add appointments for outside agency representation, to the agenda every January moving forward.

Present Situation

Currently, the established standing Board committes are Finance, Conservation, Infrastructure, and Planning.

The Board committees are comprised of the following Board of Directors and Associate Directors:

There are several vacancies on the committees that need to be filled pursuant to the November, 2016 General Election.

Current Standing Committees:

Finance – FRCD/EDC/EGWD:	**All Board Members**
Conservation Committee – FRCD:	**Tom Nelson** **Vacant** **Jeanne Sabin**
Alternate:	**Mike Schmitz**
Infrastructure Committee – EGWD:	**Bob Gray** **Tom Nelson**
Alternate:	
Planning – FRCD/EDC/EGWD:	**Jeanne Sabin** **Vacant**
Alternate:	**Vacant**

Outside Agency Representation:

Directors and Staff represent the District on the following outside agencies: ACWA/JPIA, Sacramento Local Agency Formation Commission (LAFCO), Regional Water Authority (RWA), and Sacramento Central Groundwater Authority (SCGA).

The current agency assignments are as follows:

ACWA/JPIA – Representative of EGWD	**Tom Nelson**
Sacramento Local Agency Formation Commission (LAFCO)	**Vacant**

Regional Water Authority (RWA) Board of Directors	**Vacant** **Mark Madison**
Sacramento Central Groundwater Authority (Nomination)	**Tom Nelson** **Vacant**

It is recommended that the Board review these agency assignments and make modifications as appropriate.

FINANCIAL SUMMARY

There is no financial impact associated with this agenda item.

Respectfully submitted,

STEFANI PHILLIPS
BOARD SECRETARY

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary

SUBJECT: **COMMITTEE MEETINGS**

RECOMMENDATION

No action is required at this time.

Summary

The Board has requested a monthly summary of committee meetings. No committee meetings were held in the month of October or November.

DISCUSSION

Background

At the Regular Board Meeting held on May 27, 2015, the FRCD Board of Directors determined that the committee meeting minutes will be brought to the FRCD Regular Board Meeting and placed under agenda item Committee Meetings. The agenda item Committee Meetings, were placed after Consent Calendar for approval. This item may be moved within the agenda, if necessary, by direction from Chairman Chuck Dawson. The committee meeting minutes shall be accepted by the FRCD Board of Directors.

Present Situation

No committee meetings were held in the month of October or November.

FINANCIAL SUMMARY

There is no financial impact associated with this item at this time.

Respectfully Submitted,

STEFANI PHILLIPS,
BOARD SECRETARY

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **FLORIN RESOURCE CONSERVATION DISTRICT CONSERVATION ACTIVITIES REPORT**

RECOMMENDATION

This information is provided for information only. No action by the Board is requested at this time.

Summary

Since the last report, the District's new Program Manager, Sarah Jones, attended the California Association of Resource Conservation District's Fall annual fall conference to explore potential activities and funding for the Florin Resource Conservation District. Considerable efforts were also expended by staff in the preparation of a new Municipal Services Review as required by the Sacramento Local Area Formation Commission.

DISCUSSION

Background

The Board has requested a monthly summary of Florin Resource Conservation District (FRCD) conservation activities performed by the Board and staff.

Present Situation

On November 16-18, 2016, the Florin Resource Conservation District (FRCD) Program Manager, Sarah Jones, attended the California Association of Resource Conservation District's (CARCD) annual fall conference to explore potential activities and funding for the FRCD. At this conference, information was provided on potential RCD funding from the State next year.

In the 2016-17 State Budget, the Department of Conservation (DOC) was provided $2.5 million through the Division of Land Resource Protection to assist with RCD capacity building efforts. This program is described in the attachment to this staff report.

Ultimately, RCD's may be eligible for varying grant amounts by qualifying as a Tier 1, 2 or 3 RCD. Next year, the DOC will qualify selected RCD's for Tier 1 accreditation; there are no qualifications for Tiers 2 or 3 at this time.

Based on the Tier 1 requirements, it appears that the FRCD should qualify as a Tier 1 RCD and thus be eligible for funding. $2.1 million will be split evenly between all Tier 1 RCD's that submit a scalable program work plan and budget. It is unknown at this time how much the FRCD could potentially obtain, but it could be approximately $30k. It is also important to note that these funds will not be available until next summer and that no match is required.

Also in November, the General Manager was contacted by the Sacramento Local Agency Formation Commission (LAFCo) who requested that the FRCD complete a Municipal Services Review (MSR) which is required by law. This document has been prepared and submitted to LAFCo and the LAFCo Commission is scheduled to review the document on December 7, 2016. It is anticipated that several modifications will be required and that the LAFCo Commission will entertain approval sometime in February 2017.

STRATEGIC PLAN CONFORMITY

Participation in regional conservation is in conformity with the District's conservation and cooperative program goals of the 2012-2017 Strategic Plan.

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,

MARK J. MADISON
GENERAL MANAGER

MJM:SJ

Attachment

Resource Conservation District Financial Assistance Program

Helping RCDs Achieve Performance Standards

Department of Conservation

Background

The 2016 - 2017 State Budget provides $2.5 million to the Department of Conservation through the Division of Land Resource Protection to assist with RCD capacity building efforts.

Funding to meet RCD Standards

- Funds would be used to assist RCDs in meeting the Tier 1, 2, and 3 RCD Standards outlined in the RCD adopted document "Planning for the Future: A Statewide Pathway to Excellence in Service."

Accreditation Tie-In

- This assistance would tie in to RCD Accreditation developed by DOC in partnership with CARCD and based on the RCD Standards.

We want your input! Email us at: RCD@conservation.ca.gov
or at the conference stop by our table and pick up a comment card.

DRAFT Funding Categories, Eligibility Requirements, & Eligible Activities

- All activities would need to correlate to activities and objectives in the RCD Standards.
- An RCD would choose to apply for the category below that best fits the RCD's need and eligibility.

Bootstrap Category

"Getting to Tier 1"

- RCD does not qualify for Tier 1 accreditation.
- Good Governance eligible activities would assist the RCD in meeting Tier 1 requirements.
- Funding up to $10,000/RCD.
- Estimated 10% of the total funding would be awarded in this category, approximately $250,000.

Fiscal Sponsor Sub-Category

This sub-category allows for Tier 1 RCDs to apply for funding to assist Bootstrap RCDs in achieving Tier 1.

- The RCD applying as the Fiscal Sponsor must be Tier 1 accredited.
- The Bootstrap RCD is not Tier 1 accredited and must achieve Tier 1 by end of agreement.
- Actual cost not to exceed $10,000 per district. (Fiscal sponsor receives 10% administrative costs)

Relevant Excellent Visible (R.E.V.) Capacity Building Category

"Increasing capacity of Tier 1 RCDs"

- RCD must be accredited as Tier 1 to be funded.
- R.E.V. Capacity Building funding would be used to fund activities related to Tier 2 & 3 objectives.
- Funding would be equally distributed among awardees.
- Estimated 85% of the total funding awarded in this category, estimated $2,125,000.

Timeline

- ***Anticipated Agreement Term: June 2017 – June 2018***
- Early January 2017 - Notice of funding availability
- Late February 2017 - Deadline for funding request
- Early April 2017 - Determination of awardees

DRAFT Funding Process

- Funding through interagency agreements
- Non-competitive process with no match requirement
- Distribution of funds per district determined based on number of awardees.

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Sarah Jones, Program Manager

SUBJECT: **WATER USAGE AND CONSERVATION REPORT**

RECOMMENDATION

This item is presented for information only. No action by the Board is proposed at this time.

Summary

Service Area 1 reduced its water consumption by 31.88% in October in comparison to October 2013 usage. Service Area 2 reduced by 7.33% for the same period. The combined October reduction for both service areas was 23.04%.

Service Area 1 reduced its water consumption by 41.4% in November in comparison to November 2013 usage. Service Area 2 reduced by 48.13% for the same period. The combined November reduction for both service areas was 43.94%.

A draft framework for the implementation of Governor Brown's Executive Order which mandated temporary statewide emergency water restrictions in 2016 (B-37-15), was released November 30th The final, approved plan will dictate water conservation efforts for 2017. The plan represents a shift from statewide mandates to a set of conservation standards applied based on local circumstances, including population, temperature, leaks, and types of commercial and industrial use.

DISCUSSION

Background

On May 9, 2016, Governor Brown issued an Executive Order (EO B-37-15) adjusting water conservation regulations through the end of January 2017. On May 18, 2016, the Water Board adopted emergency regulations in compliance with the Governor's Order and for continued statewide urban water conservation, revising certain requirements of urban water suppliers and these new requirements went into effect on June 1, 2016.

The new regulations adopted by the State Water Resources Control Board (Water Board) require water agencies to self-certify their ability to sustain adequate water supplies for another three years of drought. Based on the requirements in the regulations, the Elk

Grove Water District (EGWD) is able to achieve compliance with a zero percent conservation requirement for the duration of this order.

On May 25, 2016, the Board adopted Ordinance No. 05-25-16-01 amending the Water Shortage Contingency Plan's Normal Water Supply Stage and ordering the implementation of the Normal Water Supply Stage from Stage 2 Plus.

The amended Water Shortage Contingency Plan – Normal Water Supply Stage does not include watering day and time restrictions. This stage reflects a concept that, during normal supply conditions, customers should not be restricted in their water use, but they should be prohibited from wasting water. The new Normal Water Supply Stage also continues to prohibit water waste and these are subject to enforcement and the penalties prescribed for that stage.

Present Situation

The Water Board is extending the current emergency water conservation regulation, which is in effect until February 2017 for an additional 270 days, based on supply conditions and water conservation levels. The Water Board will hold a public workshop and propose extended emergency regulations in January 2017 if necessary.

On November 30th, the State Water Resource Control Board released the attached draft plan/framework for EO B-37-15, *Making Water Conservation a Way of Life: Implementing Executive Order B-37-15* (Attachment 1). The final plan is expected to be released in January 2017. The new plan will include provisions to use water more wisely, eliminate water waste, strengthen local drought resilience, and improve agricultural water use efficiency and drought planning. In addition the EO called for the development of new standards and permanent targets for water efficiency that exceed the requirements of SBx7-7 which requires a 20% reduction in water use by 2020.

Under the proposed framework water suppliers would meet the Executive Order's objectives through the following actions:

- Emergency Conservation Regulations
- New Water Use Targets (development of water budgets)
- Permanent Monthly Reporting
- Water Use Prohibitions
- Minimizing Water Loss

- Innovative Water Loss & Control Technologies
- Water Shortage Contingency Plans
- Drought Contingency Plans
- Drought Contingency Planning for Small Water Suppliers and Rural Communities

Perhaps most significant is the proposed requirement to develop new water use targets (budgets) to be adopted no later than 2020 with interim targets in 2018, starting implementation in 2021 until final compliance is reached in 2025. The water use targets will change each year based on variable metrics such as population, landscape area and evapotranspiration. Landscape area is to be determined by the state through an anticipated landscape area measurement project to be completed in 2018.

The new standards will encompass water use targets for:

- Residential indoor use
- Outdoor irrigation water use
- Water system losses
- Commercial, industrial, institutional uses

The water use target calculation is as follows:
Indoor water use budget + Outdoor water use budget+ water loss budget= Water use target

Additionally the draft framework proposes requirements for urban water suppliers to submit a Water Shortage Contingency plan (updated draft requirements to be released by January 10, 2017) and conduct a 5-year Drought Risk Assessment every five years. A requirement of the Water Shortage Contingency Plan includes an annual Water Budget Forecast.

Other key water conservation efforts included in the draft framework include:

- Permanent bans on wasteful practices, such as hosing driveways and excessively watering lawns.
- Technical assistance and financial incentives for water suppliers to implement leak prevention, detection, and repair programs.
- Collecting information about innovative water conservation and water loss detection and control technologies.

Some of the actions described in the draft plan will require working with the Legislature on new and expanded state authority, while others can be implemented under existing authorities. Comments on the draft framework are due by December 19th

Staff continues to monitor and track our water use reductions. The attached Water Usage Summary for October 2016 (Attachment 2) shows that we reduced our October water usage for Service Areas 1and 2 by 31.88% and 7.33%, respectively, for a total reduction of 23.04% compared to October 2013.

The attached Water Usage Summary for November 2016 (Attachment 3) shows that we reduced our November water usage for Service Areas 1 and 2 by 41.14% and 48.13%, respectively, for a total reduction of 43.94% compared to November 2013.

Each month, the Regional Water Authority (RWA) prepares a summary of the water savings by each of the participating members of RWA. The attached summary for October 2016 (Attachment 4) show the region's average savings for October compared to 2013, was 30.2%

STRATEGIC PLAN CONFORMITY

Compliance with State regulations is in conformity with the District's Business Practice goals of the 2012-2017 Strategic Plan.

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,

Sarah Jones

SARAH JONES
PROGRAM MANAGER

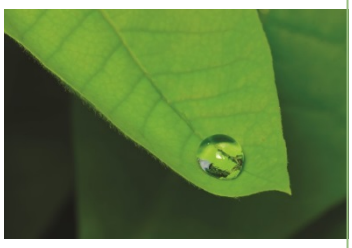
SJ:MJM

Attachments

Making Water Conservation a California Way of Life

Implementing Executive Order B-37-16

PUBLIC REVIEW DRAFT
November 2016



This report was prepared by the California Department of Water Resources, State Water Resources Control Board, California Public Utilities Commission, California Department of Food and Agriculture, and California Energy Commission in response to Governor Edmund G. Brown Jr's Executive Order B-37-16 and to provide information to the California Legislature and the public.

This report is available in electronic form:
http://www.water.ca.gov/wateruseefficiency/conservation/

Edmund G. Brown Jr.
Governor
State of California

Mark W. Cowin
Director
California Department of Water Resources

Felicia Marcus
Chair
State Water Resources Control Board

Michael Picker
President
California Public Utilities Commission

Karen Ross
Secretary
California Department of Food and Agriculture

Robert B. Weisenmiller
Chair
California Energy Commission

Executive Summary

Water resource management in California faces unprecedented challenges from climate change and a growing population. In the years ahead, the task of managing water to maintain vibrant ecosystems while supporting a robust economy will require the collective and concerted efforts of state and local governments, non-governmental organizations, businesses, and the public. Increased conservation and water use efficiency are needed to ensure the resilience of our water supplies to increasingly severe droughts and other impacts of climate change.

California is currently in the grips of an extreme drought with record low precipitation. This five-year drought has caused severe impacts across the State, including community water sources running dry, the loss of agricultural production and jobs, depletion of groundwater basins, widespread tree death, and impacts to fish and wildlife. While most urban areas have been spared from water rationing, emergency conservation has provided a critical safeguard against more dire consequences under extended drought conditions. After Governor Edmund G. Brown, Jr. called for a 25 percent reduction in urban water use in 2015, Californians rose to the challenge and saved over 24 percent during the nine months the mandate was in place.

Executive Order B-37-16, signed by Governor Brown on May 9, 2016, builds on that success to establish long-term water conservation measures and improved planning for more frequent and severe droughts. The centerpiece of the Executive Order is a requirement for the State's 410 urban water suppliers to meet new water use targets. Rather than measuring water savings as a percentage reduction from a chosen baseline, the new standards will take into account the unique climatic, demographic and land-use characteristics of each urban water agency's service area. This approach represents a fundamental shift to a conservation framework that is more durable and that can be applied equitably and uniformly across the enormous variation in local conditions in California. The new targets will ensure all urban water is used efficiently and will facilitate conservation measures such as conversion to California-friendly landscapes, replacement of inefficient fixtures and appliances, and reductions in system leakage.

Other aspects of the proposed conservation framework will:

- Provide greater consistency among water suppliers statewide in the elements of Urban Water Management Plans, Water Shortage Contingency Plans, and Agricultural Water Management Plans; and continue work with counties to improve drought planning in small communities and rural areas;
- Enable water suppliers to customize their water management strategies and plan implementation to regional and local conditions;
- Empower water suppliers to take a place-based response to water shortages caused by drought or other water emergencies, while planning for longer drought cycles; and
- Incentivize and set standards for the use of new technologies and practices to reduce leaks.

This next generation of water efficiency and conservation will fulfill the first directive of the California Water Action Plan, to "Make Conservation a California Way of Life." Improved water efficiency will also support the State's ambitious climate change goals by reducing energy use and greenhouse gas emissions associated with water use and by building resilience to future droughts.

Executive Order B-37-16 contains four inter-related objectives:

- Using Water More Wisely
- Eliminating Water Waste
- Strengthening Local Drought Resilience
- Improving Agricultural Water Use Efficiency and Drought Planning

Five state agencies – the Department of Water Resources, the State Water Resources Control Board, the California Public Utilities Commission, the California Department of Food and Agriculture, and the California Energy Commission (collectively referred to as the "EO Agencies") – are charged with implementing the Executive Order's four inter-related objectives: using water more wisely, eliminating water waste, strengthening local drought resilience, and improving agricultural water use efficiency and drought planning. Collectively, the EO Agencies will be undertaking a suite of actions that can be implemented using existing authorities, ranging from rulemaking proceedings to expanded technical assistance, to evaluation and certification of new technologies to implement the four objectives. Where necessary, the EO Agencies also recommend additional actions, authorities, and resources necessary to meet EO requirements that cannot be implemented within existing authorities.

The EO Agencies employed a robust stakeholder engagement process, which commenced with a series of public listening sessions in June 2016. The EO Agencies also convened two stakeholder advisory groups – an Urban Advisory Group and an Agricultural Advisory Group – comprised of specific stakeholder types identified in the Executive Order, as well as additional interests such as disadvantaged communities / environmental justice advocates, academia, industry, professional associations, environmental advocacy groups, and others. These meetings were open to the public and used to solicit input for EO Agency consideration. The EO Agencies will continue to solicit stakeholder and public input, make use of technical experts, and provide assistance to successfully implement this long-term framework for water conservation.

Under the proposed framework, the EO Agencies and water suppliers would meet the Executive Order's objectives through the following actions.

Using Water More Wisely

Emergency Conservation Regulations (Executive Order Item 1): The State Water Resources Control Board (Water Board) will extend its current emergency water conservation regulation, which is in effect through February 2017, for an additional 270 days based on supply conditions and water conservation levels. The Water Board will hold a public workshop and propose extended emergency regulations in January 2017, if necessary.

New Water Use Targets (Executive Order Items 2 and 6): Upon statutory authorization, the EO Agencies will adopt new water use standards for all urban water use and a new urban water use target methodology. Urban water suppliers would, in turn, be required to calculate their unique water use targets based on those standards and local conditions. The EO agencies will establish

interim targets that are applicable starting in 2018, and require full compliance with final targets by 2025. This report proposes a timeline for the EO Agencies to establish final water use standards. The report also documents the process to develop standards; reporting and compliance requirements; and assistance to be provided by the EO Agencies. Additional legal authority would be required for successful implementation.

Permanent Monthly Reporting (Executive Order Item 3): The Water Board will open a rulemaking process to establish permanent monthly urban water reporting on water usage, amount of conservation achieved, and any enforcement efforts. The rulemaking will start at the end of 2016 and run through 2017, concurrently with EO Item 4, below.

Eliminating Water Waste

Water Use Prohibitions (Executive Order Item 4): The Water Board will open a rulemaking process to establish permanent prohibitions on wasteful water practices, building on the current prohibited uses in the emergency regulation. The rulemaking will start at the end of 2016 and run through 2017, concurrently with EO Item 3.

Minimizing Water Loss (Executive Order Items 5 and 6): The EO Agencies will meet the requirements of EO Items 5 and 6 through implementation of Senate Bill 555, along with additional actions to satisfy the Executive Order's directives related to reducing water supplier leaks. Implementation actions include the following:

- Rules for validated water loss audit reports: By October 1, 2017 and annually thereafter, urban retail water suppliers must submit validated water loss audit reports to the Department of Water Resources (DWR). DWR will adopt rules for standardizing water loss audits in early 2017. DWR will also revise funding guidelines so that water suppliers that do not submit reports will be ineligible for DWR grants and loans.

- Water loss performance standards: By July 1, 2020, the Water Board will adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses.

- Technical assistance for water loss audits: The Water Board is also funding the California Water Loss Control Collaborative' s Technical Assistance Program to ensure high quality and properly validated water loss audits. For smaller water suppliers addressing water losses, the Water Board will offer financial assistance through the Drinking Water State Revolving Fund beginning in 2017.

- Minimizing leaks: The California Public Utilities Commission (CPUC) will order large, investor-owned water utilities to accelerate work to minimize leaks. The CPUC may grant financial incentives for minimizing leaks during the review of each utility's upcoming General Rate Case applications.

Innovative Water Loss & Control Technologies (Executive Order Item 7): The California Energy Commission (CEC) is evaluating various options for certification of water loss detection and control technologies at utility, household, and appliance levels. The CEC is also making investments in research and funding programs for water saving devices and technologies.

Strengthening Local Drought Resilience

Water Shortage Contingency Plans (Executive Order Items 8, 9, and 6): Upon statutory authorization, urban water suppliers will be required to submit a Water Shortage Contingency Plan and conduct a 5-year Drought Risk Assessment every five years, and conduct and submit a water budget forecast annually. The EO Agencies will establish appropriate compliance and reporting criteria, and provide assistance to urban suppliers for meeting the requirements. Additional authorities would be required for successful implementation.

Drought Contingency Planning for Small Water Suppliers and Rural Communities (Executive Order Item 10): The EO Agencies' recommendations focus on improving drought vulnerability assessment and proactive actions, and supplier readiness and responsiveness during drought conditions. Currently, the recommendations focus on pathways for the EO Agencies to continue to work with counties to develop more specific, functional recommendations, which would be expected to continue into 2017. Additional authorities and funding may be required for successful implementation.

Improving Agricultural Water Use Efficiency and Drought Planning

Strengthened Agricultural Water Management Plan Requirements (Executive Order Items 11, 12, 13, and 6): Upon statutory authorization, agricultural water suppliers will be required to: (1) develop an annual water budget for the agricultural water service area, (2) identify agricultural water management objectives and implementation plans, (3) quantify measures to increase water use efficiency, and (4) develop an adequate drought plan for periods of limited supply. The proposal would expand existing requirements to require agricultural water suppliers providing water to over 10,000 irrigated acres of land to prepare, adopt, and submit plans by April 1, 2021, and every five years thereafter. Agricultural water suppliers would also be required to submit an annual report to DWR by April 1 of each year that documents water budget inflow and outflow components in the water budget for the preceding water year. Expanded authorities would be required for successful implementation.

Table ES-1 summarizes the organization of the conservation framework presented in this report and the corresponding Executive Order items. For each component, the report describes the need for change, the vision for accomplishing the change, and specific actions required to realize the vision. Given the need for additional authorities, the Legislature has a critical role in successful implementation of the Executive Order.

Setting and meeting the conservation and efficiency goals described in this report represents a major step forward towards long-term water security. The framework supports the development of increased resiliency, more efficient water use, stronger water management portfolios and more robust financial systems. With the support of our businesses and residents, water agencies, environmental organizations, schools and universities, elected officials and others, we can keep California healthy, beautiful, and vibrant for decades to come.

Table ES-1. Actions and Recommendations Summarized in this Report

Chapter Section and Title where Item is Addressed	Executive Order Items													Within Existing Authorities (Chapter 2)	Requires New Authority (Chapter 3)
	Use Water More Wisely			Eliminate Water Waste				Strengthen Local Drought Resilience			Improve Agricultural Water Use Efficiency & Drought Planning				
	1	2	3	4	5	6	7	8	9	10	11	12	13		
2.1 Emergency Water Conservation Regulations for 2017	●													✓	
2.2 Permanent Prohibition of Wasteful Practices			●	●										✓	
2.3 Reduced Water Supplier Leaks and Water Losses					●	●								✓	
2.4 Certification of Innovative Technologies for Water Conservation and Energy Efficiency							●							✓	
3.1 New Water Use Targets Based on Strengthened Standards		●				●									✓
3.2 Water Shortage Contingency Plans						●		●	●						✓
3.3 Drought Planning for Small Systems & Rural Communities										●					✓
3.4 Agricultural Water Management Plans						●					●	●	●		✓

Note: The Executive Order directs DWR, Water Board, and CPUC to develop methods to ensure compliance with the provisions of the order, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers. These are described in Chapters 2 and 3.

This page left blank intentionally.

Contents

Acronyms and Abbreviations

20x2020	20 percent reduction in urban per capita water use by 2020
20x2020 Plan	20x2020 Water Conservation Plan
AB	Assembly Bill
AU	Agronomic Use
AW	Applied Water
AWMP	Agricultural Water Management Plan
AWUF	Agronomic Water Use Fraction
AWWA	American Water Works Association
BMP	best management practice
CASGEM	California Statewide Groundwater Elevation Monitoring
CCF	centum cubic feet
CCR	California Code of Regulations
CCUF	Crop Consumptive Use Fraction
CDFA	California Department of Food and Agriculture
CEC	California Energy Commission
CII	commercial, industrial, and institutional
CIMIS	California Irrigation Management Information System
CPUC	California Public Utilities Commission
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
DWR	California Department of Water Resources
E	evaporation
EO	Executive Order B-37-16
EO Agencies	California Department of Water Resources, State Water Resources Control Board, California Department of Food and Agriculture, California Public Utilities Commission, California Energy Commission
EPIC	Electric Program Investment Charge
ETo	Reference evapotranspiration
ETc	evapotranspiration of crops
ETAF	Evapotranspiration Adjustment Factor

ETAW	Evapotranspiration of Applied Water
EU	Environmental Use
EWMP	Efficient Water Management Practice
GPCD	gallons per capita per day
GRC	General Rate Case
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
MOU	Memorandum of Understanding
MWELO	Model Water Efficient Landscape Ordinance
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
RF	Recoverable Flows
SB	Senate Bill
SGMA	Sustainable Groundwater Management Act
SRA	Shortage Response Action
SWRCB or Water Board	State Water Resources Control Board
TWUF	Total Water Use Fraction
USEPA	U.S. Environmental Protection Agency
UWMP	Urban Water Management Plan
Water Action Plan	California Water Action Plan
Water Loss TAP	California Water Loss Control Collaborative' s Technical Assistance Program
WET	Water Energy Technology
WMF	Water Management Fraction
WSCP	Water Shortage Contingency Plan

This page left blank intentionally.

Chapter 1 – Introduction

Water has been a scarce resource in California, and conservation must become a way of life for everyone. Much has changed in the past half century, and our technology, values, and awareness of how we use water have helped to integrate conservation into our daily lives. More can be done, however, and all Californians must embrace and make part of their daily lives the principles of wise water use.

Water has played a significant role in California's history and development. Droughts have often marked critical shifts or tipping points in water resources management, altering how citizens and elected officials view and manage water. Over time, an awareness of water use and water conservation has evolved that has fueled best management practices, funding programs, and legislative and regulatory actions.

California droughts are expected to become more frequent and persistent, as warmer winter temperatures driven by climate change reduce water held in the Sierra Nevada snowpack and result in drier soil conditions. Current drought conditions, which severely impacted the State over the last several years, may persist in some parts of the State into 2017 and beyond. Recognizing these new conditions, permanent changes are needed to use water more wisely and efficiently, and prepare for more frequent, persistent periods of limited supply in all communities and for all water uses, including fish, wildlife, and their habitat needs.

This chapter describes Executive Order B-37-16 (EO), provides a brief summary of California's evolving awareness of and actions relating to drought preparedness and response, and describes the proposed framework for realizing conservation as a California way of life.

1.1 Executive Order B-37-16

Moving to bolster California's climate and drought resilience, Governor Edmund G. Brown Jr. issued the EO on May 9, 2016. The EO builds on temporary statewide emergency conservation requirements and tasks State agencies with establishing a long-term framework water conservation and drought planning, including permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating clearly wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management and drought plans.

The EO directs the California Department of Water Resources (DWR), State Water Resources Control Board (Water Board), California Department of Food and Agriculture (CDFA), California Public Utilities Commission (CPUC), and California Energy Commission (CEC) – collectively referred to as the "EO Agencies" – to summarize in a report a framework for implementing the EO and incorporating water conservation as a way of life for all Californians.

The framework described herein promotes efficient use of the State's water resources in all communities, whether conditions are wet or dry, and prepares the State for longer and more severe drought cycles that will mark our future. The EO directs DWR, the Water Board, and CPUC to develop methods to ensure compliance with the provisions of the EO, including technical and financial assistance, agency oversight, and enforcement action by the Water Board to address non-compliant water suppliers, if necessary.

The full text of the EO can be found as Attachment A and at https://www.gov.ca.gov/docs/5.9.16_Attested_Drought_Order.pdf.

The actions directed in the EO are organized around four primary objectives: (1) use water more wisely, (2) eliminate water waste, (3) strengthen local drought resilience, and (4) improve agricultural water use efficiency and drought planning.

Use Water More Wisely

The EO calls for DWR and the Water Board to require monthly reporting by urban water suppliers on a permanent basis.[1] This includes information regarding water use, conservation, and enforcement.

It also directs DWR and the Water Board to develop new water use efficiency targets as part of a long-term conservation framework for urban retail water agencies – through a public process and working with partners such as urban water suppliers, local governments, and environmental groups. These targets are to go beyond the 20 percent reduction in per capita urban water use by 2020 that was embodied in Senate Bill (SB) X7-7[2], and are to be customized to fit the unique conditions of urban water suppliers.

The Water Board is also directed to adjust emergency water conservation regulations through the end of January 2017, in recognition of the differing water supply conditions across the State, and develop proposed emergency water restrictions for 2017 should the drought persist.

The "Use Water More Wisely" objective includes EO Items 1, 2, and 3.

Eliminate Water Waste

The EO calls for the Water Board to permanently prohibit wasteful practices, consistent with temporary, emergency prohibitions that were put in place in July 2014. These practices include hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; and watering lawns in a manner that causes runoff.

The Water Board and DWR are also directed to take actions to minimize water system leaks across the State. DWR estimates that leaks in water distribution systems siphon away more than 700,000 acre-feet of water a year in California – enough to supply 1.4 million homes for a year. Audits of urban water systems have found that leaks account for an average loss of 10 percent of their total supplies.

The CPUC is directed to prepare a consistent resolution for implementation by its investor-owned utilities. The CPUC is not in a regulatory capacity; see Section 2.3 for information on this directive.

The "Eliminate Water Waste" objective includes EO Items 4, 5, 6, and 7.

Strengthen Local Drought Resilience

DWR is directed to consult with urban water suppliers, local governments, environmental groups and other partners to strengthen standards for local Water Shortage Contingency Plans (WSCP) that are part of the Urban Water Management Plans (UWMP) that urban water suppliers must submit every five years. These strengthened standards will promote planning for adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. For areas not covered by WSCPs, DWR is directed to work with counties to improve drought planning for small water suppliers and rural communities.

The "Strengthen Local Drought Resilience" objective includes EO Items 8, 9, and 10.

[1] This applies to urban retail water suppliers only as they provide water directly to end users (as opposed to wholesalers that do not provide water directly to end users).

[2] The Water Conservation Act of 2009.

Improve Agricultural Water Use Efficiency and Drought Planning

Current law requires agricultural water suppliers serving 25,000 irrigated acres or more to file Agricultural Water Management Plans (AWMP). In the EO, DWR is directed to update existing requirements for these plans, including requiring suppliers of irrigation water to quantify their customers' water use efficiency and plan for water supply shortages and periods of drought. DWR is directed to work with CDFA to seek public input on the updated requirements. The EO also increases the number of agricultural water suppliers that must file AWMPs by lowering the threshold to those serving 10,000 irrigated acres or more.

The "Improve Agricultural Water Use Efficiency and Drought Planning" objective includes EO Items 11, 12, and 13.

1.2 Evolution of Water Conservation in California

California has experienced several major droughts throughout its recorded history. In response to the State's highly variable and seasonal climate, Californians have developed hundreds of water projects and programs – at local, regional, and statewide scales – while learning to adapt to periodic droughts and other hydrologic extremes. Growing awareness of the critical role water plays in the State's economy, health and safety, and environment has precipitated legislative actions and funding programs that have fundamentally transformed the way California's greatest resource – water – is managed.

1.2.1 Historical Droughts

One of the most extreme examples of drought in California occurred in 1976 and 1977, with the 1976 water year ranking as the driest on record and the 1977 water year ranking among the top five driest in California's recorded history. However, while the drought caused unprecedented shortages in the municipal, industrial, and agricultural water sectors, the 1976-1977 drought is often credited with initiating an era of water conservation awareness in California, the results of which are still evident today, including formation of a drought emergency task force and emergency conservation actions. The 1976-1977 drought also caused numerous legislative proposals to be submitted, all with the goal of increasing California's drought responses and resiliency.

Other statewide droughts that have occurred in recent history include the 1987-1992 drought and the 2007-2009 drought. These droughts affected all communities and types of water users, and led to many of the requirements and guidelines in place during the recent drought. 2012 through 2014 are on record as California's driest three consecutive years and 2013 was the driest single year of record in numerous communities across the State, triggering numerous emergency actions at State and local levels.

1.2.2 Resulting Statewide Water Conservation and Related Water Management Planning Efforts

The State's arid climate and history of drought have prompted a variety of programs, actions, and efforts geared toward preparing for and responding

to periods of low water availability. The following highlights some of the key events and actions that have marked this evolution of conservation and water use efficiency in California in recent decades.

Water Conservation Act of 2009

California became the first state to adopt a water use efficiency target with the passage of SB X7-7 in 2009. SB X7-7 mandated the State achieve a 20 percent reduction in urban per capita water use by 2020. The reduction goal is also known as "20x2020." SB X7-7 directed water suppliers to develop individual targets for water use based on an historical per capita baseline.

The 20x2020 Water Conservation Plan (20x2020 Plan) set forth a statewide road map to maximize the State's urban water efficiency and conservation opportunities between 2009 and 2020, and beyond. The recommendations acknowledged that agricultural water use efficiency must be also improved.

What is Drought?

Drought can be defined in many ways, and there is no statutory process in California for defining or declaring a drought. Drought can be described in meteorological terms (a period of below normal precipitation), in hydrologic terms (a period of below average runoff), or in more qualitative terms (shortage of water for a particular purpose). Drought can be any length of time – spanning a single water year or multiple years – and rarely affects all water users or geographies equally. For example, one part of the State may experience severe drought conditions while another experiences a year of above normal rainfall. The economic, social, and environmental impacts of drought have changed over time as the State's population has grown and our extensive system of water infrastructure has evolved.

Implementation of the 20x2020 Plan includes three phases: (1) completion of the 20x2020 Plan (2009 through 2010); (2) implementation, monitoring, evaluating, and making adjustments (2011 through 2020); and (3) performance evaluation based on improvements from established baseline values for each supplier.

Mandatory Conservation, Water Use Prohibitions, and Other Water Saving Measures during the Recent Drought

As a statewide drought progressed during 2014 and into 2015, California took unprecedented steps to preserve its water supply. With issuance of an emergency drought proclamation by the Governor in 2014, the Water Board was directed to collect monthly water use data from the State's urban water suppliers. The proclamation also called on Californians to voluntarily conserve water, with a goal of reducing water use by 20 percent when compared to pre-drought water use (2013). However, the collected data showed that voluntary statewide conservation efforts had reached 9 percent – an effort that saved billions of gallons of water, but was well short of the 20 percent goal.

With drought conditions worsening, and the 2014-2015 water year snowpack the lowest in the State's history, the Governor's April 1, 2015 Executive Order (EO B-29-15) directed the Water Board to develop emergency water conservation regulations to implement mandatory water reductions in cities and towns across California. EO B-29-15 also set a goal to reduce potable urban water usage by 25 percent statewide. The Water Board's adoption of the May 2015 drought emergency regulation set mandatory reductions in potable urban water use between June 2015 and February 2016 by identifying a conservation tier for each urban water supplier, based on residential per capita water use for the months of July – September 2014. Conservation tiers ranged from 4 percent to 36 percent.

Under these emergency urban water conservation regulations, statewide cumulative savings from June 2015 to March 2016 totaled 23.9 percent

compared with the same months in 2013. Statewide average water use lowered to 66 residential gallons per capita per day (GPCD) in March 2016, saving nearly 1.3 million acre-feet of water from June 2015 through March 2016.

Recognizing persistent yet less severe drought conditions during the 2015-2016 water year, the Water Board modified and extended its emergency regulation in May 2016. This new approach allowed suppliers to replace their prior percentage reduction-based water conservation standard with a localized "stress test," where they could demonstrate whether a supply shortfall would develop under three additional drought years. Mandatory conservation levels were set for suppliers with projected shortfalls following three additional dry years. Alternatively, suppliers could keep their pre-existing mandatory conservation standard rather than adopting a stress-test conservation standard.

In addition to State-mandated conservation standards, the Water Boards' emergency regulations have specific prohibitions against certain water uses. Those prohibitions include watering down a sidewalk with a hose instead of using a broom or a brush, and overwatering a landscape to where water is running off the lawn, over a sidewalk, and into the gutter.

In total, the Water Board's emergency regulations have resulted in conservation of over 2.15 million acre-feet of water, enough to supply over 10 million people for a year.

EO B-29-15 also called on DWR to establish additional water saving measures, including:

- A statewide initiative to replace 50 million square feet of lawns with drought tolerant landscapes.
- A time-limited statewide toilet replacement and appliance rebate program with the CEC.
- Updating the State Model Water Efficient Landscape Ordinance (MWELO).
- Additional requirements for AWMPs.

DWR quickly established rebate and direct installation programs for both lawn conversion and the replacement of older toilets with high efficiency toilets. In addition, DWR collaborated with nonprofits to provide over 230 workshops statewide on landscape and irrigation efficiency, turf replacement, high efficiency toilet replacement, water management planning for agricultural and urban water suppliers, and conveyance system audit and leak detection for small water systems, rural communities, agricultural water suppliers and tribal governments.

DWR developed and sponsored a key exhibit at the California State Fair, providing hands-on advice to homeowners on lawn conversion and water saving measures.

Indoor and Outdoor Water Use Efficiency

Landscaping typically accounts for over half of residential water demand, and was the focus of some of the State's earliest efforts related to water use efficiency. Passed in 1990, Assembly Bill (AB) 325, the Water Conservation in Landscaping Act, directed DWR to develop MWELO. Initially drafted in 1992 and updated in 2010, the MWELO established a water budget for new construction and certain rehabilitated landscapes. Local agencies were required to adopt the MWELO or a local ordinance at least as effective as the State ordinance. The MWELO was updated in 2015 in response to EO B-29-15. AB 2515 requires DWR to update the MWELO every three years if needed.

CONSERVATION versus EFFICIENCY

The terms water conservation and water use efficiency are often used interchangeably. As used in this report, water conservation is defined as a reduction in water loss, waste, or use. The general term water conservation may include water use efficiency, in which more water-related tasks are accomplished with lesser amounts of water.

Indoor water use has also prompted action at State and federal levels. The efficiency of water fixtures used in California residential dwellings and commercial buildings is being improved through updated requirements in the California Plumbing Code (Part 5 of the California Building Standards Code) per requirements in SB 407 of 2009 and AB 715 of 2007. In addition, new construction is subject to the requirements of the California Green Building Standards Code (Part 11 of the California Building Standards Code) that requires water fixture efficiency exceeding the existing national standards set forth by U.S. Environmental Protection Agency (USEPA) and U.S. Department of Energy. Concurrently, the CEC is updating its Appliance Efficiency Regulations to include stronger standards for fixtures sold in the State.

Water Management Planning and Funding

Conservation and water use efficiency are foundational water management tools that, along with diverse regional and statewide water portfolios, help to ensure adequate and reliable water supplies for all uses. Conservation and water use efficiency are prominent in State water management plans, integrated regional water management plans, the plans of urban and agricultural suppliers, and various associated funding programs.

The California Water Plan Update 2013 highlighted water conservation as one of 17 statewide water management objectives, and emphasized urban water conservation as a water management strategy that will be most effective at matching supply with demand. The plan recognized urban water conservation as the foundation for achieving the 20x2020 mandate.

Conservation and drought protection are also two of the focus areas of the 2014 California Water Action Plan (Water Action Plan)[3] and Water Action Plan 2016 Update. Making water conservation a California way of life is the first action identified in the plan, along with integrated water management, Sacramento-San Joaquin Delta management, ecosystem restoration, storage, and flood protection.

Water conservation in California has gained support from a series of State grant programs to provide important financial assistance required to implement conservation programs. Those State grant programs include funding from Proposition 13 (2000, $565 million), Proposition 50 (2002, $680 million), Proposition 84 (2006, $1.2 billion), and Proposition 1 (2014, $810 million).

Various federal agencies also provide conservation and drought funding, including the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and the USEPA. Reclamation's drought and conservation grant program, WaterSMART, provides assistance to water users for drought contingency planning, including climate change and actions that build towards long-term drought resiliency. USEPA provides loans to eligible recipients for various infrastructure and conservation projects through the Clean Water State Revolving Fund, which is managed and administered by the Water Board in California.

[3] *California Water Action Plan*. California Natural Resources Agency. January 2014.

California Water Action Plan

The Water Action Plan provides a roadmap for sustainable water management. It has guided the work of numerous State agencies and prioritized funding at the State level, and provided the groundwork for several important bills and legislation necessary to manage California's water supply during droughts.

Building on the 2014 plan, the 2016 Update describes 10 key actions to align State efforts and investments to ensure reliable water supplies in the future. The first action is to "make conservation a California way of life." To this end, the Water Action Plan includes several specific components:

- *Expand agricultural and urban water conservation and efficiency to exceed SB X7-7 targets*
- *Provide funding for conservation and efficiency*
- *Increase coordinated water energy efficiency and greenhouse gas reduction capacity*
- *Promote local urban conservation ordinances and programs*

The Water Action Plan also provides direction on planning activities to better prepare for droughts in the future, including preparation of drought contingency plans and water shortage contingency plans.

Groundwater Sustainability

Groundwater is an important component of California's water supply, particularly in dry years. The Sustainable Groundwater Management Act (SGMA) requires development of specialized groundwater sustainability plans in each region to support a more reliable and resilient water supply portfolio for the State as a whole. It is common for rural communities, small systems, and agriculture to rely heavily on groundwater, including private wells, to meet their supply needs. Consequently, SGMA and its implementation could have significant effects on water conservation, water use efficiency, and long-term water supply reliability.

1.2.3 Recent Drought Actions and Effects

In recent years, dry conditions throughout the State have underscored the importance of water conservation and achieving greater climate and drought resilience and preparedness.

2012 through 2014 are on record as California's driest three consecutive years with respect to statewide precipitation. 2013 was the driest on record in numerous communities across the State, including San Francisco, Sacramento, and Los Angeles. Parts of Northern California had no measurable precipitation for more than 50 consecutive days during winter months that historically see the year's highest precipitation totals. Reservoirs remained low in the spring, and groundwater pumping increased dramatically throughout the State as surface water supplies became limited or unavailable.

Persistent dry conditions prompted a series of Executive Orders from 2014 through 2016 that have guided California's drought response. The Governor proclaimed a State of Emergency on January 17, 2014. This drought proclamation directed State agencies to take specified actions and requested that Californians voluntarily reduce their water usage by 20 percent compared with the 2013 baseline. Following the 2014 emergency declaration, the Governor and State Legislature worked closely to secure and accelerate appropriation of funding for drought-related actions.[4]

[4] Emergency drought legislation contained in Senate Bills 103 and 104 provided $687 million to assist drought-stricken communities and implement projects to better capture, manage and use water resources. Over $400 million was provided through Proposition 84 bond funds for grants to local agencies for integrated regional water management projects, including projects that strengthened water conservation. Additional drought funding was also

Subsequent Executive Orders directed local urban water suppliers to immediately implement water shortage contingency plans, ordered the State's drinking water program to target communities in danger of running out of water, and supported the Water Board to administer various water rights actions, including curtailments and mandatory conservation (described earlier in this chapter).

In addition, the Water Action Plan provided guidance to State agencies to better align their priorities related to water resources management, including long-term drought resilience and response. The plan and its 2016 Update have facilitated the Governor and State Legislature's engagement in several key legislative efforts, subsequent bond initiatives, and state budgeting efforts.

Californians Respond

Californians demonstrated their inherent resilience and ability to conserve water and adapt to changing conditions. Between June 2015 and March 2016, urban water systems reduced water use by 23.9 percent, saving enough water to provide 6.5 million residents with water for one year.

"Californians stepped up during this drought and saved more water than ever before, but now we know that drought is becoming a regular occurrence and water conservation must be a part of our everyday life."

Governor Edmund G. Brown Jr.

The recent drought related actions and response activities culminated in Executive Order B-37-16 in May 2016. The EO builds on the conservation successes achieved in recent years to establish long-term water conservation measures and improve proactive drought planning and response.

The impacts of the current drought have been severe, characterized by limited or exhausted drinking water supplies in some communities, lost agricultural production and jobs, severely depleted groundwater basins, and significant harm to native habitats and species. Despite Californians responding to the call to conserve water, more frequent and extended dry periods are anticipated under our changing climate, which will be characterized by warmer winter temperatures and reduced water supplies held in mountain snowpack.

The effects of drought are likely to intensify in the future as the State population continues to grow and competition for water resources intensifies. It is recognized that permanent reductions in per capita water use, and increases in water use efficiency across all sectors, will be needed to ensure long-term water supply reliability for the State. It is also acknowledged that new goals and targets will be needed that go beyond 2020 to support continued economic prosperity and healthy ecosystems, while adapting to changing climate.

1.3 Framework for Realizing Water Conservation as a California Way of Life

This document was prepared to satisfy the Governor's directive to publish a draft framework for implementation of the EO by January 10, 2017. This report was prepared to inform the Governor, the California Legislature, and the public of the actions and recommendations of the EO Agencies in implementing the EO. Water suppliers that may be affected by the EO may use this document to better understand the proposed requirements and when those requirements could go into effect.

This section describes the process used by EO Agencies in developing the conservation

included in subsequent State budgets (http://www.ebudget.ca.gov/).

framework to satisfy the EO, including public and stakeholder engagement.

1.3.1 Satisfying Executive Order B-37-16

The EO Agencies have worked collaboratively to identify actions and recommendations that can satisfy the directives in the EO, and identify a timeline for their implementation. Underlying this process was the intent to provide:

- Clarity in the new requirements;
- Flexibility for retail water suppliers in carrying out their local responsibilities;
- Transparency in desired conservation outcomes and accountability; and
- A rational means for tracking progress over time.

The intent of the long-term conservation framework is to:

- Establish greater consistency in the elements of UWMPs, WSCPs, and AWMPs among water suppliers statewide.
- Enable water suppliers to customize water management strategies and plan implementation to regional and local conditions.
- Empower water suppliers to take a place-based response to water shortages caused by drought or other emergencies.

The EO Agencies coordinated closely in developing the recommendations for implementing the EO. This included forming cross-agency teams at agency leadership, management, and project staff levels. These teams met regularly to share progress, discuss proposals, and develop the report.

1.3.2 Public Outreach and Stakeholder Engagement

EO Agencies developed a collaborative program to formulate the long-term framework for water conservation and drought planning with extensive public outreach and stakeholder engagement (see also Attachment B).

Public Listening Sessions

The EO Agencies hosted a series of public listening sessions in Northern, Central, and Southern California in June 2016. These sessions provided an overview of the EO and solicited early stakeholder input.

Stakeholder Advisory Groups

The EO directs DWR, the Water Board, and CDFA to "consult with urban water suppliers, local governments, environmental groups, agricultural water suppliers and agricultural producers, and other partners" in carrying out several of the directives: Use Water More Wisely, Strengthen Local Drought Resilience, Eliminate Water Waste, and Improve Agricultural Water Use Efficiency and Drought Planning.

To this end, an Urban Advisory Group and an Agricultural Advisory Group were formed in July 2016 to advise the EO Agencies, solicit input on the recommendations and associated methodologies, and exchange information. Advisory Group members were invited to provide broad representation including urban water suppliers, agricultural water suppliers, local government, academia, professional organizations, environmental advocates, and other interested parties.

1.3.3 Framework Components

This report describes actions and recommendations for implementing the EO.

- Actions are efforts that have been or may be undertaken within existing authorities to implement portions of the EO. Actions that can be implemented under existing policy or

regulatory authorities include potential 2017 emergency water conservation regulations, permanent restrictions on water waste, efforts to reduce water supplier leaks and system losses, and certification of innovative technologies for water and energy conservation.

- Recommendations are efforts proposed by the EO Agencies that may be undertaken to implement portions of the EO but that will require additional authorities. Recommendations include new water use targets, water shortage contingency plans, drought planning for small systems and rural communities, and agricultural management plans.

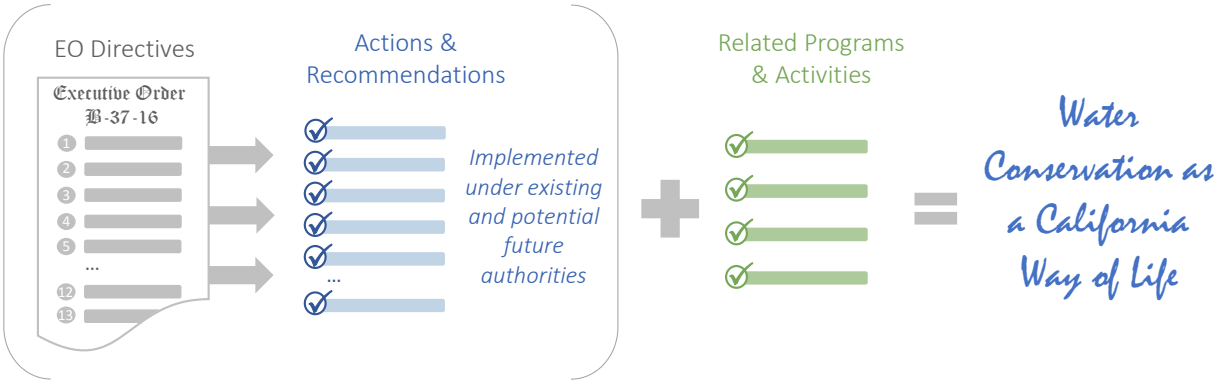
In addition to the actions and recommendations specific to meeting the directives of the EO, the EO Agencies are engaged in various other programs and activities related to water conservation, water use efficiency, and planning for droughts and other water emergencies. These ongoing efforts encompass technical assistance, funding mechanisms, guidance documents, rulemaking, and enforcement. Related programs and activities are critical to achieving the State's water use efficiency and conservation goals.

The EO actions and recommendations, along with other related State programs and activities, constitute the framework for making conservation a California way of life (Figure 1-1), as described in the EO and in the Water Action Plan.

1.3.4 Organization of this Report

This report describes proposed State actions and recommendations associated with the 13 items included in the EO, as summarized in Table 1-1.

Figure 1-2 illustrates the organization of this report. Chapter 1 provides introductory and background information setting the context for current efforts to improve conservation within the State of California, including a description of the directives in the EO. Chapters 2 and 3 describe how the directives contained in the EO are being and will be implemented. Chapter 4 provides a summary and timeline for implementing the identified actions and recommendations as part of the long-term framework for making conservation a California way of life. Attachment A includes the full language of the EO, and Attachment B summarizes the public outreach and stakeholder engagement conducted to support framework development.



Many of the needed actions and recommendations in this report cannot be implemented without new or expanded authorities and additional resources. This document describes the additional steps, resources, and legislative authority that will be needed. The actions and recommendations herein, together with existing State programs and activities related to conservation and water use efficiency, represent a statewide framework for making conservation a California way of life.

Figure 1-1. Framework for Making Water Conservation a California Way of Life

Table 1-1. EO Actions and Recommendations Summarized in this Report

Chapter Section and Title where EO Item is Addressed	EO Item: Use Water More Wisely			Eliminate Water Waste				Strengthen Local Drought Resilience			Improve Agricultural Water Use Efficiency & Drought Planning			Within Existing Authorities (Chapter 2)	Requires New Authority (Chapter 3)
	1	2	3	4	5	6	7	8	9	10	11	12	13		
2.1 Emergency Water Conservation Regulations for 2017	●													✓	
2.2 Monthly Reporting and Permanent Prohibition of Wasteful Practices			●	●										✓	
2.3 Reduced Water Supplier Leaks and Water Losses					●	●								✓	
2.4 Certification of Innovative Technologies for Water Conservation and Energy Efficiency							●							✓	
3.1 New Water Use Targets Based on Strengthened Standards		●				●									✓
3.2 Water Shortage Contingency Plans						●		●	●						✓
3.3 Drought Planning for Small Systems & Rural Communities										●					✓
3.4 Agricultural Water Management Plans						●					●	●	●		✓

Note: The EO directs the DWR, the Water Board, and CPUC to develop methods to ensure compliance with the provisions of the EO, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers.

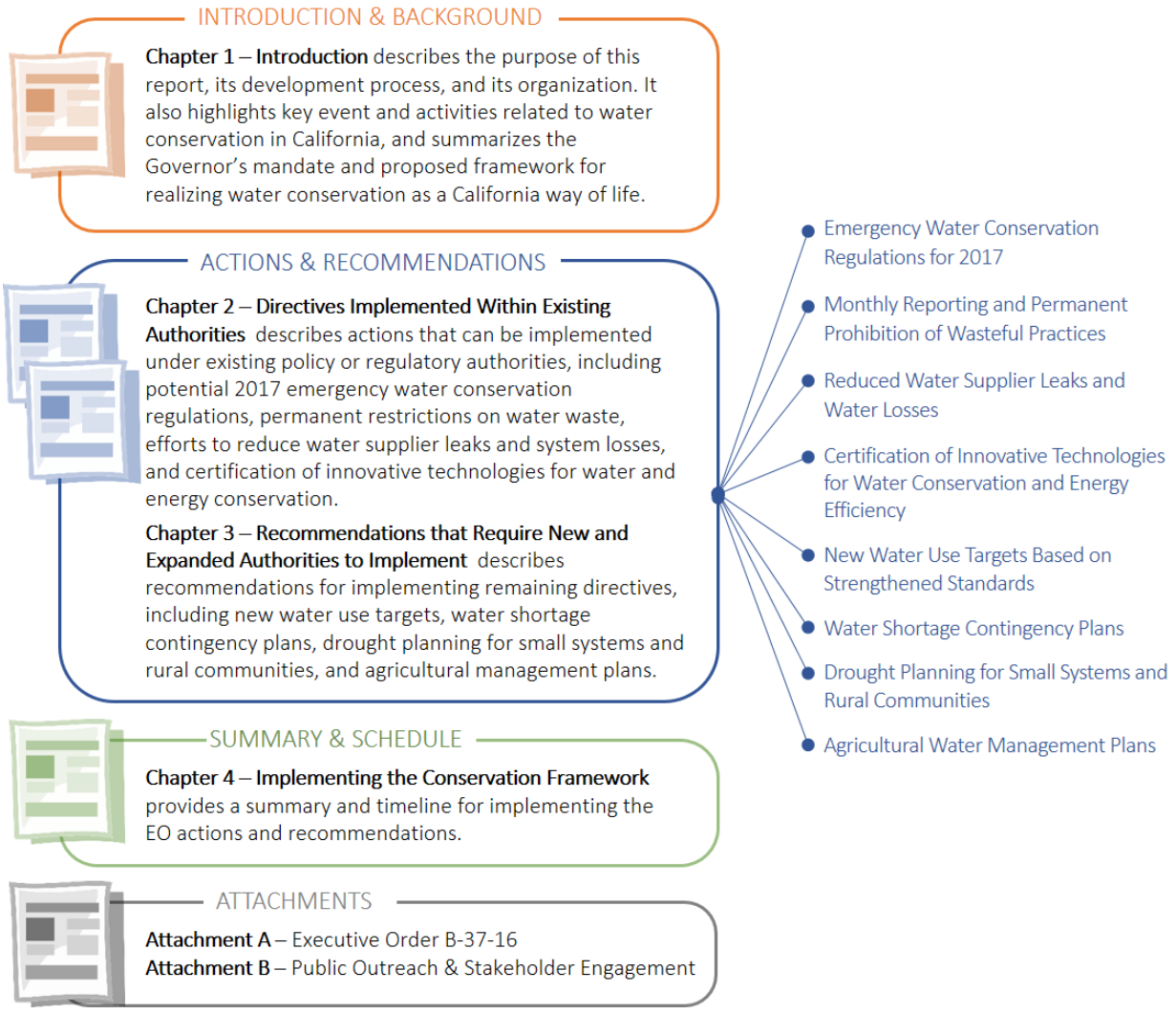
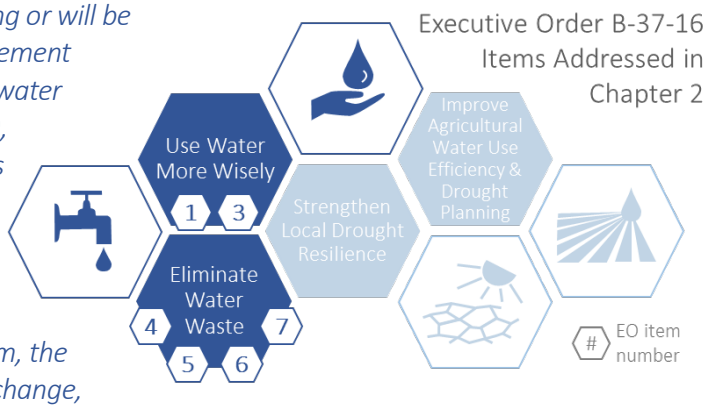


Figure 1-2. Report Organization

Chapter 2 – Directives Implemented Within Existing Authorities

This chapter describes actions that are ongoing or will be undertaken within existing authorities to implement portions of the EO. These include emergency water conservation regulations for 2017 (EO Item 1), monthly reporting and permanent restrictions on water waste (EO Items 3 and 4), efforts to reduce water supplier leaks and system losses (EO Items 5 and 6), and certification of innovative technologies for water and energy conservation (EO Item 7). For each item, the chapter includes descriptions of the need for change, the directive as stated in the EO, and implementation considerations. A summary of implementation activities and schedule are included in Chapter 4.



2.1 Emergency Water Conservation Regulations for 2017

2.1.1 Need for Change

The current emergency regulation for statewide urban water conservation is set to expire on February 28, 2017. However, drought conditions may persist through 2016 and beyond.

2.1.2 EO Directive

Water conservation regulations for 2017 address EO Item 1 that states:

> *The State Water Resources Control Board (Water Board) shall, as soon as practicable, adjust emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions across the state. To prepare for the possibility of another dry winter, the Water Board shall also develop, by January 2017, a proposal to achieve a mandatory reduction in potable urban water usage that builds off the mandatory 25% reduction called for in Executive Order B-29-15 and lessons learned through 2016.*

2.1.3 Implementation

Recognizing persistent yet less severe drought conditions due to precipitation near historical averages, the Water Board extended the emergency water conservation regulation on May 18, 2016. The current regulation requires locally developed conservation standards based upon each local water agency's specific circumstances. It replaces the prior percentage reduction-based water conservation standard with a localized "stress test" approach. These standards require local water agencies to ensure a three-year supply assuming three more dry years like the ones the State experienced from 2012 to 2015. Water agencies that would face shortages under three additional dry years are required to meet a state-mandated conservation standard equal to the amount of shortage. The May 2016 regulation is in effect from June 2016 through February 2017.

A majority of urban water suppliers determined that they have sufficient potable water supplies using the supply reliability test from the May 2016 regulation. The Water Board is monitoring drought conditions and urban potable water production and anticipates holding public workshops in winter of 2016/2017 to solicit public feedback on

changing and extending the emergency regulation in January 2017.

2.1.4 Reporting, Compliance Assistance, and Enforcement

Under the existing emergency regulations, urban water suppliers submit monthly reports to the Water Board on water production, program implementation, and local enforcement activities. The Water Board tracks progress and works with water suppliers to achieve compliance and enforce as needed. The Water Board shares supplier reports and water savings information on its website. These same reporting requirements and enforcement activities will continue under extended emergency regulations.

2.2 Monthly Reporting and Permanent Prohibition of Wasteful Practices

2.2.1 Need for Change

California faces decreasing water supplies through a combination of climate change, increasing population, and economic growth. To thrive as a state and make conservation a way of life in California, we must use our water resources effectively and stop wasteful practices. Regular and consistent supplier reports have been in place for several years and are an invaluable tool for understanding urban water supplier responses to policy changes and for statewide water management. EO items 3 and 4 direct DWR and the Water Board to extend some provisions in the emergency regulations to become permanent practices.

2.2.2 EO Directive

EO Item 3 establishes continued reporting and data collection requirements by urban water suppliers, and it states:

> *The Department and the Water Board shall permanently require urban water suppliers to issue a monthly report on their water usage, amount of conservation achieved, and any enforcement efforts.*

EO Item 4 focuses on prohibiting waste of potable water:

> *The Water Board shall permanently prohibit practices that waste potable water, such as:*
>
> - *Hosing off sidewalks, driveways and other hardscapes;*
> - *Washing automobiles with hoses not equipped with a shut-off nozzle;*
> - *Using non-recirculated water in a fountain or other decorative water feature;*
> - *Watering lawns in a manner that causes runoff, or within 48 hours after measureable precipitation; and*
> - *Irrigating ornamental turf on public street medians.*

2.2.3 Implementation

The Water Board will be conducting a rulemaking process to establish permanent monthly reporting requirements and prohibitions on wasteful water practices, building on what currently exists in the emergency regulation. This process will start at the end of 2016 and run through 2017. The Water Board plans to hold public workshops to solicit public comments during the rulemaking process.

The Water Board will implement these EO items using its rulemaking process with the following basic steps:

- Water Board staff gather data on potential impacts of proposed prohibitions and prepare draft regulatory documents.
- The Water Board solicits stakeholder input through workshops and comment periods, responds to stakeholder input, and revises

draft regulations as needed. There may be multiple iterations of this step.

- The Water Board adopts the final regulatory package of documents, including final regulations and conformance to California Environmental Quality Act requirements and submits to the Office of Administrative Law for approval.

2.2.4 Reporting, Compliance Assistance, and Enforcement

With permanent monthly reporting requirements in place, urban water suppliers will continue to submit monthly reports to the Water Board on water production, program implementation, and local enforcement activities. The Water Board will continue to track progress and work with water suppliers to achieve compliance, and enforce as needed. The Water Board will continue to post this information publicly on its website.

2.3 Reduce Water Supplier Leaks and Water Losses

2.3.1 Need for Change

Existing studies suggest that leaks and breaks in water systems (water losses) account for about 10 percent of total urban water production. DWR estimated almost 700,000 acre-feet per year of water lost at the utility level. Cost-effective water loss reduction represents a potentially significant source of conservation savings.

Water Loss

There are two types of water loss – real (e.g., leaks or breaks) and apparent (e.g., meter errors). Although the amount of water lost by water suppliers throughout the State due to distribution system leaks is not well-documented, a commonly used estimate is 10 percent of volume supplied.

2.3.2 EO Directive

EO Items 5 and 6 address minimizing system leaks and losses as well as accelerating data collection:

5. *The Water Board and the Department shall direct actions to minimize system leaks that waste large amounts of water. The Water Board, after funding projects to address health and safety, shall use loans from the Drinking Water State Revolving Fund to prioritize local projects that reduce leaks and other water system losses.*

6. *The Water Board and the Department shall direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital project to reduce water waste. The California Public Utilities Commission shall order investor-owned water utilities to accelerate work to minimize leaks.*

2.3.3 Implementation

The EO Agencies will meet the requirements of EO Items 5 and 6 through implementation of SB 555, and additional actions to satisfy the EOs directives related to reducing water supplier leaks. Signed in October 2015, SB 555 focuses on identifying real and apparent losses in urban retail water suppliers' distribution systems. It requires the following:

- Annual reporting by urban retail water suppliers
- DWR to perform rulemaking for water loss audit verification
- DWR and the Water Board to provide assistance to retail water suppliers
- The Water Board to set water loss standards between 2019 and 2020

Implementing the water loss audit program as required by SB 555 is a first step towards minimizing system leaks that waste water. As urban

retail water suppliers evaluate and identify distribution system water losses, steps can be taken to address those losses.

The SB 555 regulations for water loss audit validation are scheduled to be adopted by the California Water Commission in January 2017.

Requirements Related to Urban Water Suppliers

DWR. DWR is preparing rules for water suppliers to follow in preparation of their validated water loss audits. Setting audit standards will improve the reliability of water loss audit data.

By January 1, 2017, DWR must adopt rules for:

- Conduct of standardized water loss audits
- Process for validating a water loss audit prior to submission to DWR
- Technical qualifications and certification requirements for validators
- Method of submitting a validated audit report
- Audit review

DWR must also provide technical assistance to guide water loss detection programs, and update adopted rules within 6 months of the release of subsequent editions of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36.

In late 2016, DWR will identify urban retail water suppliers with high water losses, based on evaluation of the water loss audits submitted with the 2015 UWMPs. Suppliers ranked with high losses will be prioritized for technical assistance. Beginning in 2017, DWR will offer either workshops or one-on-one meetings to these suppliers. The aim of these interactions will be to assist the suppliers in preparing and implementing water loss reduction plans. DWR will provide guidance to suppliers on prioritizing their investments in water loss repair.

DWR will serve as a public information source for water loss data received with UWMPs and the annual water loss audit reporting. A public portal has been established,[1] and in 2017 this website will be enhanced to make the water loss audit reporting data accessible.

Water Board. No earlier than January 1, 2019, and no later than July 1, 2020, the Water Board must adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. In adopting these rules, the Water Board will employ life-cycle cost accounting to evaluate the costs of meeting the performance standards. The Water Board will identify compliance and enforcement mechanisms for water loss standards when the standards are adopted. These standards will be utilized for calculating the water targets discussed in Section 3.1 of this report.

As part of implementing SB 555, the Water Board is funding the California Water Loss Control Collaborative' s Technical Assistance Program through the California-Nevada Section of the American Water Works Association to further the preparation of consistent and high quality water loss audits. The program has held several technical assistance workshops in 2016 and will continue to offer technical assistance on water loss audits in 2017.

The Water Board will also evaluate whether to require urban water suppliers to conduct component analysis to identify cost-effective investments in water loss control ahead of the standards' rulemaking in 2019.

The Water Board will make water loss data available publicly.

CPUC. The CPUC requires reporting of water loss by investor-owned utilities. The CPUC will comply

[1] https://wuedata.water.ca.gov/

with EO Item 6 by ordering its investor-owned water utilities to accelerate work to minimize leaks to further the EO goal of eliminating water waste.

CPUC will use data received from its investor-owned utilities to identify how reductions in non-revenue water can be made. Resolution W-5119 will then be submitted for adoption by the CPUC before the end of 2016 acknowledging the progress Class A[2] investor-owned water utilities have made in keeping non-revenue water percentages stable since the Rate Case Plan Decision[3] was adopted. CPUC will encourage further work to accelerate efforts to minimize leaks, recognizing that system leaks are one component of non-revenue water.

Class A Water Utilities have been reporting non-revenue water metrics through each of their General Rate Case (GRC) Applications in accordance with the prescribed American Water Works Association (AWWA) methodology. This non-revenue water metric can be broken down further, as defined by AWWA in Table 2-1.

As evidenced in Table 2-1, non-revenue water is made up of multiple components, with system leaks being one component. Class A Water Utilities do not currently have the capability to break down their non-revenue water number into the components as defined by AWWA[4], instead reporting this number as a total percentage using AWWA's water loss audit software. However, Class A Water Utilities provide several additional metrics related to system leaks in their GRC applications, including the following:

- Identifying non-revenue water in centum cubic feet (CCF) and percentage of total water production for the last authorized test year, last five years recorded data, and proposed test year amounts.
- Submitting the results of a water loss audit performed no more than 60 days in advance of the submission of the proposed application. The audit report will be prepared using the free Audit Software developed by the AWWA and available on the AWWA website.
- In connection with the water loss audit described above, the utility shall conduct and submit the results of a cost/benefit analysis for reducing the level of non-revenue water reported in the water loss audit. If non-revenue water is more than approximately seven percent for each district or service area, submit a plan to reduce non-revenue water to a specific amount.
- Identifying specific measures taken to reduce non-revenue water in the last five years and proposed test year of the GRC application.
- Identifying the number of leaks in the last five years.
- Describing its leak detection program.
- Providing leak repair time and cost statistics for the last five years.
- Identifying specific measures taken to reduce number of leaks in the last five years and proposed test year.

[2] Class A Water Utilities are defined as utilities having greater than 10,000 service connections.
[3] The Rate Case Plan Decision adopted a schedule for the investor-owned utilities to file General Rate Case applications with the CPUC. The Decision also ordered the utilities to submit Minimum Data Requirements as part of their applications including information on efforts to reduce non-revenue water for the previous five years; a water loss audit in accordance with American Water Works Association; information on number of leaks in the last five years; a description of a utility's leak detection program; and various other metrics for supply and distribution infrastructure status and planning.
[4] Based on the Governor's Executive Order B-37-16 Information Request Response from the Class A Water Utilities to Terence Shia, CPUC, dated September 15, 2016.

Table 2-1. AWWA Water Balance

System Input Volume (corrected for known errors)	Authorized Consumption	Billed Authorized Consumption	Billed Metered Consumption (including exports)	Revenue Water
			Billed Unmetered consumption	
		Unbilled Authorized Consumption	Unbilled Metered Consumption	Non-Revenue Water
			Unbilled Unmetered Consumption	
	Water Losses	Apparent Losses	Unauthorized Consumption	
			Customer Metering Inaccuracies	
			Systematic Data Handling Errors	
		Real Losses	Leakage on Transmission and Distribution Mains	
			Leakage and Overflows at Utility's Storage Tanks	
			Leakage on Service Connections up tot point of metering	

This information expands on the efforts the CPUC's Class A Water Utilities have spent on minimizing leaks and keeping non-revenue water percentages stable.

The CPUC's Water Division has compiled[5] statistics on non-revenue water percentages from each Class A Water Utility since the Rate Case Plan Decision was adopted in 2008. This data indicates that Class A Water Utilities generally maintain non-revenue water percentages below 10% with some averaging around 4-7 percent. Given these numbers, the CPUC acknowledges the work the Class A Water Utilities have done in keeping non-revenue water percentages stable and encourages further work to accelerate efforts to minimize leaks. Efforts that may be undertaken to reduce non-revenue water and minimize leaks include: water loss audits; advanced meter and main replacement programs; increased inspections of service connection meters and mains; installation of leak-detection sensors in the distribution system; and deployment of advanced meter infrastructure.

Although the CPUC's Class B Water Utilities[6] do not have a defined Rate Case Plan and are not under the same reporting requirements as Class A utilities, these utilities should still propose methods to accelerate efforts to minimize leaks in their next General Rate Case filings in order to comply with the EO. Class B Water Utilities provide metrics on water loss in Schedule D of their annual reports. Testing data and the number of meters tested is provided in Schedule D-6 of the annual report, and total water delivered to metered customers is provided in Schedule D-7 of the annual report. With the focus on minimizing leaks and reducing water loss, Class B Water Utilities should continue to track this valuable information and provide the CPUC with this data in annual reports. In addition, the CPUC recommends that these utilities propose methods to accelerate efforts to minimize leaks in each of their next General Rate Case filings, where a cost/benefit analysis for reducing water loss can be conducted.

[5] Ibid.

[6] Class B Water Utilities are defined as utilities having greater than 2,000 but less than 10,000 service connections.

The CPUC will make available publicly the water loss data provided by investor-owned utilities.

Urban Retail Water Suppliers. By October 1, 2017, and annually thereafter, urban retail water suppliers must submit validated water loss audit reports to DWR. These reports will be made available for public viewing. Performing regular audits will help inform water suppliers about the extent of water losses in their service areas.

Financial Assistance. To incentivize urban retail water suppliers to comply with the requirement to submit validated water loss audit reports, DWR will revise its funding guidelines to state that water suppliers that do not submit reports are ineligible for DWR grants and loans.

The Water Board will offer financial assistance in 2017 to small water systems that have faced water shortages and required emergency assistance during the drought through the Drinking Water State Revolving Fund.

Other financial assistance programs that can be utilized for water loss reduction include the California Infrastructure and Economic Development Bank's revolving loan fund programs and the California Lending for Energy and Environmental Need Center's Program that offers low interest loans of $500,000 to $30 million for water conservation projects. The program is available to non-profit water agencies such as municipalities.

In addition, the CPUC may grant financial incentives for minimizing leaks during the review of each investor-owned utility's upcoming general rate case applications where further scrutiny can be conducted by interested parties considering the cost/benefit analysis of reducing the levels of non-revenue water.

Requirements Related to Agricultural Water Suppliers

Reducing water waste for agricultural water suppliers will be addressed through new AWMP requirements that include quantifying measures to increase efficiency, developing a water balance that can identify and prioritize water loss, identifying ways to improve water system management, and drought planning (see Section 3.4).

2.3.4 Reporting, Compliance Assistance, and Enforcement

Beginning in 2017, urban retail water suppliers must submit validated water loss audit reports to DWR. Those not in compliance will not be eligible for State grant and loan funding.

Upon completion of the Water Board's rulemaking related to SB 555 water loss standards in 2020, reporting, compliance assistance, and enforcement information will be available (see Section 3.1 for further detail).

2.4 Certification of Innovative Technologies for Water Conservation and Energy Efficiency

2.4.1 Need for Change

Reducing the amount of water used by appliances can result in water savings. Setting water efficiency standards can help reduce the level of water use across the State. In addition, technologies are in various states of development and deployment that aim to find underground leaks and leaks past the utility meter. As leak detection and reduction technologies advance, water loss control measures may become more cost-effective.

2.4.2 EO Directive

EO Item 7 focuses on water conservation and energy efficiency technologies, and states:

> *The California Energy Commission shall certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency.*

2.4.3 Implementation

EO Item 7 builds on Executive Order B-29-15 that incentivizes promising new technology to make

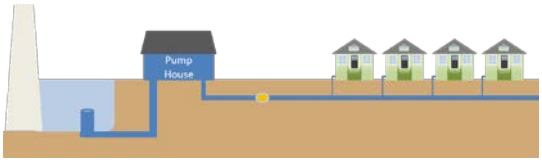
California more water efficient. This item directed the CEC to:

- Implement an appliance rebate program to replace inefficient household devices jointly with DWR and the Water Board.
- Adopt emergency regulations establishing standards to improve the efficiency of water appliances.
- Implement a Water Energy Technology (WET) Program to deploy innovative water management technologies.
- Expedite applications or petitions for power plant certifications to secure alternate water supply necessary for continued power plant operation by delegating, as appropriate, approval to the Executive Director.

Approaches to Water Conservation and Water Loss Detection and Control Technologies

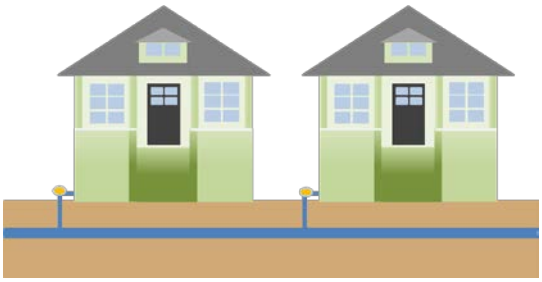
Various options for water loss detection and control are described briefly below.

Utility Level. Utility level technologies discover leaks in water distribution infrastructure prior to delivery to the customer. Some utilities have devised approaches varying from listening for the sounds from leaks to surveys from aircraft or satellites. Some utilities have begun monitoring and controlling a system's water pressure in an effort to prevent the formation of leaks and minimize water loss.



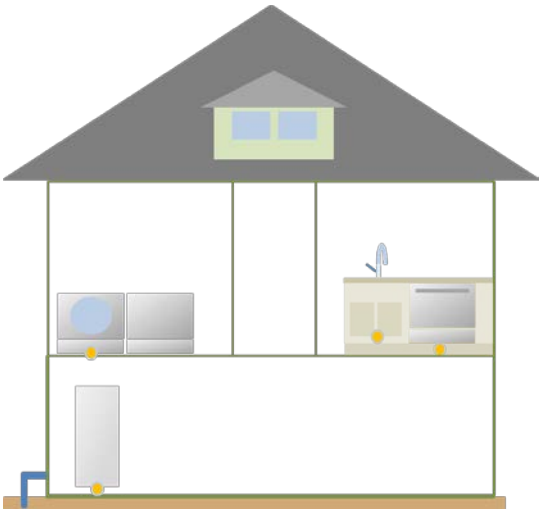
Distribution level loss detection.

House Level. Several companies are developing devices intended to monitor whole house water usage and report leaks. A typical device clamps to a house's main water supply and identifies the type of water usage by the signature of the water flow. These devices provide information to occupants via the internet.



Household level loss detection.

Appliance Level. Consumers may place a device near an appliance such as a faucet, clothes washer, water heater or dishwasher to detect leaking water. The device may alert the user through an audible alert or through a message sent to their internet connected device.



Appliance level loss detection.

CEC Research and Development Division Activities

The CEC's Electric Program Investment Charge (EPIC) Program follows an energy innovation pipeline program design, funding applied research and development, technology demonstration and deployment, and market facilitation to create new energy solutions, foster regional innovation, and bring clean energy ideas to the marketplace.

EPIC-Funded Utility Level Leak Prevention and Water Loss Detection Study. The EPIC Program is currently funding studies that will demonstrate correlating continuous acoustic monitoring, satellite imagery leak detection, district metered areas, and flow-sensitive pressure reducing valve technologies to reduce the formation of leaks and aid in the detection of leaks at four California municipal utilities. The goal is to demonstrate and improve the technologies to move them closer to commercial adoption.

CEC Efficiency Standards

Section 25402(c)(1) of the California Public Resources Code mandates that the CEC reduce the inefficient consumption of energy and water on a statewide basis by prescribing efficiency standards and other cost-effective measures for appliances that require a significant amount of energy and water to operate. Such standards must be technologically feasible and attainable and must not result in any added total cost to the consumer over the designed life of the appliance. Manufacturers must certify to the CEC that their appliances meet or exceed the applicable minimum efficiency standards.

The CEC assesses the technical feasibility of proposed standards as part of the appliance rulemaking process. Technical feasibility means determining whether technologies currently exist or will exist that can achieve the efficiency goals of the proposed standard.

In determining cost-effectiveness, the CEC considers the value of the water or energy saved, the effect on product efficacy for the consumer, and the life-cycle cost of complying with the standard to the consumer. The CEC assesses the cost effectiveness of a proposed appliance standard by surveying and comparing the cost and operation of compliant and non-compliant appliances. Any increased costs must be offset by water and energy savings due to the increase in appliance efficiency.

The CEC recently concluded a rulemaking to increase the efficiency of toilets, urinals, faucets, and showerheads that will result in saving over 150 billion gallons of water per year after full replacement. The CEC looks to further water savings by exploring appliance standards for landscape emitters and landscape irrigation controllers.

The CEC maintains a database of appliances certified by manufacturers as meeting the Appliance Efficiency Standards. The public may search the database for compliant products and use the performance data to identify appliances that use water and energy most efficiently.

Informational Proceeding Workshop. In early October 2016, the CEC conducted a public workshop to gather information on innovative water conservation and water loss detection and control technologies from industry, stakeholders, and the public. The comment period closed in late October 2016.

CEC staff will prepare and include a summary of stakeholder comments for inclusion in the final draft of this report. CEC staff will consider comments as part of the workshop process and may make recommendations for the CEC to consider in a future rulemaking.

WET Program. The CEC, jointly with DWR and the Water Board, plans to implement the WET Program to provide funding to accelerate the deployment of innovative water and energy saving technologies and reduce greenhouse gas emissions. However, launch of the program is suspended until funds are made available by the State Legislature.

2.4.4 Reporting, Compliance Assistance, and Enforcement

Reporting, compliance assistance, and enforcement do not apply to the actions associated with certification of innovative technologies for water conservation and energy efficiency.

This page left blank intentionally.

Chapter 3 – Recommendations that Require New and Expanded Authorities to Implement

This chapter describes recommended actions to be undertaken to implement portions of the EO but that require expanded statutory authority. These include new water use targets based on strengthened standards (EO Items 2 and 6), water shortage contingency planning (EO Items 6, 8, and 9), drought planning for small water suppliers and rural communities (EO Item 10), and agricultural water management planning (EO Items 6, 11, 12, and 13). For each, the chapter includes: a description of the current status and need for change; the directive as stated in the EO; and a description of reporting, compliance assistance, and enforcement. A summary of implementation activities and their schedules are included in Chapter 4.

3.1 New Water Use Targets Based on Strengthened Standards

3.1.1 Current Status and Need for Change

Urban water conservation and efficiency has been a key California water management strategy over the past 25 years starting with programs implemented during or shortly after the 1988 to 1992 drought, including MWELO and plumbing code and appliance standards. In 1991, 120 urban water suppliers[1], environmental groups and other interested parties signed a historic Memorandum of Understanding (MOU) agreeing to develop and implement comprehensive water conservation Best Management Practices (BMP). The MOU called for the creation of the California Urban Water Conservation Council (CUWCC) to oversee the implementation of the BMPs. Roughly half of urban water suppliers voluntarily joined the CUWCC in 1993, and more followed since then.

The CUWCC has played a key role in the history of urban water conservation in California, successfully creating a collaborative forum for water suppliers and the environmental community to work together to advance urban water conservation throughout the State. This voluntary documentation of conservation efforts by reporting on BMPs by water suppliers has continued through 2016. In 2009, the State conditioned grant funding eligibility for urban water suppliers on compliance with demand management measures which were defined as the CUWCC's 14 BMPs. This requirement was in place until July 1, 2016 when retail urban water suppliers' eligibility for State loan and grant funding changed to compliance with the 20x2020 urban water use targets (California Water Code (CWC) Section 10608.56).

At the end of the 2007 to 2009 drought and as part of a Sacramento/San Joaquin River Delta Legislative Package, the State set a statewide goal of reducing

[1] Urban water suppliers are defined by CWC Section 10617 as a "supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually."

urban per capita water use by 20 percent by 2020, with a 10 percent interim goal in 2015. Known as the Water Conservation Act of 2009, SB X7-7 required urban water suppliers to calculate baseline water use and set water use targets for 2020, with interim targets by 2015. Suppliers were required to report on target compliance in their UWMPs. Urban water suppliers reported a statewide average baseline water use of 199 gallons per capita per day (GPCD) for the ten-year period from 1996 to 2005, with baseline water use amongst individual suppliers showing significant variation. The statewide interim target was 179 GPCD and the final statewide 2020 target was 159 GPCD.

SB X7-7 provided several options for how suppliers could achieve higher levels of water conservation by allowing each water supplier to choose one of four methods[2] for determining their own water use target for 2020 (and interim targets for 2015). These options were designed to address regional diversity use practices, climate, history of investment in water conservation and reductions in urban water use. SB X7-7 also permitted water suppliers to join with others to meet the targets regionally. Finally, it permitted urban water suppliers to increase the use of recycled water to meet their targets.

[2] As outlined in DWR's *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use* (2010, & updated in 2016), the four methods to set 2020 per capita water use targets are as follows:

- *Method 1*: Eighty percent of the water supplier's baseline per capita water use.
- *Method 2*: Per capita daily water use estimated using the sum of performance standards applied to indoor residential use; landscaped area water use based on MWELO; and a 10% reduction in CII water use.
- *Method 3*: Ninety-five percent of the applicable State hydrologic region target as stated in the State's April 30, 2009, draft 20x2020 Plan.
- *Method 4:* An approach developed by DWR and reported to the Legislature in February 2011 that identifies per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020.

SB X7-7 directed DWR to develop technical methodologies and criteria to ensure the consistent implementation of the Act and to provide guidance to urban water suppliers in developing baseline and compliance water use.[3]

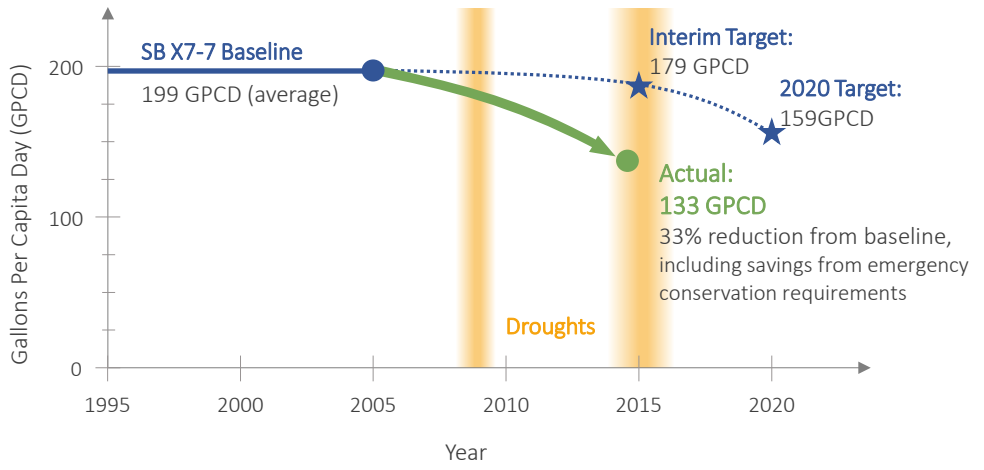
The current historical drought (2013 – present) has placed an even greater emphasis on urban water conservation and efficiency. In January 2014, Governor Brown issued an emergency drought proclamation, and on April 1, 2015, the Governor issued an Executive Order directing the Water Board, for the first time, to enact statewide mandatory conservation requirements to achieve a 25 percent reduction in statewide urban water use. As a result of these mandatory conservation requirements, urban water suppliers reported an average per capita water use of 133 GPCD in 2015, a 33 percent reduction from the baseline conditions for SB X7-7 implementation of 199 GPCD (see Figure 3-1). In 2013, prior to the imposition of statewide mandatory conservation requirements, DWR estimated that average statewide per capita use had already declined to about 160 GPCD, an 18 percent reduction from the SB X7-7 baseline.

While some of this reduction is a result of short-term drought-related cutbacks that will likely bounce back once the drought is over, the current drought has accelerated urban water conservation, exceeding 20x2020 goals well in advance of 2020.

To build on the conservation and efficiency momentum achieved during the current drought, and to "make water conservation a California way of life" on a permanent basis, the EO directs the EO Agencies to develop new water use targets that go

[3] DWR developed methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use. These are published in *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use* (DWR 2010, updated in 2016).

beyond the "20x2020" targets based on strengthened water use efficiency standards.



Urban water suppliers reported an average per capita water use of 133 GPCD in 2015, a 33 percent reduction from the baseline conditions set for SB X7-7 and well below the interim target of 179 GPCD and the final target of 159 GPCD.

Figure 3-1. Conservation Targets under SB X7-7 Compared with Actual Conservation

The EO calls for new water use targets based on strengthened water use efficiency standards, rather than a percentage reduction in urban water use. This approach builds off one of the four SB X7-7 methods urban water suppliers could use to achieve their 2020 targets (Method 2). A water use efficiency standards-based approach provides several advantages when compared with other previously used percent reduction approaches in SB X7-7. Mandatory percentage reductions may be more difficult for suppliers that have already achieved a high level of efficiency and conservation, as their overall water use may be low. Further, an efficiency approach removes negative incentives for consumers to use more water than needed during normal (non-drought) conditions such that, if required to conserve due to an emergency, it would be easier to achieve reduction targets. An efficiency-based approach also recognizes supplier efforts to reduce overall water use, including development of recycled water and turf-replacement programs, and eliminates uncertainty associated with percent reduction from a baseline.

While the Water Boards' mandatory conservation requirements were effective in reducing urban water use, those requirements function best as a short-term, interim solution. A long-term transition to conservation as a way of life must take into account the climatic, landscape, and demographic conditions unique to each supplier. The approach described in this Framework will recognize the unique geographies of the State by incorporating supplier-specific climate, population, and other settings.

3.1.2 EO Directive

New water use targets based on strengthened standards address EO Item 2, which states:

> *The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010)). These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide conservation than existing requirements, and shall be based on strengthened standards for:*
>
> *a. Indoor residential per capita water use;*

b. *Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;*

c. *Commercial, industrial and institutional water use; and*

d. *Water lost through leaks.*

EO Item 6, which addresses data collection and improved water system management, also relates to the implementation of new targets and standards directed in EO Item 2. EO Item 6 states:

> *The Water Board and the Department shall direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste.*

See also Table 1-1 in Chapter 1 for a summary of the relationship between the EO items described in this chapter.

3.1.3 Recommendations

The EO Agencies recognize that improved water use efficiency on a statewide scale will take time, and recommend setting interim targets until refined standards are adopted no later than 2020, with a path of increasing progress toward achieving final compliance in 2025. This will allow time for the EO Agencies to collect data sufficient for establishing new standards, and allow water suppliers and users to plan for and adjust to the change in approach. The EO Agencies will identify and formally adopt (revised) final standards no later than 2020. Suppliers would then calculate new water use targets based on the final standards starting in 2021, with the goal of achieving full compliance with the final standards by 2025.

The standards recommended by the EO Agencies encompass residential indoor water use, outdoor irrigation water use, water system losses, and commercial, industrial and institutional uses. The EO Agencies anticipate that the greatest water efficiency savings will be achieved through changes in outdoor landscape water use, due to the relatively high use of water in this sector compared with others.

The following describes the standards framework, and the processes needed to implement the water use target directive. The discussion is divided into three parts: (1) the process for setting a water use target, (2) the process for setting standards (including provisional outdoor and indoor water use, water loss, and commercial and industrial measures), and (3) a summary of the anticipated schedule for water use standards development.

Setting a Water Use Target

Under the EO Agencies' proposed framework, each water supplier will be required to annually calculate an overall water use target and a commercial, industrial, and institutional (CII) performance-based measures.

The EO Agencies' proposed framework improves on the SB X7-7 Method 2 approach, but differs in several respects. First, under SB X7-7 Method 2, the water use target was the sum of an indoor and outdoor performance based standard and a 10 percent reduction in CII water use, and water loss was not addressed. Under the proposed framework, water loss is now included as part of the supplier's Water Use Target. Given the substantial diversity in businesses and institutions throughout California, a better approach to the CII sector would be to institute performance measures rather than a volumetric standard or budget, at this time. Data collection associated with the CII performance measures may support industry standards and volumetric approaches in the future.

The water use targets will be calculated as the sum of a supplier's residential indoor, outdoor irrigation, and distribution system water loss budgets. Each of these budgets is calculated through the application of a water use efficiency standard, described later in this section.

Indoor Water Use Budget + Outdoor Water Use Budget + Water Loss Budget = Supplier Water Use Target

Compliance will be based on the supplier's total water use target, rather than on the individual budgets. Interim targets based on residential indoor and outdoor standards will be set by water suppliers in 2018, and final targets based on indoor, outdoor and water loss standards will set by water suppliers in 2020. The interim targets will be gradually reduced over time to create a path of increasing progress toward achieving final compliance in 2025. Water suppliers that are not on track to meet interim or final standards-based targets may be provided with additional compliance assistance and/or face enforcement actions from the Water Board.

The following provides an example water use target calculation using hypothetical budgets for residential indoor water use, outdoor irrigation water use, and distribution system water loss. For illustrative purposes, the budgets are presented in three units: gallons per capita per day (GPCD), acre-feet, and centrum cubic feet (CCF).

Example Water Use Target Calculation

Sector	Budget[1] (GPCD)	Budget Volume (acre-feet)	(CCF)
Residential Indoor Water Use	55	10,492	4,570,315
Outdoor Irrigation Water Use	45	8,584	3,739,190
Water Loss	6	1,144	498,326
Target	**106**	**20,220**	**8,830,380**

Notes:
1. Budget calculations based on the following:
   Service area population = 170,319
   Days per year = 365

Water suppliers will also calculate compliance volume by subtracting water delivered to the CII sector from total water production:

Compliance Volume =
Total Water Production - CII Deliveries

To the right is an example compliance volume calculation for a hypothetical water supplier. To be in full compliance, (1) the water supplier's compliance volume must be less than or equal to the water use target, and (2) the supplier must document full implementation of the CII performance measures (as described more fully below).

Example Compliance Volume Calculation

Supplier's Water Use:

Total water production: 26,136 acre-feet
CII deliveries: 7,240 acre-feet
Target (see prior example): 20,272 acre-feet

Compliance volume = total production – CII deliveries
= 26,136 – 7,240
= 18,896 acre-feet

The supplier is in compliance because the compliance volume of 18,896 acre-feet is less than the water use target of 20,272 acre-feet.

A supplier's water use target will change each year because, although the standards are set, the targets are based on variable metrics (population, landscape area, evapotranspiration) that change from year to year. Consequently, post-submittal changes or adjustments will not be needed to account for weather or other factors. The process and methodology for setting the standards is described in the following section.

Setting Water Use Efficiency Standards

The following describes the recommended provisional standards for residential indoor water use, outdoor irrigation, and distribution system water loss, and the performance measures standard for CII water use.

Residential Indoor Water Use Standard

This standard is defined as the volume of residential indoor water used by each person per day, expressed in GPCD. The indoor residential standard will be used to calculate the residential

indoor budget of a supplier's water use target, which is a function of the total service area population.

For example:

Residential Indoor Water Use Budget = (Service area population) x (residential indoor standard) x (number of days in a year)

Until the 2025 standard for residential indoor water use is established, the existing 55 GPCD standard based on SB X7-7[4] will apply.

A recent national study[5] conducted by the Water Research Foundation suggests that the national residential indoor water use average is about 59 GPCD. Many experts believe California's average residential indoor use to be lower. DWR is currently conducting a study to estimate average statewide residential indoor GPCD. A DWR-commissioned study[6] to support the standard development suggests that compliance with the provisional residential indoor water use standards could likely be facilitated through plumbing code changes and continued appliance replacements with higher efficiency units. This study suggests that the effects of toilet replacement through SB 407[7] and continued enforcement of federal clothes washing machine water use efficiency standards would lower residential indoor water use by roughly 6 GPCD by 2030 and by 9 GPCD by 2040. This estimated level of reduction is generally consistent across all counties in California.

DWR and the Water Board will continue gathering additional data on current indoor water use to support future revisions of the existing standard downward to reflect the increased use of efficient fixtures and appliances. The updated standards will be available in 2018, with a timeline for interim and final compliance by 2025. Afterward, the EO Agencies will reevaluate the standard for potential revision every five years, beginning in 2025.

Outdoor Irrigation Standard

The proposed outdoor irrigation water use standard will be defined as percentage of reference evapotranspiration (ETo). ETo is an estimate of the evapotranspiration[8] of well-watered cool season grass and is expressed in inches of water per day, month, or year. ETo will vary across the State based on climatic factors such as solar radiation, temperature, humidity and wind. Landscape water requirements are expressed as a percentage of ETo and encompass the plant water requirements and the irrigation system efficiency. Lawns and recreational fields can require 100% of ETo or greater while low water use landscapes can require 20 to 30% of ETo. The outdoor irrigation standard will be a fraction of ETo.

Table 3-1 shows the existing SB X7-7 standards (Method 2[9]) for outdoor water use. These existing,

[4] SB X7-7 defined 55 GPCD as a provisional standard for residential indoor water use. See CWC Section 19608.20(b)(2)(A).

[5] Water Research Foundation (2016). Residential End Uses of Water Study, Version 2: Executive Report.

[6] Mitchell, D., 2016. Projected Statewide and County-Level Effects of Plumbing Codes and Appliance Standards on Indoor GPCD, for Department of Water Resources, August.

[7] California Civil Code Section 1101 et seq.

[8] Evapotranspiration is the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants.

[9] In describing Method 2, CWC Section 10608.2 (b)(2) specifies that the 2020 per capita water use target is, "The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficiency Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of, the year of the landscape's installation or 1992. An urban retail water supplier

provisional standards will guide and assist water suppliers in their outdoor water use planning efforts until such time as the EO Agencies identify and adopt final standards (as described later in this section).

Table 3-1 Existing SB X7-7 Standards for Outdoor Water Use

Category		% of ETo
Residential Landscape by Parcel Development Date	Before 2010	0.8
	Between 2010 and 2015	0.7
	After 2015	0.55
Commercial Landscape		0.45
Landscapes Irrigated by Recycled Water		1.0
Special Landscape Areas (e.g., Parks and Fields)		1.0

Note that irrigation use for commercial properties without a dedicated account or meter will be subject to the CII performance measures, as described later. For the purpose of the provisional standards displayed in Table 3-1, areas irrigated with recycled water are considered special landscape areas and assigned an Evapotranspiration Adjustment Factor (ETAF) of 1.0, recognizing the higher salinity levels of recycled water.

The total outdoor water use budget for a water supplier is calculated as the sum of the individual budgets for all categories of outdoor water use within its service area. Because ETo and landscape area can change from year to year, the resulting outdoor water use budget also changes.

using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For CII uses, a 10-percent reduction in water use from the baseline CII water use by 2020."

As described previously, the outdoor irrigation budget is calculated based on the landscape area within a water supplier's service area. Currently, few water suppliers have measured or collected data on the landscape area within their service area. To facilitate the transition to the new standards-based approach, the EO Agencies will develop landscape area estimates for each urban retail water supplier in the State.

The EO Agencies will develop landscape area data in several steps. First, the EO Agencies will form an urban landscape area workgroup to provide technical guidance and input on this project. This work will include developing definitions for irrigated and irrigable landscape area. Next, pilot projects will be conducted to ensure that the process used for measuring landscape area is accurate. The landscape area workgroup will also provide input and guidance in reviewing the pilot projects' results. Accuracy assessments will be conducted for each of the pilot projects.

Based on lessons learned from the pilot projects, the EO Agencies will measure the landscape area for the remaining urban retail water suppliers. It is anticipated that this statewide landscape area measurement project will be completed in 2018. At the end of the project, in 2018, the service area landscape area data will be made available to water suppliers.

Using both the supplier service area landscape area data measured in the pilot and statewide projects and water suppliers' aggregate water delivery data, the EO Agencies will estimate service area, regional, and State average applied irrigation water levels.

In 2018, using the statewide estimates of applied irrigation water use, DWR and/or the Water Board will evaluate the existing SB X7-7 outdoor water use standards (Table 3-1) and develop final recommended standards that would begin to be phased in starting 2018 and need to be fully applied by 2025. At this time, the EO Agencies will also reevaluate the treatment of areas irrigated by

recycled water and determine the referenced acreage for residential landscape area (i.e., irrigated area or irrigable area) in budget calculations. The final outdoor standards will be set to increase the efficiency of outdoor water use and achieve water savings beyond SB X7-7 implementation.

By 2020 the EO Agencies will adopt the final outdoor landscape standards. Urban water suppliers must develop a plan for meeting their 2025 water use targets and report on it in their 2020 UWMPs. Starting with 2021 (reported on in 2022), urban water suppliers must start showing sufficient progress towards meeting the water use targets based on the 2025 standards. Water suppliers will be required to meet their water use targets by 2025.

Every five years thereafter, the EO Agencies will review the outdoor water use standard; at these times, they may consider further reducing the ETAFs for some or all categories, or making other adjustments to the standard and budget calculation. Landscape area data will also be updated periodically.

Distribution System Water Loss Standard.
The standard for water system loss will be established through the SB 555 process[10] and may be expressed as volume per capita or volume per connection, accounting for relevant factors such as infrastructure age and condition. The water loss standards will include system losses and leaks, as well as other non-revenue water used for system maintenance and public safety purposes.

Per SB 555, the Water Board will establish the water loss standard by 2020 for compliance in 2025. The Water Board will reevaluate the water loss standard for potential update every five years, beginning in 2025.

Commercial, Industrial, and Institutional Performance Measures.

[10] See Section 4.3 of this report for information on SB 555, water loss audits, and water loss standards.

There is substantial diversity in businesses and institutions throughout California, resulting in a wide range of water use within the commercial, industrial, and institutional sector. Consequently, the EO Agencies will not establish a volumetric standard and budget for CII water use at this time. Instead, CII water suppliers will be required to implement the following three performance measures:

1. Convert all landscapes over a specified size threshold that are served by a mixed-meter CII account to dedicated irrigation accounts, either through the installation of a separate landscape meter or the use of equivalent technology.

2. Classify all CII accounts using the North American Industry Classification System (or another similar classification system selected by the EO Agencies). Where feasible, CII subsector benchmarks will be developed to assist water suppliers in identifying CII accounts with the potential for water use efficiency improvements.

3. Conduct water use audits or require water management plans for CII accounts over a specified size, volume, or percentage threshold.

By December of 2018, the EO Agencies will develop regulations and guidelines for the implementation of the CII performance measures. This guidance will include methods for classifying CII accounts, landscape size thresholds for dedicated metering, direction on implementing CII water audits, and guidance for preparing water management plans. The regulation and guidelines will be established through a public process, with the advice and input of a new CII workgroup to be established by the EO Agencies. Every five years, the EO Agencies will review the outcomes of performance measure implementation and consider updates, if appropriate. In the future, the EO Agencies may consider establishing industry-specific benchmarks

or other means to improve water use efficiency in the CII sector.

Schedule for Water Use Standards Development, Review and Revision

The following summarizes anticipated EO Agencies actions and timeline for developing, reviewing, applying, and revising the water use standards. This timeline is subject to resource availability.

Water Use Standards Development Timeline

2017
- DWR completes pilot projects on landscape area measurements

2018
- DWR completes statewide landscape area measurements to support development of outdoor landscape standard
- EO Agencies estimates service area, regional, and State average applied irrigation levels
- EO Agencies recommend final 2025 compliance standards for indoor and outdoor water use
- EO Agencies set provisional indoor and outdoor residential standards, and water suppliers set interim targets.
- EO Agencies develop regulations and guidelines for the implementation of CII performance measures
- DWR provides urban water suppliers with the service area landscape area data

2019
- EO Agencies provide guidance and methodologies for all standards

2020
- By 2020, EO Agencies complete rulemaking and adopt final 2025 indoor, outdoor and water loss standards

2025
- EO Agencies review and consider updates to the standards, starting in 2025 and every five years thereafter; revisions will follow the requirements for rulemaking and provide opportunity for public comment and input

3.1.4 Reporting, Compliance Assistance, and Enforcement

Specific reporting and compliance dates are subject to EO Agencies requisite actions as described above. Compliance dates would be extended as necessary to accommodate any serious delays in completion of those actions.

Reporting

Beginning in 2019, water suppliers must submit limited annual progress reports showing implementation of the recommended CII performance measures, and to measure progress toward meeting interim and final targets. In their 2020 UWMPs, urban water suppliers must submit a plan for meeting their 2025 water use targets.

Starting in 2022, the annual progress report for the prior year will address all water use standards and will include the following three elements:

1. Calculation of progress towards meeting the water use standards based on prior year target developed using 2025 standards and annual production data.
2. Documentation of CII performance measures implementation.
3. A narrative description of refined actions to be taken by the supplier to ensure compliance by 2025.

Water suppliers will submit annual progress reports every year from 2022 through 2025, documenting annual water production relative to the water use targets and CII performance measure implementation for the previous year. In 2026, water suppliers will submit a concluding annual compliance report documenting accomplishments and outcomes in complying with the 2025 water use targets.

Suppliers will continue to submit annual compliance reports in 2026 and thereafter, repeating the 5-year reporting cycle and using updated standards adopted by the EO Agencies, as

applicable. Additionally, suppliers will continue to submit monthly and annual water use data, per existing requirements.

The 5-year cycle for water suppliers to update their UWMPs is similar to the 5-year cycle for the EO Agencies to update the water use standards; it is expected that updated standards will be available six months to a year prior to the July deadline for submitting UWMPs. Reporting in future UWMP updates will, therefore, incorporate the water use efficiency standards and supplier accomplishments in meeting them.

Assistance and Compliance

The EO Agencies propose that compliance will be assessed on total water use in comparison to a supplier's total water use target, rather than on the individual water budgets by sector (indoor, outdoor, and water loss). Full compliance will be met when the supplier's total water use is less than or equal to the target, and the supplier has implemented the CII performance measures.

The EO Agencies will review the monthly and annual reports and data submitted by water suppliers for completeness and progress in achieving interim targets starting in 2018 and compliance with final targets by 2025. Where necessary, DWR or the Water Board may provide feedback, direction, or suggestions for water suppliers to improve their compliance and progress. The Water Board may also issue formal Enforcement Orders to suppliers not on track to meet interim or final targets.

DWR will provide technical assistance to suppliers in preparing their annual progress reports and will continue to revise UWMP guidance, as needed, to reflect updated standards and water use compliance requirements. The EO Agencies will actively communicate the need for the water use targets and their implementation through public outreach and engagement, sharing the responsibility for public education with water suppliers.

Water suppliers must be in compliance with the new standards-based water use targets by 2025 to be eligible for State grant and loan funding.

Enforcement

Water suppliers that are not in compliance with the new standards-based water use targets by 2025 may be provided with additional compliance assistance and/or face enforcement actions from the Water Board. This could include:

- Information orders
- Conservation orders
- Cease and desist orders
- Administrative civil liability penalties (such as fines)

The EO Agencies will conduct enforcement only at the supplier level, based on compliance with the total water use target for the entire service area and associated performance measures for CII water use. Water suppliers may implement discretionary actions of their choosing on individual water accounts or users to ensure that their overall water use efficiency targets are met.

Water suppliers are required to continue submitting monthly water use reports to the Water Board for their water use, amount of conservation achieved, and any enforcement efforts, as directed in EO Item 3.

Water suppliers failing to submit annual reports for standard compliance, UWMPs, or monthly reports for water use per schedule will be subject to earlier enforcement action.

MWELO Updates and Standards

DWR may consider updating the MWELO to better align the model ordinance language with the water use efficiency standards. Better alignment will provide land use agencies with tools to implement complementary actions that assist water suppliers in complying with the standards.

3.2 Water Shortage Contingency Plans

3.2.1 Current Status and Need for Change

Current Status

Current statutes direct urban suppliers[11] to provide a water shortage contingency analysis as a component of their UWMPs, which are updated every five years. Some urban water suppliers have exceeded the existing shortage contingency analysis requirements, documenting them in official WSCPs; these plans are used to satisfy the UWMP requirements submitted to DWR. However, this is not a requirement under current guidance[12], and suppliers have used varying assumptions in their analyses. Consequently, WSCPs are varied in their form, approach, and functionality, in part due to the lack of statewide standards.

Need for Change

During the on-going historical drought, some water suppliers that had inadequately assessed the risk of water shortage were unprepared to effectively respond to the realized supply shortages. However, many other suppliers showed high levels of resiliency due to their adequate planning and well-defined contingency actions.

Supplier experiences during the current drought have prompted the need to elevate water shortage contingency planning for urban water suppliers throughout the State. Water shortage contingency planning is important because it can affect the basic health and safety of California residents. It can also be very costly for both the State and local communities to engage in last minute, emergency efforts to alleviate water supply crises when they happen.

Urban water suppliers should evaluate the potential impacts on their water supplies considering the full range of plausible water supply and demand conditions in order to properly assess their potential risk and exposure to shortage in frequency, severity, and potential consequences. Each water supplier establishes its accepted tolerance for risk that varies based on many intertwined technical, legal, economic, and political considerations. It is critical that water suppliers inform their customers of the accepted risk and potential consequences.

As these factors are often changing, a supplier must diligently assess them in a manner that allows confident management in accordance with its risk tolerance.

3.2.2 EO Directive

The water shortage contingency planning discussed in this section focuses on the requirements for DWR to develop measures to strengthen local drought resilience. Specifically, EO Items 8 and 9 state:

8. *The Department shall strengthen requirements for urban Water Shortage Contingency Plans, which urban water agencies are required to maintain. These updated requirements shall include adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. While remaining customized according to local conditions, the updated requirements shall also create common statewide standards so that these plans can be quickly utilized during this and any future droughts.*

9. *The Department shall consult with urban water suppliers, local governments, environmental groups, and other partners*

[11] UWMPs are only prepared by urban water suppliers, defined as a "supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually" (CWC Section 10617). According to DWR, there are approximately 440 urban water suppliers in the State that must prepare UWMPs.

[12] 2015 Urban Water Management Plan: Guidebook for Urban Water Suppliers, DWR, January 2016.

to update requirements for Water Shortage Contingency Plans. The updated draft requirements shall be publicly released by January 10, 2017.

EO Item 6, which relates to accelerated data collection for urban water suppliers, also has ties to EO Items 8 and 9, above. See also Table 1.1 in Chapter 1.

3.2.3 Recommendations

DWR recommends strengthening local drought resilience through improved planning and annual assessments. In addition, the proposed planning and assessment methods will allow for local control in defining the risk tolerance, with improvements in information dissemination to both customers and the State during drought conditions. This could lead to reductions in long-term impacts on customers in the wake of more frequent and severe drought conditions under climate change.

The EO Agencies established the following primary objectives in the design of the recommendations:

- Assure that an urban water supplier has adequately planned for, and can quickly respond with adequate, pre-determined actions, to droughts lasting at least five years, as well as during more frequent and severe periods of drought; and
- Provide DWR with information necessary to evaluate specific urban supplier responses throughout the State to drought conditions, to allow focused attention where necessary and forestall overarching mandates that may conflict with existing adequate local plans and responses.

To achieve these objectives, DWR recommends the following requirements for urban water suppliers and EO Agencies:

Urban Water Suppliers

Each urban water supplier will prepare and adopt an updated WSCP and submit it to DWR for review as part of the UWMP. A key component of the WSCP will be establishing the methodologies, data requirements, and policy considerations for an annual assessment of shortage risks in the current year plus one or more dry years. Following the procedures detailed in the adopted WSCP, the supplier will annually assess its actual or potential water shortage condition, respond accordingly, and report pertinent information to DWR.

Additionally, the procedures and methods for a Drought Risk Assessment that evaluates plausible worst-case supply conditions for a period of at least five years will be reported in the UWMP.

Updated Contents of the Urban Water Management Plans

Updated contents for suppliers' UWMPs include the following:

1. 5-Year Drought Risk Assessment – Define the methodology, data requirements, and basis for one or more plausible supply shortage conditions necessary to conduct a drought risk assessment that examines shortage risks for the next five or more consecutive years.

2. Evaluation Criteria – Define a set of evaluation criteria that will be used to conduct the drought risk assessment. The evaluation criteria will be locally applicable and include, but not be limited to, the following factors:

    a) Historical drought hydrology

    b) Plausible climate change effects for existing supplies and demands (e.g. precipitation or ETo changes)

    c) Plausible regulatory changes that can affect existing supplies and demands (e.g., Water Use Efficiency emergency regulations)

    d) Demand projections

3. Conduct a Drought Risk Assessment – Suppliers will conduct a drought risk assessment at a minimum of every five years, per the procedures set forth in the urban water management plan.

Contents of the Water Shortage Contingency Plan

The supplier's WSCP must provide details for each of the following standard sections:

1. Annual Water Budget Forecast Procedures – Define the process, data inputs, and water year schedule to generate the Water Budget Forecast used in the annual assessment.

2. Annual Assessment Methodology – Define the methodology necessary to conduct an Annual Water Budget Forecast assessing shortage risks for the current year and one or more dry year(s), assuming a dry year triggers Shortage Response Actions.

3. Evaluation Criteria – Define a set of evaluation criteria that will be used to conduct the Water Budget Forecast. The evaluation criteria will be locally applicable and include, but not be limited to these factors:

   a) Current year unconstrained demand, considering weather, growth or other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.

   b) Current year available supply, considering hydrologic and regulatory conditions in the current year and an additional dry year, as appropriate for the current supply sources.

   c) Existing infrastructure and operational capabilities and plausible constraints.

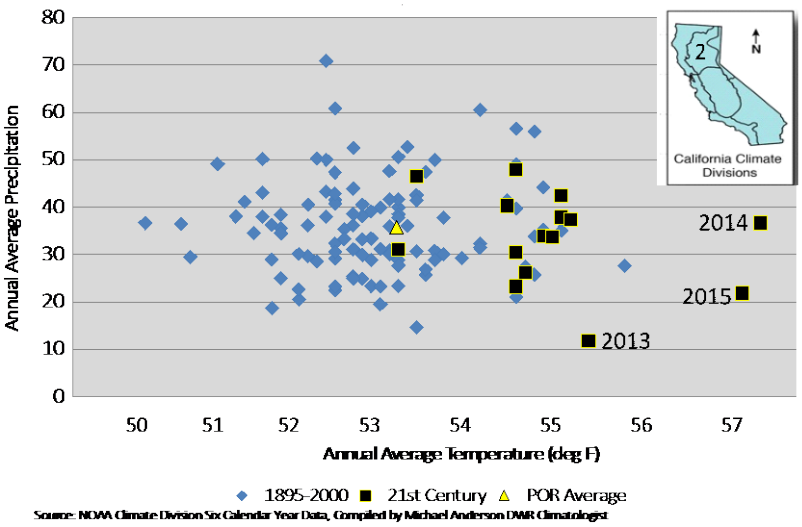
4. Shortage Levels – WSCPs must include six standard shortage levels, representing the actual shortage, or predicted shortage determined by the Water Budget Forecast, defined as:

   - Shortage Level 1: Up to 10 percent shortage
   - Shortage Level 2: Up to 20 percent shortage
   - Shortage Level 3: Up to 30 percent shortage
   - Shortage Level 4: Up to 40 percent shortage
   - Shortage Level 5: Up to 50 percent shortage
   - Shortage Level 6: Greater than 50 percent shortage

5. Shortage Response Actions (SRA) – For each Shortage Level, define a progressive series of SRAs that include a locally appropriate mix of short-term water efficiency and/or demand reduction actions, supply augmentation, and/or operational changes necessary to respond to actual or predicted shortage conditions. The SRAs must include actions necessary to respond to shortages.

6. Communication Plan – Describe the planned communications approach and anticipated actions intended to quickly inform customers, the public, and regional and State interests, about current shortages or predicted shortages as determined by the Water Budget Forecast, expected implementation of SRAs, and other necessary communications.

When developing a WSCP, water suppliers should consider the potential risks associated with climate conditions that are outside of the historical norm, as evidenced below in the graphic of the ongoing drought.



7. Customer Compliance, Enforcement, and Appeal/Exemption Procedures – Describe methods and procedures in place to (1) gain customer compliance with triggered SRAs – especially with actions requiring mandatory demand reductions, (2) enable enforcement to assure compliance, and (3) enable a customer appeal/exemption process that allows unique circumstances to be accommodated.

8. Implementation Authorities – Demonstrate that necessary authorities are in place to quickly implement SRAs. Identify specific ordinances, resolutions, or other authorities, and address compliance with CWC Section 350 et seq. Should a water supplier enter into Shortage Level 3 or higher, as described herein, there should be a water shortage emergency declaration and all appropriate actions described in CWC Section 350 et seq., must be implemented.

9. Financial Plan for Drought Conditions – Describe management of revenue and expense variances when SRAs are triggered, including but not limited to, customer rate adjustments, or use of financial reserves. Specifically describe compliance with SB 814 (CWC Section 365 et seq.).

10. Monitoring and Reporting Requirements and Procedures – Outline internal and external monitoring and reporting procedures to assure appropriate data are being collected, tracked, and analyzed for purposes of monitoring customer compliance, and to meet DWR reporting requirements.

11. Re-evaluation and Improvement Process – Identify procedures for monitoring and systematically evaluating the functionality of a WSCP to assure shortage risk tolerance is adequate, and appropriate mitigation strategies are available.

Implementing Water Shortage Contingency Plans

As articulated in the WSCP, the supplier will follow its prescribed procedures to assess current year and one or more dry year water supply reliability conditions. Specifically, the supplier will:

1. Annually conduct a Water Budget Forecast per the procedures set forth in the WSCP.

2. Depending on the results of the Water Budget Forecast, appropriate SRAs will be triggered corresponding to the projected Shortage Level.

EO Agencies

The EO Agencies will set forth planning and reporting criteria, evaluate submitted data, support compliance and enforcement, and provide technical assistance. The EO Agencies anticipate that suppliers that conduct thorough shortage planning will continue to do so under the new requirements, while those that do not will be prompted to improve their planning to levels that limit or eliminate the need for State intervention in drought response.

DWR actions will include the following:

1. Prepare Compliance Criteria – DWR will prepare necessary documents (and regulations, if necessary) detailing the WSCP and annual assessment compliance criteria that must be met by water suppliers. The criteria will include articulating the necessary data and information that must be submitted by suppliers (1) every five years, and (2) annually. Failure to comply will result in to-be-defined enforcement measures.

2. Develop Information Submittal Tools – DWR will prepare new or augment existing reporting procedures and websites to facilitate supplier reporting. Existing requirements for data and information reporting will be utilized where feasible in order to minimize additional reporting burdens on suppliers.

3. Evaluate Statewide Water Supply Conditions – On an as-needed basis, DWR will assess regional and statewide water supply conditions – such as those created by prolonged or severe hydrologic drought – to understand the likelihood and degree that urban suppliers would be implementing SRAs.

4. Review and Assess Supplier-Reported Information – DWR will review supplier-specific data and information submitted for compliance with stated criteria. The review will also allow DWR to evaluate local shortage conditions compared to the statewide water supply conditions, and prepare necessary reports for the Governor's Office and the Legislature.

5. Compliance and Enforcement – A key factor to strengthen local drought resilience is to hold suppliers accountable for being prepared to quickly respond to long-lasting and potentially more frequent and severe supply shortages. By requiring suppliers to submit adopted WSCPs and perform and submit annual assessments, the EO Agencies will have supplier-specific information that can be used to assess compliance with overall objectives. As part of recommendations, the State will define the compliance assistance and enforcement protocols.

6. Technical and Financial Assistance – To facilitate improved drought planning for all urban water suppliers, the EO Agencies will continue to offer technical and financial assistance through various existing programs and seek additional funding. Additionally, DWR will update its 2008 Drought Guidebook to incorporate the strengthened WSCP recommendations, provide further details for the recommended components and definitions, provide example drought risk assessment methods and supply shortage scenarios, and suggest various SRAs.

3.2.4 Reporting, Compliance Assistance, and Enforcement

The reporting and compliance processes described in this section will result in transparent communication of effective planning by local water suppliers and will provide the EO Agencies with an effective monitoring tool. The end result of data reporting and collection should be in a data exchange system with a public-facing GIS application that allows policy makers, water managers, and the public to view actual or predicted shortage conditions and SRAs in any part of the State.

The water supplier will follow the reporting procedures set forth in its WSCP and UWMP. The following reporting cycle is anticipated:

- Every five years
  - Submit the adopted WSCP to DWR, including the associated Drought Risk Assessment in the UWMP and supporting data.
  - Make the WSCP available to customers (website, hardcopy at desk).
- Annually
  - Submit Water Budget Forecast results and selected SRAs to DWR, including an indication of the shortage reduction anticipated to occur with the selected SRAs.
  - Communicate Water Budget Forecast results and selected SRAs to customers (website, hardcopy at desk).

DWR will review submitted data for completeness and adequacy, using criteria to be developed by DWR, in consultation with the Water Board and CPUC, for further assistance and potential enforcement actions, where applicable. DWR will receive the WSCPs and the associated reports and make them available to the public.

3.3 Drought Planning for Small Water Suppliers and Rural Communities

3.3.1 Current Status and Need for Change

Current Status

Small water suppliers and rural communities are not covered by established planning requirements, which apply to large urban water suppliers and larger agricultural suppliers (see sections 3.2 and 3.4). Often, small suppliers and rural communities lack resources and mechanisms to compel drought planning efforts. Drought planning helps to identify potential shortage conditions and justify local expenditures and measures to provide sufficient safe water.

While small water suppliers have a fiduciary relationship with their customers, self-supplied domestic water users (rural communities) rely on the county. Counties have legal and fiduciary responsibilities to assist with the general well-being of their citizens and provide for the health and safety of their citizens; they are, however, limited in enforcing any water curtailment or conservation policies.

Many State agencies have regulatory responsibilities and technical and financial assistance programs targeting rural communities and small water suppliers. Examples include the Water Board's Division of Drinking Water and their requirements for safety consideration of public water systems, and CPUC's jurisdiction over small investor-owned utilities on their operation and maintenance.

In addition, SGMA could have significant effects on management and long-term water supply reliability. SGMA applies to 127 high and medium-priority groundwater basins (as defined by DWR's California Statewide Groundwater Elevation Monitoring, or CASGEM, program). Any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" (GSA) for that basin. However, if a basin (or portion thereof) is not within the management area of a GSA, the county within which the basin is located will be presumed to be the GSA for that basin or portion. When preparing required groundwater sustainability plan(s) (GSPs), the GSA(s) and the county will need to incorporate appropriate drought planning and response measures to adequately protect small water suppliers and rural communities from possible future shortages. If the county declines its SGMA responsibilities, leaving unmanaged areas in a high or medium-priority basins, the State may be required to intervene and directly manage groundwater resources in the basin.

Need for Change

The ongoing drought has brought attention to the reality that many small water suppliers and rural communities are struggling to meet demands with significantly reduced water supplies – or even running out of water altogether.

The fundamental difference in customer relationships and access to resources between large and small water suppliers, self-supplied systems and counties requires unique approaches to facilitating improved drought planning.

California became the first state to legally recognize the human right to water with the signing of AB 685 in September 2012. This law aims to ensure universal access to safe, clean, affordable, and accessible water. When communities run out of water, State and local emergency measures must be taken and these measures are expensive to implement.

Recent policy and legislative efforts have focused on trying to assure sustainable potable water supplies exists to meet the health and safety needs of the citizens. In conjunction with these efforts, the EO directs DWR to work with counties throughout the State to facilitate improved drought planning for rural communities and small water suppliers.

3.3.2 EO Directive

EO Item 10 focuses on improved drought resiliency to small water suppliers and rural communities. The State's primary intent of this directive is to assure the availability and reliability of potable water supplies to meet the health and safety needs of citizens not otherwise receiving water from designated urban water suppliers. EO Item 10 states:

> *For areas not covered by a Water Shortage Contingency Plan, the Department shall work with counties to facilitate improved drought planning for small water suppliers and rural communities.*

3.3.3 Recommendations

Recommendations in this section focus on improved drought planning for small water suppliers and rural communities throughout every county in California.

EO Agencies are considering various actions to satisfy EO Item 10. The recommendations described below are intended to illustrate options currently under consideration and to describe the types of activities underway. This process to develop recommendations will continue into 2017.

The intent of these recommendations is for the EO Agencies and counties to collectively:

- Improve assessment of drought vulnerability to understand relative risks and prioritize actions.
- Take proactive actions to reduce drought vulnerability when and where appropriate.
- Improve availability and readiness of appropriate responses for when drought impacts do occur, including financing when and where appropriate.

The EO Agencies recommend the following efforts continue as a pathway to developing recommendations:

1. Improve engagement with cities and counties, as well as stakeholders such as the League of California Cities, the California State Association of Counties, the Regional Council of Rural Counties, the Community Water Center, and others.

2. Demonstrate funding commitments from the EO Agencies for continued engagement, for initial data collection and analysis, and for improved communications and outreach.

Although conversations and work among EO Agencies, counties, and interested and affected parties have been preliminary, the EO Agencies anticipate more specific, functional recommendations would address the following:

1. Reporting and Data Recording – Improved data collection, management, analysis, sharing, and transparency at all levels is foundational to the ability to plan. Data analysis will allow for better coordination among stakeholders and improve on both long-term actions as well as immediate responses to drought risks, especially in rural communities.

2. Communications Planning – Improved monitoring and communications among stakeholders, from the State, through the counties, and to the water suppliers and citizens.

3. County Demonstration of Drought Planning – While some portion of a county's citizenry may be covered by an urban supplier's WSCP or a small suppliers' drought plan (not required), there is nothing currently available to demonstrate that drought risk is being addressed for all county citizens. To address this need, counties may be required to submit drought planning information to the EO Agencies, possibly through documents such as:

    a) A county Drought Response Plan.

b) Drought-specific policies in a county General Plan.

c) Drought-specific protocols defined in a county (or multi-jurisdictional) Hazard Mitigation Plan.

d) A Groundwater Sustainability Plan.

4. Roles and Responsibilities – Defined State Agency and county roles, responsibilities, and funding mechanisms.

5. Coordination – Coordination with SGMA efforts to assure drought planning and responses are reflected in Groundwater Sustainability Plans (where applicable).

3.3.4 Reporting, Compliance Assistance, and Enforcement

As the recommendations for satisfying EO Item 10 are still under development, no reporting, compliance assistance, or enforcement actions have been identified at this time but will be considered as development progresses.

3.4 Agricultural Water Management Plans

3.4.1 Current Status and Need for Change

Current Status

SB X7-7 requires agricultural water suppliers that provide water to more than 25,000 irrigated acres[13] to (1) adopt and submit AWMPs to DWR, and (2) implement Efficient Water Management Practices (EWMP) including the measurement and volumetric pricing of water deliveries, both on or before December 31, 2012. AWMPs must be updated on December 31, 2015, and every five years thereafter (CWC Section 10820 (a)).

Agricultural water suppliers that provide water to 10,000 and up to 25,000 irrigated acres[14] are currently not required to prepare and submit plans unless State funds are available to support the planning efforts (CWC Section 10853). SB X7-7 permits water suppliers that are contractors under the Reclamation Reform Act or Central Valley Project Improvement Act requirements to submit their federal plans in lieu of a plan meeting the SB X7-7 criteria. Those suppliers must also provide additional information on water measurement and pricing to meet the SB X7-7 requirements of CWC Section 10608.48 and California Code of Regulations (CCR) Section 597. DWR's *Guidebook to Assist Agricultural Water Suppliers to Prepare a 2015 Agricultural Water management Plan* (June 2015) describes how federal plans can be supplemented to satisfy the CWC and CCR requirements.

Agricultural water suppliers are required to describe certain elements such as service area and infrastructure, the quantity and quality of water resources, water uses, previous water management activities and planned implementation of EWMPs, and an analysis on the effect of climate change under SB X7-7.

CWC Section 10608.48(d) requires that an agricultural water supplier include in its AWMP:

> *…a report on which EWMPs have been implemented or are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and ten years in the future. If a supplier determines that a EWMP is not locally cost-effective or technically feasible, the supplier shall submit information documenting that determination.*

CWC Section 10608.48(a) requires that agricultural water suppliers implement EWMPs pursuant to CWC Sections 10608.48(b) and (c). Two critical EWMPs must be implemented by the agricultural water supplier serving 25,000 or more irrigated acres (CWC Section 10608.48(b)):

[13] Excluding acreage irrigated with recycled water.
[14] Excluding acreage irrigated with recycled water.

1. Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section CCR Section 531.1016.

2. Adopt a pricing structure for water customers based at least in part on quantity delivered.

CWC Section10608.48(c) requires implementation of 14 EWMPs if locally cost-effective and technically-feasible. Agricultural water suppliers must adopt the plan by December 31, 2012, and update it by December 31, 2015, and every five years thereafter, and submit the plan to DWR within 30 days of adoption (CWC Section 10820 (a)). Since July 1, 2013, an agricultural water supplier subject to the SB X7-7 requirements must submit an AWMP and implement applicable EWMPs to be eligible for a water grant or loan awarded or administered by the State (CWC Section 10608.56(b) and 10852). Agricultural water suppliers not implementing all of the applicable EWMPs may become eligible for State grants and loans if agricultural water suppliers provide a schedule, financing plan, and budget for the implementation of the required EWMPs (CWC Section 10608.56(d)). Grant or loan funds may be requested to implement EWMPs to the extent the grant or loan proposal is consistent with the water fund eligibility requirements (CWC Section 10608.56(d)).

AWMPs adopted by agricultural water suppliers and updated every five years are meant to be planning documents to better manage water provided for irrigation and increase the efficiency of water use in agriculture. To make AWMPs better planning documents, EO B-29-15 of April 1, 2015, required that the 2015 AWMPs include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. EO B-29-15 also required that agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands develop AWMPs and submit their plans to DWR by July 1, 2016.

Need for Change

The EO recognizes that further improving water conservation in California will require progress in all sectors, including agriculture, and that there is a fundamental need for updating existing agricultural water management planning requirements to help advance the efficiency of agricultural water use and better prepare for periods of limited supply. This would entail updating AWMP requirements to include a drought planning component, as well as quantifiable measures to increase agricultural water use efficiency. To promote adequate drought planning across the agricultural sector, the EO requires more agricultural water suppliers to comply with the requirements by lowering the threshold of application to water suppliers with 10,000 acres of irrigated land. The EO Agencies also recognize the strong nexus of adequate agricultural water management strategies and implementation of SGMA, and propose a consistent methodology focusing on a supplier's overall water budget that can contribute to compliance for both purposes.

3.4.2 EO Directive

EO Items 11, 12, and 13 state:

11. *The Department shall work with the California Department of Food and Agriculture to update existing requirements for Agricultural Water Management Plans to ensure that these plans identify and quantify measures to increase water efficiency in their service area and to adequately plan for periods of limited water supply.*

12. *The Department shall permanently require the completion of Agricultural Water Management Plans by water suppliers with over 10,000 irrigated acres of land.*

13. *The Department, together with the California Department of Food and Agriculture, shall consult with agricultural water suppliers, local governments, agricultural producers, environmental groups, and other partners to update requirements for Agricultural Water*

Management Plans. The update draft requirements shall be publicly released by January 10, 2017.

EO Item 6 requires EO Agencies to accelerate data collection and improve water system management and prioritize capital projects to reduce water waste. This applies to agricultural water suppliers as well and is covered in this section.

3.4.3 Recommendations

To satisfy the EO directive, DWR recommends that water suppliers comply with the following: (1) develop annual water budget for the agricultural water supplier's service area, (2) identify agricultural water supplier's water management objectives and implementation plan, (3) quantify measures to increase water use efficiency, (4) develop an adequate drought plan for periods of limited supply, and (5) extend the updated requirements to more water suppliers. The following discussion provides additional details in these five recommendation areas. This information would be included as components of a supplier's AWMP.

Develop Annual Water Budget for the Agricultural Water Supplier's Service Area

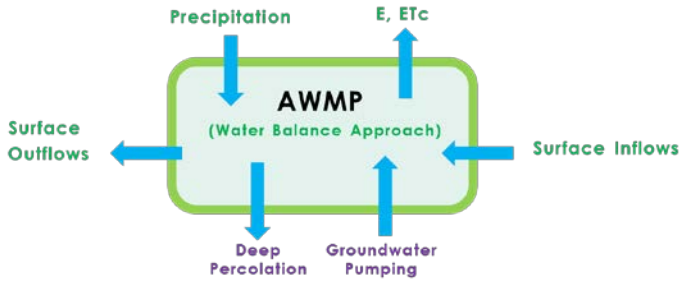
To make AWMPs more effective as planning tools and to help water suppliers identify areas where water efficiency improvements can be made, the proposed updated AWMP requirements would require suppliers to include in their plans annual water budgets that account for inflows to and outflows from the water supplier's service area. Including water budgets as part of the AWMP provides the following benefits:

- Better quantifies the flows and uses of water within the supplier's service area and better estimates unmeasurable flows, such as deep percolation.
- Provides the data necessary to quantify water management efficiency within the service area.
- Helps identify and prioritize water loss.
- Aligns AWMP reporting with implementation of SGMA.

As a part of estimating water budget, water suppliers would be required to report all water inflow and outflow components from their service area. The water budget includes two components:

- **Water Budget Inflow.** This includes surface inflow, groundwater pumping in the service area (including private groundwater pumping), and effective precipitation.
- **Water Budget Outflow.** This includes surface outflow, deep percolation and evapotranspiration (E and ETc).[15]

Agricultural water suppliers are currently required (CWC Section 10826) to describe the quantity and quality of their water resources, water uses within the agricultural water supplier's service area, overall water budget, and water use efficiency information. However, the CWC does not currently



The proposed water budget approach with major components covering the needed information for adequate agricultural water management planning and is consistent with the needs for SGMA compliance.

[15] Where E refers to evaporation and ETc refers to the evapotranspiration of crops. Evapotranspiration is the combined amount of water that enters the atmosphere by plant transpiration and surface evaporation.

require actual quantification of all components sufficient to develop a water budget.

To develop a service area water budget, the proposed revisions to the AWMP requirements would require agricultural water suppliers to quantify all currently reported components and to report on the quantity of two additional components: precipitation and private groundwater pumping.

The annual water budgets would be reported on a water year basis (beginning October 1 and ending September 31) to align with SGMA reporting requirements (CCR Section 350 et seq.).

The State, through the Agricultural Water Management Program or the Sustainable Groundwater Management program, may provide tools and resources to assist suppliers in developing and quantifying existing and new components.

Identify Water Management Objectives and Implementation Plan

The EO Agencies recommend an objective-based planning approach as part of the AWMP, in which water management objectives are identified along with actions to meet these objectives. From the water budget, agricultural water suppliers would identify and select supplier-specific water management objectives to improve water use efficiency or to meet other water management objectives. The proposed water budget approach would help agricultural water suppliers identify and prioritize water loss and identify ways to improve water system management.

In the AWMP, the supplier's objectives or intended results are identified (e.g., decrease percolation to saline ground, provide greater flexibility in irrigation deliveries), then specific efficient water management practices or measures are selected and implemented to achieve the results. Practices implemented to reduce water losses, improve water use efficiency, and attain other water management objectives would be included in an implementation plan as part of the overall AWMP.

Quantify Measures to Increase Water Use Efficiency

The proposed updates to the AWMP requirements would also require agricultural water suppliers to quantify the efficiency of agricultural water use within their service area. Agricultural water suppliers would choose the appropriate method(s) from amongst four efficiency quantification methods provided in the 2012 DWR report to the Legislature titled, "A Proposed Methodology for Quantifying the Efficiency of Agricultural Water Use." These methods can be used to calculate the ratio of beneficial water uses to amount of applied water and include the Crop Consumptive Use Fraction (CCUF), the Agronomic Water Use Fraction (AWUF), the Total Water Use Fraction (TWUF), and the Water Management Fraction (WMF). When choosing the appropriate water use fraction to determine water use efficiency, the agricultural water supplier needs to ensure that all water uses are taken into account including crop water use, agronomic water use, environmental water use, groundwater recharge, and recoverable surface flows.

The proposed water use fractions (described below) are practical methods for quantifying the efficiency of agricultural water use by irrigated agriculture and other beneficial uses that can help agricultural water suppliers evaluate current conditions and strategies for improving agricultural water management. All four methods described below are applicable for use at the basin- and supplier-scale. At the field-scale, only the first three methods are applicable.

i. Crop Consumptive Use Fraction (CCUF)

CCUF= ETAW/AW

Evapotranspiration of Applied Water (ETAW) is crop evapotranspiration minus the amount of precipitation evapotranspired by the crop.

Applied Water (AW) is the total volume of water that is applied within a boundary (e.g., field, supplier service area, or basin) in order

to meet the crop evapotranspiration, agronomic, and environmental uses from any source such as surface water (including tailwater[16] reuse), groundwater (public or private), and the initial soil moisture in the soil profile that is not from precipitation.

ii. Agronomic Water Use Fraction (AWUF)

AWUF = (ETAW + AU)/AW

Agronomic Use (AU) is the portion of applied water used for water management applications essential for crop production. Examples of essential water management applications include salinity management, frost control, and winter flooding for straw decomposition.

iii. Total Water Use Fraction (TWF)

TWUF = (ETAW + AU + EU)/AW

Environmental Use (EU) is the portion of applied water directed to environmental purposes, including water to produce and/or maintain wetlands, riparian, or terrestrial habitats.

iv. Water Management Fraction

WMF = (ETAW + RF)/AW

Recoverable Flows (RF) is the amount of water leaving a given area as surface flows to non-saline bodies or percolation to usable groundwater that is available for supply or reuse.

Components of these fractions may be empirical (measured or observed), modeled (calculated or estimated), or a combination, based on data availability and system complexity.

[16] Tailwater refers to surface water runoff from a boundary. Tailwater may be captured and reused within (returned to) the boundary.

Develop a Drought Plan for Periods of Limited Supply

The proposed updates to the AWMP requirements would also require agricultural water suppliers to include a Drought Plan. The Drought Plan should detail how the water supplier would prepare for droughts and manage water supplies and allocations during drought conditions. Some components or actions may require detailed review of conditions, policy changes, or long-term capital improvements. Additionally, as conditions change and new technology and knowledge becomes available, opportunities and constraints will change.

The Drought Plan should be prepared to provide adaptive management for and during periods of water shortages. Agricultural water suppliers would consider all items under each component and include a description of applicable items in their Drought Plan.

The Drought Plan would include a resilience component and an action plan, described below.

Resilience Component

The resilience component of the Drought Plan will include the following:

1. A description of what hydraulic levels or conditions (reservoir levels, stream flows, groundwater, snowpack etc.) are or should be monitored and measured to determine the water supply available and to identify levels of drought severity.

2. The supplier's policy or process for declaring a water shortage and for implementing the water shortage allocations and related actions.

3. A description and analysis of the agricultural water supplier's customers' vulnerability to drought (e.g., potential for crop idling, availability of multiple water sources and resilience of each source, existing water storage options).

4. A description of potential opportunities and constraints to improve drought resilience (e.g., improved groundwater or surface water storage potential, acres of permanent crops, environmental use requirements, overdrafted groundwater basin).

5. A description of actions implemented or planned for implementation to improve drought resilience (e.g., potential for improved on-farm water use efficiency measures, groundwater and surface water conjunctive use management, crop idling, and development of alternative supplies such as recycled water or tailwater reuse).

6. Discussion of the potential, if possible, for the supplier to obtain or use additional water supplies during drought conditions. These supplies could include transfers from another water agency or supplier, the use of recycled water and desalination of brackish groundwater or drainage water.

7. A description of the cost for implementing the resilience plan.

Action Plan

The Action Plan will include the following:

1. Allocation Policies – A description of the water shortage allocation policies as required by the Water Code. Water suppliers would describe their program or process for how water is allocated during a water shortage in the Drought Plan or attach a copy of their water shortage allocation policy to their AWMP.

2. Operational Adjustments – Changes in supplier water management and operations to respond to drought, including canal and reservoir operations and groundwater management.

3. Demand Management – Policies and incentives in addition to the water shortage allocation plan to lower on-farm water use.

4. Coordination and Collaboration – Include a description on how coordination and collaboration with other local suppliers, water agencies, or regional groups will be used in drought response.

5. Revenues and Expenditures – Describe how the drought and lower water allocations will affect the supplier's revenues and expenditures.

Extend Requirements to More Agricultural Water Suppliers

The proposed updates to the AWMP requirements would extend the requirement for AWMPs to include agricultural water suppliers supplying water to more than 10,000 acres of irrigated land, excluding recycled water.

3.4.4 Reporting, Compliance Assistance, and Enforcement

Reporting

All agricultural water suppliers providing water supplies to 10,000 or more irrigated acres, excluding recycled water, would be required to prepare and adopt an AWMP on or before April 1, 2021, and every five years thereafter. Agricultural water suppliers would continue to be required to submit their plans to DWR within 30 days of adoption. A water supplier that provides both urban and agricultural supplies, and is subject to both UWMP and AWMP reporting, may satisfy the AWMP requirements by adopting an UWMP that accounts for its agricultural water use and meets both requirements.

Reclamation Reform Act and Central Valley Project water suppliers that submit water conservation plans to Reclamation may still submit those plans to DWR, along with supplemental information, including: a Drought Plan for all suppliers, and water measurement and volumetric pricing for those water suppliers providing water to 25,000 irrigated acres or more, excluding recycled water (CCR Section 597.1(a) and CWC Section 10608.48(b)).

AB 1404 (Statutes of 2007, Chapter 675) requires that all agricultural water suppliers supplying 2,000 acre-feet or more of surface water annually for agricultural purposes or serving 2,000 or more acres of agricultural land must submit an annual aggregated farm-gate delivery report to DWR. Per AB 1404, an agricultural water supplier will:

- Provide DWR with monthly or bimonthly aggregated farm-gate deliveries on an annual basis, along with information on their farm-gate measurement program or practices to document that they are using "Best Professional Practices;" or

- Provide DWR with information that documents that the implementation of a program or practices to measure farm-gate deliveries using Best Professional Practices is not locally cost effective.

For the purpose of aligning agricultural water supplier annual reporting with SGMA reporting requirements, EO Agencies recommend that the annual aggregated farm-gate delivery reporting requirements for agricultural water suppliers providing water to over 10,000 irrigated acres only, be replaced by the following:

> *Agricultural water suppliers serving more than 10,000 acres of irrigated land, excluding recycled water, would submit an annual report for the prior year to DWR by April 1 of each year. The annual report should include the water budget inflow and outflow components for the preceding water year: surface inflow, supplier's groundwater pumping in the service area, effective precipitation, surface outflow, and deep percolation.*

When tools and resources are made available by the State, the annual report would also include private groundwater pumping in the service area and evapotranspiration.

Compliance Assistance

DWR will assist agricultural water suppliers in several ways:

1. AWMP Guidebook – DWR would update the AWMP Guidebook to help agricultural water suppliers better understand the CWC AWMP requirements and assist them in developing an AWMP. The Guidebook would also describe how water conservation plans submitted to Reclamation can be supplemented to satisfy the CWC and Agricultural Water Measurement Regulation requirements.

2. AWMP Workshops – Prior to finalizing the AWMP Guidebook, DWR would release a draft and hold public workshops to give opportunity for stakeholders to comment on the draft guidelines. Additional workshops would be conducted after releasing the final Guidebook.

3. California Irrigation Management Information System – DWR would continue to support and update the California Irrigation Management Information System (CIMIS) to provide climate data and resources (e.g., precipitation, crop use coefficients) necessary for calculating components of the water budget and water use efficiency fractions.

4. Water Use Efficiency Calculator – DWR would make available the water use efficiency calculator being developed and tested by the University of California through Proposition 50 and Proposition 1 grants.

The EO Agencies further recommend that DWR, through the Agricultural Water Management Program or the Sustainable Groundwater Management Program, consider providing additional tools and resources to assist suppliers in quantifying water budget components pertaining to evapotranspiration of applied water and private groundwater pumping. Examples of these tools and resources include remote sensing for measurement of actual evapotranspiration, and

models or tools for calculating deep percolation to groundwater.

DWR will lead the compliance review for submitted plans, data, and information, which are due by April 1 starting in 2021. The compliance schedule is outlined below:

1. DWR will provide an updated list of agricultural water suppliers required to submit plans to CDFA and the Water Board by March 1, 2020, and every five years thereafter.

2. DWR will continue to review each plan for meeting the requirements, including the updated and new components, as they are received. However, DWR will expedite the review if an agricultural water supplier is seeking a State grant or loan with a specific deadline. DWR may coordinate with the Water Board and CDFA on the review.

3. DWR will inform the Water Board and CDFA of the plan submittal status and review status, and post the information on DWR's website for public reference.

4. If a plan has not been submitted by July 1, 2021, and every five years thereafter or is incomplete following review, DWR will notify the agricultural water supplier, and will work with the supplier to develop a plan for corrective actions and completing the plan.

5. If the agricultural water supplier fails to submit a plan by October 31, 2021, and every five years thereafter or does not submit a plan within the negotiated plan and schedule for completion, DWR will notify the Water Board and CDFA of non-compliance for enforcement actions.

Enforcement

Water suppliers would continue to be required to have a current AWMP that has been reviewed by DWR and found to have addressed all the required elements to be eligible for State grant and loan funding.

The Water Board, in addressing agricultural suppliers that have not submitted AWMPs or have not revised AWMPs to correct identified deficiencies, may consider further enforcement actions including potential fines and civil penalties.

This page left blank intentionally.

Chapter 4 – Implementing the Conservation Framework

The heightened awareness of water scarcity and the severity of our current drought have prompted Californians to achieve new levels of conservation and resiliency. As proposed by the EO Agencies herein, the conservation framework provides the foundation needed to transform these emergency accomplishments into a long-term, sustainable water use practice for all Californians.

4.1 Conservation as an Integral Part of Water Management

Conservation alone cannot ensure a long-term sustainable water supply and drought protection for all Californians; however, a deep-rooted conservation ethos is fundamental to changing individual and societal behaviors and making progress toward these desired outcomes.

Conservation and drought protection are but two of the focus areas of the Water Action Plan 2016 Update, along with integrated water management, Sacramento-San Joaquin Delta management, ecosystem restoration, storage, and flood protection. The Water Action Plan also calls for increasing operational and regulatory efficiencies and identifying sustainable, integrated financing opportunities.

The framework presented in this report is designed to be part of the broader, multi-faceted implementation of the Water Action Plan. The EO Agencies will continue to work collaboratively, while maintaining open and transparent dialogue and technical exchange throughout implementation.

4.2 Support for Framework Implementation

As described below, several components are critical to enabling implementation of the recommended framework outlined herein.

4.2.1 Legislation and Regulatory Rulemaking

Many recommendations of the EO Agencies will require new and/or expanded authorities to execute. For those recommendations that fall within the existing authorities of the EO Agencies, rulemaking processes may still be needed to formalize requirements.

For recommendations related to existing authorities, the EO Agencies will conduct rulemaking processes that provide opportunities for input and comment from stakeholders, interested parties, and the public.

For recommendations requiring new authorities, the EO Agencies will coordinate with the Governor's Office in seeking amendments to existing codes, and the Legislature, as appropriate. Anticipated code amendments to support framework implementation include the following:

- **Establish New Water Use Standards and Targets:** CWC sections 10610-10656 for UWMPs; a new section added to CWC to establish and implement standards and water use targets, with associated changes in CWC Section 10608 related to existing conservation requirements.
- **Strengthening Water Shortage Contingency Planning:** CWC sections 350-359 and California Government Code sections 8550-8551 regarding emergency declaration; CWC sections 10631, 10632, and 10635 for required information reporting.

- **Improve Drought Planning for Small Water Suppliers and Rural Communities:** To be determined through continued collaboration of the EO Agencies and stakeholders, potentially requiring new language in the CWC.

- **Strengthening Requirements for Agricultural Water Management**: CWC sections 10800-10845 for AWMPs.

4.2.2 Continued Collaboration on Water Use Standard Development

In implementing this proposed conservation framework, the EO Agencies will establish water standards for implementation by 2021. Recognizing that water use efficiency is one component of sustainable water management, the EO Agencies will seek to balance the need for conservation with the need for water suppliers to continue investing in water supply portfolio diversification, including water reuse, desalination, storage and conjunctive use, stormwater capture, and sustainable groundwater use.

The EO Agencies will continue to collaborate with stakeholders and subject matter experts to ensure adequate progress is made in standard development and that the resulting standards will be implementable. For example, the need to establish a CII Technical Workgroup has already been identified through the current stakeholder engagement process. This workgroup will assist the EO Agencies with development of appropriate CII classifications and corresponding performance measures.

4.3 Implementation Considerations

The EO Agencies appreciate the long-term commitment and investment required by water suppliers throughout California in implementing the proposed long-term framework. To facilitate the success in implementation, the EO Agencies recognize the importance of the following considerations.

- **Coordination, Collaboration, and Advocacy:** The EO Agencies will continue to coordinate and collaborate to ensure that the framework is implemented as envisioned, providing improved drought protection for all communities and embodying water conservation in every aspect of our daily lives.

  The extraordinary conservation accomplished during the current drought was attributable in part to a strong, persistent, and active campaign and outreach led by the EO Agencies to promote conservation, combined with mandatory conservation requirements imposed by the Water Board. Active messaging and outreach efforts on conservation by the EO Agencies and suppliers will provide strong support to water suppliers in their efforts to promote conservation. Water use education and advocacy must continue after the drought emergency is lifted.

- **Water Rates and Proposition 218:** The EO Agencies recognize that State financial assistance, when available, will never be sufficient for water suppliers to implement all necessary actions to comply with the requirements outlined in the framework. It will be important that water suppliers have the ability to generate funding for their investment needs and stabilized revenue for steady improvements.

  The EO Agencies acknowledge the expressed challenges by water suppliers in generating sufficient local funding to support continued conservation effort and other needed investment due to potential limitations of existing law and regulations such as Proposition 218. While the framework does not contain requirements on rate structures, the EO Agencies encourage water suppliers to adopt conservation-oriented water rates and/or use a rate stabilization reserve fund to better manage revenue fluctuations that

occur during droughts or other unexpected conditions. Each water supplier should customize its rate structure with full consideration of its cost of service and with long-term financial sustainability as the goal.

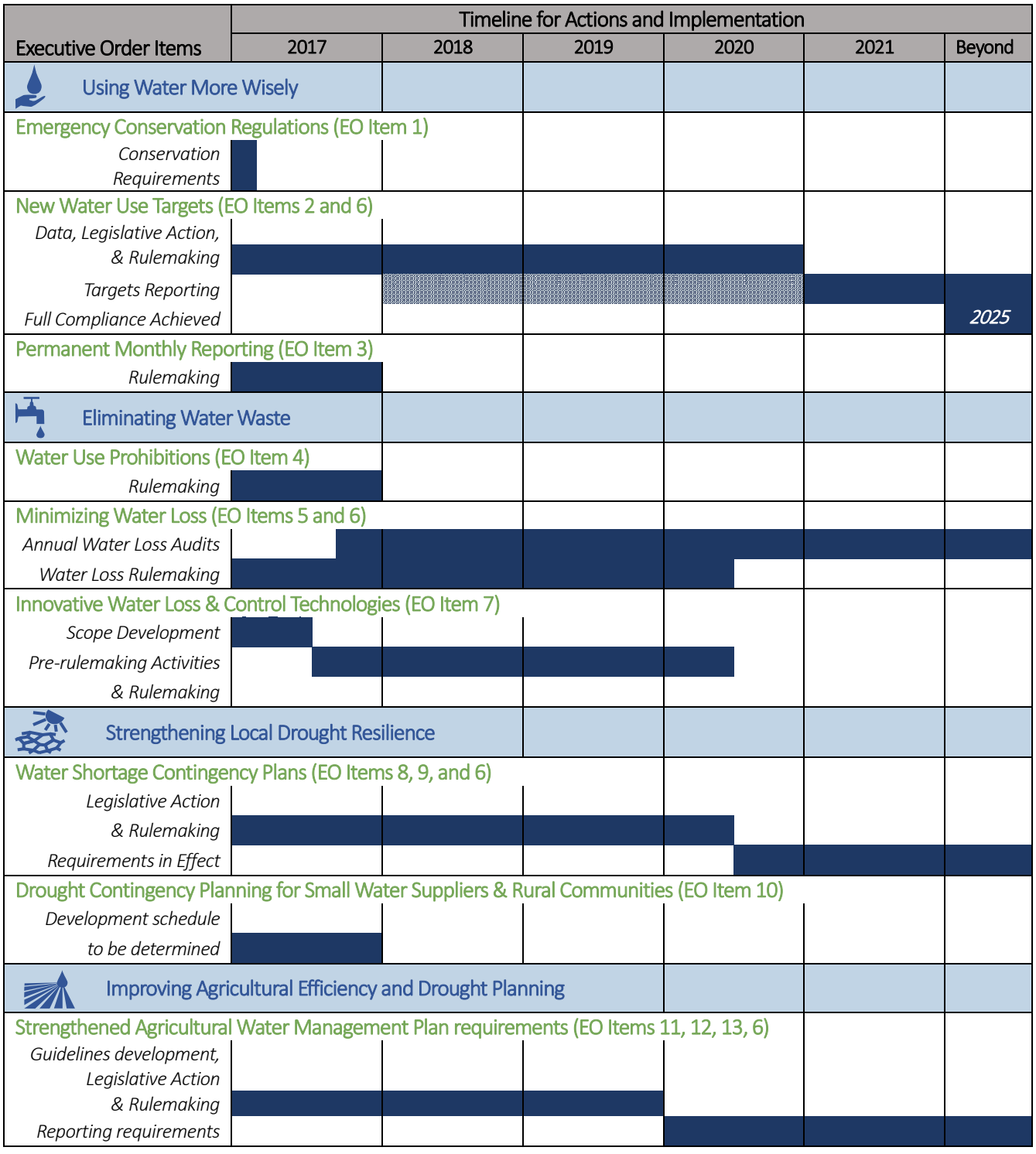
- **Coordination with Land Use Agencies and Other Jurisdictions:** The EO Agencies recognize that land use agencies (i.e., cities and counties) have direct responsibilities and jurisdictions over zoning and land development, landscape requirements, and various ministerial and discretionary permits that can positively influence direct conservation and complementary actions as well as advocacy by water suppliers. Where appropriate, the EO Agencies may facilitate communications and collaboration throughout implementation.

4.4 Implementation Schedule

The schedule for implementation of the proposed actions and recommendations identified in Chapters 2 and 3 is summarized in Figure 4-1.

Any new and/or expanded authorities required for framework implementation may be addressed during the 2017 and 2018 legislative sessions. Note that the implementation process outlined in the proposed framework is subject to change based on updated information, or subsequent legislation and rulemaking.

Figure 4-1. Anticipated Implementation Timeline for EO Directives



ATTACHMENT A:
Executive Order B-37-16

This page left blank intentionally

Executive Department

State of California

EXECUTIVE ORDER B-37-16
MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

WHEREAS California has suffered through a severe multi-year drought that has threatened the water supplies of communities and residents, devastated agricultural production in many areas, and harmed fish, animals and their environmental habitats; and

WHEREAS Californians responded to the drought by conserving water at unprecedented levels, reducing water use in communities by 23.9% between June 2015 and March 2016 and saving enough water during this period to provide 6.5 million Californians with water for one year; and

WHEREAS severe drought conditions persist in many areas of the state despite recent winter precipitation, with limited drinking water supplies in some communities, diminished water for agricultural production and environmental habitat, and severely-depleted groundwater basins; and

WHEREAS drought conditions may persist in some parts of the state into 2017 and beyond, as warmer winter temperatures driven by climate change reduce water supply held in mountain snowpack and result in drier soil conditions; and

WHEREAS these ongoing drought conditions and our changing climate require California to move beyond temporary emergency drought measures and adopt permanent changes to use water more wisely and to prepare for more frequent and persistent periods of limited water supply; and

WHEREAS increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change; and

WHEREAS these activities are prioritized in the California Water Action Plan, which calls for concrete, measurable actions that "Make Conservation a California Way of Life" and "Manage and Prepare for Dry Periods" in order to improve use of water in our state.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular California Government Code sections 8567 and 8571, do hereby issue this Executive Order, effective immediately.

IT IS HEREBY ORDERED THAT:

The orders and provisions contained in my January 17, 2014 Emergency Proclamation, my April 25, 2014 Emergency Proclamation, Executive Orders B-26-14, B-28-14, B-29-15, and B-36-15 remain in full force and in effect except as modified herein.

State agencies shall update temporary emergency water restrictions and transition to permanent, long-term improvements in water use by taking the following actions.

USE WATER MORE WISELY

1. The State Water Resources Control Board (Water Board) shall, as soon as practicable, adjust emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions across the state. To prepare for the possibility of another dry winter, the Water Board shall also develop, by January 2017, a proposal to achieve a mandatory reduction in potable urban water usage that builds off of the mandatory 25% reduction called for in Executive Order B-29-15 and lessons learned through 2016.

2. The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010).) These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:

    a. Indoor residential per capita water use;
    b. Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;
    c. Commercial, industrial, and institutional water use; and
    d. Water lost through leaks.

    The Department and Water Board shall consult with urban water suppliers, local governments, environmental groups, and other partners to develop these water use targets and shall publicly issue a proposed draft framework by January 10, 2017.

3. The Department and the Water Board shall permanently require urban water suppliers to issue a monthly report on their water usage, amount of conservation achieved, and any enforcement efforts.

ELIMINATE WATER WASTE

4. The Water Board shall permanently prohibit practices that waste potable water, such as:

    - Hosing off sidewalks, driveways and other hardscapes;
    - Washing automobiles with hoses not equipped with a shut-off nozzle;
    - Using non-recirculated water in a fountain or other decorative water feature;
    - Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and
    - Irrigating ornamental turf on public street medians.

5. The Water Board and the Department shall direct actions to minimize water system leaks that waste large amounts of water. The Water Board, after funding projects to address health and safety, shall use loans from the Drinking Water State Revolving Fund to prioritize local projects that reduce leaks and other water system losses.

6. The Water Board and the Department shall direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste. The California Public Utilities Commission shall order investor-owned water utilities to accelerate work to minimize leaks.

7. The California Energy Commission shall certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency.

STRENGTHEN LOCAL DROUGHT RESILIENCE

8. The Department shall strengthen requirements for urban Water Shortage Contingency Plans, which urban water agencies are required to maintain. These updated requirements shall include adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. While remaining customized according to local conditions, the updated requirements shall also create common statewide standards so that these plans can be quickly utilized during this and any future droughts.

9. The Department shall consult with urban water suppliers, local governments, environmental groups, and other partners to update requirements for Water Shortage Contingency Plans. The updated draft requirements shall be publicly released by January 10, 2017.

10. For areas not covered by a Water Shortage Contingency Plan, the Department shall work with counties to facilitate improved drought planning for small water suppliers and rural communities.

IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING

11. The Department shall work with the California Department of Food and Agriculture to update existing requirements for Agricultural Water Management Plans to ensure that these plans identify and quantify measures to increase water efficiency in their service area and to adequately plan for periods of limited water supply.

12. The Department shall permanently require the completion of Agricultural Water Management Plans by water suppliers with over 10,000 irrigated acres of land.

13. The Department, together with the California Department of Food and Agriculture, shall consult with agricultural water suppliers, local governments, agricultural producers, environmental groups, and other partners to update requirements for Agricultural Water Management Plans. The updated draft requirements shall be publicly released by January 10, 2017.

The Department, Water Board and California Public Utilities Commission shall develop methods to ensure compliance with the provisions of this Executive Order, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 9th day of May 2016.

EDMUND G. BROWN JR.
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

ATTACHMENT B:
Public Outreach and Stakeholder Engagement

On May 9, 2016 Governor Edmund G. Brown Jr. issued Executive Order B-37-16 directing State Agencies to establish a long-term framework for water conservation and drought planning that builds on the conservation accomplished during the historical drought and implementation of the Governor's Water Action Plan. The named agencies include DWR, Water Board, CPUC, CDFA, and CEC (collectively, the EO Agencies). The full text of the EO can be found at the Governor's Office Website, https://www.gov.ca.gov/docs/5.9.16_Attested_Drought_Order.pdf, or in Attachment A to this report.

The EO Agencies have developed a collaborative program to formulate the long-term framework for water conservation and drought planning called for by the EO with extensive public outreach and stakeholder engagement. In addition to public input throughout the process, the EO Agencies formed the Urban Advisory Group and Agricultural Advisory Group to provide input into the framework development. These advisory groups represent urban and agricultural water suppliers, local governments, professional associations, academics, environmental advocacy groups, and other interested parties. The framework development, associated public outreach and stakeholder engagement process, and public comments received are available at DWR's website, http://www.water.ca.gov/wateruseefficiency/conservation/.

The following provides a list of public outreach and stakeholder engagement meetings throughout the process in developing the report (in chronological order) after the issuance of the EO on May 9, 2016.

Date	Event	Location
June 3, 2016	Listening Session #1 for the Directives of Executive Order B-37-16	Sacramento, CA
June 6, 2016	Listening Session #2 for the Urban Directives of Executive Order B-37-16	Los Angeles, CA
June 7, 2016	Listening Session #2 for the Listening Session Agricultural and County Drought Planning Directives of Executive Order B-37-16	Tulare, CA
August 15, 2016	EO B-37-16 Urban Advisory Group Meeting #1	Sacramento, CA
August 25, 2016	EO B-37-16 Agricultural Advisory Group Meeting #1	Sacramento, CA
August 31, 2016	EO B-37-16 Water Shortage Contingency Planning Workshop #1	Sacramento, CA
September 1, 2016	EO B-37-16 Water Shortage Contingency Planning Workshop #2	Fountain Valley, CA
September 6, 2016	EO B-37-16 Long-Term Water Use Targets Workshop #1	Oakland, CA
September 8, 2016	EO B-37-16 Long-Term Water Use Targets Workshop #2	Los Angeles, CA
September 19 and 20, 2016	EO B-37-16 Urban Advisory Group Meeting #2	Los Angeles, CA
September 26, 2016	EO B-37-16 Agricultural Advisory Group Meeting #2	Madera, CA

Date	Event	Location
October 3, 2016	EO B-37-16 Water Shortage Contingency Planning Technical Workshop #2	Sacramento, CA
October 5, 2016	State Water Resources Control Board Workshop on EO B-37-16 and Implementation	Sacramento, CA
October 11, 2016	CEC Staff Workshop Innovative Water Conservation and Water Loss Detection and Control Technologies	Sacramento, CA
October 13, 2016	EO B-37-16 Water Shortage Contingency Planning Workshop – Focus on Drought Planning for Small Water Suppliers and Rural Communities	Sacramento, CA
October 18, 2016	EO B-37-16 Agricultural Advisory Group Meeting #3	Sacramento, CA
October 20, 2016	EO B-37-16 Urban Advisory Group Meeting #3	Sacramento, CA
December 7, 2016	EO B -37-16 Agricultural Advisory Group and Urban Advisory Group Public Draft Report Meeting	Sacramento, CA

Elk Grove Water District Water Usage

2013	Monthly Production (gallons)											
	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	68,254,916 *	81,368,191 *	100,542,522	121,613,523	172,623,839	196,557,137	221,335,388	205,830,850	166,997,536	145,352,530	107,186,459	80,494,167
Purchased (SA2)	33,769,956	30,929,052	36,942,972	51,911,200	87,470,372	100,709,224	112,128,192	110,885,764	105,417,136	81,665,892	71,505,060	62,165,532
Total	102,024,872	112,297,243	137,485,494	173,524,723	260,094,211	297,266,361	333,463,580	316,716,614	272,414,672	227,018,422	178,691,519	142,659,699

2015	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	62,684,574	57,365,413	86,489,437	88,984,850	106,158,389	114,555,359	127,038,586	125,052,315	117,883,208	99,385,733	64,079,715	57,508,787
Purchased (SA2)	28,648,400	30,029,208	36,876,400	51,626,212	52,734,000	62,368,240	71,273,928	75,055,068	70,123,504	63,526,892	46,873,420	34,399,772
Total	91,332,974	87,394,621	123,365,837	140,611,062	158,892,389	176,923,599	198,312,514	200,107,383	188,006,712	162,912,625	110,953,135	91,908,559

2016	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	54,579,679	53,455,693	56,776,025	80,317,655	110,937,338	148,518,660	164,758,463	159,501,571	140,200,584	99,019,629		
Purchased (SA2)	27,516,676	26,507,624	27,531,636	34,054,196	51,071,196	75,541,268	96,246,656	93,992,184	86,904,136	75,682,640		
Total	82,096,355	79,963,317	84,307,661	114,371,851	162,008,534	224,059,928	261,005,119	253,493,755	227,104,720	174,702,269	0	0
% Reduction	19.53%	28.79%	38.68%	34.09%	37.71%	24.63%	21.73%	19.96%	16.63%	23.04%	100.00%	100.00%

*Notes

2013 January and February production numbers do not match actually recorded production because of an open intertie delivering water to SA2. Information below is further details.

SA1 = Service Area 1, SA2 = Service Area 2. SA1 is all groundwater (GW) production. SA2 is all purchased water from SCWA.

Actual Recorded Prod. (Jan. 2013) - Service Area 1 79,361,342 gallons (Includes water delivered to SA2 due to open intertie. Intertie closed end of Feb. 2013)

Actual Recorded Prod. (Feb. 2013) - Service Area 1 94,608,406 gallons (Includes water delivered to SA2 due to open intertie. Intertie closed end of Feb. 2013)

To determine estimate of Feb. 2013 production delivered to Service Area 1, use multiplier from March data which is seasonally similar.)

Service Area 1 Multiplier = 1.39 (calculated from March 2013 Prod. Data/March 2014 Prod. Data)

Calc'd Feb. 2013 Prod. = Feb. 2014 Prod. Data x 1.39 = 79,737,924

To determine estimate of Jan. 2013 production, use prorated amount from Feb. 2013 data. (This method due to Jan. 2014 being unseasonably hot.)

Calc'd Jan. 2013 Prod. = (Feb. 2013 Prod. Data Calc'd / Feb. 2013 Prod. Data Actual) x Jan. 2013 Prod. Data Actual = 68,254,916

Service Area 2		# Accts	Consumption CCF	Gallons
2016	Jan	4,269	36,787	27,516,676
	Feb	4,268	35,438	26,507,624
	Mar	4,269	36,807	27,531,636
	Apr	4,269	45,527	34,054,196
	May	4,269	68,277	51,071,196
	Jun	4,269	100,991	75,541,268
	Jul	4,269	128,672	96,246,656
	Aug	4,270	125,658	93,992,184
	Sep	4,270	116,182	86,904,136
	Oct	4,270	101,180	75,682,640
	Nov			0
	Dec			0

Elk Grove Water District Water Usage

	Monthly Production (gallons)											
2013	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	68,254,916 *	81,368,191 *	100,542,522	121,613,523	172,623,839	196,557,137	221,335,388	205,830,850	166,997,536	145,352,530	107,186,459	80,494,167
Purchased (SA2)	33,769,956	30,929,052	36,942,972	51,911,200	87,470,372	100,709,224	112,128,192	110,885,764	105,417,136	81,665,892	71,505,060	62,165,532
Total	102,024,872	112,297,243	137,485,494	173,524,723	260,094,211	297,266,361	333,463,580	316,716,614	272,414,672	227,018,422	178,691,519	142,659,699
2015	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	62,684,574	57,365,413	86,489,437	88,984,850	106,158,389	114,555,359	127,038,586	125,052,315	117,883,208	99,385,733	64,079,715	57,508,787
Purchased (SA2)	28,648,400	30,029,208	36,876,400	51,626,212	52,734,000	62,368,240	71,273,928	75,055,068	70,123,504	63,526,892	46,873,420	34,399,772
Total	91,332,974	87,394,621	123,365,837	140,611,062	158,892,389	176,923,599	198,312,514	200,107,383	188,006,712	162,912,625	110,953,135	91,908,559
2016	January	February	March	April	May	June	July	August	September	October	November	December
GW (SA1)	54,579,679	53,455,693	56,776,025	80,317,655	110,937,338	148,518,660	164,758,463	159,501,571	140,200,584	99,019,629	63,087,762	
Purchased (SA2)	27,516,676	26,507,624	27,531,636	34,054,196	51,071,196	75,541,268	96,246,656	93,992,184	86,904,136	75,682,640	37,088,084	
Total	82,096,355	79,963,317	84,307,661	114,371,851	162,008,534	224,059,928	261,005,119	253,493,755	227,104,720	174,702,269	100,175,846	0
% Reduction	19.53%	28.79%	38.68%	34.09%	37.71%	24.63%	21.73%	19.96%	16.63%	23.04%	43.94%	100.00%

*Notes

2013 January and February production numbers do not match actually recorded production because of an open intertie delivering water to SA2. Information below is further details.

SA1 = Service Area 1, SA2 = Service Area 2. SA1 is all groundwater (GW) production. SA2 is all purchased water from SCWA.

Actual Recorded Prod. (Jan. 2013) - Service Area 1 79,361,342 gallons (Includes water delivered to SA2 due to open intertie. Intertie closed end of Feb. 2013)

Actual Recorded Prod. (Feb. 2013) - Service Area 1 94,608,406 gallons (Includes water delivered to SA2 due to open intertie. Intertie closed end of Feb. 2013)

To determine estimate of Feb. 2013 production delivered to Service Area 1, use multiplier from March data which is seasonally similar.)

Service Area 1 Multiplier = 1.39 (calculated from March 2013 Prod. Data/March 2014 Prod. Data)

Calc'd Feb. 2013 Prod. = Feb. 2014 Prod. Data x 1.39 = 79,737,924

To determine estimate of Jan. 2013 production, use prorated amount from Feb. 2013 data. (This method due to Jan. 2014 being unseasonably hot.)

Calc'd Jan. 2013 Prod. = (Feb. 2013 Prod. Data Calc'd / Feb. 2013 Prod. Data Actual) x Jan. 2013 Prod. Data Actual = 68,254,916

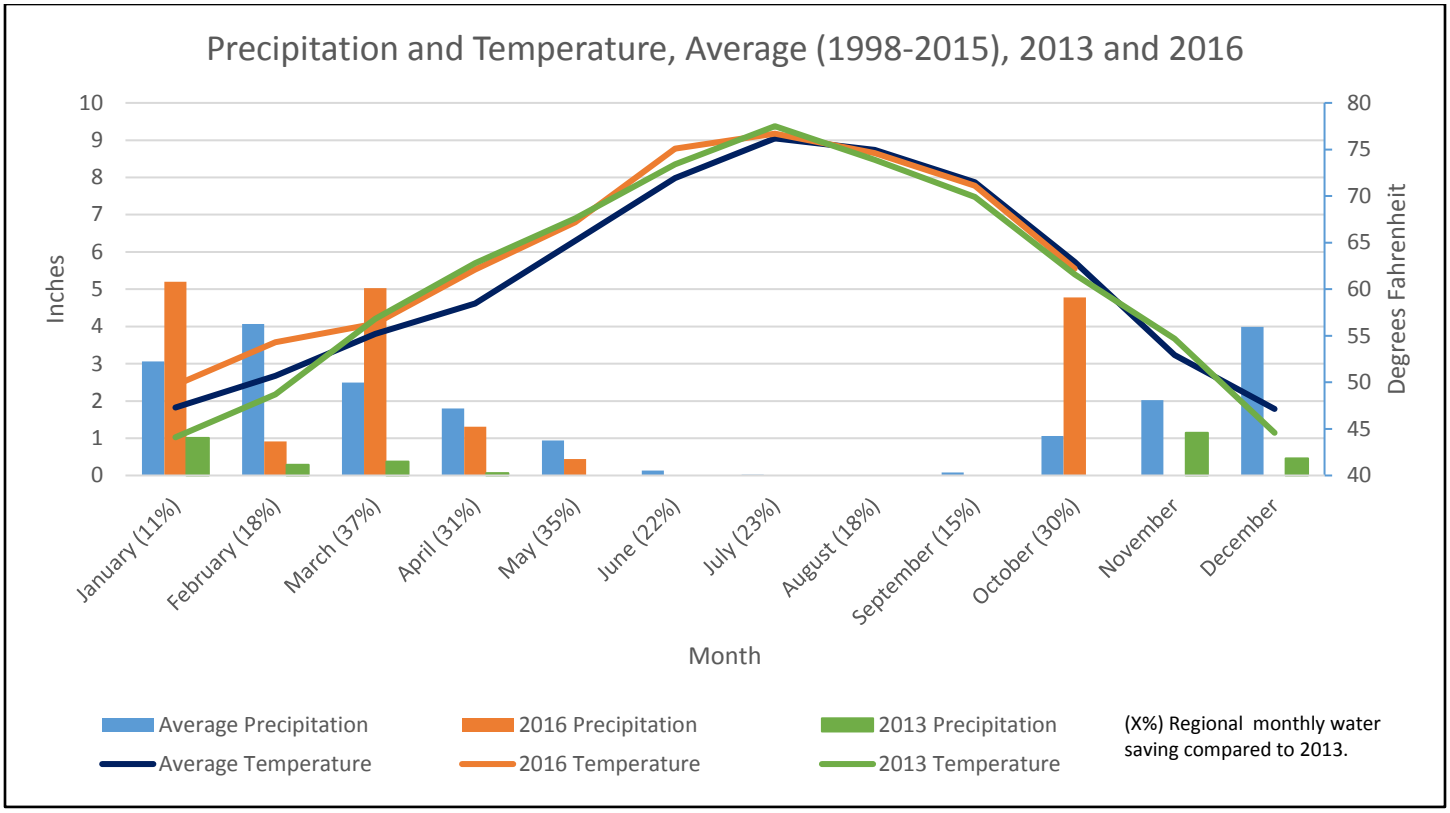
		Consumption		
Service Area 2	# Accts	CCF	Gallons	
2016 Jan	4,269	36,787	27,516,676	
Feb	4,268	35,438	26,507,624	
Mar	4,269	36,807	27,531,636	
Apr	4,269	45,527	34,054,196	
May	4,269	68,277	51,071,196	
Jun	4,269	100,991	75,541,268	
Jul	4,269	128,672	96,246,656	
Aug	4,270	125,658	93,992,184	
Sep	4,270	116,182	86,904,136	
Oct	4,270	101,180	75,682,640	
Nov	4,399	49,583	37,088,084	
Dec			0	

RWA Savings Summary October 2016

REDUCTION BY VOLUME (Million Gallons)													
	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total
2016	6,154	5,900	6,354	8,435	11,413	15,136	17,257	17,190	14,696	10,357			112,892
2013	6,954	7,233	10,095	12,105	17,472	19,483	22,418	20,855	17,311	14,836			148,760
%	11.5%	18.4%	37.1%	30.3%	34.7%	22.3%	23.0%	17.6%	15.1%	30.2%			**24.1%**

STATE WATER BOARD WATER SAVINGS TRACKING (Million Gallons)																		
	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Total
2015/16	12,419	13,789	13,866	12,560	10,759	7,131	6,217	6,154	5,900	6,354	8,435	11,413	15,136	17,257	17,190	14,696	10,357	189,632
2013	19,488	22,418	20,859	17,311	14,836	10,649	8,433	6,954	7,233	10,095	12,105	17,472	19,483	22,418	20,855	17,311	14,836	262,755
%	36.3%	38.5%	33.5%	27.4%	27.5%	33.0%	26.3%	11.5%	18.4%	37.1%	30.3%	34.7%	22.3%	23.0%	17.6%	15.1%	30.2%	**27.8%**

REDUCTION BY AGENCY (Data compared to 2013)		
Water Agency	**Oct. 2016 Reduction**	**June 15 - Oct. 16 Reduction**
California American Water	33.8%	32.6%
Carmichael Water District	36.4%	30.5%
Citrus Heights Water District	35.2%	30.6%
City of Davis	28.9%	24.3%
City of Folsom	21.8%	20.8%
City of Lincoln	29.8%	27.1%
City of Roseville	35.9%	29.2%
City of Sacramento	31.3%	27.9%
City of West Sacramento	25.6%	27.8%
City of Woodland	19.7%	28.6%
City of Yuba City	24.0%	25.9%
Del Paso Manor Water District	15.6%	30.3%
El Dorado Irrigation District	33.2%	26.1%
Elk Grove Water District	23.0%	30.2%
Fair Oaks Water District	38.7%	31.2%
Golden State Water Company	24.7%	27.2%
Orange Vale Water Company	40.3%	34.7%
Placer County Water Agency	20.0%	24.1%
Rancho Murieta CSD	29.9%	24.8%
Rio Linda/Elverta CWD	33.4%	29.7%
Sacramento County Water Agency	31.5%	28.7%
Sacramento Suburban WD	27.2%	27.5%
San Juan Water District	40.5%	28.5%
Average	29.6%	28.2%
Minimum	15.6%	20.8%
Maximum	40.5%	34.7%



Water Agency	2016 Residential Gallons Per Capita Per Day (R-GPCD)											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
California American Water	59	59	58	76	91	121	131	122	111	79		
Carmichael Water District	75	78	76	115	155	241	258	276	221	148		
Citrus Heights Water District	80	77	77	107	155	213	237	242	189	123		
City of Davis	59	60	58	79	99	116	124	142	132	92		
City of Folsom	83	89	89	127	166	226	256	259	230	155		
City of Lincoln	59	64	55	104	122	156	188	194	167	121		
City of Roseville	49	41	46	73	85	135	145	166	160	108		
City of Sacramento	72	60	65	85	112	141	156	154	125	90		
City of West Sacramento	85	80	75	103	123	159	168	172	147	106		
City of Woodland	56	58	52	72	85	115	119	120	113	86		
City of Yuba City	73	75	78	105	123	152	144	153	138	104		
El Dorado Irrigation District	76	69	79	80	153	183	302	207	230	104		
Elk Grove Water District	50	54	52	75	93	135	146	144	132	98		
Fair Oaks Water District	69	74	76	122	176	262	293	282	249	149		
Golden State Water Company	83	81	83	107	129	191	202	211	202	144		
Orange Vale Water Company	84	86	76	115	170	263	290	275	239	143		
Placer County Water Agency	56	76	79	95	147	185	211	212	184	139		
Rancho Murieta CSD	77	79	74	117	151	245	294	296	255	217		
Rio Linda/Elverta CWD	84	90	86	123	167	257	281	268	224	138		
Sacramento County Water Agency	65	70	69	102	126	166	171	168	152	103		
Sacramento Suburban WD	64	68	63	89	118	153	163	162	139	112		
San Juan Water District	97	92	114	198	296	466	534	521	415	221		
Sacramento Regional Average	**68**	**66**	**68**	**93**	**123**	**164**	**185**	**180**	**159**	**108**		

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **ELK GROVE WATER DISTRICT OPERATIONS REPORT – OCTOBER AND NOVEMBER 2016**

RECOMMENDATION

This item is presented for information only. No action by the Board is proposed at this time.

Summary

The Elk Grove Water District (EGWD) Operations Report is a standing item on the regular board meeting agenda.

All regulatory requirements were met during both October and November 2016. Other notable events are described below.

DISCUSSION

Background

Every month, staff presents an update of the activities related to the operations of the District. Included for the Board's review is the EGWD's October and November 2016 Operations Report.

Present Situation

EGWD October 2016 Operations Report highlights are as follows:

- **Operations Activities Summary –** Notable items in the activities summary are that the District hung 729 door hangers for past due balances which resulted in 71 shutoffs. There were 3 pressure complaints and 3 water quality complaints, none of which were validated upon inspection.

- **Production –** Well 13 remains offline while staff is working to reduce the arsenic levels in that well. The Combined Total Service Area 1 production graph on page

13 shows that production during the month of October decreased slightly compared to October 2015, and is about 31.88 percent less than what was produced in 2013. The Total Demand/Production for both service areas on page 14 shows that customer use during the month of October, compared to October 2013, was down by 23.04 percent.

- **Static and Pumping Level Graphs –** The Fourth quarter soundings are shown and indicate the static water levels in deeper zones have slightly improved compared to 2013.

- **Treatment (Compliance Reporting) –** All samples taken during the month are in compliance with all regulatory permit requirements. No exceedances of any maximum contaminant levels were found and all water supplied to the District's customers met or exceeded safe drinking water standards.

- **Preventative Maintenance Program –** The tables included in this section of the report also include certain activities completed to date. Below is a list of out-of-ordinary maintenance work completed in October:

    - Staff facilitated the pump performance tests for all pumps/motors.
    - Staff repaired the "good-neighbor" fence at wellsite #6.
    - Staff replaced a malfunctioning flow transmitter at well 4D Webb.

- **Backflow Prevention Program 2016 –** There were 40 notices issued for the month. From the initial testing notice 29 devices passed and 5 devices failed. Of those failed devices, all have passed. There were 6 secondary notices issued, of which we have received no passing tests. There are a total of 7 outstanding devices as of this month which will require further investigation.

- **Safety Meetings/Training –** There were 5 safety training sessions conducted for the month. Only 2 safety sessions are required by OSHA standards.

- **Service Line Replacement Map –** The District installed 5 service lines for residential services in the month of October.

- **Service and Main Leaks Map –** There were two main line leaks and 5 service line leaks reported for the month.

The EGWD November 2016 Operations Report highlights are as follows:

- **Operations Activities Summary –** Notable items in the activities summary are that the District hung 7 door hangers for past due balances which resulted in 5. There was 1 pressure complaint and 1 water quality complaint, neither of which were validated upon inspection.

- **Production –** Well 13 remains offline while staff is working to reduce the arsenic levels in that well. The Combined Total Service Area 1 production graph on page 13 shows that production during the month of November decreased slightly compared to November 2015, and is about 41.14 percent less than what was produced in 2013. The Total Demand/Production for both service areas on page 14 shows that customer use during the month of November, compared to November 2013, was down by 43.94 percent.

- **Static and Pumping Level Graphs –** The Fourth quarter soundings are shown and indicate the static water levels in deeper zones have slightly improved compared to 2013.

- **Treatment (Compliance Reporting) –** All samples taken during the month are in compliance with all regulatory permit requirements. No exceedances of any maximum contaminant levels were found and all water supplied to the District's customers met or exceeded safe drinking water standards.

- **Preventative Maintenance Program –** The tables included in this section of the report also include certain activities completed to date. Below is a list of out-of-ordinary maintenance work completed in November:

    - Staff painting portions of the Railroad Treatment Plant offices outside of regular work hours.

- **Backflow Prevention Program 2016 –** There were 39 notices issued for the month. From the initial testing notice 33 devices passed. There were 6 secondary notices issued, of which we have received no passing tests. There was are a total of 6 outstanding devices as of this month which will require further investigation.

- **Safety Meetings/Training –** There were 5 safety training sessions conducted for the month. Only 2 safety sessions are required by OSHA standards.

- **Service Line Replacement Map** – The District installed 11 service lines for residential services in the month of November.

- **Service and Main Leaks Map** – There were no main line leaks and 2 service line leaks reported for the month.

STRATEGIC PLAN CONFORMITY

The District's Strategic Plan addresses responsible business practices and the importance of providing the community with safe drinking water. The EGWD Operations Report is a key document for managing the District's distribution and treatment system. The EGWD Operations Report assists the District toward its responsibility of delivering safe drinking water.

FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully Submitted,

MARK J. MADISON
GENERAL MANAGER

MJM/ah

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Jim Malberg, Finance Manager/Treasurer

SUBJECT: **ELK GROVE WATER DISTRICT FISCAL YEAR 2016-17 WATER REVENUE ADJUSTMENT DEFERRAL AND OPERATING BUDGET AMENDMENT**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors adopt Ordinance No. 12.14.16.01 and Resolution No. 12.14.16.01 deferring one-half percent of the water revenue adjustment scheduled on January 1, 2017 and amending the Elk Grove Water District Fiscal Year 2016-17 Operating Budget.

Summary

Deferring one-half percent of the scheduled water revenue adjustment on January 1, 2017 and amending the Elk Grove Water District (EGWD) Fiscal Year 2016-17 (FY 2016-17) Operating Budget will reduce budgeted revenues in FY 2016-17 approximately $32,195. This will result in FY 2016-17 budgeted expenditures exceeding budgeted revenues by $12,780. If approved, operating reserves in the amount of $12,780 will be set aside and used to structurally balance the amended FY 2016-17 Operating Budget.

By this action, if approved, the previously approved rate adjustment of 3.5%, scheduled for January 1, 2017, would be reduced to 3%, making it consistent with the rate adjustments implemented in the three previous years.

DISCUSSION

Background

On June 26, 2013 the Board adopted ordinance 06.26.13.01 Approving the 2013 Water Rate Study Report and Adopting Water Service Rates, Fees and Charges. The report recommended annual water revenue adjustments beginning on January 1, 2014 through

January 1, 2018 of 3%, 3%, 3%, 3.5% and 4.5%, respectively. The first three revenue adjustments were implemented on January 1, 2014, 2015 and 2016 as recommended. Adopting ordinance 12.14.16.01 will allow the Board the discretion to defer all or partial annual water revenue adjustments to future years when it is determined by the Board that the entire suggested water revenue adjustment is not necessary in a given fiscal year.

On June 22, 2016 the Board of Directors of the Florin Resource Conservation District (Board) adopted Resolution No. 06.22.16.04 approving the EGWD FY 2016-17 Operating Budget containing budgeted revenues of approximately $13,745,658, and projected expenditures of approximately $13,726,243.

The projected revenues in excess of expenditures of approximately $19,415 were to be contributed to operating reserves. A revenue adjustment of three and one-half percent (3.5%), to be implemented in January 2017, was included in that budget. At the Board meeting on October 26, 2016 Director Bob Gray suggested that the District implement an "even" three percent (3%) revenue adjustment on January 1, 2017 rather than the suggested 3.5% adjustment.

Adopting resolution 12.14.16.01 will amend the budgeted FY 2016-17 revenues and authorize staff to set aside $12,780 of operating reserves to structurally balance the budget.

Present Situation

Staff is proposing to defer one-half percent of the annual revenue adjustment scheduled for January 1, 2017 and amending the EGWD FY 2016-17 Operating Budget as detailed in the Financial Summary of this staff report. The impact to water rates will be as follows:

Connection Type	Current Rate	Adopted Rate	Amended Rate
1" Meter or less	62.84	65.04	64.73
1 ½" Meter	88.45	91.55	91.10
2" Meter	119.18	123.35	122.76
3" Meter	190.89	197.57	196.62
4" Meter	293.33	303.60	302.13

6” Meter	549.43	568.66	565.91
8” Meter	856.75	886.74	882.45
10” Meter	1,215.29	1,257.83	1,251.75

Connection Type	Current Rate	Adopted Rate	Amended Rate
2” Fire Service	2.87	2.98	2.96
3” Fire Service	8.35	8.68	8.60
4” Fire Service	17.80	18.51	18.33
6” Fire Service	51.70	53.77	53.25
8” Fire Service	110.17	114.58	113.48
10” Fire Service	198.12	206.04	204.06
12” Fire Service	320.02	332.82	329.62

Service Type	Current Rate	Adopted Rate	Amended Rate
Tier 1 – Residential	1.48	1.53	1.52
Tier 2 – Residential	2.93	3.03	3.02
Non-Residential	1.67	1.73	1.72
Irrigation	1.80	1.86	1.85

Environmental Considerations

There is no environmental action associated with this item.

Strategic Plan Conformity

This item, and all other budget related activities, conforms to the FRCD/EGWD’s 2012-2017 Strategic Plan. Adoption of an annual EGWD budget is specifically identified as a goal in the financial stability challenge section of the Strategic Plan.

FINANCIAL SUMMARY

Deferring one-half percent of the suggested FY 2016-17 annual revenue adjustment will result in a reduction in budgeted revenues as follows:

	Adopted	Amended	Difference
Residential	$ 11,929,493	$ 11,901,105	$ 28,388
Commercial	1,460,916	1,457,765	3,151
Fire Service	133,749	133,094	656
Total	**$ 13,524,158**	**$ 13,491,963**	**$ 32,195**

Deferring one-half percent of the annual revenue adjustment will reduce the total FY 2016-17 budgeted revenues from $13,745,658 to $13,713,463 with budgeted remaining the same at $13,726,243. Operating reserves in the amount of $12,780 will be set aside to structurally balance the Amended FY 2016-17 EGWD Operating Budget.

Respectfully submitted,

JIM MALBERG
FINANCE MANAGER/TREASURER

JM

Attachments

ORDINANCE NO. 12.14.16.01

AN ORDINANCE OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS APPROVING THE 2013 WATER RATE STUDY REPORT AND ADOPTING WATER SERVICE RATES, FEES AND CHARGES

WHEREAS, Government Code sections 66016 and 66018 authorize the Florin Resource Conservation District (the "District") to adopt a resolution or ordinance to establish and impose water service fees and charges; and

WHEREAS, Article XIII D Section 6 of the California Constitution authorizes the District to establish and impose property-related fees and charges including water rates; and

WHEREAS, the District Board of Directors ("Board of Directors") caused to have prepared the Elk Grove Water District 2013 Water Rate Study Report, dated April 18, 2013, which recommends changes to the existing water service rates; and

WHEREAS, the Board of Directors wishes to adjust several other miscellaneous, water service fees and charges to reflect the actual cost of providing the services for which they are charged; and

WHEREAS, pursuant to Article XIII D Section 6 of the California Constitution and Government Code section 66018, the District held a public hearing on June 26, 2013, as part of a regularly scheduled meeting of its Board of Directors, during which the District gave members of the public the opportunity to make oral or written presentations to the Board of Directors on the proposed changes to the water service rates and other miscellaneous water service fees and charges; and

WHEREAS, the District published notice of the time and place of the June 26, 2013, public hearing, including a general explanation of the matter to be considered, at least ten days before the hearing as required by Government Code sections 6062a and 66018; and

WHEREAS, at least ten days before the public hearing, the District made data publicly available that indicates (1) the estimated cost required to provide the services for which the District proposes to levy the miscellaneous water service rates and charges and (2) the revenue sources anticipated to provide such services, all according to Government Code section 66016; and

WHEREAS, the above-described data sets forth reasonable cost estimates for the District's provision of the miscellaneous water service fees and charges, and establishes that the proceeds generated by the fees and charges do not exceed the total of the estimated costs.

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS HEREBY DETERMINES AND ORDAINS AS FOLLOWS:

Section 1. Recitals. The above recitals are true and correct and incorporated herein.

Section 2. Final Approval of Rate Study. The Elk Grove Water District 2013 Water Rate Study Report dated April 18, 2013 was approved June 26, 2013.

Section 3. Amendment. Exhibit A of Ordinance No. 06.26.13.01 is hereby replaced in its entirety with the attached Exhibit A.

Section 4. California Environmental Quality Act Compliance.

(a) Pursuant to California Public Resources Code section 21080(b)(8), the District's adjustments to the water rates and miscellaneous water service fees and charges are not subject to the requirements of the California Environmental Quality Act. In accordance with Section 21080(b)(8), the District finds and determines that these adjustments constitute the modification of charges to meet operating expenses and for obtaining funds for capital projects necessary to provide and maintain water service within the District's service area.

(b) District staff is hereby directed to file a Notice of Exemption with the Sacramento County Clerk within three (3) business days after adoption of this Ordinance.

Section 5. Ordinance Effective Date. This ordinance shall take effect upon its adoption.

APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 14th day of December, 2016.

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Tom Nelson, Vice Chairperson

Attest: _____
Stefani Phillips, Secretary

EXHIBIT A

Florin Resource Conservation District / Elk Grove Water District
Water Ordinance
Schedule of Charges, Rates, Fees, and Deposits

1. Account Set-Up Fee. A new occupant of a residence will be considered a new account and will be charged an account set-up fee of $30.00

2. Returned Check Service Charge. Any person who submits to the District a check for which there are insufficient funds shall be subject to a charge of $35.00, in addition to the amount of the check.

3. 24-Hour Turn-On Fee. $100.00 shall be charged to a realtor or other responsible party for the temporary turn-on of water service at a vacant property for the purposes of inspection.

4. Over the Phone Payments. A $5.00 credit card processing fee shall be charged for payments made by telephone.

5. Photocopies. A per-page fee of ten cents for black and white copies and fifteen cents for color copies shall be charged for copies provided in response to a Public Records Act request or other requests for substantial photocopy services.

6. Delinquency Shut-Off. When water service is discontinued because of delinquency in payment of a bill, the service shall not be restored until the Customer has paid:

    a. The amount of the unpaid bill,
    b. $25.00 fee for the "door hanger" notice, and
    c. A shut-off/field service fee of $100.00.

    During the door-hanger period, termination of service may be avoided by payment of the unpaid bill and the $25.00 door hanger fee. All of the forgoing fees must be paid in cash, cashier's check or money order only.

7. Change of Meter Size or Location. When a Customer requests a change of meter size or relocation of an existing meter or service connection for the Customer's convenience, the change will be made by the District upon payment by the Customer of the applicable meter and installation charge set forth in Paragraph 14.

8. Testing of Meters; Back Flow Valves; Fire Flow. Meters will be tested upon request of the Customer and payment of the cost of the test and District staff's time at the hourly rate of $47.00. If the meter is faulty, fees will be waived. Back flow valves will be tested upon request of the Customer and payment of a fee of $70.00 for each valve tested. Fire flows shall be tested upon request of the Customer and payment of a fee of $156.00.

9. Meter Re-read. A meter may be re-read upon request of the Customer. The first re-read will be performed at no charge. Each subsequent re-read will be subject to a charge of $25.00.

10. Plan Check Fees for Water Systems Extensions. Any person required by this Ordinance to have plans checked shall deposit with the Elk Grove Water District the following fee or fees for the service:

    a. Irrigation only: $500.00
    b. Nine or less lots, building units, or EDUs: $2,000.00
    c. Ten or more lots, building units, or EDUs: $5,000.00

This deposit will serve as credit towards fees for plan check, inspection, engineering and administrative costs of the project and actual fees will be calculated on a time and material basis. Expenses incurred beyond the deposit will be billed monthly and the project will not be accepted by Elk Grove Water District until all outstanding balances have been paid. Credits not used after acceptance of a project shall be refunded to the project.

11. Rates for Water Service. Rates for water service are the rates recommended in the "Elk Grove Water District 2013 Water Rate Study Report" dated April 18, 2013 and approved June 26, 2013. The Board of Directors has the discretion to defer all or partial annual rate increases to future years when it is determined that none or not all of the recommended rate increase is required to balance the annual operating budget.

12. Private Fire Protection Service Rates. Rates for private fire protection are the rates recommended in the "Elk Grove Water District 2013 Water Rate Study Report" dated April 18, 2013 and approved June 26, 2013. The Board of Directors has the discretion to defer all or partial annual rate increases to future years when it is determined that none or not all of the recommended rate increase is required to balance the annual operating budget.

13. Construction and other temporary services. Rates for construction and other temporary water service rendered for street paving, grading and trench flooding, and water delivered to tank trucks from fire hydrants or other outlets for such purposes, are as follows:

    Permits will be charged an installation and removal charge of $194.00 and a weekly rental fee of $50.00 for use of the District's equipment (e.g., meter; reduced pressure backflow device). Charges for water actually used will be billed at the non-residential rate.

    The applicant for temporary service shall be required to deposit with the District the amount of $2,000.00. Upon permit expiration, the Contractor should bring the water meter used for the permit into the District where a final meter reading will be collected. The District will determine if additional monies or a refund is due, and collect the amount or process a refund. If a refund is owed, a check will be prepared and mailed to the Contractor.

14. Water Connection Fees. Water connection fees are the fees recommended in the " Elk Grove Water District 2013 Water Connection Fee Study Report" dated April 18, 2013 and approved June 26, 2013. Beginning June 1, 2014 and continuing annually thereafter on that same month and day, the maximum total connection fee will be automatically increased according to the most recent index values published in the Engineering News-Record Magazine's Construction Cost Index.

15. Fines for Violation. Any violation of this Ordinance shall be subject to a fine in the amount of $100.00 for the first occurrence, $200.00 for the second occurrence within one year and $500.00 for each additional occurrence within one year.

RESOLUTION NO. 12.14.16.01

RESOLUTION OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS AMENDING THE ELK GROVE WATER DISTRICT FISCAL YEAR 2016-17 OPERATING BUDGET

WHEREAS, and the Board adopted Resolution 06.22.16.04 approving the Elk Grove Water District FY2016-17 Budget submitted by the Finance Manager/Treasurer on June 22, 2016.

WEHREAS, the Board desires to defer to a future year one-half percent of the annual rate increase scheduled January 1, 2017.

NOW, THEREFORE, BE IT RESOLVED that the Florin Resource Conservation District Board of Directors, hereby:

1. Amends the Total Revenues of the approved Elk Grove Water District FY 2016-17 Budget to the total of $13,713,464.

2. Amends the FY 2016-17 water rate increase to three percent (3%) effective January 1, 2017.

3. Defers one-half percent of the annual water rate increase scheduled January 1, 2017 to a future year.

PASSED, APPROVED, AND ADOPTED this 14th day of December 2016.

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Tom Nelson
Vice Chairman of the Board of Directors

ATTEST:

_____
Stefani Phillips
Secretary to the Board of Directors

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Sarah Jones, Program Manager

SUBJECT: **LEGISLATIVE UPDATE**

RECOMMENDATION

This item is presented for information only. No action by the Board is proposed at this time.

SUMMARY

Staff periodically reports to the Board on legislative matters that potentially affect the Florin Resource Conservation District/Elk Grove Water District. Several bills were recently passed by the California Legislature and approved by Governor Brown.

The Elk Grove Water District is now a member of the Regional Water Authority's Legislative and Regulatory Advocacy Program. This participation will assist staff in tracking current and proposed legislation and enhance our ability to advocate.

DISCUSSION

The following bills have recently passed and potentially affect the District:

SB 814: Prohibits "excessive" water use by metered residential customers during specific types of drought emergencies. This bill requires each urban retail water supplier to establish a method to identify and discourage excess water use during the proscribed periods. Authorizes as a method to identify and discourage excess water use the establishment of rate structure that includes block tiers, water budgets or rate surcharges over the base rate. It also authorizes the establishment of an excessive water use ordinance, rule or tariff condition. The District is in the process of defining "excessive use" and developing a new water contingency plan.

SB 7: Requires owners of multi-unit rental properties constructed after January 1, 2018 to sub-meter all apartments and multifamily units. SB 7 was authored by Senator Lois Wolk (D-Davis) to encourage additional, responsible water use and conservation. The

new legislation also requires owners of multi-unit rentals to provide residents with accurate information about the volume and cost of their water use through their own unit-specific submeters by the January 1, 2018 deadline. Residents' water bills will also be based on their unit-specific usage. It is important to note that the burdens required of this bill affect the property owners and not the local water purveyors.

SB 552: Revises the existing authority of the Water Board to order consolidation where a public water system or state small water system consistently fails to provide an adequate supply of safe drinking water.

AB 2874: Requires a groundwater sustainability agency to notify the California Public Utilities Commission (CPUC) before imposing or increasing a fee specified in the Sustainable Groundwater Management Act of 2014 in a groundwater basin that includes a CPUC- regulated water corporation.

AB 2257: Requires the online posting of an agenda for a meeting of a local legislative body occurring on and after January 1, 2019, that has an internet website, to be posted on the local agency's primary internet homepage and be accessible through a prominent, direct link. There are certain exemptions for legislative bodies that have integrated agenda management platforms. This requirement will be incorporated into the District's new website.

AB 1436: Requires a local legislative body to orally report a summary of a recommendation for a final action on the salaries, salary schedules, or compensation paid in the form of fringe benefits of a local agency executive during the open meeting prior to taking the related final action.

AB 2801: Requires a local agency to maintain written protests for a minimum of two years following the date of a public hearing regarding the levying of a proposed new or increased fee or charge.

AB 2515: This bill is referred to as the Water Conservation in Landscaping Act: Model water- efficient landscaping ordinance (MWELO) and requires the Water Board, on or before January 1, 2020 and every three years thereafter, to either update MWELO or make a finding that an update to the efficiency of landscape water use or the administration of the ordinance.

The Elk Grove Water District (EGWD) is now a subscribing member of the Regional Water Authority's (RWA) Legislative and Regulatory Advocacy Program (LRAP). The LRAP was formed several years ago to positively influence legislative and regulatory actions to

protect, and improve the regions water supply. The attached LRAP program description is included with this staff report.

LRAP has also contracted a lobbyist to represent the group members. The EGWD will benefit because joining a regional effort gives us a stronger voice in Sacramento and this is especially important now with the new water conservation requirements being proposed by the State.

STRATEGIC PLAN CONFORMITY

Tracking active legislation complies with the District's Regulatory Compliance goals of the 2012-2017 Strategic Plan.

FINANCIAL SUMMARY

There may be a fiscal impact for the District from the new laws, however the extent is unknown at this time.

Respectfully submitted,

Sarah Jones

SARAH JONES
PROGRAM MANAGER

SJ:MJM

Attachment

RWA Legislative and Regulatory Advocacy Program

(Approved by the Board on September 10, 2015)

Introduction

The Regional Water Authority (RWA) Legislative and Regulatory Advocacy Program (Advocacy Program) has been created as part of the commitment to regional collaboration and unity in pursuit of the region's common goals as acknowledged by the "RWA 2018+ Strategic Plan". The intent of the Advocacy Program is to positively influence legislative and regulatory actions to protect, preserve and improve the region's water supply reliability.

This advocacy effort takes on many forms including high level commitment to increasing the region's profile in California water politics; a focused and agreed upon set of priorities; a clear and resolute set of Policy Principles to guide advocacy positions and decisions; and fostering beneficial coalitions with allied organizations. The success of these advocacy efforts will be directly linked to maintaining the level of excellence this region has demonstrated in the stewardship of our water resources. This stewardship has resulted in the preservation and enhancement of our local watersheds; protection of a federally designated Wild and Scenic River running through a metropolitan area of over 2 million people (the lower American River); and a reliable and diverse water supply supporting the growth of the local economy.

The Priority Issues and companion Policy Principles that are adopted by the RWA Board and included herein serve as the foundation for RWA' s Advocacy Program. The Priority Issues are the long-standing, foundational issues that are at the core of RWA's mission and stand the test of time. An example of a Priority Issue adopted as part of the Advocacy Program is the "protection of the water rights and entitlements of RWA member agencies". Vigilant protection of these valuable, local assets will be a perpetual priority for RWA and its member agencies. The Policy Principles that support each of the Priority Issues are also long-term in nature though the RWA Advocacy Program should carefully consider and modify these on a regular basis to stay abreast of the ever-changing politics of California's water resources management.

Combined, the Priority Issues and Policy Principles adopted by the Board serve as the Advocacy Platform that will guide development of annual legislative and regulatory work plans. The advocacy platform allows RWA staff and member agencies to operate within an agreed upon set of guidelines when advocating for the region's common goals. *(Currently, a contract lobbyist paid for by 10 RWA member agencies supports the Advocacy Program, and the program is staffed on a half-time basis. Consistent with the Strategic Plan, it is a goal of RWA to eventually support full-time staffing and expand participation in funding the lobbyist.)*

RWA Legislative and Regulatory Advocacy Program

(Approved by the Board on September 10, 2015)

Following the Priority Issues and Policy Principles are the guidelines the Advocacy Program will use for determining recommended positions and prioritizing legislation that is introduced as part of each legislative session.

Finally, this document includes an overview of the California legislative process and calendar, as well as an overview of key state agencies in which we engage.

Priority Issues

- **Ensure a Diverse, Resilient, and Reliable Water Supply**

  Conjunctive use of surface and groundwater resources along with cost-effective investments in recycled water, stormwater capture, water efficiency, and water conservation can significantly drought proof the region's water supply, protect the region's water resources and environment, and assure the continued growth of the region's economy.

  Policy Principles

  - Promote legislative and regulatory measures that enhance local agencies ability to share regional water resources.
  - Support and participate in Folsom Reservoir and Central Valley Project operational improvements to assure a reliable surface water supply to RWA agencies.
  - Develop infrastructure necessary to access surface water entitlements.
  - Advance efforts to streamline CEQA compliance for water resource projects that diversify or strengthen this regions water supply reliability.
  - Promote and support amendments to SGMA and development of regulations that enhance water supply reliability and protect groundwater resources.
  - Support measures that help expedite and cost-effectively integrate new water resources such as stormwater reuse and recycled water into the regions water supply portfolio.
  - Continue to increase conjunctive use capabilities within the region.
  - Sponsor and/or support legislation that guarantees investments made in regional water supply reliability and drought resilience are available for their intended purposes.
  - Support cost-effective surface water and groundwater storage projects.

Priority Issues (Continued)

- **Protect the Water Rights and Entitlements of RWA Member Agencies**

  Water rights issues are complex and contentious. This region's surface water rights and entitlements and long-standing management of groundwater resources have been critical in the shaping of the local economy and are vital for the future. Our reasonable use of water has and will continue to assure the region's water rights and entitlements provide the region with abundant, affordable and high quality water while maintaining and protecting the environmental resources of the Lower American River and the region's watersheds.

  Policy Principles

  - Support and defend the existing water rights priority system.
  - Support enforcement of the existing water rights laws.
  - Maintain area-of-origin protections.
  - Oppose any unreasonable curtailments of our area's water rights that impact our beneficial use of water.
  - Promote legislation that supports and clarifies the multiple beneficial uses of water.
  - Support legislation and regulatory action that allows for retaining groundwater rights.
  - Support new laws, policies, and regulations embracing the concept that recognize inherent regional differences that drive water use efficiency and conservation.
  - Ensure that water rights are preserved in the context of conserving water.
  - Promote system operations that ensure delivery of water supplies based on water rights and contract obligations.
  - Proactively engage with the SWRCB on the Delta tributary flow process.

Priority Issues (Continued)

- **Maximize Funding Opportunities Beneficial to RWA Member Agencies**

  The region is prepared to make and support investments that will improve water supply reliability and protect the environment, including the Lower American River. Large-scale infrastructure projects such as improvements at Folsom Reservoir, increased or new storage capacity, additional facilities on the Sacramento River, and expanded groundwater, recycled water, transmission and distribution facilities will help prepare the region for the future while protecting the environment and increasing water supply reliability.

  Policy Principles

  - Actively engage in legislative and regulatory initiatives that consider the development of a public goods charge.
    - Develop RWA policy on public goods charges.
  - Assure that any funding that is extracted from this region be returned to this region for the benefit of this region.
  - Support policies that provide funding allocations based on merit of the project and the impact or benefit.
  - Promote the statewide benefits that our actions provide due to our unique location within the State's water system.
  - Support Proposition 218 reform that improves water agencies ability to fund programs that help diversify the region's water supply portfolio.
    - Develop RWA policy on Proposition 218 reforms.
  - Promote statewide funding to increase flexibility for the CVP.
  - Support legislation that provides funding for local and regional water resources infrastructure projects.
  - Support funding for agencies to develop and utilize storm water capture projects.
  - Ensure state funding is available for state imposed mandates.

Priority Issues (Continued)

- **Promote Balanced Statewide Water Management Solutions Beneficial to the Greater Sacramento Region**

  RWA recognizes the need for a statewide water plan that assures a reliable water supply for all regions in the state. RWA supports a statewide solution, including protection of the Delta that is balanced and beneficial to the Sacramento region's water supply reliability.

  Policy Principles

  - Ensure improvements or modifications to the statewide water system are protective of this region's water supply.
  - Support statewide water plans and policies that recognize and honor previous investments made to assure this region's water supply reliability.
  - Promote a statewide drought action plan that acknowledges this region's investment in drought resiliency.
  - Encourage revisions to policies and operations that streamline water transfers.
  - Support statewide water storage solutions that provide benefit or are neutral to the region's water supply reliability and flood protection.
  - Encourage statewide water planning efforts that recognizes water management differs based on climate, population density, return flows, and other regional geographic and hydrologic factors.
  - Promote modifications to state and federal operations that protect the region's ability to use regional resources.

Priority Issues (Continued)

- **Promote Water Efficiency and Water Conservation**

  Our region invests in water efficiency and water conservation that are locally cost effective, feasible, and improve the water supply reliability of the region. Water efficiency makes good business sense and is key to assuring we continue our reasonable use of water consistent with our water rights and contracts.

  Policy Principles

  - Unique factors such as climate, land use, and return flows must be taken into consideration when developing statewide laws and regulations.
  - Promote policies that recognized the differences between water efficiency and water conservation.
  - Promote a better understanding of water use efficiency based on local supplies and site-specific factors.
  - Define appropriate water conservation requirements that consider local supplies.
  - Develop partnerships with other local agencies on public affairs campaigns/messaging.
  - Promote public-private partnerships with local businesses that lead to greater water efficiency and benefit the local economy.
  - Support a state led effort to establish rate stabilization funds programs that are consistent with state laws.
  - Assure that the region receives the benefit of its water conservation efforts.

Priority Issues (Continued)

- **Support Stewardship of the Region's Environmental Resources**

  The region's management of water resources is committed to the preservation of the Lower American River (LAR) and tributary watersheds as demonstrated by the historic Water Forum Agreement enacted in 2000. The LAR is a federally designated Wild and Scenic River running through a metropolitan area of over 2 million people that still supports one of the prime cold water fisheries in the State and is home to Chinook Salmon and threatened Central Valley Steelhead.

  Policy Principles

  - Support flow management standards that protect the ecosystem of the Lower American River, prevent dead pool conditions in Folsom Reservoir, and improve flood safety.
  - Promote legislative and regulatory initiatives supporting conjunctive use that will make more surface water available for the Lower American River in dry years.
  - Implement infrastructure projects that will improve temperature control and access to cold water at Folsom Reservoir.

RWA Legislative Analysis Process

- **Process for Adopting Positions on Introduced Legislation**

  The Priority Issues and Policy Principles will be adopted by the RWA Board and serve as the Advocacy Platform, for which RWA works from in the legislative and regulatory arenas.

  Each new legislative session, RWA staff and the contract lobbyist will screen newly introduced legislation using the adopted Advocacy Platform as a guide. Bills that are relative to RWA's platform or are otherwise considered noteworthy to RWA interests are presented to the Lobbyist Subscription Program (LSP) Committee for analysis and consideration.

  Through this collaborative process, the LSP Committee determines a recommended position on each bill and then assigns a priority (see the list of formal positions and priorities below). During this process, bills may be removed from further consideration and additional bills may be added to RWA's list based on input from the LSP Committee or other factors. The Committee's

RWA Legislative Analysis Process (Continued)

recommendations are taken to the RWA Executive Committee for further discussion and approval, consistent with RWA Policy 100.5.

Many of these initial positions and priorities will change as bills are amended throughout the course of the legislative process. The LSP Committee will be routinely updated on the status of bills as they move through the legislative process and will decide upon changes in position and priority as the process dictates. In time sensitive situations, RWA staff may change a current position and/or priority with the approval of the RWA Executive Director and concurrence of general counsel. Such changes will be done using the adopted Advocacy Platform as guidance. The LSP Committee will be updated of changes as soon as possible and the Executive Committee will be asked to ratify such changes at its first meeting following the changes.

- **Formal Positions**

Support - A bill that would benefit RWA or one or more RWA members (without detriment to others), and/or is generally good public policy

Support if Amended - A bill that could benefit RWA, or one or more RWA members, if amended. This position implies that RWA is ready to offer specific amendments.

Oppose - A bill detrimental to RWA or one or more RWA members.

Oppose Unless Amended - A bill that is detrimental to RWA or one or more RWA members, that could be amended to remove the detrimental provisions. This position implies that RWA is ready to offer specific amendments, and will move to a neutral position if accepted.

Watch - A bill of interest to RWA and its members that does not affect RWA directly, or for other reasons does not yet merit a position. May be a “spot” or “intent” bill that does not yet have meaningful language.

Neutral - Generally a bill from which we have removed an Oppose or Oppose Unless Amended position due to amendments or other factors.

RWA Legislative Analysis Process (Continued)

- **Bill Priorities**

  High Priority - A bill of major significance with direct impact to RWA or a number of RWA members. RWA has a formal position and is actively lobbying, writing letters, offering amendments, testifying in committee, and taking other direct actions as necessary. "Watch" bills can be considered high priority, especially early in the legislative process, depending on the topic, the author, or other factors that warrant heightened monitoring.

  Medium Priority - A bill of interest but not anticipated to have major significance to RWA or more than a few of its members. RWA has a formal position but is not actively lobbying legislators. RWA and/or RWA members may submit letters, provide testimony or take other actions as part of other groups or coalition or, in some situations, directly. Individual RWA members may be more active depending on the topic of the bill.

  Low Priority - A bill in an area of interest to RWA, but with little potential impact. RWA will only have a Watch position on such bills. No immediate action is planned but these bills will be monitored to assure they don't evolve into a high priority status. Individual RWA members may be more active depending on the nature of the bill.

The California Legislative Process Calendar

January – February

- Bills are introduced in their houses of origin. Most bills first go to the Legislative Counsel's Office where they are drafted into formal legislative language.
- Deadline for introducing bills to be heard that year is the end of the third week of February.
- Bill is given a "first reading" in its house of origin.

March – April

- Bills are heard in their respective policy committees.
    - Bills with a fiscal impact must be out by the beginning of May.
    - Bills without fiscal impact must be out by the beginning of the second week of May

May

- Fiscal committees in house of origin hear bills
- Bills go to the "floor" for vote by full house be last week of May.

June – August

- Process is repeated in the other house.
    - June through mid- August in policy committees
    - Second half of August considered by fiscal committees.

September

- Floor sessions held in both houses.
- All bills must be out of the legislature and to the Governor's desk by end of second week of September.
- Governor has until the end of September to act on bills.

State Regulatory Agencies and Processes

- **State Water Resources Control Board**
  - Water Rights
  - Water Conservation
  - Drinking Water Program
  - Grants
  - Discharge Programs (through the Regional Water Quality Control Boards)

- **Department of Water Resources**
  - Sustainable Groundwater Management Act Regulations
  - Water Efficiency
  - State Water Project
  - Grants - IRWM

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **GENERAL MANAGER'S REPORT**

RECOMMENDATION

This item is presented for information only. No action by the Board is proposed at this time.

Summary

The Board requested a monthly summary of activities performed by the General Manager on behalf of the Florin Resource Conservation District (FRCD) and the Elk Grove Water District (EGWD). This report is provided in compliance with that request and no action is requested of the Board at this time.

DISCUSSION

Background

At the March 23, 2016 Board meeting, the Board requested the General Manager to include a General Manager's Report as part of the agenda for every regular FRCD Board meeting. More specifically, it was requested that this report include a listing of the General Manager's various activities involving the FRCD and the EGWD.

Present Situation

This report has been structured to inform the Board of those activities between the last Regular Board Meeting and the current Regular Board Meeting. It is designed to not repeat various updates included in other status reports presented in this agenda, although there may be activities listed where the General Manager was involved but not cited in the other status reports.

Since October 26, 2016, the notable General Manager's activities included the following:

Florin Resource Conservation District

- Reviewed the AR SWRP meeting on November 17.
- Prepared and submitted the FRCD Municipal Services Review to the Sacramento Local Agency Formation Commission.
- Attended the Sacramento LAFCO Commission meeting on December 7.
- Attended the annual Tri-RCD luncheon on December 8.
- Prepared the October, 2016 Florin Resource Conservation Activities Staff Report.

Elk Grove Water District

- Attended the RWA Lobbyist Subscription Program meeting on November 2.
- Advance efforts to revise the EGWD Meter Reading Program.
- Attended a cybersecurity workshop presented by a special agent of the FBI.
- Assisted Vice-Chair Tom Nelson in attending an SCGA Alternative Submittal workshop.
- Met with developers regarding a potential senior living development on East Stockton Blvd.
- Conducted a Leadership Team meeting to initiate discussions on strategic planning and other matters.
- Represented the District at an RWA meeting on November 10.
- Represented the District at an Elk Grove Leadership luncheon.
- Initiated efforts to resume water system flushing this winter.
- Attended the ACWA conference in Anaheim with Vice-Chair Tom Nelson and various staff members.
- Conducted three private meetings with a Board Members.
- Prepared various reports for the October 26 Board meeting.

STRATEGIC PLAN CONFORMITY

This report directly conforms to the goals and objectives for both the Florin Resource Conservation District and the Elk Grove Water District as the General Manager is responsible for implementing the requirements of the Strategic Plan.

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,

MARK J. MADISON
GENERAL MANAGER

MJM

December 14, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **FLORIN RESOURCE CONSERVATION DISTRICT REGULAR BOARD MEETING SCHEDULE**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors discuss and provide direction to staff on the desired dates and times of the regularly scheduled Florin Resource Conservation District Board meetings beginning in January 2017.

Summary

To date, the regularly scheduled board meetings of the Florin Resource Conservation District (FRCD) have been held at 6:30 pm on the fourth Wednesday of every month. It is requested that the Board discuss and provide direction to staff on the dates and times of these regular meetings beginning in January 2017.

A change in the regular meeting time potentially assists with three things. It may better accommodate the availability of Board Members, it may allow staff to attend the City of Elk Grove's Council meetings, and it may save money and improve the timeliness of public outreach.

DISCUSSION

Background

For many years, the FRCD Regular Board Meetings have been conducted on the fourth Wednesday of every month, starting at 6:30 pm. Occasionally, this schedule has been altered and this has generally been the case in November and December when those regular meetings are combined.

The primary reasons for having the regular board meeting on that day of the month are that it generally corresponded when all of the FRCD Board Members were available and

it did not conflict with a day when the board chambers of the Cosumnes Community Services District (CSD) were occupied. Up until a fire, which occurred in February 2015, destroyed CSD's administration building the FRCD used the CSD's board chambers in their administration building to conduct its regular board meetings.

Present Situation

Two individuals (Sophia Sherman and Lisa Medina) have been newly elected to serve as Board Members of the FRCD. As such, staff recommends that the new Board discuss which dates and times best fit their availability, as well as the three remaining Board Members.

A concern has also been expressed that conducting the regular meetings on the fourth Wednesday of every month conflicts with the City of Elk Grove's Council (Council) Meeting, which is also on that same evening. It has been stated that there may be occasions when FRCD or Elk Grove Water District (EGWD) staff need to be present at the Council meeting and, in fact, this has been a problem in the past.

Lastly, there is a public outreach and financial benefit to potentially shifting the FRCD Regular Board Meetings from the fourth week of the month to the third week of the month and this involves the timing of bill inserts.

Bill inserts are a very cost effective means to provide public outreach and typically cost less than $1,000 per month to reach out to our customers. The utility bills are mailed at the beginning of the month and are received by the customers generally between the 5th and the 10th of each month.

When the FRCD Regular Board Meetings are held on the fourth Wednesday, and if an action is taken warranting public outreach, there is usually insufficient time to prepare a bill insert to be placed into the next month's bill. In this case, that public outreach must either wait for the next month or a separate letter or notice is mailed directly to the customers and this costs approximately $8,500. If the regular meetings were conducted during the third week of the month, and there was an action taken by the Board warranting public outreach, approximately $7,500 could be saved each time this occurred.

STRATEGIC PLAN CONFORMITY

The action in this staff report conforms to the FRCD/EGWD's 2012-2017 Strategic Plan. The Strategic Plan directs EGWD to achieve financial stability in order to operate in an efficient manner as to provide our ratepayers with a safe and reliable source of water for their current and future needs.

FINANCIAL SUMMARY

If the Board were to decide to hold the FRCD Regular Board Meetings during the third week of the month instead of the fourth week of the month, and based on the assumption that there may be four occasions during a year where immediate public outreach is warranted, the FRCD/EGWD could potentially save approximately $30,000 per public outreach costs.

Respectfully submitted,

MARK J. MADISON
GENERAL MANAGER

MJM:sp