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

Agenda

Wednesday, May 25, 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. Proclamations and Announcements

Associate Director Comment

Public Comment

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

a. Regular Meeting Minutes – April 27, 2016
b. FRCD Cash Flow Worksheet – April, 2016
c. Warrants Paid – April, 2016
d. Active Accounts – April, 2016
e. Bond Covenant Status for FY 2015-16 – April, 2016
f. Revenues and Expenses – Actual vs. Budget FY 2015-16 – April, 2016
g. Cash Accounts – April, 2016
h. Consultants Expenses – April, 2016
i. Major Capital Improvement Projects – April, 2016

Associate Director Comment

Public Comment

Recommended Action: Approve FRCD Consent Calendar items a – i

3. **Committee Meetings** (Stefani Phillips, Board Secretary)
   a. Special Meeting of the Infrastructure Committee Minutes – April 21, 2016
   b. Finance Committee Meeting Minutes – May 11, 2016

Associate Director Comment

Public Comment

Recommended Action: Accept the minutes of the Special Meeting of the Infrastructure Committee held on April 21, 2016 and the Finance Committee meeting held on May 11, 2016

4. **Amendment to Water Shortage Contingency Plan and Implementation of Normal Water Supply Stage** (Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

Recommended Action: Adopt Ordinance No. 05.25.16.01 amending the Water Shortage Contingency Plan's Normal Water Supply Stage and order implementation of the amended Normal Water Supply Stage

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

Associate Director Comment

Public Comment

6. **Elk Grove Water District Operations Report – April 2016**
   (Mark J. Madison, General Manager)

Associate Director Comment

Public Comment

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

Associate Director Comment

Public Comment

8. **Draft 2015 Urban Water Management Plan** (Bruce M. Kamilos, Assistant General Manager)

Associate Director Comment

Public Comment

9. **New Classification Request – Program Manager**
   (Stefani Phillips, Human Resource Administrator)

Associate Director Comment

Public Comment

Recommended Action: **Adopt Resolution No. 05.25.16.01 approving the Florin Resource Conservation District/Elk Grove Water District Classification and Salary Study and authorizing associated changes to the Florin Resource Conservation District's Organization Chart and Elk Grove Water District Salary Schedule**

10. Florin Resource Conservation District/Elk Grove Water District General Liability, Property, and Workers Compensation Insurance (Jim Malberg, Finance Manager)

Associate Director Comment

Public Comment

Recommended Action: **Adopt Resolution No. 05.25.16.02, of the Board of Directors of the Florin Resource Conservation District authorizing application to the Director of Industrial Relations, State of California for a Certificate of Consent to Self-Insure Workers' Compensation Liabilities; Resolution No. 05.25.16.03 of the Board of Directors of the Florin Resource Conservation District consenting to enter the Joint Protection Programs of the Association of California Water Agencies/Joint Powers Insurance Authority; and Resolution No. 05.25.16.04 of the Board of Directors of the Florin Resource Conservation District authorizing volunteer personnel workers' compensation insurance**

11. Directors Comments

Associate Director Comment

Public Comment

Adjourn to Regular Meeting – June 22, 2016.

May 25, 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 FRCD Consent Calendar items a – i.

Summary

By this action, the Board will approve FRCD Consent Calendar items a – i.

DISCUSSION

Background

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

FINANCIAL SUMMARY

N/A

Respectfully Submitted,

STEFANI PHILLIPS, BOARD SECRETARY AND
JIM MALBERG, TREASURER

SP

Attachments

Consent
Calendar Item# a

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

Wednesday, April 27, 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, Elliot Mulberg, Tom Nelson, Jeanne Sabin
Directors Absent:	None
Staff Present:	Mark J. Madison, General Manager; Stefani Phillips, Secretary; Bruce Kamilos, Assistant General Manager; Jim Malberg, Finance Manager; Donella Murrillo, Finance Supervisor
Associate Directors Present:	Lisa Medina, Mike Schmitz
General Counsel Present:	Ann Siprelle, Best Best & Krieger (BB&K)
Consultants Present:	None

Public Comment

Dottie Roderberg, Resident, explained to the Board that she put in new sod and would be watering each and every day to ensure her sod will not die. She said once the first three weeks are up, she will honor the watering days set forth by the Elk Grove Water District (EGWD).

Mark Madison, General Manager, explained that there is an item on the agenda to further discuss the conservation efforts.

Mr. Madison will get back to Ms. Roderberg after a decision has been made on watering days.

Chuck Dawson, Chairman, pulled agenda item no. 9 from the agenda.

1. Proclamations and Announcements

Mark Madison, General Manager, announced to the Board that the Elk Grove Western Festival will be held the upcoming weekend of April 30 – May 1, 2016 and the EGWD will have a booth at the event.

Elliot Mulberg, Director, asked for volunteers to be a judge at the BBQ contest at the Western Festival on Saturday, April 30, 2016 and commented that it would be a four hour commitment.

Mr. Madison talked about the Eco-Landscape Workshop that the District would be sponsoring on Saturday, April 30, 2015.

2. Consent Calendar

a. Regular Meeting Minutes – March 23, 2016
b. FRCD Cash Flow Worksheet – March, 2016
c. Warrants Paid – March, 2016
d. Active Accounts – March, 2016
e. Bond Covenant Status for FY 2015-16 – March, 2016
f. Revenues and Expenses – Actual vs. Budget FY 2015-16 – March, 2016
g. Cash Accounts – March, 2016
h. Consultants Expenses – March, 2016
i. Major Capital Improvement Projects – Budget vs. Actuals – March , 2016

j. Elk Grove Water District 2014 Employee Policy Manual Amendment – Post Retirement Benefits

MSC (Mulberg/Sabin) to approve Consent Calendar items a-j 5/0: Ayes: Dawson, Gray, Mulberg, Nelson, and Sabin.

3. Committee Meetings

There were three committee meetings held in the months of March and April:

- Special Meeting of the Conservation Committee Minutes – March 23, 2016
- Special Meeting of the Conservation Committee Minutes – April 6, 2016
- Special Meeting of the Infrastructure Committee Minutes – April 6, 2016

Elliot Mulberg, Director, spoke about the Conservation Committee meeting.

Tom Nelson, Vice-Chairman, spoke about the Infrastructure Committee meeting. A discussion occurred regarding potential long-term improvement plans for the Administration Building.

MSC (Sabin/Nelson) to accept Special Meeting Minutes of the Conservation Committee meetings held on March 23 and April 6, 2016 and the Infrastructure Committee meeting held on April 6, 2016 5/0: Ayes: Dawson, Gray, Mulberg, Nelson, and Sabin.

4. Elk Grove Water District Conservation Activities – March 2016

Mark Madison, General Manager, presented the Elk Grove Water District Conservation Activities – March 2016 to the Board. In summary, the District's customers have been doing a good job conserving water. Service Area 1 reduced its water consumption by 43.5% in March 2016 in comparison to March 2013 usage. Service Area 2 reduced water consumption by 25.5% for the same period. The combined reduction for both service areas was 38.68%. The cumulative reduction since June 2015, now totals 35.12% which is well above the District's new target of 25%.

A discussion occurred regarding the idea of customers being able to irrigate three days a week.

Bob Gray, Director, inquired when the Administrative Citation clock restarts. Mr. Madison responded June 1st, but it is up for discussion.

A discussion occurred regarding a policy for customers applying for a watering exception.

The Board agreed to post-pone action on the potential changes to the current stage of the District's Water Shortage Contingency Plan until the regular board meeting in May, pending the State's decision.

5. Florin Resource Conservation District Conservation Activities – April 2016

Mark Madison, General Manager, presented the Florin Resource Conservation District Conservation Activities – April 2016 to the Board.

Mr. Madison gave the Board an overview of the recommendations from the Conservation Committee meeting that was held on April 6, 2016 and asked the Board if they wanted Mr. Madison to proceed with the recommendations. The recommendations are as follows:

1) The FRCD should consider submitting an application to become the Groundwater Sustainability Agency, in compliance with the 2014 Sustainable Groundwater Management Act, for its jurisdictional area.

2) The General Manager should engage with the Fire Districts to discuss the potential for conducting weed abatement within the FRCD.
3) The General Manager should engage with the appropriate representative of the Building Industry Association (BIA) to explore potential synergies between the FRCD and the BIA as it relates to water supply assessments and wetland mitigation.
4) The General Manager should engage with Supervisor Don Nottoli on the potential for development mitigation activities.
5) The General Manager should engage with the California Resource Conservation Districts and that Natural Resource Conservation Service regarding grant funding opportunities.

Chuck Dawson, Chairman, inquired what weed abatement is. Elliot Mulberg, Director, explained the process of weed abatement and that the FRCD would rent the equipment needed and perform the activity.

Bob Gray, Director, inquired if the insurance policy would cover weed abatement. Mr. Madison responded that he would have to look into that.

Jeanne Sabin, Director, inquired if agenda item no. 5, Florin Resource Conservation District Conservation Activities – April 2016, could be moved because the outcome of agenda item no. 10 could guide the FRCD activities. Mr. Mulberg concurred with Ms. Sabin's statement to move this item after agenda item no. 10.

6. Elk Grove Water District Operations Report – March 2016

Mark Madison, General Manager, presented the Elk Grove Water District Operations Report – March 2016 to the Board.

Comments and inquiries included:

- 467 Door Hangers
- 67 Shut Offs
- 3 Water Quality Complaints for the month
- 68 Hydrant Maintenance
- 111 Valve Exercising
- 41 Service Line Replacements
- Monthly Production
    - Well 1D – no production
    - Well 4D – ran the last two weeks of the month
    - Well 11D – ran the first two weeks of the month
    - Well 14D – no production
    - Well 3 – didn't run much only for sounding purposes
    - Well 8 – no production
    - Well 9 – did not need to run due to demand being low
    - Well 13 – offline, working on Arsenic level
- Combined Total Production – usage down from last year and also 2013
- Total Demand/Production – usage down from last year and also 2013
- Static and Pumping levels – nothing new to report, second quarter data will be available in the May report
- Water samples came back normal
- No water waste discharge for the month of March
- Preventative Maintenance Program is on track
- 3 outstanding delinquents for the Backflow Prevention Program

- 5 Safety Meetings for the month
- 3 Service line leaks for the month – all were cracked poly lines
- Pressure maps – Sample Station Area (SSA)1 and SSA2 are running about 15% in the 65-75 PSI range due to the running of the shallow wells which aren't controlled by the Variable Frequency Drive (VFD)

7. Elk Grove Water District Fiscal Year 2015-16 Quarterly Operating Budget Status Report

Jim Malberg, Finance Manager, presented the Elk Grove Water District Fiscal Year 2015-16 Quarterly Operating Budget Status Report to the Board. Mr. Malberg explained to the Board that the District has completed about 75% of the 2015-16 Fiscal Year.

Comments and inquiries include:

1) 75% of the way through the year the District is on the high side due to some items that weren't included into the budget last year, these reasons are listed below:
    - Board approved the bonus for the General Manager which was not included into last year's budget
    - Longevity pay was not accounted for in last year's budget
    - Positions/Promotions were not accounted for in last year's budget
    - Workman's Comp came in higher under the true-up from last year

Tom Nelson, Vice-Chairman, inquired if the figures show that capitalized labor has been taken out for the projects. Mr. Malberg responded yes.

Elliot Mulberg, Director, inquired if the third quarter figures act as a prediction for the end of the year for the next year's budget. Mr. Malberg responded yes.

Mr. Mulberg commented that he would like to see a projection of the year end instead of a third quarter report.

8. Elk Grove Water District Fiscal Year 2015-16 Quarterly Capital Reserves Status Report

Jim Malberg, Finance Manager, presented the Elk Grove Water District Fiscal Year 2015-16 Quarterly Capital Reserves Status Report to the Board. In summary, the total amount available for reserves on July 1, 2015 was $11,500,000. Based on Board policy adopted August 22, 2012, the reserves are allocated first to the Operating Reserve (120 days of expenses), then to the Fiscal Year 2015-16 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. As of March 31, 2016, the District spent $890,391 on capital projects leaving a remaining total reserve balance of $10,609,609.

9. Banking and Payment Processing Services

The Board pulled this agenda item.

10. Sustainable Groundwater Management Act Quarterly Update

Bruce Kamilos, Assistant General Manager, presented the Sustainable Groundwater Management Act Quarterly Update to the Board.

Comments and inquiries include:

- At the SCGA board meeting on April 20, 2016, the board:
    - Passed a resolution for SCGA staff to set a public hearing and provide the required notice and publications for SCGA to form a GSA in the South

American sub-basin (sub-basin 5-21.65). The resolution passed on an 8-3 vote. The three (3) board members that opposed the resolution were FRCD, Omochumne-Hartnell Water District (OHWD), and Agricultural Interests.
    - Passed a resolution for SCGA staff to move forward with an alternative plan submittal in place of a Groundwater Sustainability Plan (GSP). The resolution passed on a 7-3-1 vote. The three (3) board members that opposed the resolution were FRCD, OHWD, and Agricultural Interests.
- At the SGMA Subcommittee meeting on April 7, 2016, the subcommittee:
    - Approved a motion recommending to the SCGA Board to adopt a resolution stating SCGA's intent to move forward with an alternative submittal. FRCD opposed the motion.
    - Approved a motion recommending to the SCGA Board to adopt a resolution commencing the SGMA GSA formation process relative to the proposed boundaries. FRCD opposed the motion.
- At the SGMA Subcommittee meeting on March 10, 2016, Bruce Kamilos presented the proposed new joint powers agreement (JPA) to the subcommittee members. Several members asked what FRCD sought to achieve with the new JPA. FRCD is scheduled to provide an additional presentation of the proposed new JPA at the SGMA subcommittee on April 21, 2016.
- At the SCGA board meeting on March 9, 2016, the board:
    - Deferred discussion of FRCD's proposed new JPA to the SGMA Subcommittee. Two directors questioned why the FRCD didn't have documentation that stated the FRCD Board supported the JPA.
- At the SCGA board meeting on February 10, 2016, the board:
    - Directed SCGA staff to conduct public outreach, notice, and hearing required to file a Notice of GSA Formation for SCGA service area, within the South American sub-basin, if Sloughhouse RCD includes any portion of the South American subbasin as part of their GSA filing.
    - Directed the SCGA Executive Director to file a letter in opposition of Omochumne-Hartnell Water District's and Sloughhouse RCD's proposed boundary adjustment.

Mark Madison, General Manager, stated that, "If the FRCD needs something to do, this is it."

Mr. Madison explained to the board that when SCGA files to become a GSA and is posted on the Department of Water Resources site, then that is when the clock starts for the District.

Elliot Mulberg, Director, inquired if the SCGA decides they want to become a GSA under that legislation that the District would have to work with SCGA and SCGA would need to agree and allow the District to do ours. Mr. Madison responded if SCGA files then the clock starts for the District and we have 90 days to file.

Tom Nelson, Vice-Chairman, spoke regarding the logistics of filing an alternative plan by January 1, 2017.

Mr. Madison stated three reasons for the FRCD to become a GSA:

1) Should the FRCD apply to be its own Groundwater Sustainable Agency (GSA) over its own jurisdiction?
2) Do we think the FRCD could be a good leader as a GSA?
3) Only way to preserve the FRCD boundaries and have leverage.

Jeanne Sabin, Director, inquired if the attorney from Downey Brand was going to be present at tonight's meeting. Mr. Madison responded stating that the Board needs to advise as to whether the attorney should be present for future meetings.

Ms. Sabin inquired how the attorney feels about this. Mr. Madison responded stating that his opinion has not changed and he specified that the District should continue to engage with SCGA but ask if they would agree to provide the District with 2-3 things, that the District has asked for, then maybe it would be ok if they set a defined timeline on starting to revise the Joint Powers Agreement including the District as a signatory.

Mr. Madison recommended to the Board wait one month so staff can gather more information.

Ms. Sabin inquired if the District can establish the next public meeting as a means to form a GSA. Mr. Madison responded stating there is a process the District will have to follow.

A lengthy discussion followed.

Jay Schneider, Sloughhouse RCD, commented that the Sloughhouse RCD and the Omochumne-Hartnell Water District's filed to be a GSA last week.

Mr.Schneider stated he has encouraged others to become a GSA, so that they have representation and a role. He then stated that all GSA's will have to coordinate a Groundwater Sustainability Plan (GSP) together.

Chuck Dawson, Chairman, inquired if the District should wait a month to decide on taking action to file for a GSA. Mr. Nelson responded it is likely the District will get some of the requested changes as to who will be a representative on the Board.

Mr. Madison stated he strongly recommended the Board wait one month to make a decision.

Bob Gray, Director, inquired how much would it cost to set up a GSA. Mr. Madison responded stating he needs more time to prepare this information.

Further discussion followed.

Mr. Mulberg commented that he would like to see a report on the timeline, process, potential cost, and potential downsides of doing this. Mr. Madison responded stating he can provide that to the Board at the May board meeting.

Ms. Sabin inquired how many months has the District been going to the SCGA meetings. Mr. Nelson responded a little less than a year.

Ms. Sabin inquired how long the attorney from Downey Brand has been advising to become a GSA. Mr. Madison responded that he has expressed periodically that the District should be considering this.

Mr. Gray commented that the Board will need to have a better understanding of what to expect.

Mr. Mulberg inquired if the District had a public hearing would the timeline, process, potential cost, and potential downsides of doing this need to be identified. Mr. Madison responded stating that he would do his best to provide the information.

Mr. Mulberg motioned to schedule a public hearing to become a GSA. There was no second.

The Boards consensus was to bring back this agenda item to the regular board meeting in May.

5. Florin Resource Conservation District Conservation Activities – April 2016 – Continued

The discussion on the Sustainable Groundwater Management Act ended and the Board continued their discussion regarding the Florin Resource Conservation District Conservation Activities – April 2016.

Mr. Madison asked the Board how they would like to proceed with the recommendations. The recommendations are as follows:

1) The FRCD should consider submitting an application to become the Groundwater Sustainability Agency, in compliance with the 2014 Sustainable Groundwater Management Act, for its jurisdictional area.
2) The General Manager should engage with the Fire Districts to discuss the potential for conducting weed abatement within the FRCD.
3) The General Manager should engage with the appropriate representative of the Building Industry Association (BIA) to explore potential synergies between the FRCD and the BIA as it relates to water supple assessments and wetland mitigation.
4) The General Manager should engage with Supervisor Don Nottoli on the potential for development mitigation activities.
5) The General Manager should engage with the California Resource Conservation Districts and that Natural Resource Conservation Service regarding grant funding opportunities.

MSC (Sabin/Dawson) would like to suspend items no. 2-5 now and stay focused on item no. 1.

A discussion followed.

Mr. Mulberg stated that he has concerns for the revenue of the FRCD during the time the District focuses on item no. 1.

Mr. Nelson suggested Mr. Madison to look into items no. 3 and 4 this month.

Ms. Sabin stated she was not a fan of item no. 2.

MSC (Mulberg/Dawson) to have the General Manager proceed with item no. 1, 3, 4, 5, 4/1: Ayes: Dawson, Gray, Mulberg, and Nelson; Noes: Sabin.

11. California Special Districts Association Call for Nominations – Board of Directors

Stefani Phillips, Board Secretary, presented the California Special Districts Association for Nominations – Board of Directors to the Board. In summary, The California Special Districts Association (CSDA) is calling for nominations for the Board of Directors Sierra Network,

Seat B, for the term beginning January 1, 2017 through December 31, 2019. The CSDA Board of Directors (CSDA Board) governing body is responsible for all policy decisions related to the CSDA's member services, legislative advocacy, education and resources.

Elliot Mulberg, Director, recommended that the District does not nominate anyone since the incumbent is running.

The Boards consensus was to take no action on this item.

12. General Manager's Report – April 2016

Mark Madison, General Manager, present the General Manager's Report – April 2016 to the Board.

Mr. Madison presented his activities since April 27, 2016, they are as follows:

- Florin Resource Conservation District
  - Prepared a summary of the Potential FRCD Conservation Activities as contained in the FRCD Needs Assessment.
  - Conducted the Conservation Committee meeting on April 6, 2016.
  - Prepared the April 2016 Florin Resource Conservation Activities Staff Report.
  - Continued to coordinate the FRCD's efforts to sponsor and participate with the Greener Gardens Landscaping Tour and the EcoLandscape workshop at the City of Elk Grove to be held on April 23, 2016 and April 30, 2016, respectively.
- Elk Grove Water District
  - Participated in a banking services meeting to evaluate banking options for the EGWD.
  - Conducted a retirement luncheon for a retiring employee.
  - Initiated the kickoff of the staff's work to prepare the FY 2016-17 EGWD Operating and Capital Improvement Program (CIP) budgets.
  - Met with a consultant to potentially initiate outside services to conduct safety monitoring and training for the District.
  - Represented the Elk Grove Water District at the ACWA/JPIA Executive Board meeting where our application to become insured by ACWA/JPIA was considered.
  - Met with staff and consultants to review options for resolving the arsenic problems at Water Well 13.
  - Met with staff on the efforts to implement a new fire backflow prevention program.
  - Initiated efforts to maintain certain activities, previously performed by the Management Analyst, such as the water conservation program and water waste investigations.
  - Conducted an Infrastructure Committee meeting to explore potential improvements to the District's Administration building.
  - Conducted two private meetings with Board Members.
  - Assisted Director Nelson in representing the FRCD/EGWD at two Sacramento Central Groundwater (SCGA) Subcommittee meetings and one SCGA Board meeting.
  - Conducted an Information Technology (IT) budget meeting to address potential IT expenditures during FY 2016-17.
  - Conducted a second Infrastructure Committee meeting to review the proposed 2017-21 CIP expenditures.
  - Assisted in the efforts to complete the purchase of a property from the Wilton Rancheria Tribe.
  - Participated in a coordination meeting between the EGWD and the Sacramento County Water Agency to resolve various problems, including the

SCWA efforts to master meter wholesale water deliveries to the EGWD Service Area 2.

13. Directors Comments

No comments were made.

Adjourn to Regular Meeting on Wednesday, May 25, 2016 at 6:30 p.m.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Secretary

SP/CR

Consent
Calender Item#. b

Florin Resource Conservation District

FRCD Cash Flow
For the Month Ended April 30, 2016

Cash in Bank – Beginning	**$ 104,084.66**
Receipts:	
Interest Earned	**$ 6.85**
Disbursements:	
Cash in Bank – Ending	**$ 104,091.51**

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

Check History Report

4/1/2016 to 4/30/2016
Elk Grove Water District

Check Number	Check Date	Vendor Number	Name	Check	Explanation
040404	4/6/2016	B WAGNE	BRANDON WAGNER	43.16	Clothing Reimbursement
040405	4/6/2016	BSK4	BSK ASSOCIATES	144.00	Sampling
040406	4/6/2016	COUNT11	COUNTY OF SACRAMENTO REAL ESTATE DIVISION	7,500.00	Business CTR/CSD BLDG Water Main Easement
040407	4/6/2016	EGWF	ELK GROVE WESTERN FESTIVAL	500.00	
040408	4/6/2016	ISCC	ISCC, INC	149.00	
040409	4/6/2016	JAN PRO	JAN-PRO CLEANING SYSTEMS OF	515.00	Janitorial Services-MOC/ADMIN
040410	4/6/2016	MAITA	MAITA CHEVROLET	319.90	Repairs & Maintenance-Vehicles
040411	4/6/2016	RCB DO	CARD SERVICE CENTER	996.88	Hotel-CSMFO-Jim/Donella
040412	4/6/2016	RCB SH	CARD SERVICE CENTER	411.58	Materials/Supplies-Treatment
040413	4/6/2016	RCBJC	CARD SERVICE CENTER	434.20	Materials/Supplies-Distribution
040414	4/6/2016	REPUBLI	REPUBLIC SERVICES #922	769.41	
040415	4/6/2016	SMUD	SMUD	814.42	
040416	4/6/2016	SMUD	SMUD	3,161.03	
040417	4/6/2016	SMUD	SMUD	5,884.07	
040418	4/6/2016	SMUD	SMUD	95.71	
040419	4/6/2016	SMUD	SMUD	5,220.47	
040420	4/6/2016	SMUD	SMUD	803.31	
040421	4/6/2016	SMUD	SMUD	646.64	
040422	4/6/2016	SMUD	SMUD	44.64	
040423	4/6/2016	SMUD	SMUD	337.49	
040424	4/6/2016	TOSHIBA	TOSHIBA FINANCIAL SERVICES	528.93	Copier-ADMIN
040425	4/6/2016	TULLY	TULLY & YOUNG, INC.	4,625.00	UWMP 2015
040426	4/6/2016	VERIZON	VERIZON WIRELESS	416.38	
040427	4/12/2016	SCOTSMA	WILLIAMS SCOTSMAN, INC	1,233.93	Temp Trailer-MOC
040428	4/15/2016	BG SOLU	SOLUTIONS BY BG INC.	5,073.00	Daily Tasks/Help Tickets
040429	4/18/2016	A. TEIC	A. TEICHERT & SON, INC	688.67	Materials/Supplies-Colton
040430	4/18/2016	ACWAJPI	CB&T/ ACWA-JPIA	56,359.42	
040431	4/18/2016	AFLAC	AFLAC	1,511.99	
040432	4/18/2016	AQUA	AQUA SIERRA CONTROLS, INC	769.99	Service & Calibrate 2 ABB Meters
040433	4/18/2016	BRINKS	BRINK'S INCORPORATED	279.46	
040434	4/18/2016	BSK4	BSK ASSOCIATES	295.00	Sampling
040435	4/18/2016	CAL STE	CALIFORNIA STEAM	343.96	
040436	4/18/2016	CCPPM	CCPPM	11.20	
040437	4/18/2016	CONSOLI	CONSOLIDATED COMMUNICATIONS	241.11	Ethernet Service

Consent Calendar Item # C

040438	4/18/2016	CONSOLI	CONSOLIDATED COMMUNICATIONS	1,250.36	Phones-MOC/ADMIN
040439	4/18/2016	COUNTY3	COUNTY OF SACRAMENTO	100.00	
040440	4/18/2016	CRCHR	CHRISTOPHER HOFFMANN-RIVERA	42.75	Account Closed-Credit Refund
040441	4/18/2016	CRF BLY	BLONG LEE	69.65	Account Closed-Credit Refund
040442	4/18/2016	CRF KEN	KENT STREET TIC	61.20	Account Closed-Credit Refund
040443	4/18/2016	CRF LEN	LENNAR HOMES CA, INC	28.83	Account Closed-Credit Refund
040444	4/18/2016	CRF LEN	LENNAR HOMES CA, INC	12.20	Account Closed-Credit Refund
040445	4/18/2016	CRF LEN	LENNAR HOMES CA, INC	12.20	Account Closed-Credit Refund
040446	4/18/2016	CRF LEN	LENNAR HOMES CA, INC	41.56	Account Closed-Credit Refund
040447	4/18/2016	CRF TMG	TMG RENTALS INC	18.72	Account Closed-Credit Refund
040448	4/18/2016	CRF YLL	YEE LANCE LEE	37.63	Account Closed-Credit Refund
040449	4/18/2016	CRFCHTI	CHICAGO TITLE	324.13	Account Closed-Credit Refund
040450	4/18/2016	CRFCOH	CONSTANCE HEGUIAGARAY	9.21	Account Closed-Credit Refund
040451	4/18/2016	CRFCVE	CENTRAL VALLEY ENGINEERING &	1,486.84	Account Closed-Credit Refund
040452	4/18/2016	CRFJS	JASON SCHIERLING	146.96	Account Closed-Credit Refund
040453	4/18/2016	DATAPRO	DATAPROSE LLC	7,195.58	Monthly Billing
040454	4/18/2016	EG FORD	ELK GROVE FORD	94.00	Repairs & Maintenance-Vehicles
040455	4/18/2016	EG FORD	ELK GROVE FORD	516.53	Repairs & Maintenance-Vehicles
040456	4/18/2016	ELK LOC	ELK GROVE LOCK AND SAFE CO	15.07	
040457	4/18/2016	FASTENA	FASTENAL COMPANY	61.13	
040458	4/18/2016	GOLDEN	GOLDEN STATE FLOW	1,557.19	Materials/Supplies-Distribution
040459	4/18/2016	INT STA	INTERSTATE OIL COMPANY	980.51	Fuel
040460	4/18/2016	JAYS	JAY'S TRUCKING SERVICE	305.99	Materials/Supplies-Colton
040461	4/18/2016	KAISER2	KAISER FOUNDATION HEALTH PLAN	230.00	
040462	4/18/2016	LAKE V	LAKE VUE ELECTRIC, INC	458.00	
040463	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	75.00	
040464	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	100.00	
040465	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	16.00	
040466	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	16.00	
040467	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	103.50	
040468	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	100.00	
040469	4/18/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	16.00	
040470	4/18/2016	PRE ALL	PREFERRED ALLIANCE, INC	393.00	
040471	4/18/2016	RADIAL	RADIAL TIRE OF ELK GROVE	1,112.99	Repairs & Maintenance-Vehicles
040472	4/18/2016	RCB MM	CARD SERVICE CENTER	2,750.36	Hotel, Contracted Services, Meals, ACWA Conference
040473	4/18/2016	RCB RS	CARD SERVICE CENTER	1,139.56	Materials/Supplies-Colton
040474	4/18/2016	RCB SP	CARD SERVICE CENTER	1,084.45	Meals, Training, Western Festival Materials
040475	4/18/2016	ROTH	ROTH STAFFING COMPANIES, L.P.	1,078.99	Temporary Customer Service Help
040476	4/18/2016	SAC 5	SACRAMNTO COUNT	19.00	Lien Releases
040477	4/18/2016	SAC 5	SACRAMNTO COUNT	19.00	Lien Releases
040478	4/18/2016	SAC 5	SACRAMNTO COUNT	19.00	Lien Releases
040479	4/18/2016	SAC 5	SACRAMNTO COUNT	19.00	Lien Releases
040480	4/18/2016	SIERRA	SIERRA OFFICE SUPPLIES	358.56	
040481	4/18/2016	SUMMIT	AIR WORKS INC	165.00	
040482	4/18/2016	SWRCB	SWRCB	5,105.61	Large System Fees-July-December 2015
040483	4/18/2016	TRAFF S	TRAFFIC SIGN SPECIALTIES	424.44	

040484	4/18/2016	ULTRA	ULTRA TRUCK WORKS, INC	122.80	
040485	4/18/2016	WAC	WAC SOLUTIONS PARTNERS	95.00	
040486	4/20/2016	BAY ALA	BAY ALARM COMPANY	36.75	
040487	4/20/2016	CAL STE	CALIFORNIA STEAM	25.49	
040488	4/20/2016	COEG	CITY OF ELK GROVE	2,782.90	Colton/Orton Inspections
040489	4/20/2016	COUNTY	COUNTY OF SACRAMENTO	329,530.11	Sacramento County Water Billing-Feb/Mar
040490	4/20/2016	COUNTY4	SACRAMENTO COUNTY UTILITIES	103.71	
040491	4/20/2016	CRF FN	FIDELITY NATIONAL TITLE	6.47	Account Closed-Credit Refund
040492	4/20/2016	CRF FTO	FIRST AMERICAN TITLE CO	16.98	Account Closed-Credit Refund
040493	4/20/2016	CRFSD	SANDRA DONATO	44.58	Account Closed-Credit Refund
040494	4/20/2016	CSDS	CSDS SACRAMENTO	75.55	
040495	4/20/2016	DOWNEY	DOWNEY BRAND, LLP	3,091.26	Legal
040496	4/20/2016	EFFECT	EFFECTIVE PHONE SOLUTIONS INC.	1,265.85	Disaster Recovery
040497	4/20/2016	FASTENA	FASTENAL COMPANY	109.44	
040498	4/20/2016	FLORIN	FLORIN AUTOMOTIVE REPAIR	355.28	Repairs & Maintenance-Vehicles
040499	4/20/2016	FRONT C	FRONTIER COMMUNICATIONS	221.38	Well site communications-Alarm and Security
040500	4/20/2016	FRONT C	FRONTIER COMMUNICATIONS	169.37	Well site communications-Alarm and Security
040501	4/20/2016	FRONT C	FRONTIER COMMUNICATIONS	174.75	Well site communications-Alarm and Security
040502	4/20/2016	GOLDEN	GOLDEN STATE FLOW	395.90	
040503	4/20/2016	GRAINGE	GRAINGER	87.05	
040504	4/20/2016	HANFORD	HANDFORD READY MIX INC.	197.40	
040505	4/20/2016	HERBURG	HERBURGER PUBLICATIONS, INC	590.00	Home & Garden Ad
040506	4/20/2016	PAULA M	PAULA MAITA & COMPANY	241.38	
040507	4/20/2016	PEST	PEST CONTROL CENTER INC	160.00	
040508	4/20/2016	PG&E	PACIFIC GAS & ELECTRIC	31.66	
040509	4/20/2016	PURCH	PURCHASE POWER	520.99	Postage
040510	4/20/2016	RADIAL	RADIAL TIRE OF ELK GROVE	154.95	
040511	4/20/2016	ROTH	ROTH STAFFING COMPANIES, L.P.	900.24	Temporary Customer Service Help
040512	4/20/2016	SIERRA	SIERRA OFFICE SUPPLIES	147.21	
040513	4/20/2016	TRAFF S	TRAFFIC SIGN SPECIALTIES	99.36	
040514	4/27/2016	BADAWI	BADAWI & ASSOCIATES	11,520.00	Audit Services
040515	4/27/2016	BAY ALA	BAY ALARM COMPANY	324.45	
040516	4/27/2016	BG SOLU	SOLUTIONS BY BG INC.	4,959.00	Daily Tasks/Help Tickets
040517	4/27/2016	BSK4	BSK ASSOCIATES	1,323.00	Sampling
040518	4/27/2016	BULLET	BULLET GUARD	10,968.57	ADMIN BLDG Improvements
040519	4/27/2016	CAP AIR	CAPITAL AIR TOOL, LLC.	225.16	
040520	4/27/2016	COUNTY4	SACRAMENTO COUNTY UTILITIES	103.70	
040521	4/27/2016	GHA	GHA TECHNOLOGIES, INC	475.33	
040522	4/27/2016	GRAINGE	GRAINGER	37.06	
040523	4/27/2016	HINTON	SEAN HINTON	206.00	Education Reimbursement
040524	4/27/2016	INT STA	INTERSTATE OIL COMPANY	1,387.50	Fuel
040525	4/27/2016	JAYS	JAY'S TRUCKING SERVICE	449.31	
040526	4/27/2016	LAKE V	LAKE VUE ELECTRIC, INC	2,680.00	Electricity for Temp Trailer at MOC
040527	4/27/2016	PACE	PACE SUPPLY CORP	493.50	
040528	4/27/2016	PACTECH	PACIFIC TEK	594.90	
040529	4/27/2016	ROTH	ROTH STAFFING COMPANIES, L.P.	1,125.03	Temporary Customer Service Help

040530	4/27/2016	RWA	REGIONAL WATER AUTHORITY	886.60	
040531	4/27/2016	TRUEPOI	TRUEPOINT SOLUTIONS	10,000.00	Annual Support Renewal
040532	4/27/2016	VALL MO	VALLEY MOTOR PARTS	14.03	
040533	4/27/2016	VANCE	JOHN VANCE	183.44	
040534	4/27/2016	WILSON	MARCELL WILSON	222.39	Clothing Reimbursement
040535	4/27/2016	ZOOM	ZOOM IMAGING SOLUTIONS, INC	156.33	
040536	4/28/2016	A. TEIC	A. TEICHERT & SON, INC	217.61	
040537	4/28/2016	BAY ALA	BAY ALARM COMPANY	5,979.00	Final Payment for Fire System
040538	4/28/2016	CRF FT	FIRST AMERICAN TITLE	44.79	Account Closed-Credit Refund
040539	4/28/2016	CRF FT	FIRST AMERICAN TITLE	43.70	Account Closed-Credit Refund
040540	4/28/2016	CRF O	ORANGE COAST TITLE COMPANY	2.37	Account Closed-Credit Refund
040541	4/28/2016	CRFFTC	FIRST AMERICAN TITLE COMPANY	82.76	Account Closed-Credit Refund
040542	4/28/2016	CRFID	FIDELITY NATIONAL TITLE CO	3.54	Account Closed-Credit Refund
040543	4/28/2016	CRFJEP	JOHN & ELINOR PFEIFER	34.20	Account Closed-Credit Refund
040544	4/28/2016	CRFJOO	JOHNNY O'NEAL	7.44	Account Closed-Credit Refund
040545	4/28/2016	CRFSTS6	STEWART TITLE OF SACRAMENTO	2.99	Account Closed-Credit Refund
040546	4/28/2016	FASTENA	FASTENAL COMPANY	75.21	
040547	4/28/2016	PAC BEN	PACIFIC BENEFIT CONSULTANTS,	16.00	
040548	4/28/2016	SIERRA	SIERRA OFFICE SUPPLIES	369.59	
040549	4/28/2016	UNITED	UNITED SITE SERVICES	250.15	
040550	4/28/2016	WHITE	HDS WHITE CAP CONST SUPPLY	82.19	
040551	4/29/2016	WILSON	MARCELL WILSON	65.08	Clothing Reimbursement
040552	4/30/2016	HEWITT	Aaron Hewitt	62.42	Travel Reimbursement
040553	4/30/2016	T FRANK	TRAVIS FRANKLIN	42.50	Travel Reimbursement
			Total:	527,811.30	

Elk Grove Water District
Active Account Information
4/30/2016

	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		
Commercial	513	517	518	521	519	519	521	522	521	521		
Fire Service	121	122	122	124	122	122	122	122	122	123		
Total Accounts	12,303	12,297	12,287	12,282	12,284	12,297	12,292	12,276	12,297	12,310	-	-

Elk Grove Water District
Active Account Information
FY 2014/2015

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Non-metered												
Residential	135	133	134	133	107	80	65	21	20	-	-	-
Commercial	47	33	33	35	21	10	10	4	4	-	-	-
Metered												
Residential	11,494	11,484	11,490	11,473	11,479	11,513	11,525	11,579	11,607	11,632	11,651	11,658
Commercial	457	458	459	457	479	492	502	509	512	514	511	512
Fire Service	123	121	121	121	121	121	121	121	121	121	121	121
Total Accounts	12,256	12,229	12,237	12,219	12,207	12,216	12,223	12,234	12,264	12,267	12,283	12,291

Consent
Calendar Item# d

Consent
Calendar Item# e

Elk Grove Water District

Bond Covenant Status

For Fiscal Year 2015-16

As of April 30, 2016

Operating Revenues:		
Charges for Services	$	10,875,011
Operating Expenses:		
Salaries & Benefits		2,745,032
Seminars, Conventions and Travel		32,925
Office & Operational		556,213
Purchased Water		1,994,543
Outside Services		510,875
Equipment Rent, Taxes, an Utilities		234,444
Total Operating Expenses		6,074,032
Income From Operations	$	4,800,979
Interest & Principal Payments		
2,225,240 interest + 1,430,000 principal		3,046,033 *
Debt Service Coverage Ratio:		
Actual		**1.58**
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
April 30, 2016

	General Ledger Reference	April Activity	April Budget	Variance	%	YTD Activity	Annual Budget	10/12=83.33% Variance	% Realized
Revenues	4100 - 4900	1,034,111	1,115,496	(81,384)	-7.30%	$10,875,011	$13,385,949	($2,510,938)	81.24%
Salaries & Benefits (1)	5100 - 5280	263,636	257,578	6,058	2.35%	$2,745,032	$3,090,937	($345,905)	88.81%
Seminars, Conventions and Travel	5300 - 5350	1,651	3,679	(2,029)	-55.14%	$32,925	$44,150	($11,225)	74.58%
Office & Operational	5410 - 5494	37,742	82,767	(45,024)	-54.40%	$556,213	$993,202	($436,989)	56.00%
Purchased Water (2)	5495 - 5495	184,422	240,976	(56,553)	-23.47%	$1,994,543	$2,891,709	($897,166)	68.97%
Outside Services	5505 - 5580	53,940	67,665	(13,725)	-20.28%	$510,875	$811,983	($301,108)	62.92%
Equipment Rent, Taxes, Utilities	5620 - 5760	20,616	36,950	(16,334)	-44.21%	$234,444	$443,400	($208,956)	52.87%
Total Operational Expenses		562,007	689,615	(127,608)	-18.50%	$6,074,032	$8,275,381	($2,201,349)	73.40%
Net Operations		472,104				$4,800,978			
Non-Operating Activity									
Capital Equipment & Expenditures	1705 - 1760	129,167	129,167	0	0.00%	1,291,667	1,550,000	(258,333)	83.33%
Bond Interest Accrued	7300 - 7300	185,437	185,437	0	0.00%	1,854,367	2,225,240	(370,873)	83.33%
Interest Earned	9910 - 9910	136	1,667	(1,530)	-91.83%	8,310	20,000	(11,690)	41.55%
Other Income	9920 - 9973	11,903	0	11,903		86,259	0	86,259	
Revenues in Excess of Expenditures (Net Revenues)		169,541				1,749,514			
Capital Expenses									
Capital Improvements						528,565			
Capital Replacements						342,694			
Equipment						62,255			
Bond Retirement: $1,430,000						1,191,667			
Total Capital And Debt Retirement Expenditures						2,125,181			
Net Position after Capital and Debt Retirement Expenditures						(375,667)			

(1) Approximately $226,194 of the budgeted $509,238 of salary & benefit expenses has been capitalized to various capital projects.
(2) Estimated Expenditures: Purchased Water $184,422 in April.

Consent Calendar Item# 5

Florin Resource Conservation District
CASH - Detail Schedule of Investments
4/30/2016

		Account number / name	Investment Name	Investment Type			Restrictions	Market Value
HELD BY BOND TRUSTEE:								
G/L Account #	**Money Market Fund**							
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	187,950.44
1107-000-20	Water	BNY 113576 FRCD 2003 A CONST FUND	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
1122-000-20	Water	BNY 113584 FRCD 2005 A CONST FUND	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
1123-000-20	Water	BNY 113585 FRCD 2005 A INST PM	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	192,425.27
1121-000-20	Water	BNY 113586 FRCD 2005 A RATE STAB	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
	Water	BNY 113587 FRCD 2005 A RES FD	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	1.00
1101-000-20	Water	BNY 113764 FRCD 2002 A/B RATE STABILIZATION	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
1108-000-20	Water	BNY 892747 FRCD 2014A COI	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
1109-000-20	Water	BNY 892745 FRCD 2014A REDEMPTION	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	0.00
1110-000-20	Water	BNY 892744 FRCD 2014A DEBT SERVICE	Dreyfus Inst Treasury	MM Mutual Fund			Restricted	9,145.84
							Subtotal	**$ 389,525.56**
1001-000-20	Water	CASH ON HAND					Unrestricted	**$ 300.00**
HELD BY RIVER CITY BANK:								
1010-000-10	FRCD	RCB 1111057982 CHECKING ACCOUNT					Unrestricted	104,091.51
1010-000-20	Water	RCB 1111063486 GENERAL CHECKING					Unrestricted	451,334.34
1020-000-20	Water	RCB 1111028001 MONEY MARKET					Unrestricted	1,202,161.06
1030-000-20	Water	RCB 1111025851 CHARGE CARD ACCOUNT					Unrestricted	243,313.60
1040-000-20	Water	RCB 1111096589 HIGH YIELD MONEY MARKET					Unrestricted	253.37
1050-000-20	Water	RCB 1111099502 DEBT SERVICE ACCOUNT					Unrestricted	8.27
1060-000-20	Water	RCB 1111097844 PAYROLL ACCOUNT					Unrestricted	179,760.13
1070-000-20	Water	RCB 1111097933 WEB PAYMENT RECEIPTS					Unrestricted	132,640.72
							Subtotal	**$ 2,313,563.00**
1080-000-20	Water	Office of the Treasurer - Sacramento California	LAIF	Investment Pool	Unrated	N/A	Unrestricted	**$ 7,845,873.55**
	Water	Union Bank Global Custody Services-6736302330				N/A		**$ 1,000,000.00**
	Water	CALTrust Short Term		Investment		N/A		**$ 1,000,000.00**
	Water	CALTrust Medium Term		Investment		N/A		**$ 1,000,000.00**
							Total	**$ 13,549,262.11**
							Total Restricted	**$ 389,525.56**
							Total Unrestricted	**$ 13,159,736.55**

Consent Calendar Item# 9

Consultant Expenses
April 30, 2016

Fiscal Retainer Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of year (83%)
Best Best, & Krieger**	Task orders		76,039	130,000	58.49%
Solutions by BG, Inc.	Task orders	10,032	106,236	124,636	85.24%
Downey Brand LLP**	Task orders	3,091	13,044	25,000	52.18%

Project Specific Contracts

Consultant	Description	Current Month	Paid to date	Budget/Contract Amount	Percent of Contract Amount
AECOM	ERP	1,743	75,700	74,720	101.31%

Consent Calendar Item# h

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

Capital Project	Total Project Budget	Expenditures to Date *	Percent Spent
Service Line Replacements	$450,000	$178,580	39.68%
Colton Ave./Orton St. Water Main	415,000	316,167	76.18%
Railroad Corridor Water Line	164,000	181,084	110.42%
Hampton Road WTP Refurbishment	1,346,000	1,107,363	82.27%
VFD's - Booster Pumps Railroad Street WTF	134,000	63,064	47.06%
SCADA Improvements	175,000	181,419	103.67%
Business Center/CSD Bldg. Water Main Looping	175,000	16,352	9.34%
Truck Replacements	120,000	62,255	51.88%
Administration Building Improvements	50,000	43,221	86.44%
RRWTF Modular Meeting Room & IT Center	125,000	1,727	1.38%
Railroad Street WTF Parking Lot Improvements	455,375	451,693	99.19%
Sub-Total	$3,609,375	$2,602,925	72.12%

*Includes $226,194 of capitalized labor in FY 2015-16

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Board Secretary

SUBJECT: **COMMITTEE MEETINGS**

RECOMMENDATION

It is recommended that the Board accept the minutes of the Special Meeting of the Infrastructure Committee held on April 21, 2016 and the Finance Committee meeting held on May 11, 2016.

Summary

The Board has requested a monthly summary of committee meetings. Two committee meetings were held in the months of April and May 2016. The committee meeting minutes are attached.

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

The following committee meetings were held in the months of April and May 2016:

a. Special Meeting of the Infrastructure Committee Minutes – April 21, 2016
b. Meeting of the Finance Committee Minutes – May 11, 2016

The committee meeting minutes listed above are attached.

FINANCIAL SUMMARY

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

Respectfully Submitted,

STEFANI PHILLIPS,
BOARD SECRETARY

Committee
Meeting Item # a

Minutes of the Special Meeting of the Infrastructure Committee of the Florin Resource Conservation District Board of Directors

Wednesday, April 21, 2016

Attendance:

Committee Members:	Tom Nelson, Vice Chairman
	Bob Gray, Director
	Lisa Medina, Associate
Staff:	Mark J. Madison, General Manager
	Stefani Phillips, Board Secretary
	Bruce Kamilos, Assistant General Manager
	Jim Malberg, Finance Manager
	Travis Franklin, GIS Technician I
Public:	None

This was a posted meeting and no members of the public were present.

1. Draft 2017-2021 Capital Improvement Program

Bruce Kamilos, Assistant General Manager took the lead in presenting the Draft 2017-2021 Capital Improvement Program (CIP) to the members of the Infrastructure Committee.

Mr. Kamilos highlighted the notable changes between the proposed 2017-21 CIP and the current 2016-20 CIP:

- An "Expenditure History & Revision" table has been added on projects that span over several years. This table will track total expenditures against a project.
- The schedule for the "Service Line Replacements" project has been revised to span from two years to four years.
- The "8-inch Water Line Replacement Waterman Rd." project has been eliminated.
- The "Pumped-to-Waste Infrastructure – Deep Wells" project has been eliminated.
- The "Hydropneumatic Tanks Refurbishments project has been eliminated.
- The "Well 8 Pump Conversion" project has been replaced by the "Well 8 Pumps Replacement/VFD" project.
- The "Automatic Meter Infrastructure (AMI)" project had be eliminated.

Mark Madison, General Manager, inquired if the District had investigated whether or not sand is being bumped at startup. Mr. Kamilos responded stating there was no sand found at pump startup. A discussion followed regarding sand pumped from deep wells.

Mr. Madison inquired what Mr. Kamilos thoughts were on adding a dump structure with Variable Frequency Drive (VFD) at the Hydropneumatic Tanks. Mr. Kamilos responded stating that would not be a good idea because it would still cause a hammer affect. A discussion about the Hydropneumatic Tanks occurred.

Tom Nelson, Vice-Chairman, commented if a note could be added to the projects that have been eliminated on the final version of the CIP. Mr. Kamilos responded that he will include the notes on the staff report vs. the CIP because he would like to keep the CIP clean.

Bob Gray, Director, inquired if Well 8 will be submersible. Mr. Kamilos responded stating yes, Well 8 capacity will be derated.

Mr. Gray inquired how arsenic is disposed. Mr. Kamilos responded stating it gets oxidized and taken out of solution and filtered by the media. The media gets backwashed into the backwash tank where it gets settled out, including the arsenic, and the sludge is discharged into a sanitary sewer to Sacramento Regional. A discussion regarding Hampton WTP Improvements and the arsenic levels occurred.

Mr. Gray inquired how the District is going to transmit the supervisory control and data acquisition (SCADA) data. Mr. Kamilos responded that he wasn't sure at the moment.

Lisa Medina, Associate Director, commented that the mileage for the Truck Replacement project is so low. Mr. Kamilos responded stating that the mileage should be considered as "hard miles" and there is a lot of wear and tear on the vehicles.

Mr. Gray made a comment during the Security Infrastructure discussion that motion sensor capabilities on the sensors is degraded highly in rain and fog. He also stated that the camera will not detect anything in those types of conditions.

Mr. Kamilos asked the committee if the District should keep the District's Administration Building Improvements in the CIP. The Infrastructure Committee agreed to keep it in the CIP. Mr. Madison inquired if the District should set aside approximately $30,000 to have an architect come in and provide improvement concepts. Mr. Nelson responded stating that a basic discussion on the improvements for the District's Administration Building should occur first before an architect comes in. Mr. Gray commented that if the District would like to build, the District will need more space. The committee agreed to set aside $30,000.

A discussion occurred about the change of funding source for the Well 1D Gate Improvement project. Mr. Kamilos stated that he will change the funding source to Capital Repair and Replacement (CRR) funds.

Mr. Kamilos made a comment that $140,000 was dipped into during the Fiscal Year 2015-16 time period for unforeseen CIP's approved by the Board.

Mr. Kamilos will bring back a cleaned up version of the CIP to the next Infrastructure Committee meeting.

Adjourn to the next Infrastructure Committee Meeting on Wednesday, May 11, 2016 at 5:00PM.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Secretary

SP/CR

Committee
Meeting Item # 6

Minutes of the Finance Committee of the Florin Resource Conservation District Board of Directors

Wednesday, May 11, 2016

Attendance:

Committee Members:	Tom Nelson, Vice Chairman
	Bob Gray, Director
	Elliot Mulberg, Director
	Jeanne Sabin, Director
	Mike Schmitz, Associate
Staff:	Mark J. Madison, General Manager
	Stefani Phillips, Board Secretary
	Bruce Kamilos, Assistant General Manager
	Jim Malberg, Finance Manager
	Donella Murillo, Finance Supervisor
Public:	None

This was a posted meeting and no members of the public were present.

1. **Draft Fiscal Year 2016-17 Elk Grove Water District Operating Budget**
   Mark Madison, General Manager, kicked off the meeting and provided background of the budget process.

   Jim Malberg, Finance Manager, provided the Board an updated copy of the budget worksheet. He stated that three changes were made to the worksheet:
   1) Allocation of the 90/10 spilt of the General Manager's salary
   2) Election costs
   3) Corrected the double entry of permit fees

   Mr. Malberg provided an overview of the proposed budget to the Board.

   Bob Gray, Director, commented that consumption may rise due to the Governor's new order therefore increasing the District's revenues. Mr. Malberg responded stating that the 3.5% revenue adjustment has been built in but the consumption estimates are based on calendar 2015 figures with no change at all.

   Staff recommends the 3.5% rate increase and next year will be up for discussion.

   Mr. Malberg commented that he is still working on the figures for fire service and will know more information by the next Finance Committee meeting on June 8, 2016.

   A discussion occurred regarding the transparency of the General Manager's salary. Mr. Gray commented that he would like to see the General Manager's salary all in one category versus having it spilt between the Florin Resource Conservation District (FRCD) and Elk Grove Water District (EGWD). Mr. Madison responded, "Yes, we can change that."

Mr. Malberg stated the new Other Post-Employment Benefits (OPEB) actuarial rules increased annual required contribution by 63%. A discussion regarding OPEB occurred.

Mr. Malberg commented that he would like to change the name of the line item "telephone" to "communication."

Staff will double check the water conservation budget, should be $30,000. Tom Nelson, Vice-Chairman, made a comment that we need to budget just for conservation.

There was a discussion regarding the conservation program and efforts for the future.

Staff will verify the amount budgeted for telephone/communications and bring back to the next Finance Committee meeting on June 8, 2016.

A discussion regarding bank charges and charging a flat fee for credit card use occurred.

Mr. Malberg will find out what the debt service true number will look like and report back to the Board.

Mr. Madison asked Mr. Malberg if he could provide a graph or chart of actual savings from the bond refinancing. Mr. Malberg responded, yes.

Mr. Malberg will bring back the chronology for the election reserve at the next Finance Committee meeting on June 8, 2016. A discussion regarding this continued.

A discussion regarding increasing the employee phone stipend occurred. Staff will provide examples of phone/data packages at the next Finance Committee meeting on June 8, 2016.

Mr. Madison commented that he would like the Board to adopt a schedule of rates and fees every year at the same time the budget is proposed.

Adjourn to the next Finance Committee Meeting on Wednesday, June 8, 2016.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Secretary

SP/CR

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **AMENDMENT TO WATER SHORTAGE CONTINGENCY PLAN AND IMPLEMENTATION OF NORMAL WATER SUPPLY STAGE**

RECOMMENDATION

It is recommended that the Board of Directors of the Florin Resource Conservation District adopt Ordinance No. 05.25.16.01 amending the Water Shortage Contingency Plan's Normal Water Supply Stage and order implementation of the amended Normal Water Supply Stage.

Summary

On May 9, 2016, Governor Brown issued an Executive Order adjusting water conservation regulations through the end of January 2017. On May 18, 2018, the State Water Resources Control Board (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. These new requirements will go into effect on June 1, 2016.

As these new requirements relate to the Elk Grove Water District (District), water waste will continue to be prohibited but no conservation is required. For this reason, staff recommends that the District's Normal Water Stage be amended to remove all restrictions on watering dates and times, and to conform to the water waste restrictions as adopted by the Water Board.

DISCUSSION

Background

On June 21, 2006, the FRCD Board adopted a Water Shortage Contingency Plan by Ordinance No. 06.21.06.01. The Plan was updated on April 28, 2010 by adoption of Ordinance 04.28.10.01 as part of a regional cooperative effort to adopt plans consistent with other agencies belonging to the Regional Water Authority.

On April 25, 2014, Governor Brown issued an Executive Order to amplify State drought actions. Pursuant to that order, and corresponding requirements adopted by the Water Board, the District amended and implemented Stage 1 – Water Alert which contains enhanced water use restrictions and conservation requirements.

On April 1, 2015, Governor Brown issued another Executive Order calling for expedited actions by State agencies to increase conservation measures further. This order was followed by a new set of regulations adopted by the Water Board on May 5, 2015, intended to achieve a 25% water use reduction throughout the State.

Those new water regulations, adopted by the Water Board, imposed mandated water use reductions on all water agencies, including the District. These mandatory reductions also varied depending on the level of water use by the agency and the District's reduction was established at 28% compared to our usage in 2013. These requirements went into effect beginning May 18, 2015.

To achieve the mandated water use reductions, the District amended the Water Shortage Contingency Plan to include Stage 2 Plus which imposed further restrictions on water use and this also went into effect on May 18, 2015. Since that time, the District has achieved a cumulative savings of 35.04% compared to 2013 and this is shown on Attachment 1 to this report.

Present Situation

On May 9, 2016, Governor Brown issued an Executive Order adjusting water conservation regulations through the end of January 2017. On May 18, 2018, 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 will go into effect on June 1, 2016.

The new regulations adopted by the 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 District is able to achieve compliance with a zero percent conservation requirement for the duration of this order.

Although no conservation is required, potable water waste must permanently be prohibited. Specifically, the following practices of water waste are identified in the Governor's Executive Order:

- 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;
- Irrigating ornamental turf on public street medians.

The District's most recently adopted Water Shortage Contingency Plan - Normal Water Supply Stage is attached to this report as Attachment 2. That stage includes restrictions on watering days and times which, in staff's opinion, should not be included during normal supply conditions.

Rather, staff proposes the amended Water Shortage Contingency Plan – Normal Water Supply Stage, as Exhibit A to Ordinance No. 05.25.16.01, which does not include the watering day and time restrictions. This proposed 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. In that regard, the proposed stage has also been amended to incorporate the specific water waste prohibitions as listed above.

It should be noted that although the proposed Water Shortage Contingency Plan - Normal Water Supply Stage eliminates water use restrictions, water waste prohibitions are still incorporated and these are subject to enforcement and the penalties prescribed. It is also proposed that if the Board approves this proposed stage, and its implementation, the infraction levels of all customers will be reset to zero beginning June 1, 2016.

STRATEGIC PLAN CONFORMITY

Adoption of Ordinance No. 05.25.16.01 is keeping with the 2012-2017 Strategic Plan goals for Regulatory Compliance.

FINANCIAL SUMMARY

There is no financial impact related to this item at this time.

Respectfully Submitted,

MARK J. MADISON
GENERAL MANAGER

Attachments

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								
Purchased (SA2)	27,516,676	26,507,624	27,531,636	34,054,196								
Total	82,096,355	79,963,317	84,307,661	114,371,851	0	0	0	0	0	0	0	0
% Reduction	19.53%	28.79%	38.68%	34.09%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
% Cumulative Reduction	**35.24%**	**34.87%**	**35.12%**	**35.04%**		**40.48%**	**40.51%**	**39.27%**	**37.42%**	**35.98%**	**36.19%**	**36.14%**

*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			0
	Jun			0
	Jul			0
	Aug			0
	Sep			0
	Oct			0
	Nov			0
	Dec			0

Attachment 1

ELK GROVE WATER DISTRICT

Water Shortage Contingency Plan – Stages of Action

NORMAL WATER SUPPLY – No shortage exists. No extraordinary water conservation regulations exist and customers are requested to observe normal efficiency measures as required by local ordinances.

- **Odd/Even irrigation for residential & commercial**
  - Addresses ending in an odd number (1,3,5,7,9) irrigate on Tuesday, Thursday and Saturday
  - Addresses ending in an even number (0,2,4,6,8) irrigate on Wednesday, Friday and Sunday
  - No irrigation on Mondays
- **Irrigation hours**- No landscaping irrigation shall be permitted between the hours of noon and 6:00 pm
- **Runoff** – Irrigation shall not be allowed to run off to adjoining property to the roadside ditch or gutter
- **Hoses**- Open hoses are not permitted. Automatic shutoff nozzles are required
- **Washing driveways and other paved areas** – Use of water to clean sidewalks, driveways or patios is not permitted. Washing of streets and commercial parking lots with a hose is not permitted, except to alleviate immediate fire or sanitation hazards
- **Water Leaks** – Leaking pipes, fixtures or sprinklers shall be repaired promptly
- **Serving of Water** – Restaurants shall serve water to customers only upon special request
- **Pools, ponds and fountains** – All swimming pools, ponds and fountains shall be equipped with recirculating pumps

PENALTIES FOR WATER WASTING

- First violation – Customer is notified of violation
- Second violation – Written warning sent to customer
- Subsequent violation - $100 fine

ORDINANCE NO. 05.25.16.01
AN ORDINANCE OF THE BOARD OF DIRECTORS OF THE FLORIN RESOURCE CONSERVATION DISTRICT ADOPTING ORDINANCE NO. 05.25.16.01 AMENDING THE WATER SHORTAGE CONTINGENCY PLAN'S NORMAL WATER SUPPLY STAGE AND ORDER IMPLEMENTATION OF THE AMENDED NORMAL SUPPLY STAGE

WHEREAS, on June 21, 2006, the Florin Resource Conservation District (the "District") adopted a Water Shortage Contingency Plan by Ordinance No. 06.21.06.01; and

WHEREAS, on April 28, 2010, the District adopted an updated Water Shortage Contingency Plan by Ordinance No. 04.28.10.01 consistent with plans of other Regional Water Authority members; and

WHEREAS, on January 17, 2014, Governor Brown declared a State of Emergency due to severe drought and on April 25, 2014, Governor Brown adopted an Executive Order to Redouble State Drought Actions; and

WHEREAS, on July 15, 2014, the State Water Resources Control Board adopted Resolution No. 2014-0038 approving emergency regulations for statewide water conservation including specific requirements for urban water suppliers; and

WHEREAS, the District Board ordered implementation of Stage 1 – Water Alert of the Water Shortage Contingency Plan and on July 23, 2014, adopted Ordinance No. 07.23.14.02 Amending the Contingency Plan's Outdoor Irrigation Schedule; and

WHEREAS, on May 5, 2015, the State Water Resources Control Board adopted regulations intended to achieve a 25% water use reduction throughout the State and imposing mandated water use reductions on all water agencies effective June 1, 2015, including the District; and

WHEREAS, the District's reduction was established at 28% compared to its usage in 2013; and

WHEREAS, to achieve the mandated water use reductions, the District amended the Water Shortage Contingency Plan to include Stage 2 Plus which imposed further restrictions on water use, effective May 18, 2015; and

WHEREAS, since May 18, 2015, the District has achieved a cumulative savings of 35.04% compared to 2013; and

WHEREAS, on May 9, 2016, Governor Brown issued an Executive Order adjusting water conservation regulations through the end of January 2017, and on May 18, 2016, the State Water Resources Control 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, effective June 1, 2016; and

WHEREAS, the new regulations adopted by the State Water Resources Control Board require water agencies to self-certify their ability to sustain adequate water supplies for another three years of drought; and

WHEREAS, based on the requirements of the new regulations, the District can achieve compliance with a zero percent conservation requirement for the duration of the Executive Order; and

WHEREAS, the District wishes to amend the Water Shortage Contingency Plan – Normal Water Supply Stage to eliminate restrictions on watering days and times while prohibiting waste including the specific practices of water waste identified in the Executive Order.

NOW, THEREFORE, the Board of Directors of the Florin Resource Conservation District hereby determines and ordains as follows:

Section 1. Recitals. The above recitals are true and correct and incorporated herein.

Section 2. Amendment. The Water Shortage Contingency Plan – Normal Water Supply Stage is hereby amended as set forth in the attached Exhibit "A."

Section 3. Ordinance Effective Date. This ordinance shall take effect upon its adoption.

APPROVED AND ADOPTED by the Board of Directors of the Florin Resource Conservation District on this 25th day of May, 2016.

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Chuck Dawson
Chairman of the Board of Directors

Attest: _____
Stefani Phillips
Secretary to the Board of Directors

Exhibit A

ELK GROVE WATER DISTRICT

Water Shortage Contingency Plan – Stages of Action

NORMAL WATER SUPPLY – No shortage exists. No extraordinary water conservation regulations exist and customers are prohibited from the following practices that waste potable water:

- **Runoff** – Irrigation shall not be allowed to run off to adjoining properties or to the roadside ditch or gutter.
- **Watering after a Rainfall Event** – No irrigation shall be allowed for 48 hours after a measurable rainfall event. A measureable rainfall event shall be defined as an event having 0.10 inches of rain in one day.
- **Hoses** - Open hoses are not permitted. Automatic shutoff nozzles are required.
- **Washing driveways and other paved areas** – Use of water to clean sidewalks, driveways, patios, or other hardscapes is not permitted. Washing of streets and commercial parking lots with a hose is not permitted, except to alleviate immediate fire or sanitation hazards.
- **Water Leaks** – Leaking pipes, fixtures or sprinklers shall be repaired promptly.
- **Serving of Water** – Restaurants shall serve water to customers only upon special request.
- **Pools, ponds and fountains** – All swimming pools, ponds, fountains, or other decorative water feature shall use recirculated water.

PENALTIES FOR WATER WASTING

- First violation – Customer is notified of violation
- Second violation – Written warning sent to customer
- Subsequent violation - $100 fine

May 25, 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

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

DISCUSSION

Background

The Conservation Committee convened on April 6, 2016, to discuss the Needs Assessment and consider its findings and recommendations. There were five key recommendations made and these were presented to the Board on April 27, 2016.

At that Board meeting, the General Manager was directed to focus on issues related to the FRCD becoming the groundwater sustainability agency (GSA) for the FRCD jurisdictional area. The General Manager was also directed to contact Supervisor Don Notolli and the Building Industry Association (BIA) to discuss the potential for the FRCD to engage in various mitigation activities required by developers in the course of constructing new developments

Present Situation

On April 30, the FRCD sponsored and participated in the Eco-Landscape Watersmart Workshop held at the Elk Grove City Hall. There were approximately 40 participants in this event and education was provided on smart irrigation practices, drought tolerant landscaping, and invasive plants and species.

As of the preparation of this report, the General Manager has not yet made contact with either Supervisor Notolli or the BIA. Considerable efforts have been devoted, however,

to the issues involving the Sustainable Groundwater Management Act and the potential formation of a GSA for the FRCD's jurisdictional area.

Staff attended a Sacramento Central Groundwater Authority (SCGA) Board meeting where staff expressed concerns about governance and financing. Staff and Director Nelson also attended a subsequent SCGA Subcommittee meeting where our proposed governance requests, and the FRCD GSA concept was discussed.

That discussion provoked considerable objections by various subcommittee members and the subcommittee has been clear that it will not support our proposal for a new Joint Powers Agreement or certain other requests at this time. The subcommittee does support our request that the FRCD Board should have the authority to assign a District employee as the representative serving on the SCGA Board.

On June 8, 2016, it is expected that our request to assign a District employee to serve on SCGA will be discussed and potentially acted on by the SCGA Board.

Based on the discussion at the April 27, 2016 Board meeting, it was clear that the Board is anxious to deliberate on the matter of the FRCD filing to become a GSA. For this reason, it is recommended that the FRCD hold a Special Board meeting on the evening of June 8, 2016 to consider the question and provide guidance to the General Manager.

STRATEGIC PLAN CONFORMITY

Participation in regional conservation outreach 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

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Mark J. Madison, General Manager

SUBJECT: **ELK GROVE WATER DISTRICT OPERATIONS REPORT – APRIL 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 for the month of April. 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 April 2016 Operations Report.

Present Situation

The EGWD April 2016 Operations Report highlights are as follows:

- **Operations Activities Summary** – Notable items in the activities summary are that the District hung 302 door hangers for past due balances which resulted in 35 shutoffs.

- **Production** – Well 11D was offline for the entire month for a scheduled rehabilitation. Well 13 also remained 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 April decreased compared

to April 2015 and is also 33.96 percent less than what was produced in 2013. The production decrease remains due to the drought and customer water use reductions. The Total Demand/Production for both service areas on page 14 shows that customer use during the month of April, compared to April 2013, was down by 34.09 percent.

- **Static and Pumping Level Graphs** – The second 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 April:

    - Well 11D Dino was taken off-line for a scheduled rehabilitation. Staff assisted with equipment and sampling.
    - Staff completed evaluating tag definitions and separating them into different groups. This was done in order to improve the alarm history query tool on SCADA.
    - The Bi-annual clear well storage tank inspections were completed.

- **Backflow Prevention Program 2016** – There were 12 notices issued for the month. From the initial testing notice, 11 devices passed and 1 device failed. After repairs were made, all of the devices passed. There is a total of 1 outstanding device as of this report 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 8 service lines for residential services for the month.

- **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, P.E.
GENERAL MANAGER

MJM/ah

EGWD

OPERATIONS REPORT

April 2016

Elk
Grove
Water
District

Elk Grove Water District
A DEPARTMENT OF THE
Florin Resource Conservation District

Elk Grove Water District

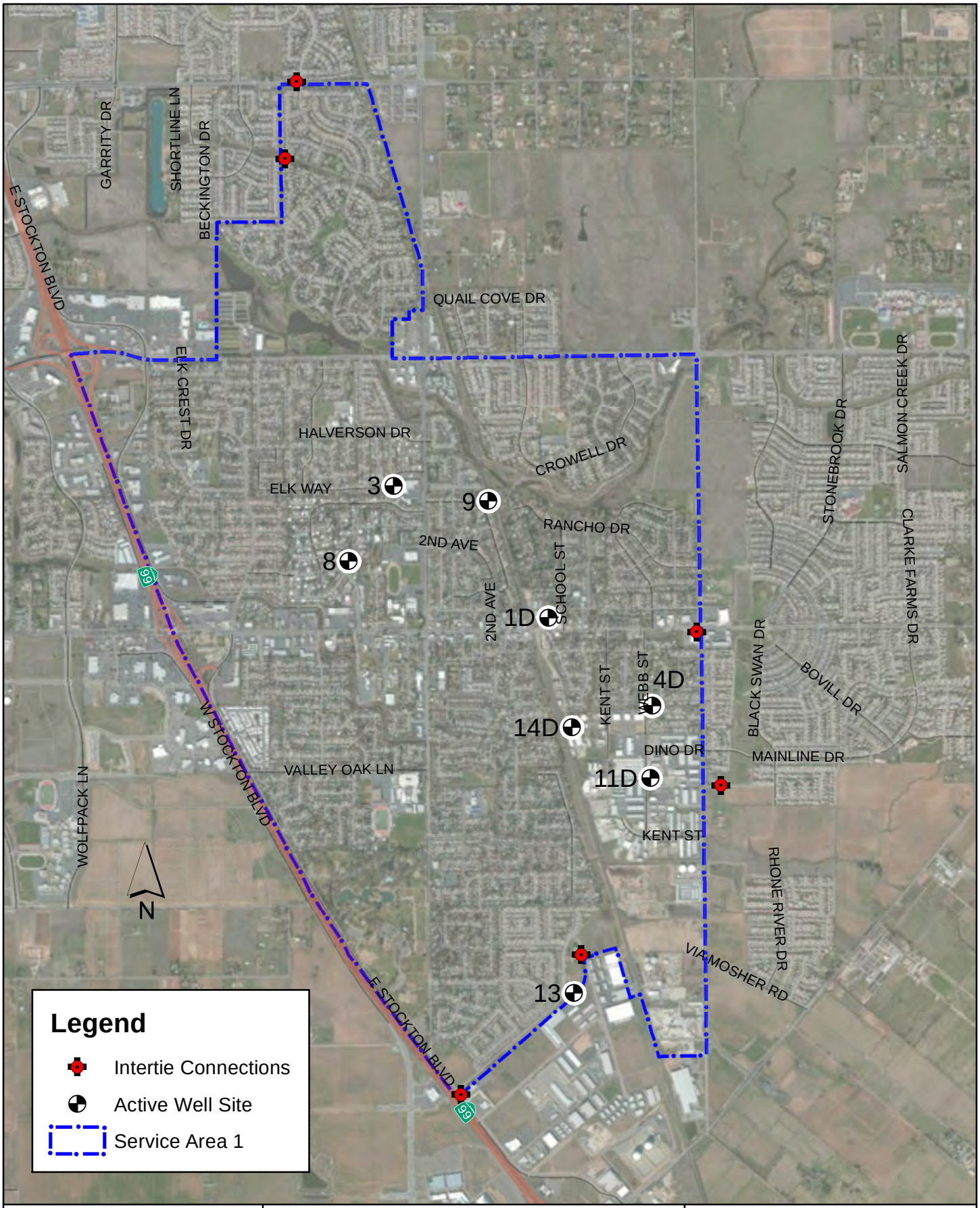
Operations Report

Table of Contents

Operations Activities Summary

Service Requests:	Apr-16		YTD (Since July 1, 2015)	
Department	Service Request	Hours	Service Request	Hours
Distribution				
Door Hangers	302	16	3798	183.49
Shut offs	35	10	440	66.27
Turn ons	44	9.27	529	87.22
Investigations	21	25.75	336	220.59
USA Locates	157	39.25	1249	312.25
Customer Complaints				
-Pressure	2	1	16	11.75
-Water Quality	2	1	16	12
-Other	0	0	0	0

Work Orders:	Apr-16		YTD (Since July 1, 2015)	
Department	Work Orders	Hours	Work Orders	Hours
Treatment:				
Preventative Maint.	16	48.5	151	462.5
Corrective Maint.	2	25	25	243
Water Samples	11	43	120	347
Distribution:				
Meters Installed	0	0	2	4.5
Backflow Devices Installed	0	0	10	59
Preventative Maint.				
-Hydrant Flushing Program	0	0	0	0
-Hydrant Maintenance	70	27	535	447.22
-Valve Exercising	119	37	1151	384
-Other	5	43	6	49
Corrective Maint.				
-Leaks	2	15	50	974.75
-Other	33	124.5	245	1167.25
Valve Locates	2	30.5	23	172.5
Utility:				
Service Line Replacement	8	184.75	103	2205.19
Corrective Maint.	0	0	7	362



Active Well Sites & Intertie Connections

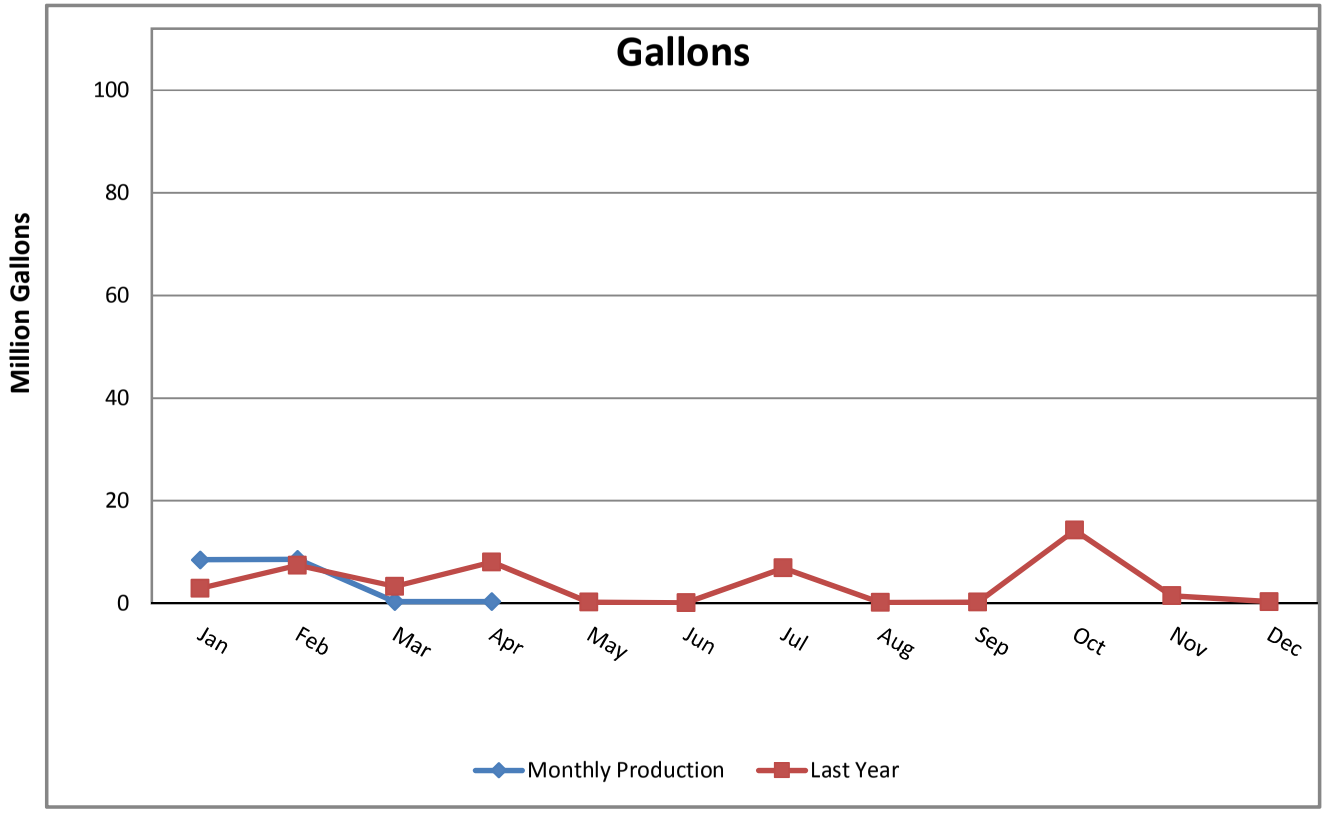
0 1,250 2,500 5,000 Feet

Elk Grove Water District

Elk Grove Water District

Monthly Production

Well 1D School -- Apr. 2016



Selected Month Production
330,697 Gallons

Average GPM:
1,837

Motor:	
Volts:	478
Volts (Rated):	460
RPM:	2145
RPM (Rated):	2115
Amps A:	172
Amps A (Rated):	222
Amps B:	177
Amps B (Rated):	222
Amps C:	172
Amps C (Rated):	222
Motor Temp:	98.6 F
Hour Meter:	3.00
KW Hour Total:	640.00

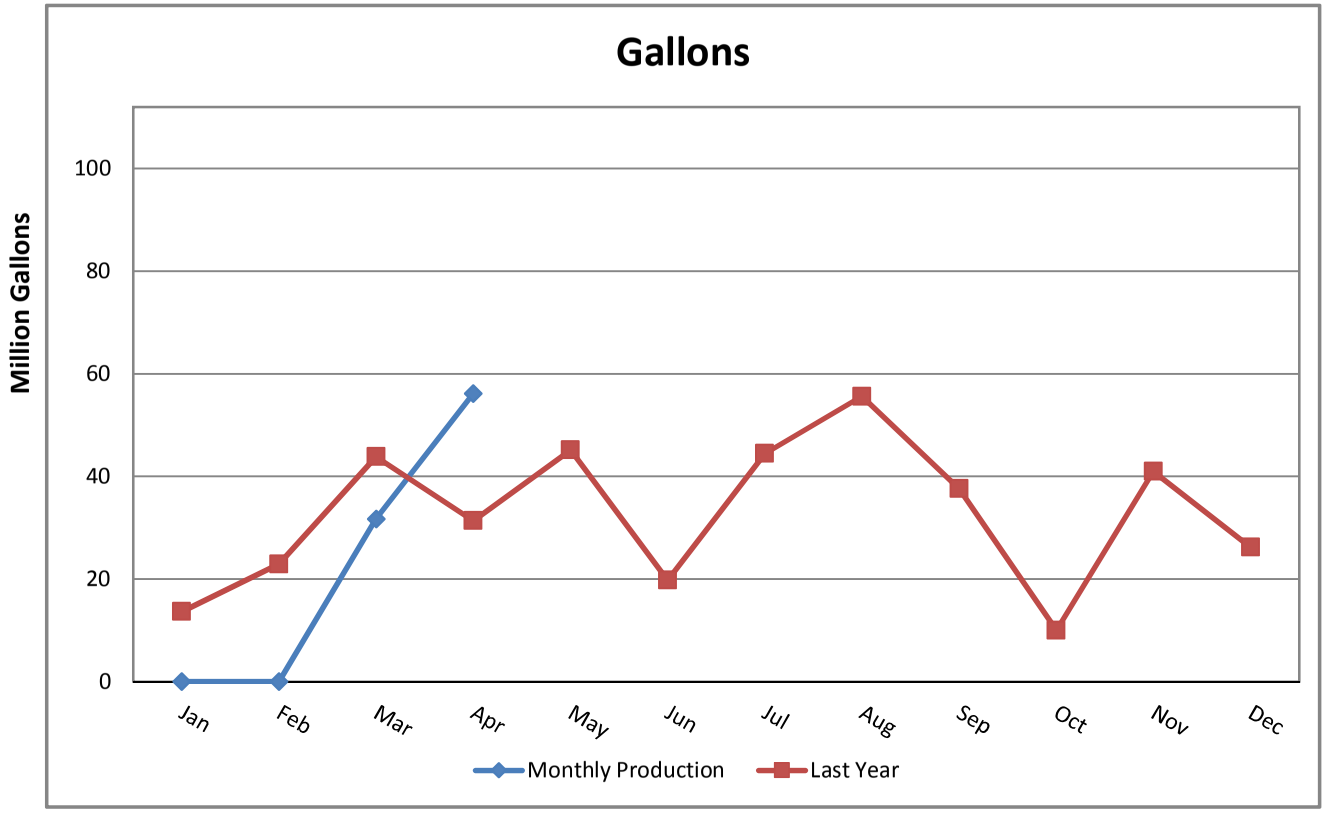
Chlorine:	
Dosing:	1.57
Demand:	0.45
Residual:	1.12

Vibration Reading:	
Base Line:	0.05
Current:	0.02

Elk Grove Water District

Monthly Production

Well 4D Webb -- Apr. 2016



Selected Month Production
56,146,593 Gallons

Average GPM:
1,703

Motor:

Volts:	478
Volts (Rated):	460
RPM:	1822
RPM (Rated):	1775
Amps A:	177
Amps A (Rated):	225
Amps B:	176
Amps B (Rated):	225
Amps C:	176
Amps C (Rated):	225
Motor Temp:	122.5 F
Hour Meter:	549.20
KW Hour Total:	66,240.00

Chlorine:

Dosing:	1.76 mg/L
Demand:	0.72 mg/L
Residual:	1.04 mg/L

Vibration Reading:

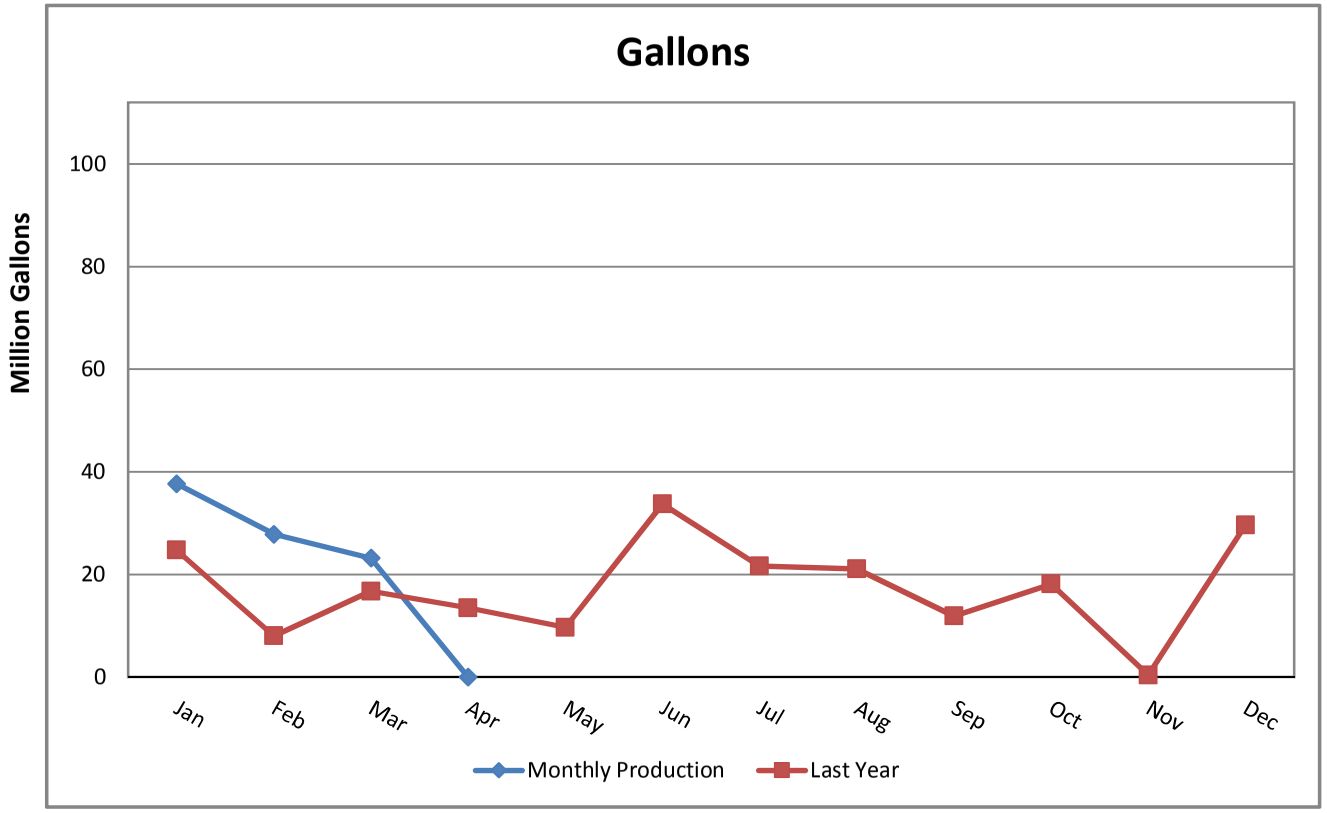
Base Line:	0.05 in/sec
Current:	0.02 in/sec

Elk Grove Water District

Monthly Production

Well 11D Dino -- Apr. 2016

Well Offline (Rehab.)



Selected Month Production
0 Gallons

Average GPM:
0

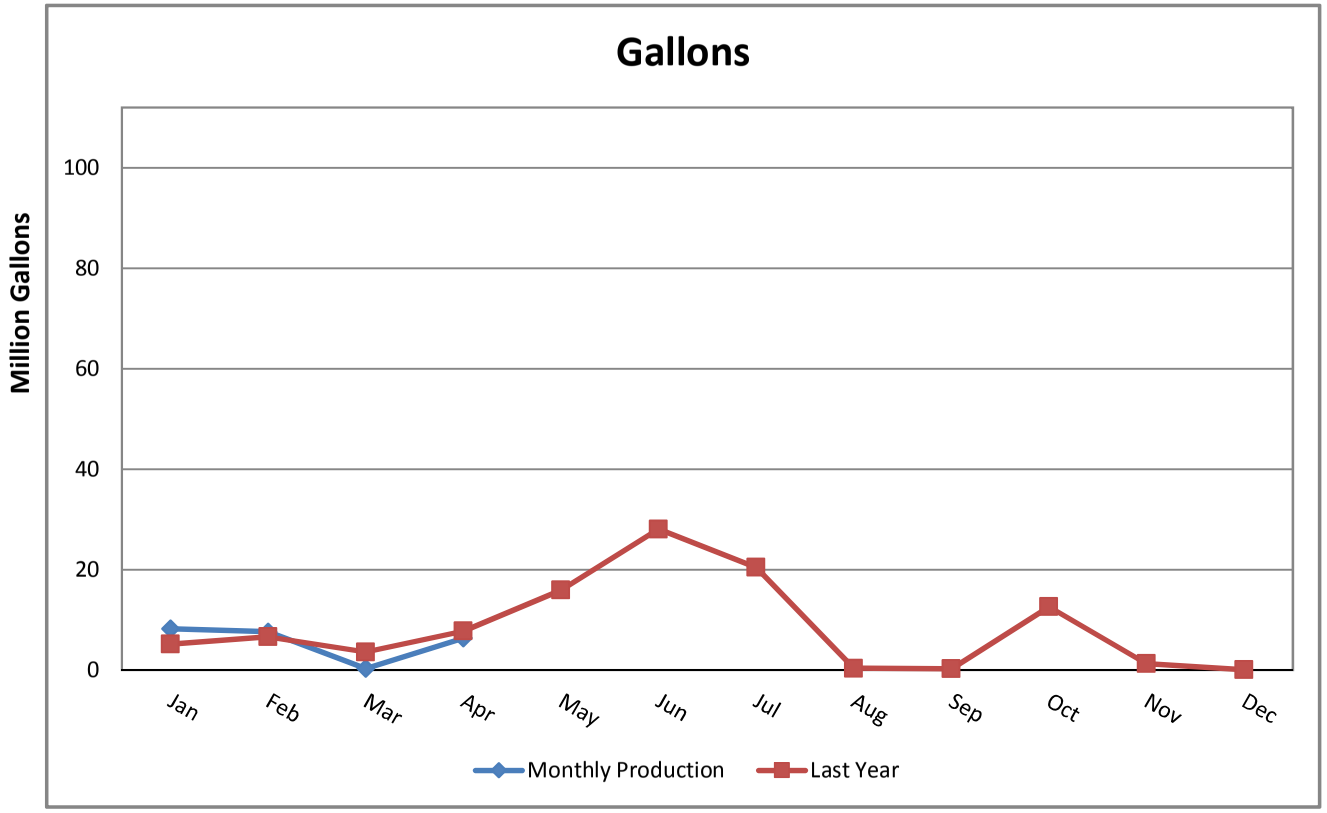
Motor:

Volts:	
Volts (Rated):	460
RPM:	
RPM (Rated):	1775
Amps A:	
Amps A (Rated):	225
Amps B:	
Amps B (Rated):	225
Amps C:	
Amps C (Rated):	225
Motor Temp:	F
Hour Meter:	
KW Hour Total:	

Elk Grove Water District

Monthly Production

Well 14D Railroad -- Apr. 2016



Selected Month Production
6,356,365 Gallons

Average GPM:
1,614

Motor:

Volts:	475
Volts (Rated):	460
RPM:	2092
RPM (Rated):	1785
Amps A:	163
Amps A (Rated):	171
Amps B:	161
Amps B (Rated):	171
Amps C:	158
Amps C (Rated):	171

Motor Temp.:	148.8 F
Hour Meter:	65.60
KW Hour Total:	54,880.00

(KWH total is for the entire facility)

Chlorine:

Dosing:	1.83 mg/L
Demand:	0.79 mg/L
Residual:	1.04 mg/L

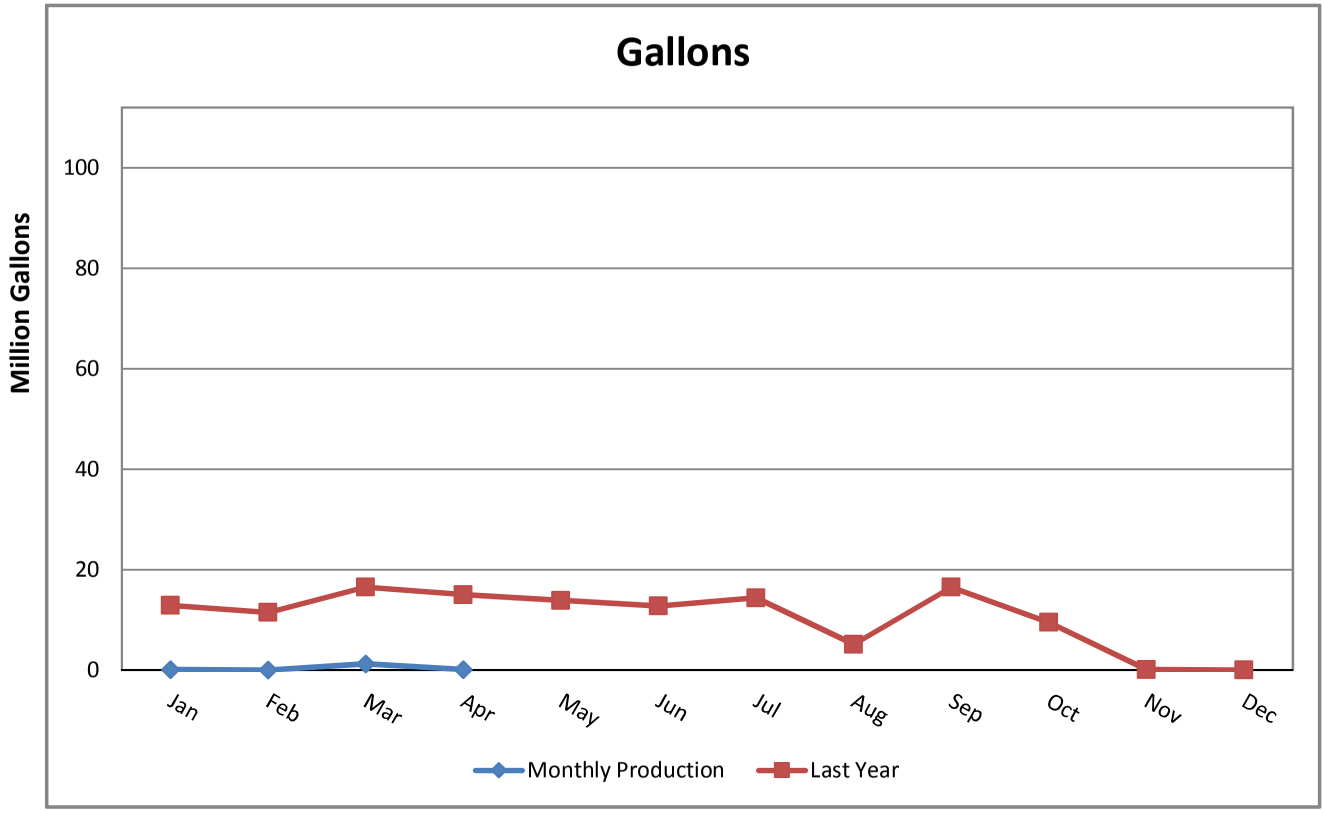
Vibration Reading:

Base Line:	0.02 in/sec
Current:	0.06 in/sec

Elk Grove Water District

Monthly Production

Well 3 Mar-Val -- Apr. 2016



Selected Month Production
91,000 Gallons

Average GPM:
892

Motor:

Volts:	479
Volts (Rated):	460
RPM:	2014
RPM (Rated):	1770
Amps A:	88
Amps A (Rated):	88
Amps B:	87
Amps B (Rated):	88
Amps C:	88
Amps C (Rated):	88
Motor Temp.:	182.6 F
Hour Meter:	1.70
KW Hour Total:	217.00

Chlorine:

Dosing:	1.42 mg/L
Demand:	0.67 mg/L
Residual:	0.75 mg/L

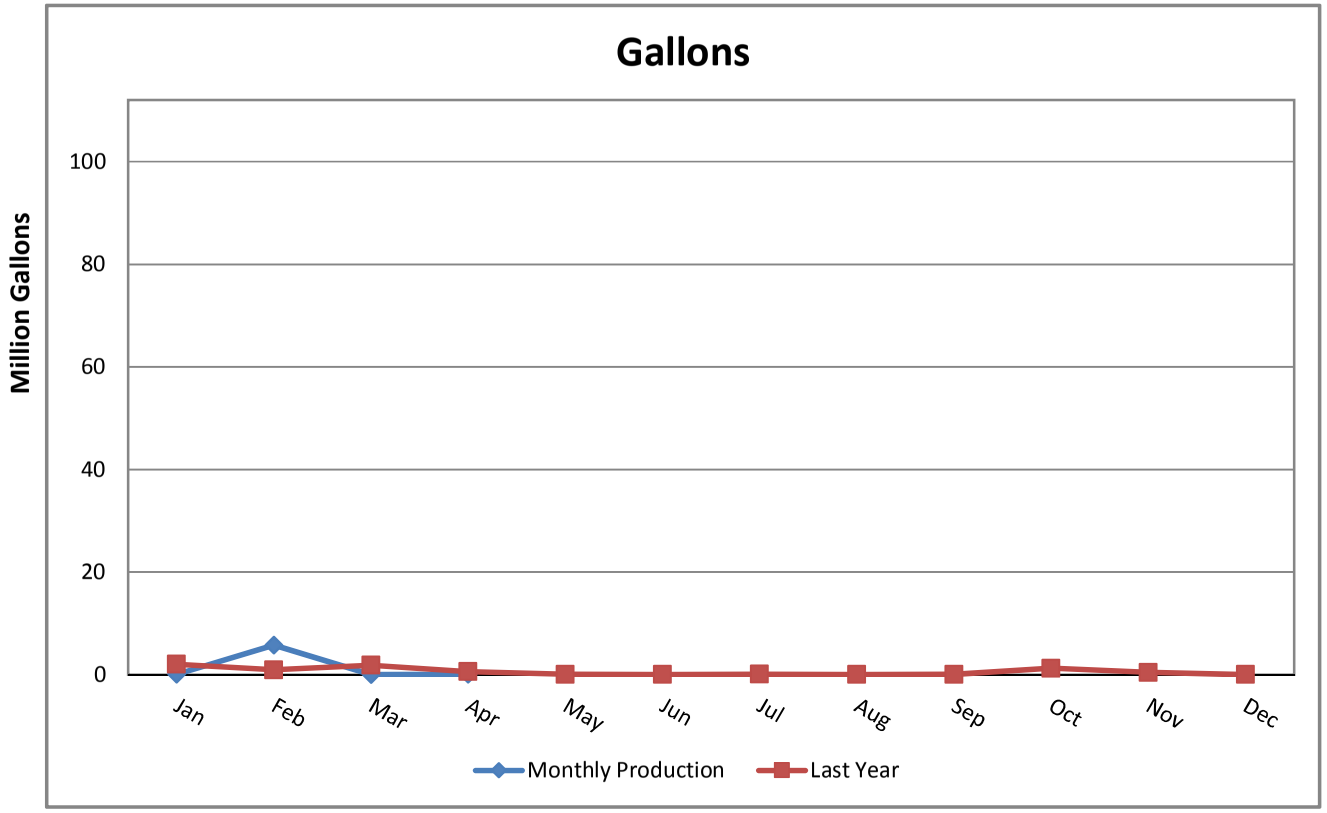
Vibration Reading:

Base Line:	0.02 in/sec
Current:	0.01 in/sec

Elk Grove Water District

Monthly Production

Well 8 Williamson -- Apr. 2016



Selected Month Production
84,000 Gallons

Average GPM:
823

Motor:

Volts:	454
Volts (Rated):	460
RPM:	1914
RPM (Rated):	1780
Amps A:	88
Amps A (Rated):	87
Amps B:	87
Amps B (Rated):	87
Amps C:	88
Amps C (Rated):	87
Motor Temp.:	111.3 F
Hour Meter:	1.70
KW Hour Total:	220.00

Chlorine:

Dosing:	1.14 mg/L
Demand:	0.27 mg/L
Residual:	0.87 mg/L

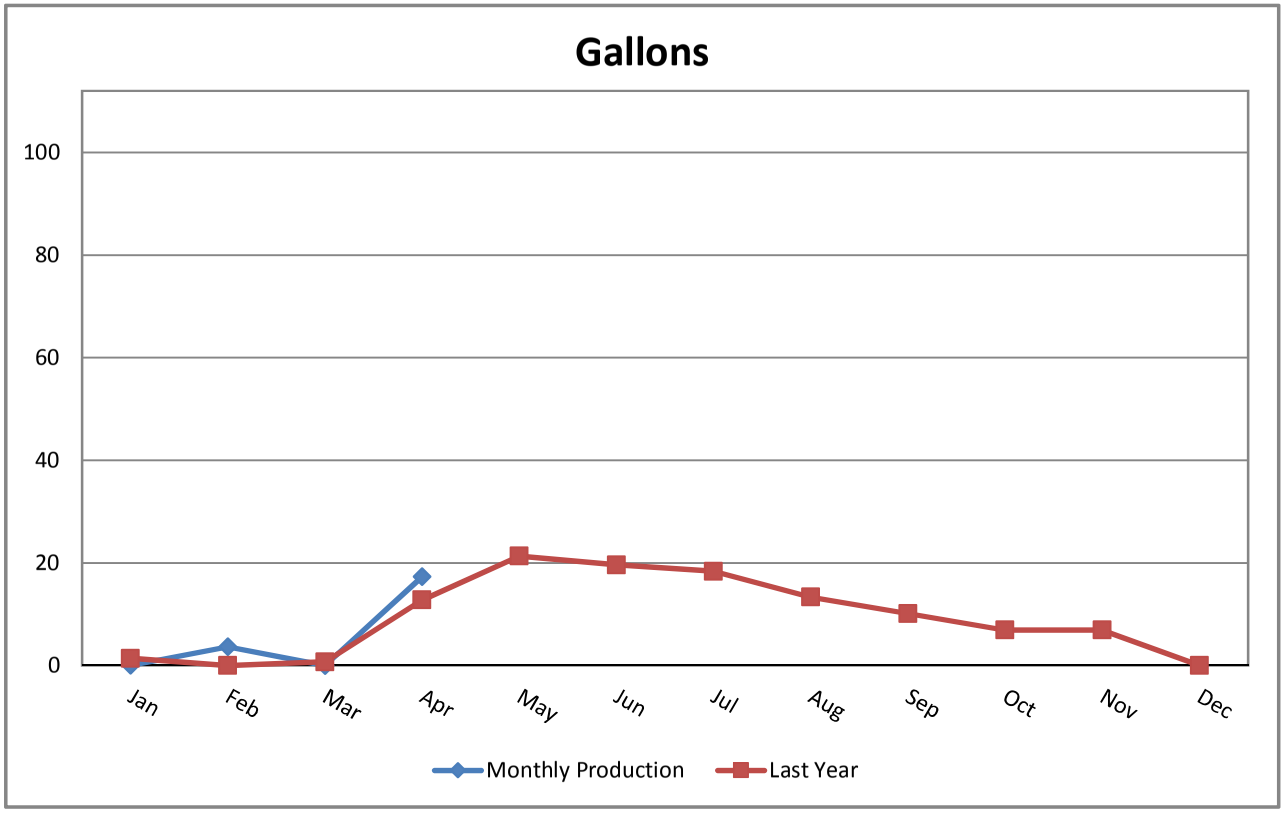
Vibration Reading:

Base Line:	0.03 in/sec
Current:	0.01 in/sec

Elk Grove Water District

Monthly Production

Well 9 Polhemus -- Apr. 2016
(Submersible)



Selected Month Production
17,309,000 Gallons

Average GPM:
486

Motor:

Volts:	478
Volts (Rated):	460
Amps A:	59
Amps A (Rated):	65
Amps B:	57
Amps B (Rated):	65
Amps C:	61
Amps C (Rated):	65
Hour Meter:	593.50
KW Hour Total:	23,409.00

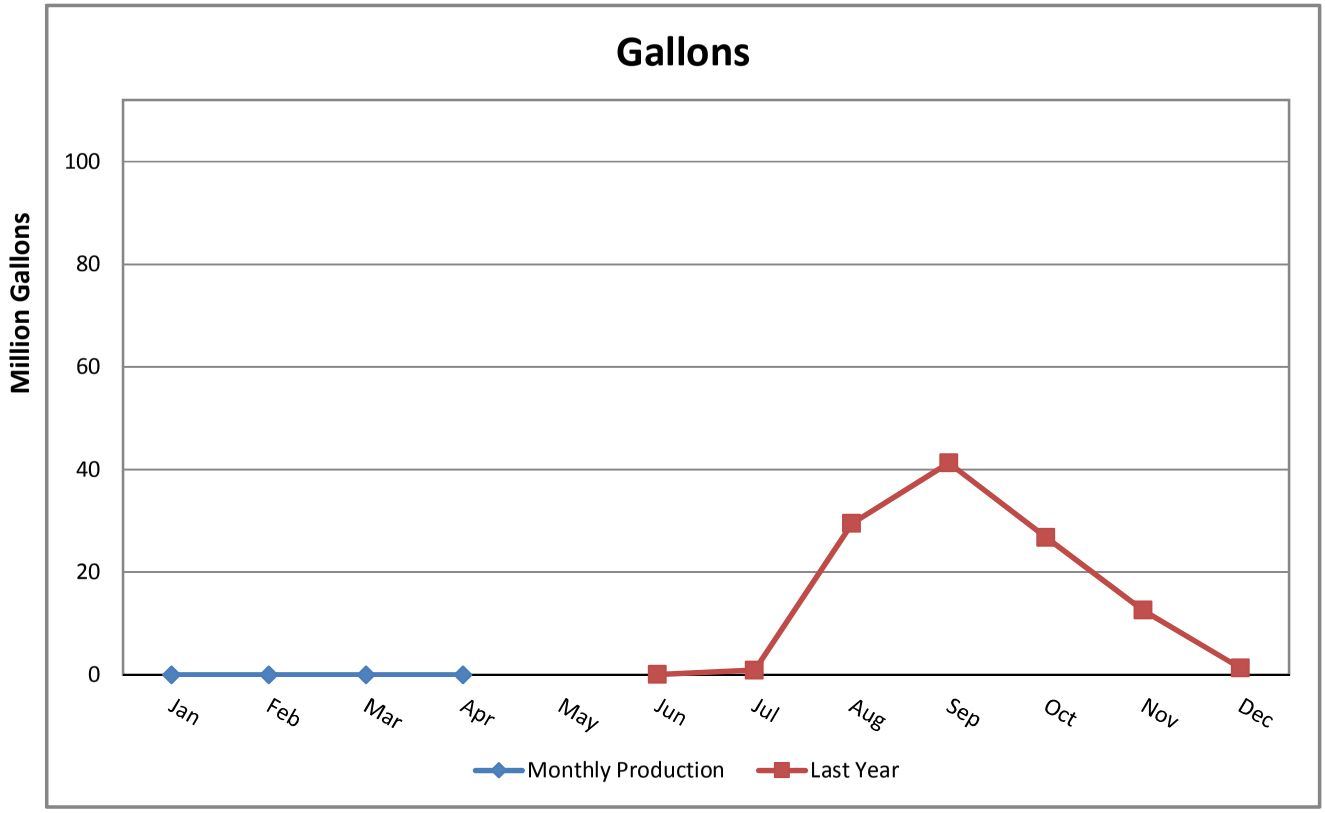
Chlorine:

Dosing:	1.23 mg/L
Demand:	0.19 mg/L
Residual:	1.04 mg/L

Elk Grove Water District

Monthly Production

Well 13 Hampton -- Apr. 2016
(Well is offline)



Selected Month Production
0 Gallons

Average GPM:
0

Motor:

Volts:	
Volts (Rated):	460
RPM:	
RPM (Rated):	1785
Amps A:	
Amps A (Rated):	142
Amps B:	
Amps B (Rated):	142
Amps C:	
Amps C (Rated):	142
Motor Temp.:	
Hour Meter:	0.00
KW Hour Total:	0.00

Chlorine:

Dosing:	0 mg/L
Demand:	0 mg/L
Residual:	0 mg/L

Vibration Reading:

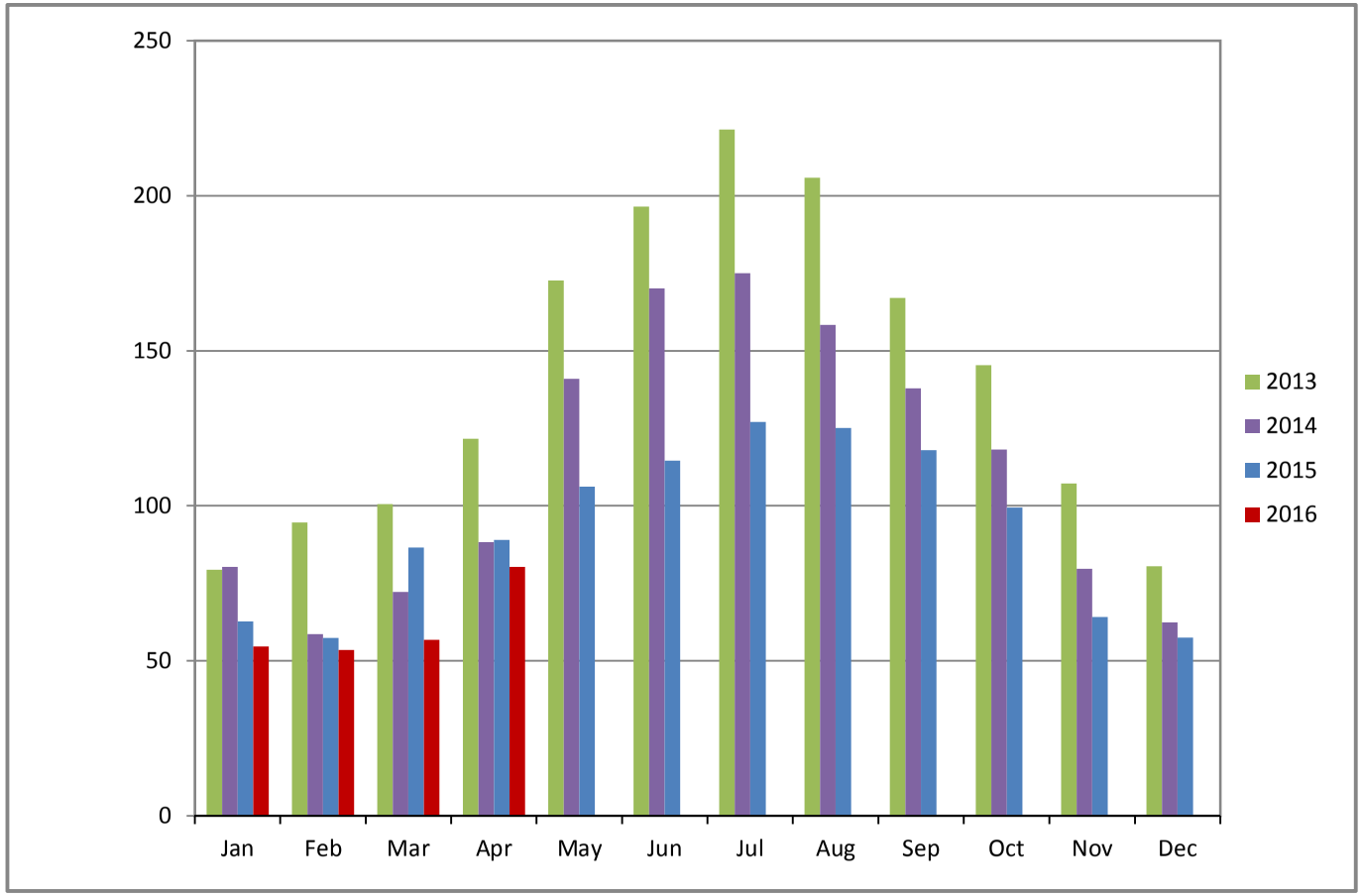
Base Line:	0.02 in/sec
Current:	

Elk Grove Water District

Combined Total Production

Service Area 1

Apr-2016



Current Month Production:
80,317,655 Gallons

Highest Day Demand of the Month:	Date of Occurance
3,449,000	19-Apr-16

Highest Day Demand of the Calender Year:	Date of Occurance
3,449,000	19-Apr-16

"Water Year" Rainfall: (Oct-15 to Sep-16)

Current Month:	1.03 in
Year To Date:	15.80 in

"Water Year" Rainfall: (Oct-14 to Sep-15)

April 2015	1.85 in
Year To Date:	15.27 in
Last Year Total:	15.45 in

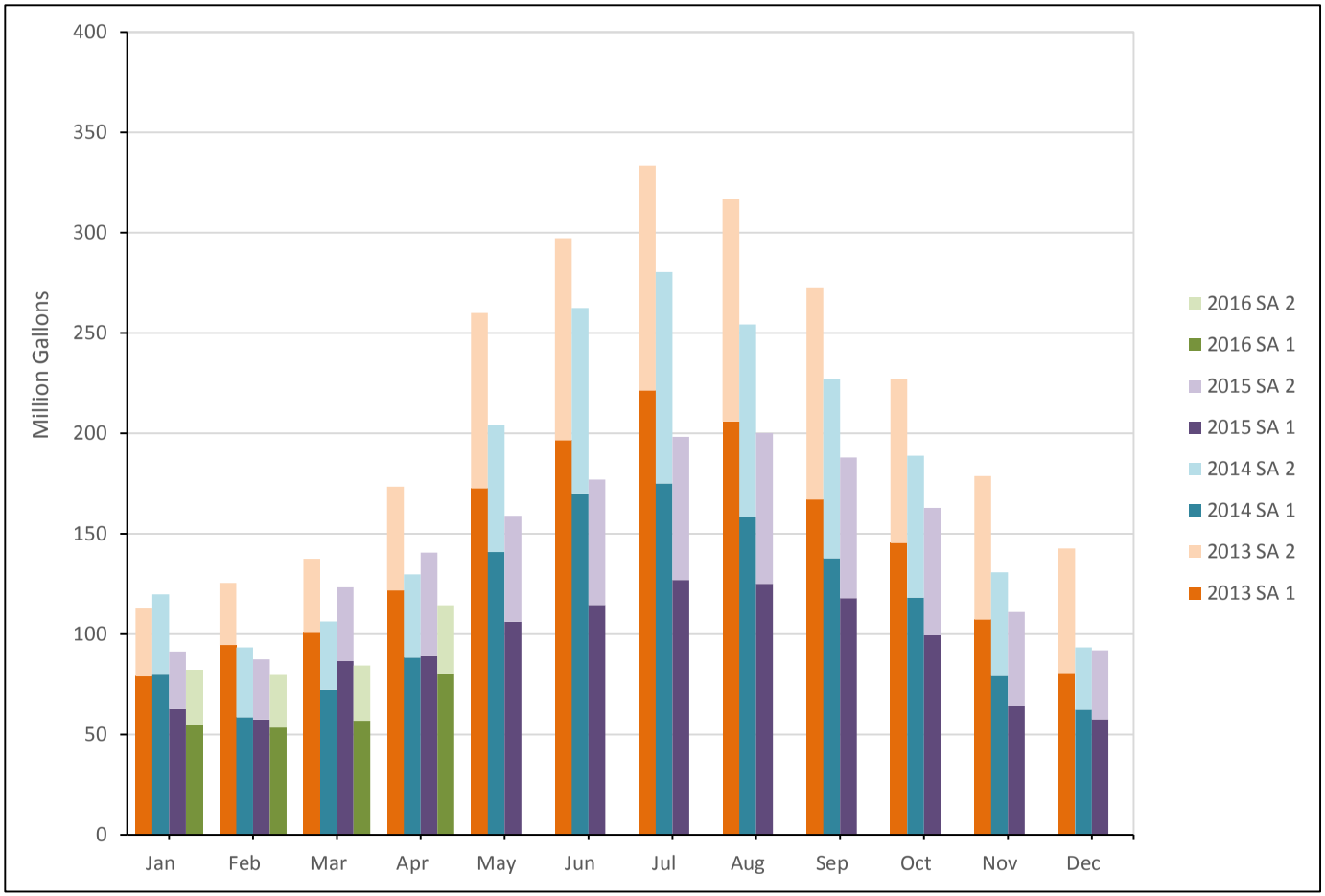
Temperature:

This Month High	88 F
This Month Low	44 F
APR-15 High	92 F
APR-15 Low	37 F

Elk Grove Water District

Total Demand/Production

Apr-2016



Current Month Demand/Production:
114,371,851 Gallons
Reduction From Apr. 2013: 34.09%
GPCD: 61.5 Gallons per Day
R-GPCD: 52.2 Gallons per Day

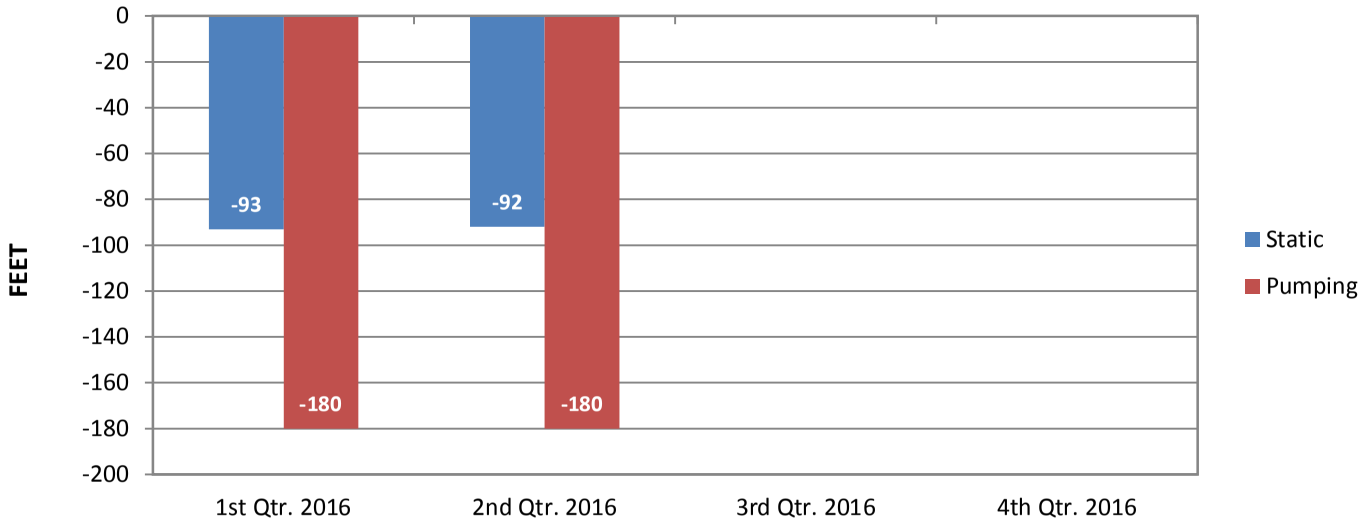
Service Area 1
Active Connections: 7,905
Current Month Demand/Production:
80,317,655 Gallons
GPCD: 94.1 Gallons per Day
R-GPCD: 79.0 Gallons per Day

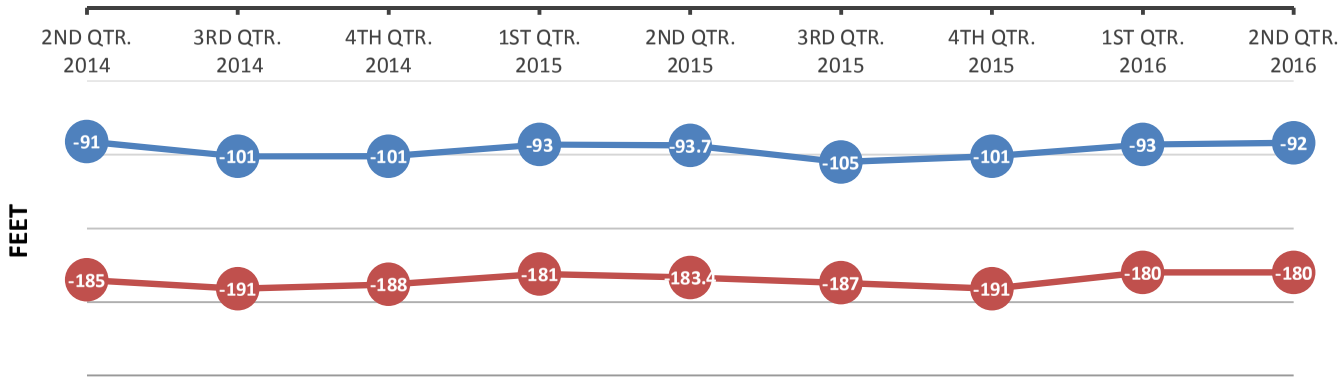
Service Area 2
Active Connections: 4,270
Current Month Demand/Production:
34,054,196 Gallons
GPCD: 71.7 Gallons per Day
R-GPCD: 65.3 Gallons per Day

Elk Grove Water District

Static and Pumping Levels

Well 1D School St





Latest Well Sounding

Static:	92 Ft
Pumping:	180 Ft
Drawdown:	88 Ft
GPM:	1,855.00
Specific Capacity:	21.080

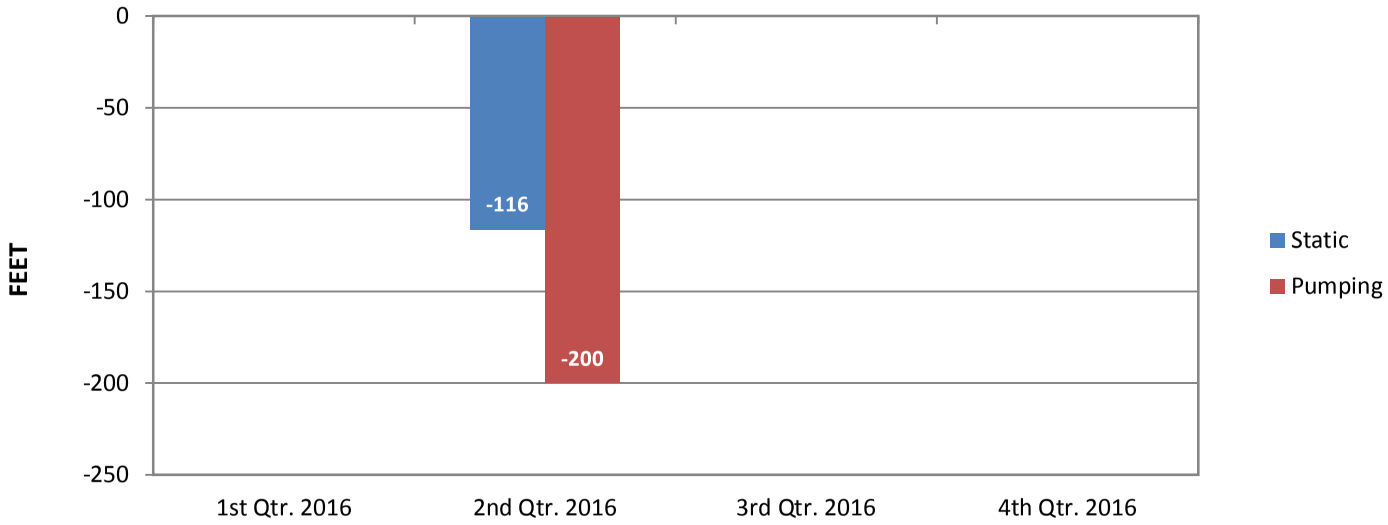
Latest Sand Tester Results:

15 Min:	< 5 ppm

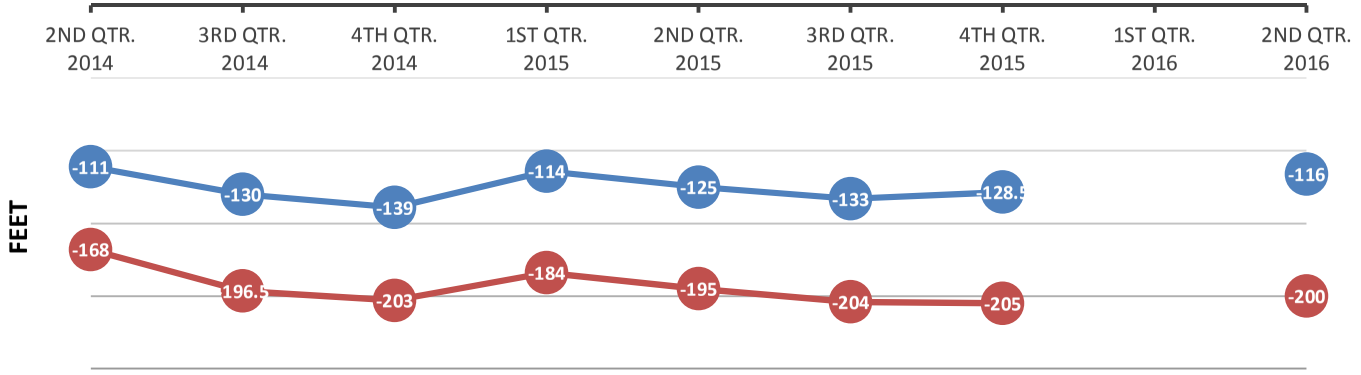
Elk Grove Water District

Static and Pumping Levels

Well 4D Webb St



Sounding Quarter/Year



Latest Well Sounding

Static:	116 Ft
Pumping:	200 Ft
Drawdown:	84 Ft
GPM:	1,679.00
Specific Capacity:	19.988

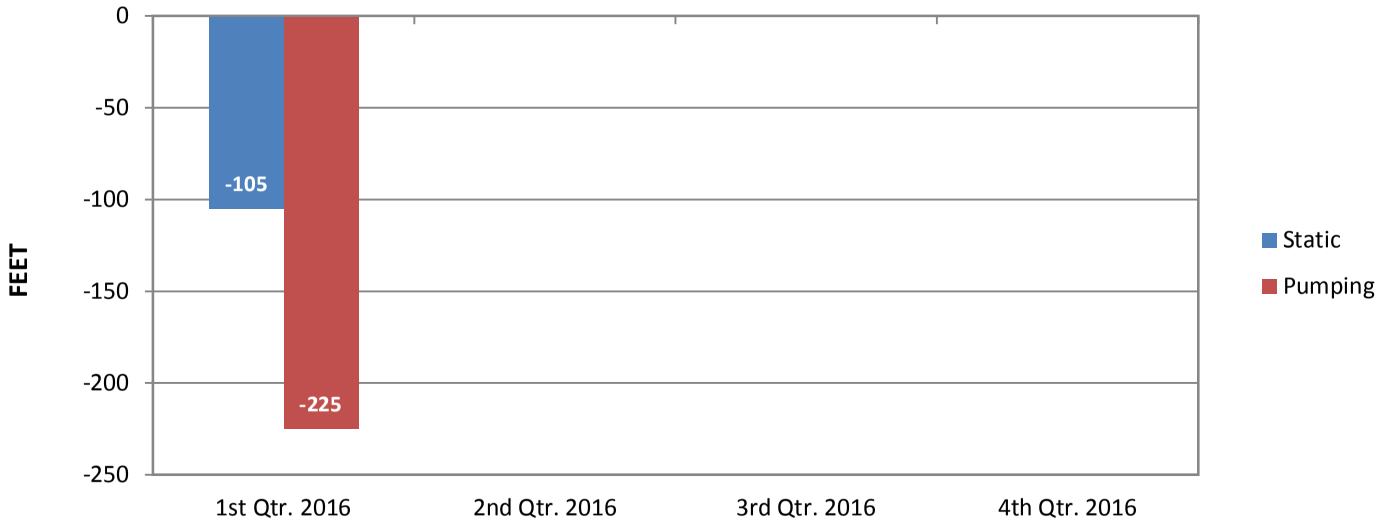
Latest Sand Tester Results:

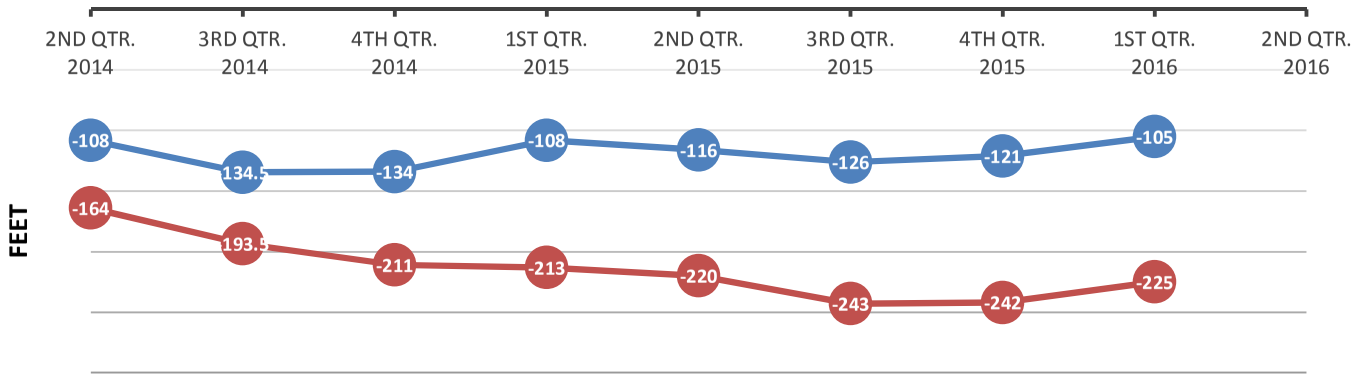
15 Min:	< 5 ppm

Elk Grove Water District

Static and Pumping Levels

Well 11D Dino





Latest Well Sounding

Static:	105 Ft
Pumping:	225 Ft
Drawdown:	120 Ft
GPM:	1,698.00
Specific Capacity:	14.150

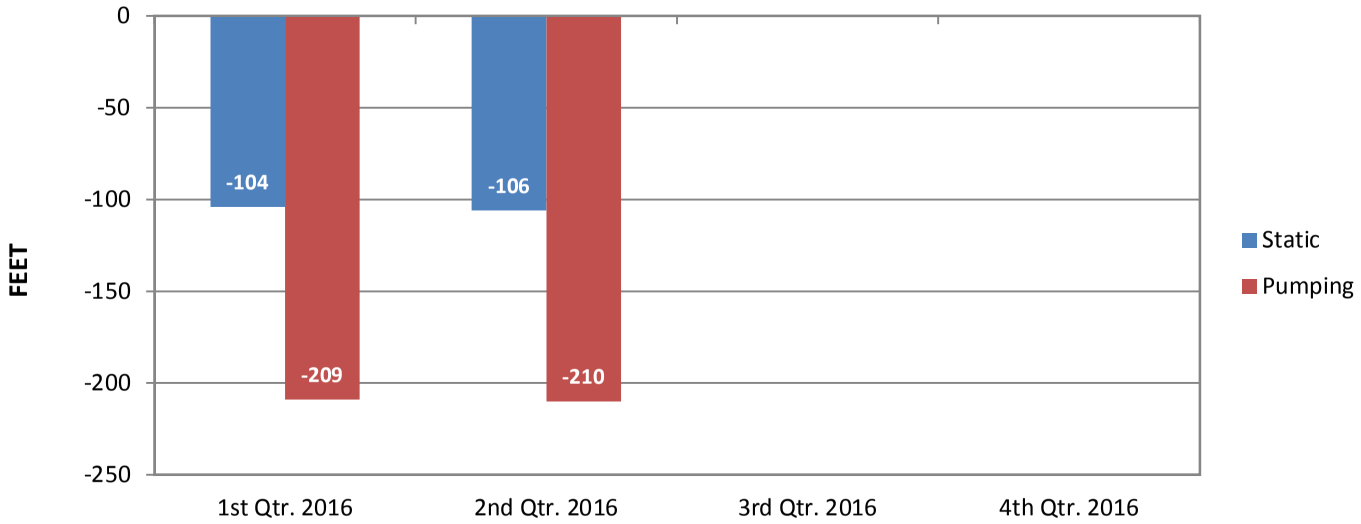
Latest Sand Tester Results:

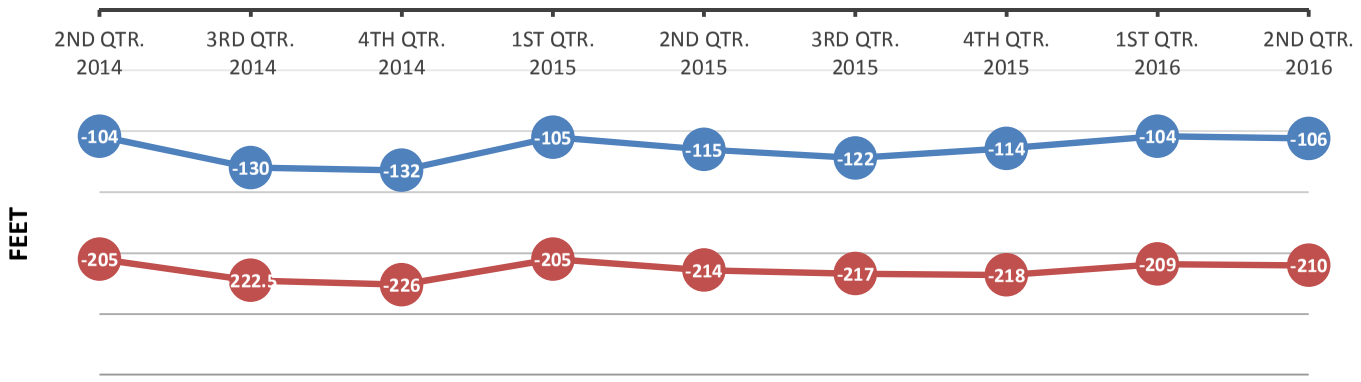
15 Min: < 5 ppm

Elk Grove Water District

Static and Pumping Levels

Well 14D Railroad





Latest Well Sounding

Static:	104 Ft
Pumping:	209 Ft
Drawdown:	105 Ft
GPM:	1,626.00
Specific Capacity:	15.486

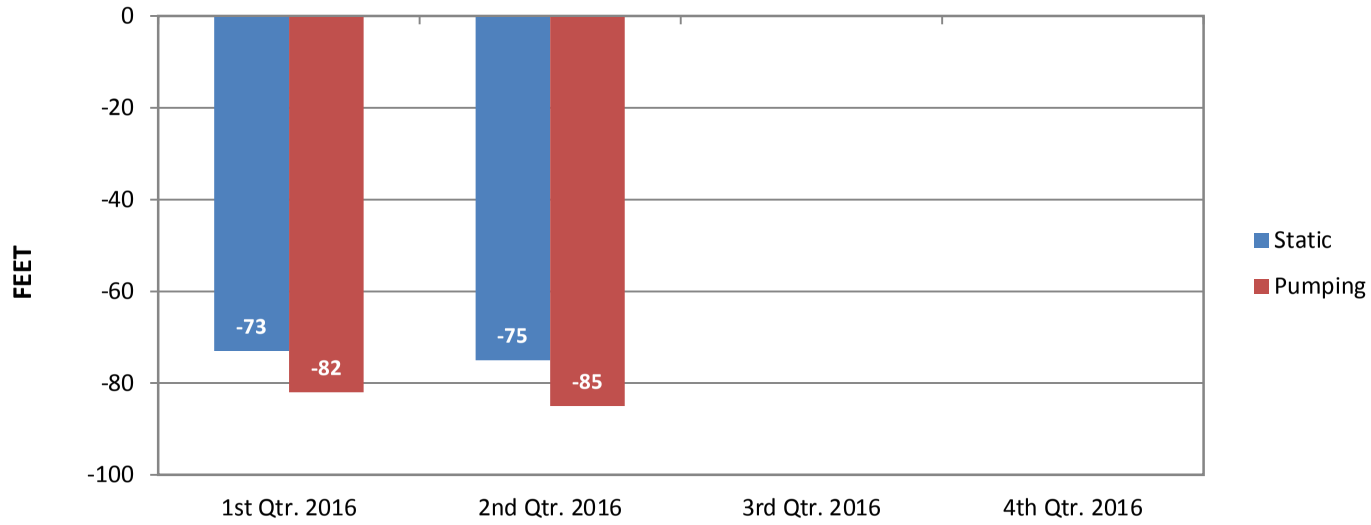
Latest Sand Tester Results:

15 Min: < 5 ppm

Elk Grove Water District

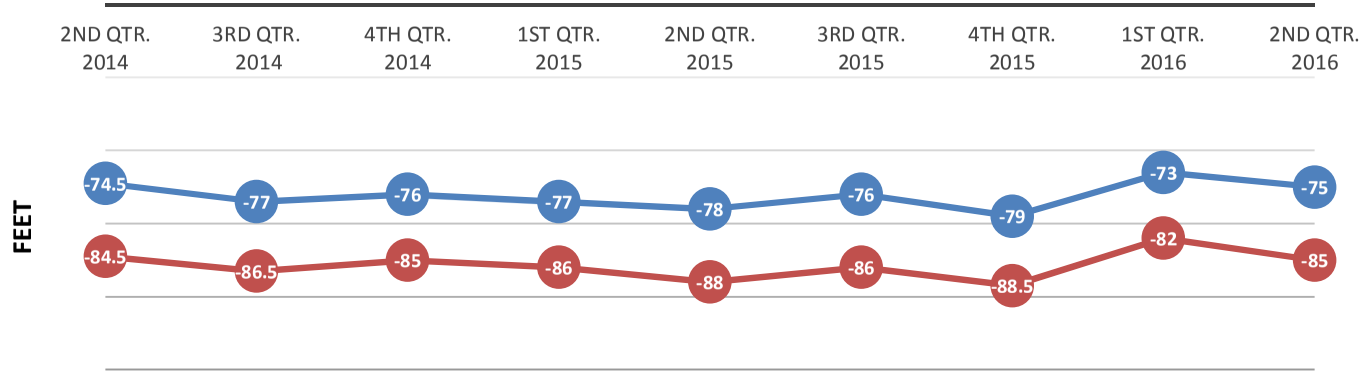
Static and Pumping Levels

Well 3 Mar-Val



Latest Well Sounding

Static:	75 Ft
Pumping:	85 Ft
Drawdown:	10 Ft
GPM:	870.00
Specific Capacity:	87.000



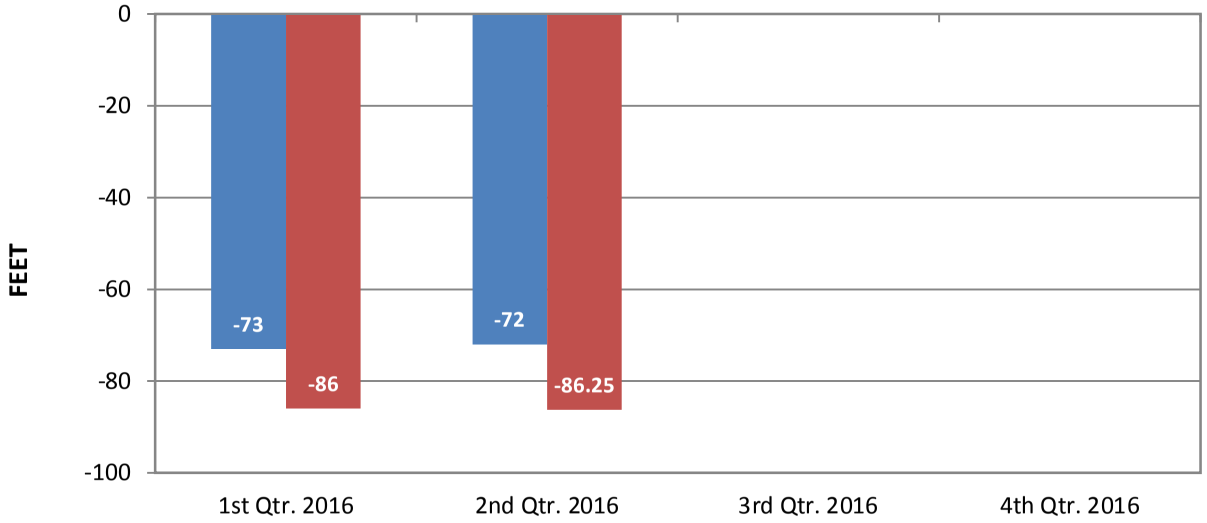
Latest Sand Tester Results:

15 Min:	< 5 ppm

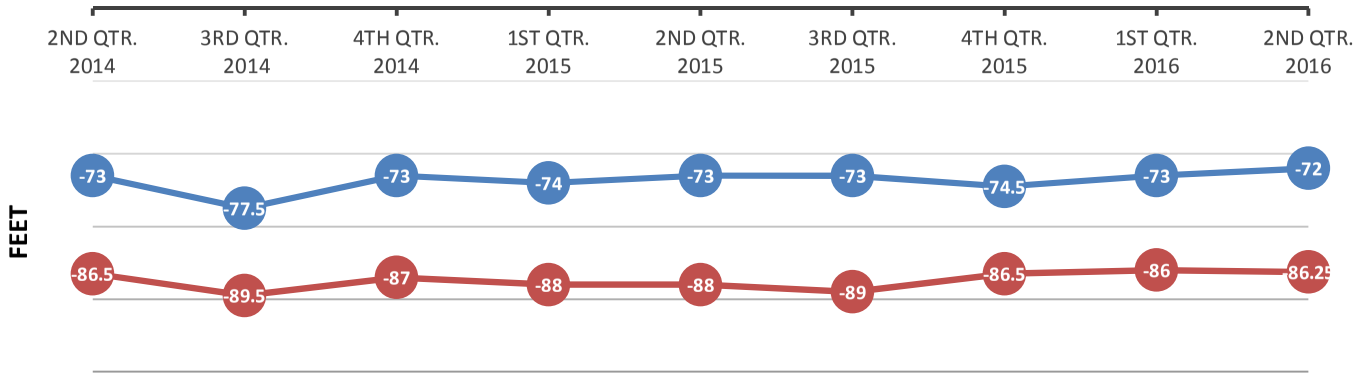
Elk Grove Water District

Static and Pumping Levels

Well 8 Williamson



Sounding Quarter/Year



Latest Well Sounding

Static:	72 Ft
Pumping:	86.25 Ft
Drawdown:	14.25 Ft
GPM:	840.00
Specific Capacity:	58.947

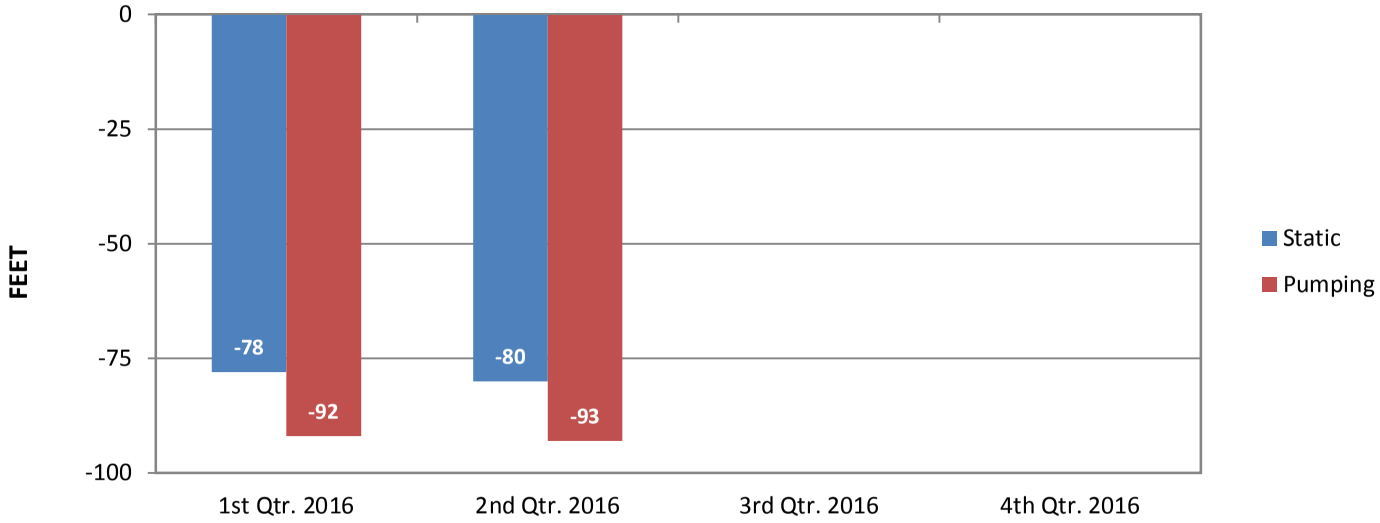
Latest Sand Tester Results:

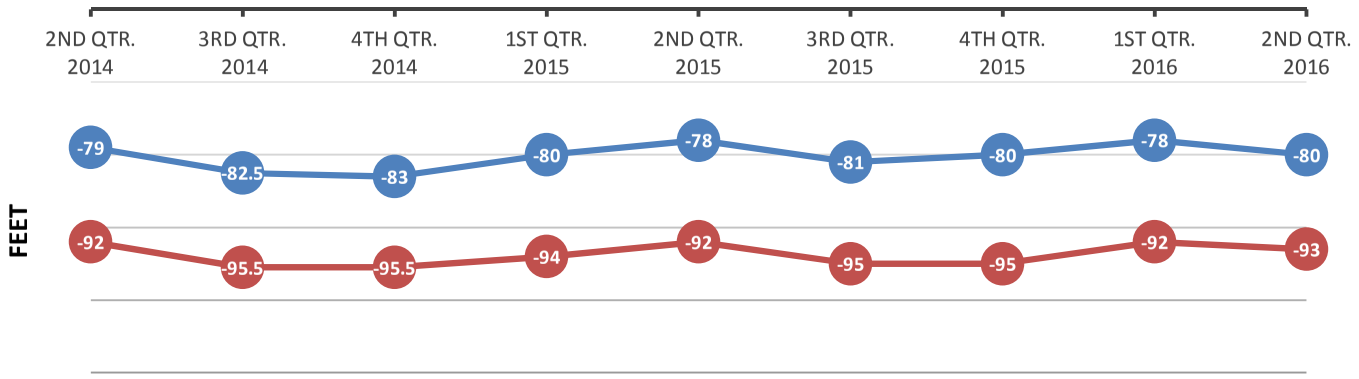
15 Min: < 5 ppm

Elk Grove Water District

Static and Pumping Levels

Well 9 Polhemus





Latest Well Sounding

Static:	80 Ft
Pumping:	93 Ft
Drawdown:	13 Ft
GPM:	480.00
Specific Capacity:	36.923

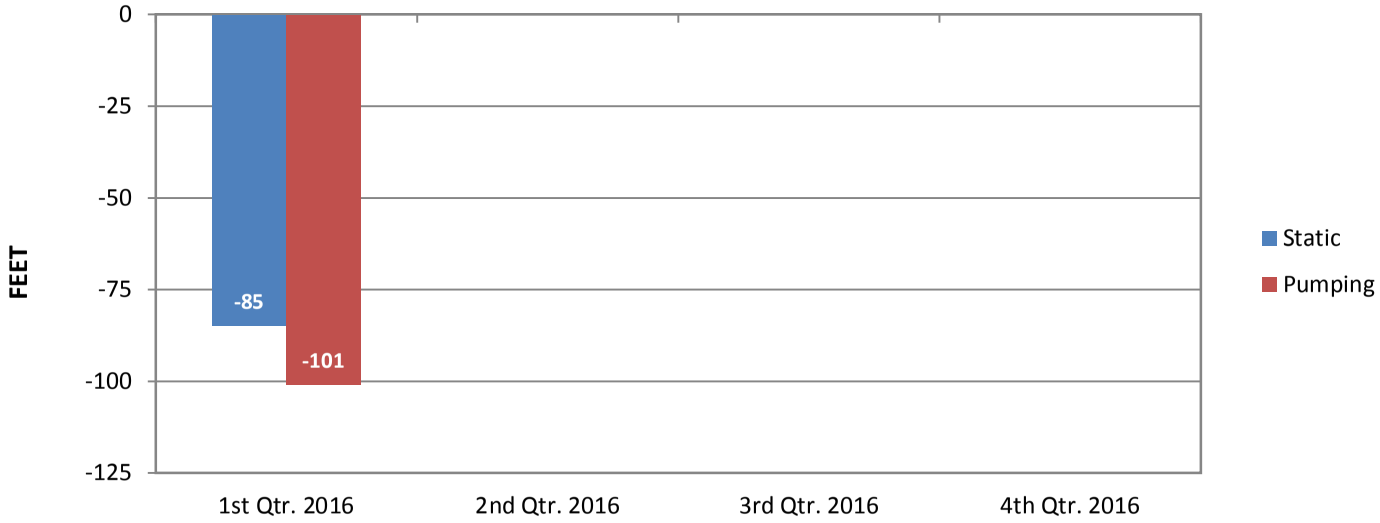
Latest Sand Tester Results:

15 Min: < 5 ppm

Elk Grove Water District

Static and Pumping Levels

Well 13 Hampton



Latest Well Sounding

Static:	85 Ft
Pumping:	101 Ft
Drawdown:	16 Ft
GPM:	990.00
Specific Capacity:	61.875

Latest Sand Tester Results:

15 Min: < 5 ppm

Monthly Sample Report - April 2016
Water System: Elk Grove Water System

Sampling Point: 01 - 8693 W. Camden			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week
4/5/2016	Distribution System	TTHM's & HAA5	Quarterly

Sampling Point: School Well 01D - Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: 02 - 9425 Emerald Vista			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week
4/5/2016	Distribution System	TTHM's & HAA5	Quarterly

Sampling Point: Mar-Val Well 3 Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: 03 - 8809 Valley Oak			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: Webb Well 04D - Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Source Water	3 mo - Bacteriological	Quarterly
4/5/2016	Source Water	3 mo - Fe,Mn,As Total	Quarterly
4/5/2016	Source Water	3 mo - Fe,Mn,As Dissolved	Quarterly

Sampling Point: 04 - 10122 Glacier Point			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: 05 - 9230 Amsden Ct.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: 06 - 9227 Rancho Dr.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: 07 - Al Gates Park Mainline Dr.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: Williamson Well 8 Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: 08 - 9436 Hollow Springs Wy.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week
4/5/2016	Distribution System	TTHM's & HAA5	Quarterly

Sampling Point: Polhemus Well 9 Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/12/2016	Source Water	3 mo - Bacteriological	Quarterly
4/12/2016	Source Water	3 mo - Fe,Mn,As Total	Quarterly
4/12/2016	Source Water	3 mo - Fe,Mn,As Dissolved	Quarterly

Sampling Point: 09 - 8417 Blackman Wy.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: 10 - 9373 Oreo Ranch Cir.			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Distribution System	Bacteriological	Week
4/12/2016	Distribution System	Bacteriological	Week
4/19/2016	Distribution System	Bacteriological	Week
4/26/2016	Distribution System	Bacteriological	Week

Sampling Point: Dino Well 11D - Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: Hampton Well 13 - Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: Hampton WTP Effluent			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: Hampton WTP Backwash Tank			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Wastewater	6 mo Bod,Tss,Tkn,Cu,Mn,Zn	BiAnnually

Sampling Point: Railroad Well 14D - Raw Water			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**

Sampling Point: Railroad WTP Backwash Tank			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Wastewater	6 mo Bod,Tss,Tkn,Cu,Mn,Zn	BiAnnually

Sampling Point: Railroad WTP Effluent			
Sample Date	**Sample Class**	**Sample Name**	**Collection Occurrence**
4/5/2016	Treated Plant Effluent	WTP Eff - Fe,Mn,As,Al Total	Month
4/5/2016	Treated Plant Effluent	WTP Eff - Fe,Mn,As,Al Dissolved	Month

Sampling Point: Special Distribution/Construction Samples			
Sample Date	**Sample Class**	**Sample Name**	**Collection Description**
4/12/2016	Distribution System	9875 Dino Dr.	Remove Main Valve
4/20/2016	Wastewater	Well 11D Dino	CIP Well Rehab
4/25/2016	Treated Water	Storage Tank #1	CIP Tank Inspection
4/28/2016	Treated Water	Storage Tank #2	CIP Tank Inspection

Colors	Monthly Total	Yearly Total
Black = Scheduled	50	209
Green = Unscheduled	7	28
Red = Incomplete Sample	0	0

Elk Grove Water District
A DEPARTMENT OF THE
Florin Resource Conservation District

May 5, 2016

State Water Resources Control Board
Division of Drinking Water
1001 I Street
13th Floor
Sacramento, Ca. 95814

MONTHLY SUMMARY OF DISTRIBUTION SYSTEM COLIFORM MONITORING

Enclosed is the Monthly Summary of Distribution System Coliform Monitoring report from Elk Grove Water District for April 2016.

If you have any further questions, you may contact me at 916-687-3155 ext. 102.

STEVE SHAW
WATER TREATMENT SUPERVISOR

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

State of California -- Health and Human Services Agency

Department of Public Health
Drinking Water Program

MONTHLY SUMMARY OF DISTRIBUTION SYSTEM COLIFORM MONITORING
(including triggered source monitoring for systems subject to the Groundwater Rule)

System Name	System Number
Elk Grove Water District	3410008

Sampling Period: Month	Year
April	2016

	Number Required	Number Collected	Number Total Coliform Positives	Number Fecal/ E.coli Positives
1. Routine Samples (see note 1)	40	40	0	0
2. Repeat Samples following Samples that are Total Coliform Positive and Fecal/E.coli ***Negative*** (see notes 5 and 6)		0	0	
3. Repeat Samples following Routine Samples that are Total Coliform ***Positive*** and Fecal/E.coli Positive (see notes 5 and 6)		0		
4. MCL Computation for Total Coliform Positive Samples				
a. Totals (sum of columns)		40	0	

b. If 40 or more samples collected in month, determine percent of samples that are total coliform positive [(total number positive/total number collected) x 100] = 0 %

c. Is system in compliance.....with fecal/E. coli MCL? (see notes 2 and 3) ☑ Yes ☐ No

.....with monthly MCL? (see note 4) ☑ Yes ☐ No

5. Source Samples Triggered by Routine Samples that are Total Coliform Positive (This applies **only** to systems subject to the Groundwater Rule - see notes 7 and 8)	0	0	

6. Invalidated Samples
(Note what samples, if any, were invalidated; who authorized the invalidation; and when replacement samples were collected. Attach additional sheets, if necessary.)

7. Summary Completed By: Steve Shaw

Signature	Title	Date
	Water Treatment Supervisor	5/5/2016

NOTES AND INSTRUCTIONS:

1. Routine samples include:
   a. Samples required pursuant to 22 CCR Section 64423 and any additional samples required by an approved routine sample siting plan established pursuant to 22 CCR Section 64422.
   b. Extra samples are required for systems collecting less than five routine samples per month that had one or more total coliform positives in previous month;
   c. Extra samples for systems with high source water turbidities that are using surface water or groundwater under direct influence of surface water and do not practice filtration in compliance with regulations;
2. Note: For a repeat sample following a total coliform positive sample, any fecal/*E.coli* positive repeat (boxed entry) **constitutes an MCL violation and requires immediate notification to the Department** (22, CCR, Section 64426.1).
3. Note: For repeat sample following a fecal/*E.coli* positive sample, any total coliform positive repeat (boxed entry) **constitutes an MCL violation and requires immediate notification to the Department** (22, CCR, Section 64426.1).
4. Total coliform MCL **(Notify Department within 24 hours of MCL violation):**
   a. For systems collecting less than 40 samples, if two or more samples are total coliform positive, then the MCL is violated.
   b. For systems collecting 40 or more samples, if more than 5.0 percent of samples collected are total coliform positive, then the MCL is violated.
5. Positive results and their associated repeat samples are to be tracked on the Coliform Monitoring Worksheet.
6. Repeat samples must be collected within 24 hours of being notified of the positive results. For systems collecting more than one routine sample per month, three repeat samples must be collected for each total coliform positive sample. For systems collecting one or fewer routine samples per month, four repeat samples must be collected for each total coliform positive sample.
7. For systems subject to the Groundwater Rule: Positive results and the associated triggered source samples are to be tracked on the Coliform Monitoring Worksheet.
8. For triggered sample(s) required as a result of a total coliform routine positive sample, an *E.coli,* enterococci, or coliphage positive triggered sample (boxed entry) **requires immediate notification to the Department, Tier 1 public notification, and corrective action.**

10/2009 - 8477

Elk Grove Water District
A DEPARTMENT OF THE
Florin Resource Conservation District

May 5, 2016

Sacramento Regional County
Sanitation District
Environmental Specialist
10060 Goethe Rd.
Sacramento, Ca. 95827

MONTHLY COMPLIANCE REPORT

Enclosed is the Monthly Compliance Report Form from Elk Grove Water District for April 2016.

If you have any further questions, you may contact me at 916-687-3155 ext. 102.

STEVE SHAW
WATER TREATMENT SUPERVISOR

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

COMPLIANCE REPORT FORM

Attn: Tom Martin	Wastewater Source Control Section
Phone # (916) 876-7378	Fax # (916) 876-6374
From: Steve Shaw	
Company: Elk Grove Water Service	Permit# **WTP010**

The following reports and information are attached (check all that apply):

Month:	4	Year:	2016

☑ Water use/flow meter report

Railroad WTP: 0
Hampton WTP: 1620

☑ Monitoring results/analytical report

	Date	Time	pH
Hampton WTP	4-5-2016	12:29	8.1
Railroad WTP	4-5-2016	9:00 am	7.7

☑ **Discharge Rate**

Check the statement below that applies to this report:

- ☑ Based on a review of this facilities flow data, discharge rate limit was exceeded
- ☑ I certify that this facility is in compliance with the discharge rate limit.

☐ Attached is a description of anticipated changes that may significantly alter the nature, quality, or volume of the wastewater discharged.

☑ Flow monitoring equipment certification (Flow or pH meter, etc.)

☐ Other (describe)

Domestic Calculation

Domestic Usage	Number of Employees	Business Days per Month	Allowance (gallons per day)	Gallons
Production	2	21	25	1050
Office	3	21	20	1260
Drivers/Field	17	21	5	1785
			Total	4095

Certification Statement

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations".

SIGNATURE of Authorized Representative: 

PRINTED NAME, TITLE: Steve Shaw (Name) Water Treatment Supervisor (Title)

DATE: 5-5-2016

Elk Grove Water District Monthly Waste Report April 2016

Date	Railroad WTP Waste Meter	Gallons	Hampton WTP Waste Meter	Gallons
1	10723761	0	81358	0
2	10729125	5364 *	81358	0
3	10729125	0	81358	0
4	10729125	0	82978	1620
5	10729125	0	82978	0
6	10729125	0	82978	0
7	10729125	0	82978	0
8	10729125	0	82978	0
9	10729125	0	82978	0
10	10729125	0	82978	0
11	10729125	0	82978	0
12	10729125	0	82978	0
13	10729125	0	82978	0
14	10729125	0	82978	0
15	10729125	0	82978	0
16	10729125	0	82978	0
17	10729125	0	82978	0
18	10729125	0	82978	0
19	10729125	0	82978	0
20	10729125	0	82978	0
21	10729125	0	82978	0
22	10729125	0	82978	0
23	10729125	0	82978	0
24	10729125	0	82978	0
25	10729125	0	82978	0
26	10729125	0	82978	0
27	10729125	0	82978	0
28	10729125	0	82978	0
29	10729125	0	82978	0
30	10729125	0	82978	0
31				

* Simulated flow for meter calibration

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A6D0399
4/20/2016
Invoice: A608144

Steve Shaw
Elk Grove Water District
9257 Elk Grove Boulevard
Elk Grove, CA 95624

RE: Report for A6D0399 General

Dear Steve Shaw,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 4/6/2016. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Michelle Kawaguchi , at 559-497-2888.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Michelle Kawaguchi

Michelle Kawaguchi, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

Case Narrative

Project and Report Details		Invoice Details	
Client:	Elk Grove Water District	**Invoice To:**	Elk Grove Water District
Report To:	Steve Shaw	**Invoice Attn:**	Steve Shaw
Project #:	April 2016 Hampton Backwash Wastewater	**Project PO#:**	-
Received:	4/06/2016 - 09:30		
Report Due:	4/20/2016		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 1.3

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-SAC

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

CV0.0	CCV recovery was above method acceptance limits; no material impact on reported result as sample is ND for this parameter.
MS1.0	Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Steve Shaw	FINAL.RPT	wquintero@egwd.org
Aaron Hewitt	FINAL.RPT	

Certificate of Analysis

Sample ID: A6D0399-03
Sampled By: Aaron Hewitt
Sample Description: Composite - Hampton Backwash Wastewater Bottles 1 & 2

Sample Date - Time: 04/05/16 - 12:29
Matrix: Waste Water
Sample Type: Composite

Composite Start: 04/05/16 - 12:28

BSK Associates Fresno

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Biochemical Oxygen Demand	SM 5210B	ND	1.0	mg/L	1	A603932	04/06/16 18:40	04/11/16	
Total Kjeldahl Nitrogen	EPA 351.2	ND	1.0	mg/L	1	A604053	04/07/16	04/11/16	
Total Suspended Solids	SM 2540D	ND	5.0	mg/L	1	A604040	04/07/16	04/12/16	

Metals

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Copper	EPA 200.8	ND	5.0	ug/L	1	A604067	04/07/16	04/18/16	
Manganese	EPA 200.7	ND	0.010	mg/L	1	A604067	04/07/16	04/14/16	
Zinc	EPA 200.8	ND	50	ug/L	1	A604067	04/07/16	04/18/16	CV0.0

BSK Associates Fresno
General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 351.2 - Quality Control											
Batch: A604053										Prepared: 4/7/2016	
Prep Method: Digestion										Analyst: CEG	
Blank (A604053-BLK1)											
Total Kjeldahl Nitrogen	ND	1.0	mg/L							04/11/16	
Blank Spike (A604053-BS1)											
Total Kjeldahl Nitrogen	10	1.0	mg/L	10		101	90-110			04/11/16	
Blank Spike Dup (A604053-BSD1)											
Total Kjeldahl Nitrogen	9.6	1.0	mg/L	10		96	90-110	6	10	04/18/16	
Matrix Spike (A604053-MS1), Source: A6D0424-02											
Total Kjeldahl Nitrogen	14	1.0	mg/L	10	2.9	109	90-110			04/11/16	
Matrix Spike Dup (A604053-MSD1), Source: A6D0424-02											
Total Kjeldahl Nitrogen	14	1.0	mg/L	10	2.9	116	90-110	5	10	04/11/16	MS1.0 ***High***
SM 2540D - Quality Control											
Batch: A604040										Prepared: 4/7/2016	
Prep Method: Method Specific Preparation										Analyst: DEH	
Blank (A604040-BLK1)											
Total Suspended Solids	ND	5.0	mg/L							04/12/16	
Duplicate (A604040-DUP1), Source: A6D0389-01											
Total Suspended Solids	81	5.0	mg/L		80			1	20	04/12/16	
Duplicate (A604040-DUP2), Source: A6D0395-01											
Total Suspended Solids	22	5.0	mg/L		22			0	20	04/12/16	
SM 5210B - Quality Control											
Batch: A603932										Prepared: 4/6/2016	
Prep Method: Method Specific Preparation										Analyst: NDR	
Blank (A603932-BLK1)											
Biochemical Oxygen Demand	ND	1.0	mg/L							04/11/16	
Blank Spike (A603932-BS1)											
Biochemical Oxygen Demand	200	1.0	mg/L	200		100	85-115			04/11/16	
Duplicate (A603932-DUP1), Source: A6D0387-02											
Biochemical Oxygen Demand	46	9.0	mg/L		46			0	10	04/11/16	

BSK Associates Fresno

Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.7 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: NYY	
Blank (A604067-BLK2)											
Manganese	ND	0.010	mg/L							04/14/16	
Blank Spike (A604067-BS2)											
Manganese	0.19	0.010	mg/L	0.20		96	85-115			04/14/16	
Blank Spike Dup (A604067-BSD2)											
Manganese	0.19	0.010	mg/L	0.20		95	85-115	1	20	04/14/16	
Matrix Spike (A604067-MS3), Source: A6D0367-01											
Manganese	0.20	0.010	mg/L	0.20	ND	98	70-130			04/14/16	
Matrix Spike (A604067-MS4), Source: A6D0450-01											
Manganese	0.29	0.010	mg/L	0.20	0.10	94	70-130			04/14/16	
Matrix Spike Dup (A604067-MSD3), Source: A6D0367-01											
Manganese	0.19	0.010	mg/L	0.20	ND	97	70-130	0	20	04/14/16	
Matrix Spike Dup (A604067-MSD4), Source: A6D0450-01											
Manganese	0.29	0.010	mg/L	0.20	0.10	95	70-130	1	20	04/14/16	
EPA 200.8 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: MAS	
Blank (A604067-BLK1)											
Copper	ND	5.0	ug/L							04/18/16	
Zinc	ND	50	ug/L							04/18/16	
Blank Spike (A604067-BS1)											
Copper	200	5.0	ug/L	200		101	85-115			04/18/16	
Zinc	200	50	ug/L	200		102	85-115			04/18/16	
Blank Spike Dup (A604067-BSD1)											
Copper	200	5.0	ug/L	200		99	85-115	2	20	04/18/16	
Zinc	200	50	ug/L	200		102	85-115	0	20	04/18/16	
Matrix Spike (A604067-MS1), Source: A6D0367-01											
Copper	200	5.0	ug/L	200	9.9	97	70-130			04/18/16	
Zinc	240	50	ug/L	200	ND	100	70-130			04/18/16	
Matrix Spike (A604067-MS2), Source: A6D0450-01											
Copper	190	5.0	ug/L	200	ND	92	70-130			04/18/16	
Zinc	190	50	ug/L	200	ND	96	70-130			04/18/16	
Matrix Spike Dup (A604067-MSD1), Source: A6D0367-01											

BSK Associates Engineers & Laboratories

BSK Associates Fresno
Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.8 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: MAS	
Matrix Spike Dup (A604067-MSD1), Source: A6D0367-01											
Copper	210	5.0	ug/L	200	9.9	99	70-130	1	20	04/18/16	
Zinc	240	50	ug/L	200	ND	100	70-130	1	20	04/18/16	
Matrix Spike Dup (A604067-MSD2), Source: A6D0450-01											
Copper	190	5.0	ug/L	200	ND	95	70-130	3	20	04/18/16	
Zinc	200	50	ug/L	200	ND	98	70-130	2	20	04/18/16	

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792016-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-16

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008-008	State of Washington	C824-15

A6D0399

04062016

ElkGr3556

Turnaround: Standard
Due Date: 4/20/2016

Elk Grove Water District

Printed: 4/6/2016 5:40:47PM

40

A6D0399 04/06/2016
ElkGr3556 10

BSK Associates
Engineers & Laboratories
1414 Stanislaus St., Fresno, CA 93706
(559) 497-2888 Fax (559) 497-2893
www.bskassociates.com

1.3

*Required Fields — Temp:

Company/Client Name*: Elk Grove Water District	Report Attention*: Steve Shaw; Additional cc's: Aaron Hewitt	Invoice To*: PO#:	Phone*: 916-687-3155 ext.102; Fax*: 916-687-3157; E-mail*: sshaw@egwd.org / ahewitt@egwd.org
Address*: 9257 Elk Grove Blvd; City*: Elk Grove	State*: CA; Zip*: 95624	Regulatory Carbon Copies: ☐ CDPH ☐ Fresno Co ☐ Merced Co ☐ Tulare Co ☐ Madera Co ☐ Other:	
Project: April 2016 Hampton Backwash Wastewater	Project #:		
Reporting Options: ☐ Trace (J-Flag) ☐ Swamp ☐ EDD Type:	How would you like your completed results sent?* ☒ E-Mail ☐ Fax ☒ Mail	Regulatory Compliance: ☐ EDT to California DPH; System Number*:	
Sampler Name (Printed/Signature)*: Aaron Hewitt [signature]	TAT*: ☒ Standard - 10 Business Days; ☐ **Rush: Date Needed (**Surcharge)	☐ Geotracker #:	

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid

#	Sample Description*	Sampled* Date	Time	Matrix*	Comments / Station Code / WTRAX	B.O.D.	T.S.S.	T.K.N.	Heavy Metals (Totals) Cu, Mn, Zn	Composite				
1	Hampton Backwash Wastewater bottle 1	4-5-16	12:04	WW						X				
2	Hampton Backwash Wastewater bottle 2	4-5-16	12:20	WW						X				
3	Composite 1 & 2 (To be mixed by lab)	4-5-16		WW	WTRAX 17279	X	X	X	X					

Field test pH = 8.1

Relinquished by: (Signature and Printed Name)	Company	Date	Time	Received by: (Signature and Printed Name)	Company
Aaron Hewitt [signature]	EGWD	4-5-16	2:37	[signature] S Chapin	BSK-SAC
Chris Grant [signature]	BSK-SAC	4/5/16	1606		
Received for Lab by: (Signature and Printed Name) [signature]		4/6/16	9:30	Payment Received at Delivery: Date: Amount: PIA#:	Check / Cash Init.

Shipping Method: ONTRAC UPS GSO WALK-IN FED EX Courier:
Cooling Method: Wet Blue None
Custody Seal: Y / N
Chilling Process Begun: Y / N

Payment for services rendered as noted herein are due in full within 30 days from the date invoiced. If not so paid, account balances are deemed delinquent. Delinquent balances are subject to monthly service charges and interest specified in BSK's current Standard Terms and Conditions for Laboratory Services. The person signing for the Client/Company acknowledges that they are either the Client or an authorized agent to the Client, that the Client agrees to be responsible for payment for the services on this Chain of Custody, and agrees to BSK's terms and conditions for laboratory services unless contractually bound otherwise. BSK's current terms and conditions can be found at www.bskassociates.com/BSKLabTermsConditions.pdf

SR-FL-0012-05 Analytical Chain of Custody

A6D0399 04/06/2016
ElkGr3556 10

BSK Associates SR-FL-0002-15

Sample Integrity

BSK Bottles: Yes No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	Do samples have a hold time <72 hours?	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No NA	Was PM notified of discrepancies? PM: By/Time:	Yes No NA

Bottles Received

"—" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-2	3			
Bacti $Na_2S_2O_3$	—	—					
None (P) White Cap	—	—	1C	2C			
Cr6 (P) Br. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ DW	Cl, pH > 8	Y N					
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ WW	pH 9.3-9.7	Y N					
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ 7199 ***24 HOUR HOLD TIME***	pH 9.0-9.5	Y N					
HNO_3 (P) Red Cap	—	—					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N					
NaOH (P) Green Cap	Cl, pH >10	Y N					
NaOH + ZnAc (P)	pH > 9	Y N					
Dissolved Oxygen 300ml (g)	—	—					
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
HCl (AG) Lt. Blue Label O&G, Diesel	—	—					
Na_2O_3S+HCl (AG) Lt Pink Label 525	—	—					
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—					
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,THM,524	—	—					
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—					
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N					
NH_4Cl (AG) Purple Label 552	—	—					
EDA (AG) Brown Label DBPs	—	—					
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—					
Buffer pH 4 (CG)	—	—					
None (CG)	—	—					
H_3PO_4 (CG) Salmon Label	—	—					
Other:							
Asbestos 1Liter Plastic w/ Foil	—	—					
Low Level Hg / Metals Double Baggie	—	—					
Bottled Water	—	—					
Clear Glass Jar: 250 / 500 / 1 Liter	—	—					
Soil Tube Brass / Steel / Plastic	—	—					
Tedlar Bag / Plastic Bag	—	—					

CW 4/6/16

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: DH @ 15:28 Labels checked by: EMH @ 15:32 RUSH Paged by: _____ @ _____

BSK Associates Fresno
1414 Stanislaus St
Fresno, CA93706
559-497-2888 (Main)
559-485-6935 (FAX)

A6D0396
4/20/2016
Invoice: A608161

Steve Shaw
Elk Grove Water District
9257 Elk Grove Boulevard
Elk Grove, CA 95624

RE: Report for A6D0396 General

Dear Steve Shaw,

Thank you for using BSK Associates for your analytical testing needs. In the following pages, you will find the test results for the samples submitted to our laboratory on 4/6/2016. The results have been approved for release by our Laboratory Director as indicated by the authorizing signature below.

The samples were analyzed for the test(s) indicated on the Chain of Custody (see attached) and the results relate only to the samples analyzed. BSK certifies that the testing was performed in accordance with the quality system requirements specified in the 2009 TNI Standard. Any deviations from this standard or from the method requirements for each test procedure performed will be annotated alongside the analytical result or noted in the Case Narrative. Unless otherwise noted, the sample results are reported on an "as received" basis.

If additional clarification of any information is required, please contact your Project Manager, Michelle Kawaguchi , at 559-497-2888.

Thanks again for using BSK Associates. We value your business and appreciate your loyalty.

Sincerely,

Michelle Kawaguchi

Michelle Kawaguchi, Project Manager

Accredited in Accordance with NELAP
ORELAP #4021

BSK Associates Engineers & Laboratories

Case Narrative

Project and Report Details		Invoice Details	
Client:	Elk Grove Water District	**Invoice To:**	Elk Grove Water District
Report To:	Steve Shaw	**Invoice Attn:**	Steve Shaw
Project #:	April 2016 Backwash Wastewater	**Project PO#:**	-
Received:	4/06/2016 - 09:30		
Report Due:	4/20/2016		

Sample Receipt Conditions

Cooler: Default Cooler
Temperature on Receipt °C: 1.3

Containers Intact
COC/Labels Agree
Received On Wet Ice
Packing Material - Bubble Wrap
Sample(s) were received in temperature range.
Initial receipt at BSK-SAC

Data Qualifiers

The following qualifiers have been applied to one or more analytical results:

CV0.0	CCV recovery was above method acceptance limits; no material impact on reported result as sample is ND for this parameter.
MS1.0	Matrix spike recoveries exceed control limits.

Report Distribution

Recipient(s)	Report Format	CC:
Steve Shaw	FINAL.RPT	wquintero@egwd.org
Aaron Hewitt	FINAL.RPT	

Certificate of Analysis

Sample ID: A6D0396-03
Sampled By: Aaron Hewitt
Sample Description: Composite - Railroad Backwash Wastewater Bottles 1 & 2

Sample Date - Time: 04/05/16 - 09:01
Matrix: Waste Water
Sample Type: Composite

Composite Start: 04/05/16 - 09:00

BSK Associates Fresno

General Chemistry

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Biochemical Oxygen Demand	SM 5210B	ND	1.0	mg/L	1	A603932	04/06/16 18:38	04/11/16	
Total Kjeldahl Nitrogen	EPA 351.2	ND	1.0	mg/L	1	A604106	04/08/16	04/11/16	
Total Suspended Solids	SM 2540D	ND	5.0	mg/L	1	A604031	04/07/16	04/11/16	

Metals

Analyte	Method	Result	RL	Units	RL Mult	Batch	Prepared	Analyzed	Qual
Copper	EPA 200.8	ND	5.0	ug/L	1	A604067	04/07/16	04/18/16	
Manganese	EPA 200.7	**0.036**	0.010	mg/L	1	A604067	04/07/16	04/14/16	
Zinc	EPA 200.8	ND	50	ug/L	1	A604067	04/07/16	04/18/16	CV0.0

BSK Associates Fresno
General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 351.2 - Quality Control											
Batch: A604106										Prepared: 4/8/2016	
Prep Method: Digestion										Analyst: CEG	
Blank (A604106-BLK1)											
Total Kjeldahl Nitrogen	ND	1.0	mg/L							04/11/16	
Blank Spike (A604106-BS1)											
Total Kjeldahl Nitrogen	11	1.0	mg/L	10		110	90-110			04/11/16	
Blank Spike Dup (A604106-BSD1)											
Total Kjeldahl Nitrogen	11	1.0	mg/L	10		106	90-110	3	10	04/11/16	
Matrix Spike (A604106-MS1), Source: A6D0556-01											
Total Kjeldahl Nitrogen	9.7	1.0	mg/L	10	ND	91	90-110			04/11/16	
Matrix Spike (A604106-MS2), Source: A6D0638-04											
Total Kjeldahl Nitrogen	11	1.0	mg/L	10	ND	110	90-110			04/11/16	
Matrix Spike Dup (A604106-MSD1), Source: A6D0556-01											
Total Kjeldahl Nitrogen	8.5	1.0	mg/L	10	ND	78	90-110	14	10	04/11/16	MS1.0 *Low*
Matrix Spike Dup (A604106-MSD2), Source: A6D0638-04											
Total Kjeldahl Nitrogen	10	1.0	mg/L	10	ND	104	90-110	5	10	04/11/16	
SM 2540D - Quality Control											
Batch: A604031										Prepared: 4/7/2016	
Prep Method: Method Specific Preparation										Analyst: DEH	
Blank (A604031-BLK1)											
Total Suspended Solids	ND	5.0	mg/L							04/11/16	
Duplicate (A604031-DUP1), Source: A6D0206-01											
Total Suspended Solids	ND	5.0	mg/L		ND				20	04/11/16	
Duplicate (A604031-DUP2), Source: A6D0284-02											
Total Suspended Solids	18	5.0	mg/L		21			15	20	04/11/16	
SM 5210B - Quality Control											
Batch: A603932										Prepared: 4/6/2016	
Prep Method: Method Specific Preparation										Analyst: NDR	
Blank (A603932-BLK1)											
Biochemical Oxygen Demand	ND	1.0	mg/L							04/11/16	
Blank Spike (A603932-BS1)											
Biochemical Oxygen Demand	200	1.0	mg/L	200		100	85-115			04/11/16	
Duplicate (A603932-DUP1), Source: A6D0387-02											

BSK Associates Fresno

General Chemistry Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
SM 5210B - Quality Control											
Batch: A603932										Prepared: 4/6/2016	
Prep Method: Method Specific Preparation										Analyst: NDR	
Duplicate (A603932-DUP1), Source: A6D0387-02											
Biochemical Oxygen Demand	46	9.0	mg/L		46			0	10	04/11/16	

BSK Associates Fresno
Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.7 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: NYY	
Blank (A604067-BLK2)											
Manganese	ND	0.010	mg/L							04/14/16	
Blank Spike (A604067-BS2)											
Manganese	0.19	0.010	mg/L	0.20		96	85-115			04/14/16	
Blank Spike Dup (A604067-BSD2)											
Manganese	0.19	0.010	mg/L	0.20		95	85-115	1	20	04/14/16	
Matrix Spike (A604067-MS3), Source: A6D0367-01											
Manganese	0.20	0.010	mg/L	0.20	ND	98	70-130			04/14/16	
Matrix Spike (A604067-MS4), Source: A6D0450-01											
Manganese	0.29	0.010	mg/L	0.20	0.10	94	70-130			04/14/16	
Matrix Spike Dup (A604067-MSD3), Source: A6D0367-01											
Manganese	0.19	0.010	mg/L	0.20	ND	97	70-130	0	20	04/14/16	
Matrix Spike Dup (A604067-MSD4), Source: A6D0450-01											
Manganese	0.29	0.010	mg/L	0.20	0.10	95	70-130	1	20	04/14/16	
EPA 200.8 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: MAS	
Blank (A604067-BLK1)											
Copper	ND	5.0	ug/L							04/18/16	
Zinc	ND	50	ug/L							04/18/16	
Blank Spike (A604067-BS1)											
Copper	200	5.0	ug/L	200		101	85-115			04/18/16	
Zinc	200	50	ug/L	200		102	85-115			04/18/16	
Blank Spike Dup (A604067-BSD1)											
Copper	200	5.0	ug/L	200		99	85-115	2	20	04/18/16	
Zinc	200	50	ug/L	200		102	85-115	0	20	04/18/16	
Matrix Spike (A604067-MS1), Source: A6D0367-01											
Copper	200	5.0	ug/L	200	9.9	97	70-130			04/18/16	
Zinc	240	50	ug/L	200	ND	100	70-130			04/18/16	
Matrix Spike (A604067-MS2), Source: A6D0450-01											
Copper	190	5.0	ug/L	200	ND	92	70-130			04/18/16	
Zinc	190	50	ug/L	200	ND	96	70-130			04/18/16	
Matrix Spike Dup (A604067-MSD1), Source: A6D0367-01											

BSK Associates Fresno
Metals Quality Control Report

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Date Analyzed	Qual
EPA 200.8 - Quality Control											
Batch: A604067										Prepared: 4/7/2016	
Prep Method: EPA 200.2										Analyst: MAS	
Matrix Spike Dup (A604067-MSD1), Source: A6D0367-01											
Copper	210	5.0	ug/L	200	9.9	99	70-130	1	20	04/18/16	
Zinc	240	50	ug/L	200	ND	100	70-130	1	20	04/18/16	
Matrix Spike Dup (A604067-MSD2), Source: A6D0450-01											
Copper	190	5.0	ug/L	200	ND	95	70-130	3	20	04/18/16	
Zinc	200	50	ug/L	200	ND	98	70-130	2	20	04/18/16	

Certificate of Analysis

Notes:

- The Chain of Custody document and Sample Integrity Sheet are part of the analytical report.
- Any remaining sample(s) for testing will be disposed of according to BSK's sample retention policy unless other arrangements are made in advance.
- All positive results for EPA Methods 504.1 and 524.2 require the analysis of a Field Reagent Blank (FRB) to confirm that the results are not a contamination error from field sampling steps. If Field Reagent Blanks were not submitted with the samples, this method requirement has not been performed.
- Samples collected by BSK Analytical Laboratories were collected in accordance with the BSK Sampling and Collection Standard Operating Procedures.
- J-value is equivalent to DNQ (Detected, not quantified) which is a trace value. A trace value is an analyte detected between the MDL and the laboratory reporting limit. This result is of an unknown data quality and is only qualitative (estimated). Baseline noise, calibration curve extrapolation below the lowest calibrator, method blank detections, and integration artifacts can all produce apparent DNQ values, which contribute to the un-reliability of these values.
- (1) - Residual chlorine and pH analysis have a 15 minute holding time for both drinking and waste water samples as defined by the EPA and 40 CFR 136. Waste water and ground water (monitoring well) samples must be field filtered to meet the 15 minute holding time for dissolved metals.
- Summations of analytes (i.e. Total Trihalomethanes) may appear to add individual amounts incorrectly, due to rounding of analyte values occurring before or after the total value is calculated, as well as rounding of the total value.
- RL Multiplier is the factor used to adjust the reporting limit (RL) due to variations in sample preparation procedures and dilutions required for matrix interferences.
- Due to the subjective nature of the Threshold Odor Method, all characterizations of the detected odor are the opinion of the panel of analysts. The characterizations can be found in Standard Methods 2170B Figure 2170:1.
- The MCLs provided in this report (if applicable) represent the primary MCLs for that analyte.

Definitions

mg/L:	Milligrams/Liter (ppm)	MDL:	Method Detection Limit	MDA95:	Min. Detected Activity
mg/Kg:	Milligrams/Kilogram (ppm)	RL:	Reporting Limit: DL x Dilution	MPN:	Most Probable Number
µg/L:	Micrograms/Liter (ppb)	ND:	None Detected at RL	CFU:	Colony Forming Unit
µg/Kg:	Micrograms/Kilogram (ppb)	pCi/L:	Picocuries per Liter	Absent:	Less than 1 CFU/100mLs
%:	Percent Recovered (surrogates)	RL Mult:	RL Multiplier	Present:	1 or more CFU/100mLs
NR:	Non-Reportable	MCL:	Maximum Contaminant Limit		

Please see the individual Subcontract Lab's report for applicable certifications.

BSK is not accredited under the NELAC program for the following parameters: **NA**

Certifications: **Please refer to our website for a copy of our Accredited Fields of Testing under each certification.**

Fresno

State of California - ELAP	1180	State of Hawaii	4021
State of Nevada	CA000792016-1	State of Oregon - NELAC	4021
EPA - UCMR3	CA00079	State of Washington	C997-16

Sacramento

State of California - ELAP	2435

Vancouver

State of Oregon - NELAC	WA100008-008	State of Washington	C824-15

A6D0396

04062016

ElkGr3556

Turnaround: Standard
Due Date: 4/20/2016

Elk Grove Water District

Printed: 4/6/2016 5:40:50PM

BSK Associates Engineers & Laboratories
1414 Stanislaus St., Fresno, CA 93706
(559) 497-2888 Fax (559) 497-2893
www.bskassociates.com

A6D0396 04/06/2016
ElkGr3556 10

1.3

*Required Fields Temp:

Company/Client Name*: Elk Grove Water District	Report Attention*: Steve Shaw Additional cc's: Aaron Hewitt	Invoice To*: PO#:	Phone*: 916-687-3155 ext.102 Fax*: 916-687-3157 E-mail*: sshaw@egwd.org / ahewitt@egwd.org
Address*: 9257 Elk Grove Blvd	City*: Elk Grove	State*: CA	Zip*: 95624
Project: April 2016 Backwash Wastewater	Project #:		
Reporting Options: ☐ Trace (J-Flag) ☐ Swamp ☐ EDD Type:	How would you like your completed results sent?* ☒ E-Mail ☐ Fax ☒ Mail		
Sampler Name (Printed/Signature)*: Aaron Hewitt	TAT* **Surcharge ☒ Standard - 10 Business Days ☐ **Rush: Date Needed		

Regulatory Carbon Copies: CDPH ☐ ☐ Fresno Co; Merced Co ☐ ☐ Tulare Co; Madera Co ☐ ☐ Other:

Regulatory Compliance: ☐ EDT to California DPH System Number*: ☐ Geotracker #:

Matrix Types: SW=Surface Water BW=Bottled Water GW=Ground Water WW=Waste Water STW=Storm Water DW=Drinking Water SO=Solid

#	Sample Description*	Sampled* Date	Sampled* Time	Matrix*	Comments / Station Code / WTRAX	B.O.D.	T.S.S.	T.K.N.	Heavy Metals (Totals) Cu, Mn, Zn	X X Composite
1	Railroad Backwash Wastewater bottle 1	4-5-16	9[illegible]	WW						
2	Railroad Backwash Wastewater bottle 2	4-5-16	9[illegible]	WW						
3	Composite 1 & 2 (To be mixed by lab)	4-5-16		WW	WTRAX 17257	X	X	X	X	

Field Inst. pH = 7.7

Relinquished by: (Signature and Printed Name) Aaron Hewitt	Company EGWD	Date 4-5-16	Time 2:37p	Received by: (Signature and Printed Name) S. Chepski	Company BSK-SAC
Relinquished by: (Signature and Printed Name) Chris Grant	Company BSK-SAC	Date 4/5/16	Time 1600	Received by: (Signature and Printed Name)	Company
Received for Lab by: (Signature and Printed Name) Lawlen White	Date 4/6/16	Time 9:32	Payment Received at Delivery: Date:	Amount:	PIA#: Check / Cash Init.

Shipping Method: ONTRAC UPS GSO WALK-IN FED EX Courier:
Cooling Method: Wet Blue None
Custody Seal: Y / N
Chilling Process Begun: Y / N

BSK Associates SR-FL-0002-15

A6D0396 04/06/2016
ElkGr3556 10

Sample Integrity

BSK Bottles: Yes / No Page 1 of 1

COC Info

Was temperature within range? Chemistry ≤ 6°C Micro < 10°C	Yes No NA	Were correct containers and preservatives received for the tests requested?	Yes No NA
If samples were taken today, is there evidence that chilling has begun?	Yes No NA	Were there bubbles in the VOA vials? (Volatiles Only)	Yes No NA
Did all bottles arrive unbroken and intact?	Yes No	Was a sufficient amount of sample received?	Yes No
Did all bottle labels agree with COC?	Yes No	Do samples have a hold time <72 hours?	Yes No
Was sodium thiosulfate added to CN sample(s) until chlorine was no longer present?	Yes No NA	Was PM notified of discrepancies? PM: By/Time:	Yes No NA

Bottles Received

"_" means preservation/chlorine checks are either N/A or are performed in the lab

250ml(A) 500ml(B) 1Liter(C) 40ml VOA(V)	Checks	Passed?	1-2	3			
Bacti $Na_2S_2O_3$	—	—					
None (P) White Cap	—	—	1C	2C			
Cr6 (P) Br. Green Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **DW**	Cl, pH > 8	Y N					
Cr6 (P) Pink Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **WW**	pH 9.3-9.7	Y N					
Cr6 (P) Black Label/Blue Cap $NH_4OH(NH_4)_2SO_4$ **7199** ***24 HOUR HOLD TIME***	pH 9.0-9.5	Y N					
HNO_3 (P) Red Cap	—	—					
H_2SO_4 (P) or (AG) Yellow Cap/Label	pH < 2	Y N					
NaOH (P) Green Cap	Cl, pH >10	Y N					
NaOH + ZnAc (P)	pH > 9	Y N					
Dissolved Oxygen 300ml (g)	—	—					
None (AG) 608/8081/8082, 625, 632/8321, 8151, 8270	—	—					
HCl (AG) Lt. Blue Label O&G, Diesel	—	—					
Na_2O_3S+HCl (AG) Lt. Pink Label 525	—	—					
$Na_2S_2O_3$ 1 Liter (Brown P) 549	—	—					
$Na_2S_2O_3$ (AG) Blue Label 547,515,548,THM,524	—	—					
$Na_2S_2O_3$ (CG) Blue Label 504, 505	—	—					
$Na_2S_2O_3$ + MCAA (CG) Orange Label 531	pH < 3	Y N					
NH_4Cl (AG) Purple Label 552	—	—					
EDA (AG) Brown Label DBPs	—	—					
HCL (CG) 524.2,BTEX,Gas, MTBE, 8260/624	—	—					
Buffer pH 4 (CG)	—	—					
None (CG)	—	—					
H_3PO_4 (CG) Salmon Label	—	—					
Other:							
Asbestos 1Liter Plastic w/ Foil	—	—					
Low Level Hg / Metals Double Baggie	—	—					
Bottled Water	—	—					
Clear Glass Jar: 250 / 500 / 1 Liter	—	—					
Soil Tube Brass / Steel / Plastic	—	—					
Tedlar Bag / Plastic Bag	—	—					

Compared 4/6/16

Split

	Container	Preservative	Date/Time/Initials		Container	Preservative	Date/Time/Initials
S P				S P			
S P				S P			

Comments

Labeled by: BAD @ 1527 Labels checked by: TNL @ 1533 RUSH Paged by: _____ @ _____

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com

Attn: STEVE SHAW
ELK GROVE WATER DISTRICT
9257 ELK GROVE BLVD
ELK GROVE, CA. 95624

Instrument ID 07
Description MAGNETIC FLOW METER
Serial Number 04W024929
Model Number MFE4ER140111

Calibrated 4/1/2016
Scheduled 4/1/2017
Calibration ID 25482
Certificate # 07
Equipment ID WASTE METER
Department ELK GROVE WATER
Manufacturer ABB KENT TAYLOR
Calibration Type INITIAL
Location RAILROAD WTP
Building WASTE TANK

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET PER SEC.	0.00	GPM Rate	0.00	0.00%	0.00	0.00%
1.50	FEET PER SEC.	63.11	GPM Rate	63.35	0.38%	63.35	0.38%
3.00	FEET PER SEC.	126.21	GPM Rate	126.87	0.52%	126.87	0.52%
6.00	FEET PER SEC.	252.43	GPM Rate	253.71	0.51%	253.71	0.51%

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET PER SEC.	0.00	GPM Totalizer	0.00	0.00%	0.00	0.00%
1.50	FEET PER SEC.	63.11	GPM Totalizer	63.61	0.79%	63.61	0.79%
3.00	FEET PER SEC.	126.21	GPM Totalizer	126.83	0.49%	126.83	0.49%
6.00	FEET PER SEC.	252.43	GPM Totalizer	253.93	0.59%	253.93	0.59%

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET PER SEC.	4.00	mA	4.01	0.25%	4.01	0.25%
1.50	FEET PER SEC.	5.68	mA	5.69	0.18%	5.69	0.18%
3.00	FEET PER SEC.	7.37	mA	7.39	0.27%	7.39	0.27%
6.00	FEET PER SEC.	10.73	mA	10.77	0.37%	10.77	0.37%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
203	Magmeter Simulator	Abb	MFE-SIM	P1540511212
356	TRUE RMS MULTIMETER	Fluke	87MKV	31860265 - KEVIN

Notes about this calibration

WASTE METER
MAIN FLOOR
0-600 GPM = 4-20 mA
SENSOR SIZE: 100 MM
SENSOR FACTOR: #1 = 1.10888, #2 = -19, #3 = 5, #4 = 1.0000
TOTALIZER START: 10723761 GALLONS
TOTALIZER END: 10729125 GALLONS
METER IS LOCATED AT: 9715 RAILROAD STREET, ELK GROVE RAILROAD W.T.P.

Calibration Result Calibration Successful
Who Calibrated KEVIN VANG

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
(530) 823-3241 Fax (530-823-3475

METER CERTIFICATION REPORT

CUSTOMER: ELK GROVE WATER DISTRICT **DATE: 4-1-2016**
ADDRESS: 9257 ELK GROVE BLVD.
ELK GROVE, CA. 95624
LOCATION: 10113 HAMPTON OAK, HAMPTON OAK W.T.P. **ATTN: STEVE SHAW**

DECRIPTION OF METERING EQUIPMENT:

4" ABB WATER METER
MODEL #FET3251AOP183C1H1
SERIAL #3K620000175209

TEST RUN # 1

APPOX RUN TIME 5:03 MINUTES

SIEMENS SITRANS F	Appx. Flow	Totalized Flow	Customer Meter	Appx. Flow	Totalized Flow	Error %
FUP 1010	43.91 GPM	222.00 GAL	ABB	44.24 GPM	224 GALLONS	0.75%

TEST RUN # 2

APPOX RUN TIME 5:03 MINUTES

SIEMENS SITRANS F	Appx. Flow	Totalized Flow	Customer Meter	Appx. Flow	Totalized Flow	Error %
FUP 1010	29.22 GPM	147.60 GAL	ABB	28.11 GPM	142 GALLONS	-3.75%

TEST RUN # 3

APPOX RUN TIME 5:03 MINUTES

SIEMENS SITRANS F	Appx. Flow	Totalized Flow	Customer Meter	Appx. Flow	Totalized Flow	Error %
FUP 1010	92.17 GPM	466.00 GAL	ABB	88.01 GPM	445 GALLONS	-4.70%

FINAL CHECK AFTER ADJUSMENT

APPOX RUN TIME

SIEMENS SITRANS F	Appx. Flow	Totalized Flow	Customer Meter	Appx. Flow	Totalized Flow	Error %
FUP 1010						

COMMENTS: 4" STAINLESS STEEL PIPE, C2 HEADS REFLECT, PIPE O.D. = 4.500", WALL THICKNESS = 0.120
PIPE IS VERY SHORT, TRANSMITTER LOCATED INSIDE BUILDING (BACK WASH WASTE FLOW)
PIPE IS LOCATED OUTSIDE BY TANK.

CALIBRATION PERFORMED BY: KEVIN VANG

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

M.C.C. and Lab

Item		Quarterly Refer.	1st	2nd	3rd	4th	Annual Refer.	2016
Fume Hood	Initials	Sect: 1.1.1	AH				Sect: 1.2.3	
	Date		3/22/16					
	W.O. #		13869					
Dulco-meter	Initials	Sect: 1.1.2	AH					
	Date		3/22/16					
	W.O. #		13869					
M.C.C.	Initials						Sect: 1.2.1	
	Date							
	W.O. #							
Circuit Breaker	Initials						Sect: 1.2.2	
	Date							
	W.O. #							
Cl2 DPD Handheld	Initials	Sect: 1.1.3	AH					
	Date		3/29/16					
	W.O. #		13869					

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Backwash System and Storage Tanks

Item		MONTHLY												Semi-annual			Annual	
		Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Mag meter	Initials																	Sect: 2.3.2	WQ
	Date																		4/1/16
	W.O. #																		13971
MCC	Initials																	Sect: TBD	
	Date																		
	W.O. #																		
Pressure Transdcr	Initials																	Sect: 2.2.1	
	Date																		
	W.O. #																		
Backwash Tank	Initials																	Sect: 2.3.4	
	Date																		
	W.O. #																		
Return Pumps	Initials	Sect: TBD	WQ	WQ	WQ	WQ									Sect: TBD				
	Date		1/20/16	2/4/16	3/23/16	4/14/16													
	W.O. #		13585	13745	13865	13966													
Storage Tanks	Initials																	Sect: 2.4.1	
	Date																		
	W.O. #																		
Bray Valves	Initials																	Sect: 2.2.2	
	Date																		
	W.O. #																		

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Booster Pumps

Item		Monthly												Semi-annual			Annual	
		Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Electric Motor	Initials	Sect: 3.1.1	WQ	AH	WQ	WQ									Sect: 3.2.1				
	Date		1/20/16	2/17/16	3/24/16	4/13/16													
	W.O. #		13582	13746	13868	13967													
PUMP	Initials	Sect: 3.1.2	WQ	AH	WQ	WQ												Sect: 3.2.4	
	Date		1/20/16	2/17/16	3/24/16	4/13/16													
	W.O. #		13582	13746	13868	13967													
A.R.V.	Initials																	Sect: 3.3.1	
	Date																		
	W.O. #																		
Rising stem Valve	Initials																	Sect: 3.3.3	
	Date																		
	W.O. #																		

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Clor-Tec System

Item		Monthly Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Quarterly Refer.	1st	2nd	3rd	4th	Annual Refer.	2016
CL2 Meter System	Initials	Sect: 4.2.1	WQ	WQ	WQ	WQ														Sect: 4.4.1	
	Date		1/19/16	2/2/16	3/1/16	4/14/16															
	W.O. #		13581	13744	13866	13964															
Exhaust Fan	Initials														Sect: 4.3.1	AH					
	Date															3/9/16					
	W.O. #															13748					
Hydrogen Blow/Det.	Initials																			Section: 4.4.2/4.4.3	
	Date																				
	W.O. #																				
Cell and Electrode	Initials														Sect: 4.3.2	WQ					
	Date															2/8/16					
	W.O. #															13748					
Hypo/Brine Tank	Initials	Sect: 4.2.3	WQ	WQ	WQ	WQ														Sect: 4.4.5	
	Date		1/19/16	2/2/16	3/1/16	4/14/16															
	W.O. #		13581	13744	13866	13964															
Water Softener	Initials																			Sect: 4.4.6	
	Date																				
	W.O. #																				
Rectifier	Initials	Sect: 4.2.4	WQ	WQ	WQ	WQ															
	Date		1/19/16	2/2/16	3/1/16	4/14/16															
	W.O. #		13581	13744	13866	13964															
Clor-Tec Unit	Initials	Sect: 4.2.2	WQ	WQ	WQ	WQ														Sect: 4.4.4	
	Date		1/19/16	2/2/16	3/1/16	4/14/16															
	W.O. #		13581	13744	13866	13964															

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Filter Vessels

Item		Monthly													Semi-annual			Annual	
		Refer	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Air/Vac Valves	Initials																	Sect: 5.2.1	
	Date																		
	W.O. #																		
Bray Valves	Initials														Sect: 5.2.2				
	Date																		
	W.O. #																		
CLA-VAL	Initials																	Sect: 5.3.1	
	Date																		
	W.O. #																		
Pilot Valves	Initials	Sect: 5.1.1	WQ	AH	WQ	WQ/MW												Sect: 5.3.2	
	Date		1/21/16	2/17/16	3/21/16	4/13/16													
	W.O. #		13584	13747	13867	13965													
Press. Diff. Trnsdcr.	Initials																	Sect: 5.3.3	
	Date																		
	W.O. #																		
Vessels	Initials																	Sect: 5.3.4	
	Date																		
	W.O. #																		

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Standby Generator

Item		Monthly Refer	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Semi-annual Refer	1ST 6-MO.	2ND 6-MO.	Annual/Biannual Refer	2016
Fuel Tank	Initials	Sect: 6.1.1	WQ	WQ	WQ	WQ									Sect: 6.2.1			Sect: 6.3.1	
	Date		1/5/16	2/2/16	3/23/16	4/6/16													
	W.O. #		13583	13743	13864	13968													
Radiator	Initials														Sect: 6.2.2			Section: 6.3.2/6.4.1	WQ
	Date																		4/19/16
	W.O. #																		13977
Battery/ Charger	Initials	Sect: 6.1.2	WQ	WQ	WQ	WQ													
	Date		1/5/16	2/2/16	3/23/16	4/6/16													
	W.O. #		13583	13743	13864	13968													
Coolant Heater	Initials																	Sect: 6.3.3	WQ
	Date																		4/19/16
	W.O. #																		13977
Generator	Initials	Sect: 6.1.3	WQ	WQ	WQ	WQ													
	Date		1/5/16	2/2/16	3/23/16	4/6/16													
	W.O. #		13583	13743	13864	13968													
Engine	Initials														Sect: 6.2.3			Section: 6.3.4/6.4.2	WQ
	Date																		4/19/16
	W.O. #																		13977

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 1D School

Item		Monthly Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Semi-annual Refer.	1ST 6-MO.	2ND 6-MO.	Annual Refer.	2016
Pump	Initials	Sect: 13.1.1	WQ	WQ	WQ	WQ									Sect: 13.2.1				
	Date		1/6/16	2/5/16	3/21/16	4/4/16													
	W.O. #		13592	13740	13878	13963													
Motor	Initials	Sect: 13.1.2	WQ	WQ	WQ	WQ									Sect: 13.2.2				
	Date		1/6/16	2/5/16	3/21/16	4/4/16													
	W.O. #		13592	13740	13878	13963													
Press/Lvl Transdcr.	Initials																	Sect: 13.3.2	
	Date																		
	W.O. #																		
Isolation Valves	Initials																	Sect: 13.3.6	
	Date																		
	W.O. #																		
Cla-Val	Initials																	Sect: 13.3.1	
	Date																		
	W.O. #																		
Mag-Meter	Initials																	Sect: 13.3.3	
	Date																		
	W.O. #																		
A.R.V.	Initials														Sect: 13.2.3			Sect: 13.3.4	
	Date																		
	W.O. #																		
M.C.C.	Initials																	Sect: 13.3.5	
	Date																		
	W.O. #																		

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 4D Webb

Item		Monthly Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Semi-annual Refer.	1ST 6-MO.	2ND 6-MO.	Annual Refer.	2016
Pump	Initials	Sect: 8.1.1	WQ	AH	WQ	WQ									Sect: 8.2.1				
	Date		1/21/16		3/15/16	4/11/16													
	W.O. #		13593	13742	13875	13958													
Motor	Initials	Sect: 8.1.2	WQ	AH	WQ	WQ									Sect: 8.2.2				
	Date		1/21/16		3/15/16	4/11/16													
	W.O. #		13593	13742	13875	13958													
Press/Lvl Transdcr.	Initials																	Sect: 8.3.2	
	Date																		
	W.O. #																		
Isolation Valves	Initials																	Sect: 8.3.6	
	Date																		
	W.O. #																		
Cla-Val	Initials																	Sect: 8.3.1	
	Date																		
	W.O. #																		
Mag-Meter	Initials																	Sect: 8.3.3	
	Date																		
	W.O. #																		
A.R.V.	Initials														Sect: 8.2.3			Sect: 8.3.4	
	Date																		
	W.O. #																		
M.C.C.	Initials																	Sect: 8.3.5	
	Date																		
	W.O. #																		
Portable Generator	Initials	Sect: 8.1.3	WQ	AH	WQ	WQ									Sect: 8.2.4			Section: 8.3.7/8.4.1	
	Date		1/21/16		3/15/16	4/11/16													
	W.O. #		13593	13742	13875	13958													
Generator Set	Initials																	Sect: 8.4.2	
	Date																		
	W.O. #																		

=Well Offline

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 11D Dino

Item		Monthly													Semi-annual			Annual	
		Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Pump	Initials	Sect: 9.1.1	WQ	AH	WQ	AH									Sect: 9.2.1				
	Date		1/7/16	2/18/16	3/16/16														
	W.O. #		13591	13741	13874	13957													
Motor	Initials	Sect: 9.1.2	WQ	AH	WQ	AH									Sect: 9.2.2				
	Date		1/7/16	2/18/16	3/16/16														
	W.O. #		13591	13741	13874	13957													
Press/Lvl Transdcr.	Initials																	Sect: 9.3.2	
	Date																		
	W.O. #																		
Isolation Valves	Initials																	Sect: 9.3.6	
	Date																		
	W.O. #																		
Cla-Val	Initials																	Sect: 9.3.1	
	Date																		
	W.O. #																		
Mag-Meter	Initials																	Sect: 9.3.3	
	Date																		
	W.O. #																		
A.R.V.	Initials														Sect: 9.2.3			Sect: 9.3.4	
	Date																		
	W.O. #																		
M.C.C.	Initials																	Sect: 9.3.5	
	Date																		
	W.O. #																		
Portable Generator	Initials	Sect: 9.1.3	WQ	AH	WQ	AH									Sect: 9.2.4			Section: 9.3.7/9.4.1	
	Date		1/7/16	2/18/16	3/16/16														
	W.O. #		135911	13741	13874	13957													
Generator Set	Initials																	Sect: 9.4.2	
	Date																		
	W.O. #																		

=Well Offline

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 14D Railroad

Item		Monthly Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Semi-annual Refer.	1ST 6-MO.	2ND 6-MO.	Annual Refer.	2016
Pump	Initials	Sect: 7.1.1	WQ	WQ	WQ	WQ									Sect: 7.2.1				
	Date		1/5/16	2/3/16	3/22/16	4/5/16													
	W.O. #		13589	13739	13879	13962													
Motor	Initials	Sect: 7.1.2	WQ	WQ	WQ	WQ									Sect: 7.2.2				
	Date		1/5/16	2/3/16	3/22/16	4/5/16													
	W.O. #		13589	13739	13879	13962													
Press/Lvl Transdcr.	Initials																	Sect: 7.3.2	
	Date																		
	W.O. #																		
Isolation Valves	Initials																	Sect: 7.3.6	
	Date																		
	W.O. #																		
Cla-Val	Initials																	Sect: 7.3.1	
	Date																		
	W.O. #																		
Mag-Meter	Initials																	Sect: 7.3.3	
	Date																		
	W.O. #																		
A.R.V.	Initials														Sect: 7.2.3			Sect: 7.3.4	
	Date																		
	W.O. #																		
M.C.C.	Initials																	Sect: 7.3.5	
	Date																		
	W.O. #																		

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

WELL 3 MAR-VAL

Item		Monthly													Quarterly					Semi-annual			Annual	
		Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1st	2nd	3rd	4th	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Motor	Initials	Section: 12.1.2	WQ	AH/WQ	WQ	WQ														Section: 12.3.2				
	Date		1/13/16	2/24/16	3/22/16	4/12/16																		
	W.O. #		13586	13737	13876	13961																		
Pump	Initials	Section: 12.1.1	WQ	AH/WQ	WQ	WQ														Section: 12.3.1				
	Date		1/13/16	2/24/16	3/22/16	4/12/16																		
	W.O. #		13586	13737	13876	13961																		
Chlorine Pump	Initials														Section: 12.2.1	WQ								
	Date															3/22/16								
	W.O. #															13877								
Air Charger	Initials														Section: 12.2.2	WQ								
	Date															3/22/16								
	W.O. #															13877								
Check Valve	Initials																			Section: 12.3.3				
	Date																							
	W.O. #																							
A.R.V.	Initials																			Section: 12.3.4				
	Date																							
	W.O. #																							
M.C.C.	Initials																						Section: 12.4.1	
	Date																							
	W.O. #																							
Pneumat Tank	Initials														Section: 12.2.3	WQ								
	Date															3/22/16								
	W.O. #															13877								
Isolation Valves	Initials																						Section: 12.4.3	
	Date																							
	W.O. #																							
Propeller Meter	Initials																						Section: 12.4.2	
	Date																							
	W.O. #																							

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 8 Williamson

Item		Monthly													Quarterly					Semi-annual			Annual	
		Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	1st	2nd	3rd	4th	Refer.	1ST 6-MO.	2ND 6-MO.	Refer.	2016
Motor	Initials	Section: 11.1.2	AH	AH	WQ/MW	AH														Section: 11.3.2				
	Date		1/13/16	2/18/16	3/23/16	4/11/16																		
	W.O. #		13587	13738	13872	13959																		
Pump	Initials	Section: 11.1.1	AH	AH	WQ/MW	AH														Section: 11.3.1				
	Date		1/13/16	2/18/16	3/23/16	4/11/16																		
	W.O. #		13587	13738	13872	13959																		
Chlorine Pump	Initials														Section: 11.2.1	WQ/MW								
	Date															3/23/16								
	W.O. #															13873								
Air Charger	Initials														Section: 11.2.2	WQ/MW								
	Date															3/23/16								
	W.O. #															13873								
Check Valve	Initials																			Section: 11.3.3				
	Date																							
	W.O. #																							
A.R.V.	Initials																			Section: 11.3.4				
	Date																							
	W.O. #																							
M.C.C.	Initials																						Section: 11.4.1	
	Date																							
	W.O. #																							
Pneumat Tank	Initials														Section: 11.2.3	WQ/MW								
	Date															3/23/16								
	W.O. #															13873								
Isolation Valves	Initials																						Section: 11.4.3	
	Date																							
	W.O. #																							
Propeller Meter	Initials																						Section: 11.4.2	
	Date																							
	W.O. #																							

Year: 2016

Elk Grove Water District

Preventative Maintenance Program

Well 9 Polhemus

Item		Monthly Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Quarterly Refer.	1st	2nd	3rd	4th	Annual Refer.	2016
Check Valve	Initials																				
	Date																				
	W.O. #																				
Chlorine Pump	Initials	Sect: TBD	WQ	WQ	WQ	WQ									Section: TBD	WQ				Section: TBD	
	Date		1/11/16	2/4/16	3/22/16	4/7/16										3/22/16					
	W.O. #		13588	13736	13870	13960										13871					
Air Charger	Initials														Section: TBD	WQ					
	Date															3/22/16					
	W.O. #															13871					
Isolation Valves	Initials																			Section: TBD	
	Date																				
	W.O. #																				
A.R.V.	Initials																				
	Date																				
	W.O. #																				
M.C.C.	Initials																			Section: TBD	
	Date																				
	W.O. #																				
Pneumat Tank	Initials														Section: TBD	WQ					
	Date															3/22/16					
	W.O. #															13871					
Propeller Meter	Initials																			Section: TBD	
	Date																				
	W.O. #																				

Elk Grove Water District
Backflow Prevention Program 2016

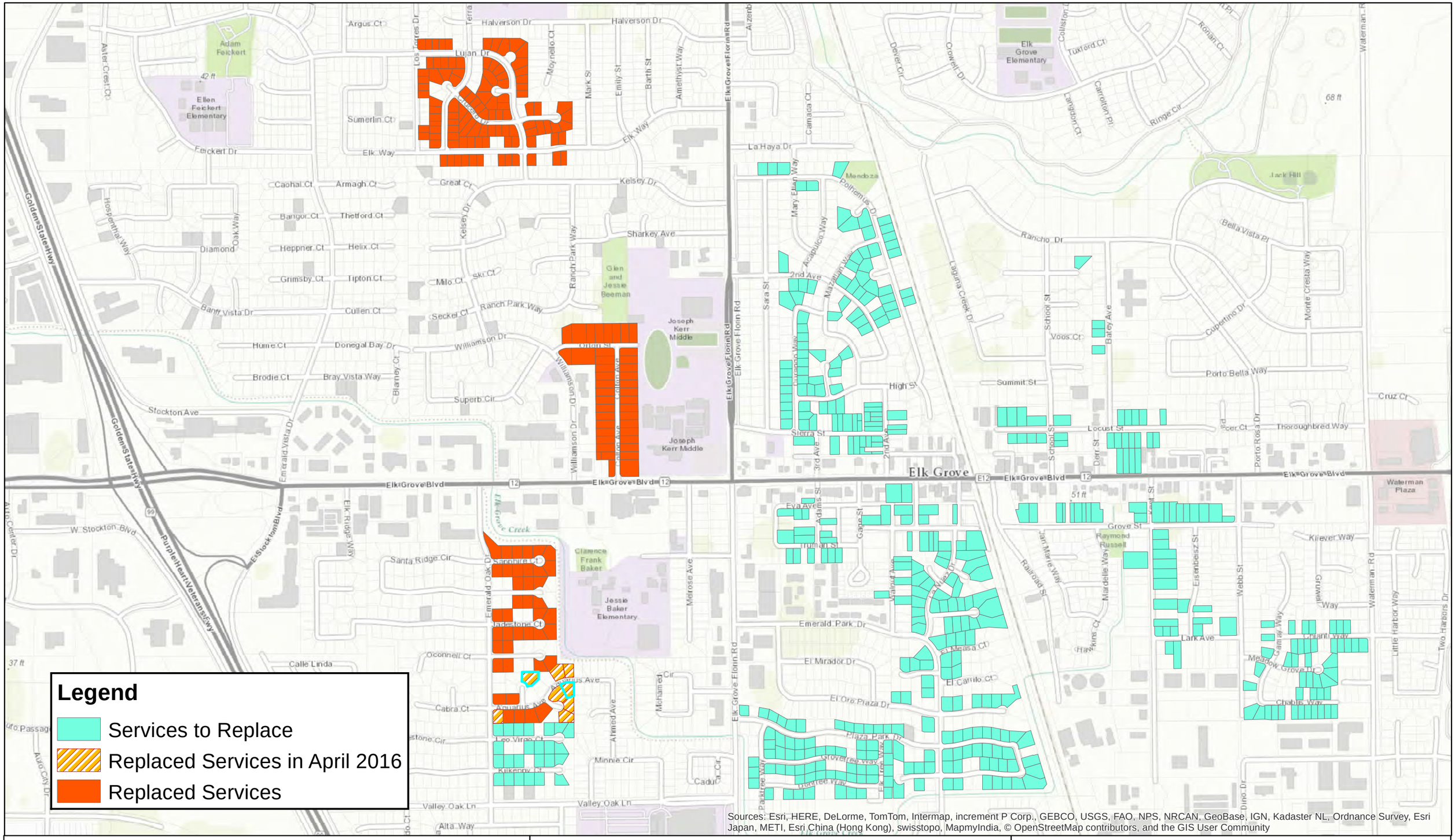
Backflow Device Reports		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CURRENT													
Notices Issued		21	38	74	12								
	Pass:	12	38	61	11								
Results Received	Fail:	0	0	4	1								
Failed Devices Retested----Passed				3	1								
Outstanding Results Due		9	0	10	0								

DELINQUENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Investigations													
Deactivated Devices													
	Sent:	9	0	9	0								
2nd Notice	Received:	9	0	8	0								
	Sent:			2									
3rd Notice	Received:			0									
Schedule Code Changed													
Outstanding Delinquents		0	0	2	0								
Carryover from 2015	0												

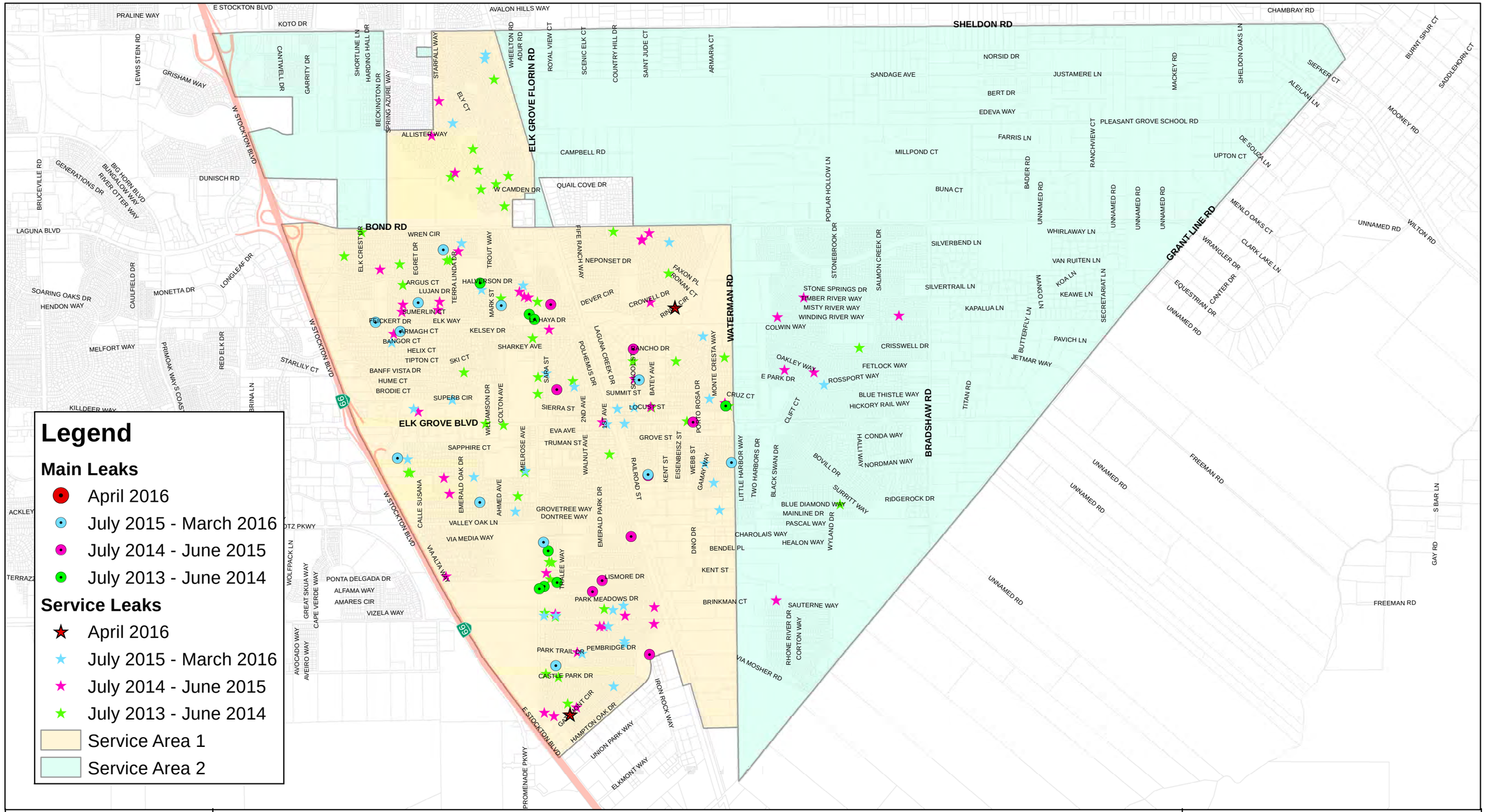
Total Outstanding Delinquents	**2**

Elk Grove Water District
Safety Meetings/Training
Apr-16

Date:	Topic:	Attendees:	Hosted By:
4/4/2016	Setting Up a Safe Traffic Control Zone	Jose C, Jose M, John V, Sean, Michael, Justin, Richard, Alan, Chris, Sal, Steve, Aaron, Travis, Wilfredo, David, William	Steve Shaw
4/11/2016	Focus Mentally To Avoid Distracted Work	Jose C, Jose M, John V, John D, Sean, Michael, Justin, Richard, Alan, Chris, Sal, Brandon, Steve, Aaron, Travis, Wilfredo, Marcel, David, William	Steve Shaw
4/18/2016	Hazard Communication Safety Data Sheets (SDSs)	Jose C, Jose M, John V, John D, Sean, Michael, Justin, Richard, Alan, Sal, Brandon, Steve, Aaron, Travis, Wilfredo, Marcel, David	Steve Shaw
4/25/2016	Lockout/Tagout: Water Under Pressure Poses Danger	Jose C, Jose M, John V, John D, Sean, Michael, Justin, Richard, Alan, Chris, Sal, Steve, Aaron, Travis, Wilfredo, Marcel, David, William	Steve Shaw
4/28/2016	Heat Illness	All Staff Required to Attend	Erick Watkins



Services to Replace: 431	**Elk Grove Water District** **Service Line Replacement**	Projected Coordinate System: NAD 83 State Plane, Californa II, FIPS 0420
Services Replaced in April 2016: 8	0 500 1,000 2,000 Feet N W E S	Source: City of Elk Grove, EGWD and Sacramento County GIS databases
Total Service Replaced: 191		Created by: Travis Franklin
		Date: May 10, 2016



April 2016	
Main Line Leaks: 0	YTD: 12
Service Line Leaks: 2	YTD: 38
Total Leaks: 2	YTD: 50

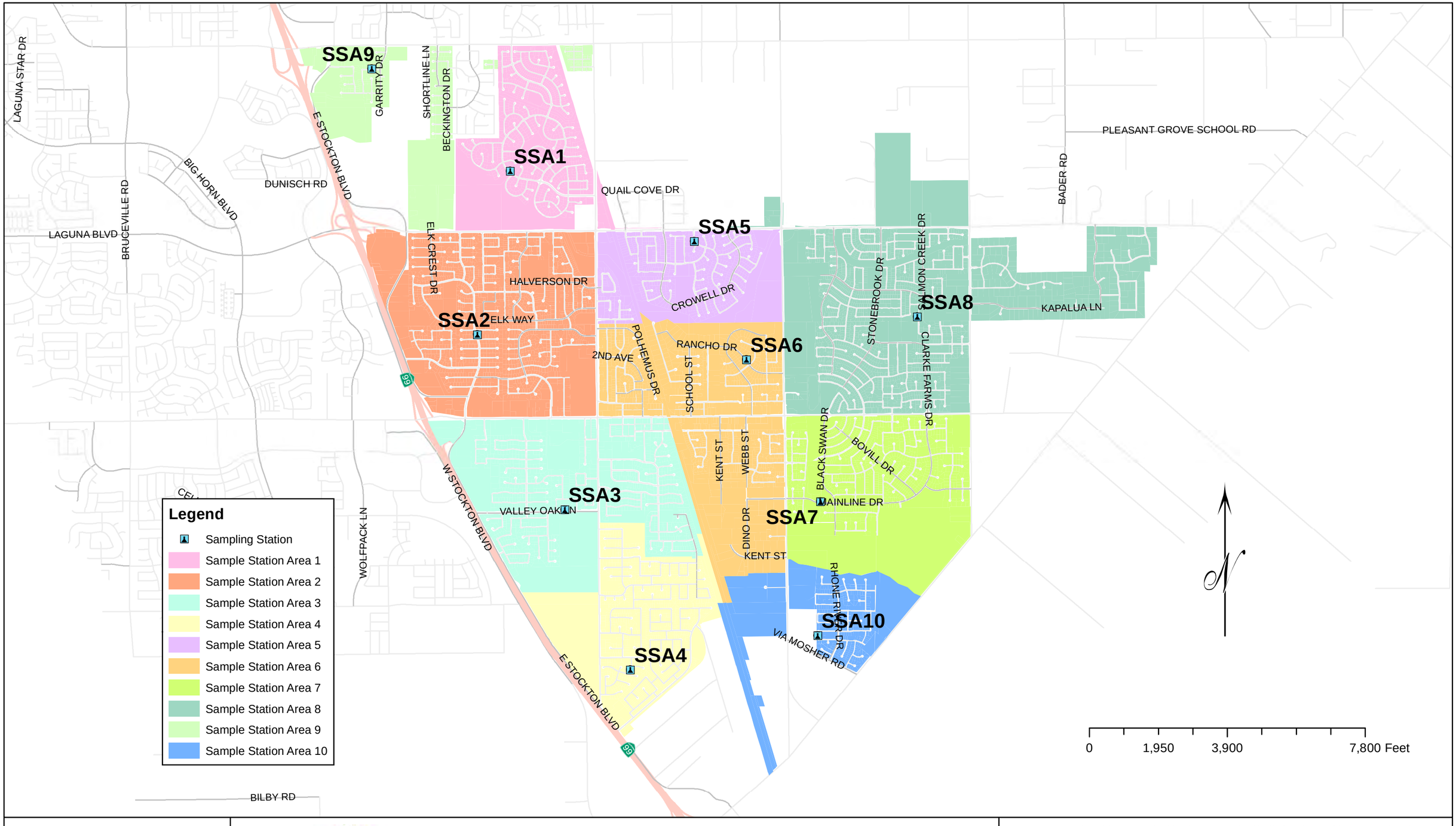
Elk Grove Water District

Service and Main Leaks Map

0 3,300 6,600 Feet

N W E S

Elk Grove Water District
Service / Main Leaks
Created by: Travis Franklin
Date: May 9, 2016



Sample Stations: 10

Elk Grove Water District

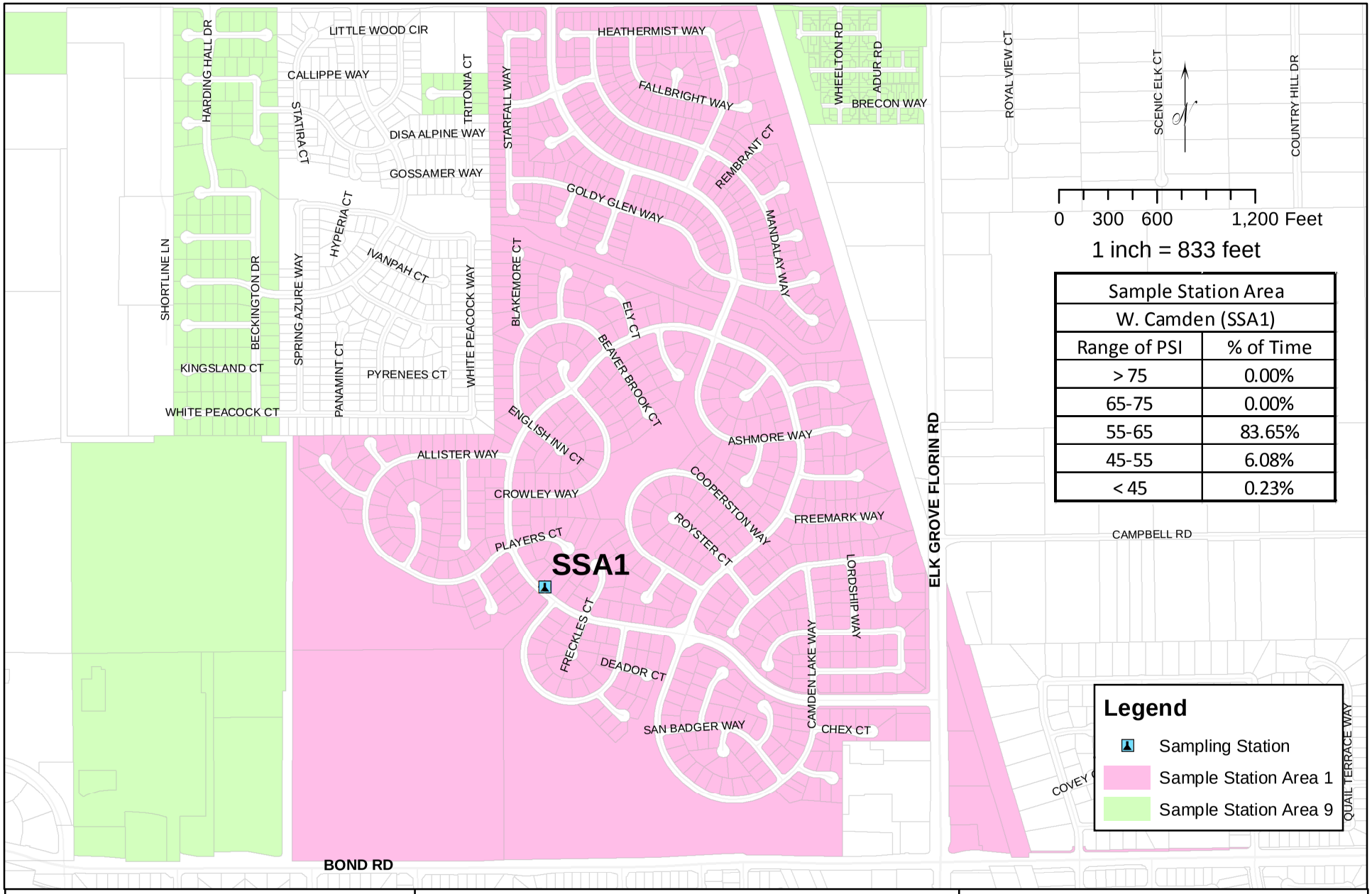
Sample Station Areas

Projected Coordinate System: NAD 83 State Plane CA II FIPS 0402

Source: EGWD GIS database

Modified by: Travis Franklin

May 5, 2016

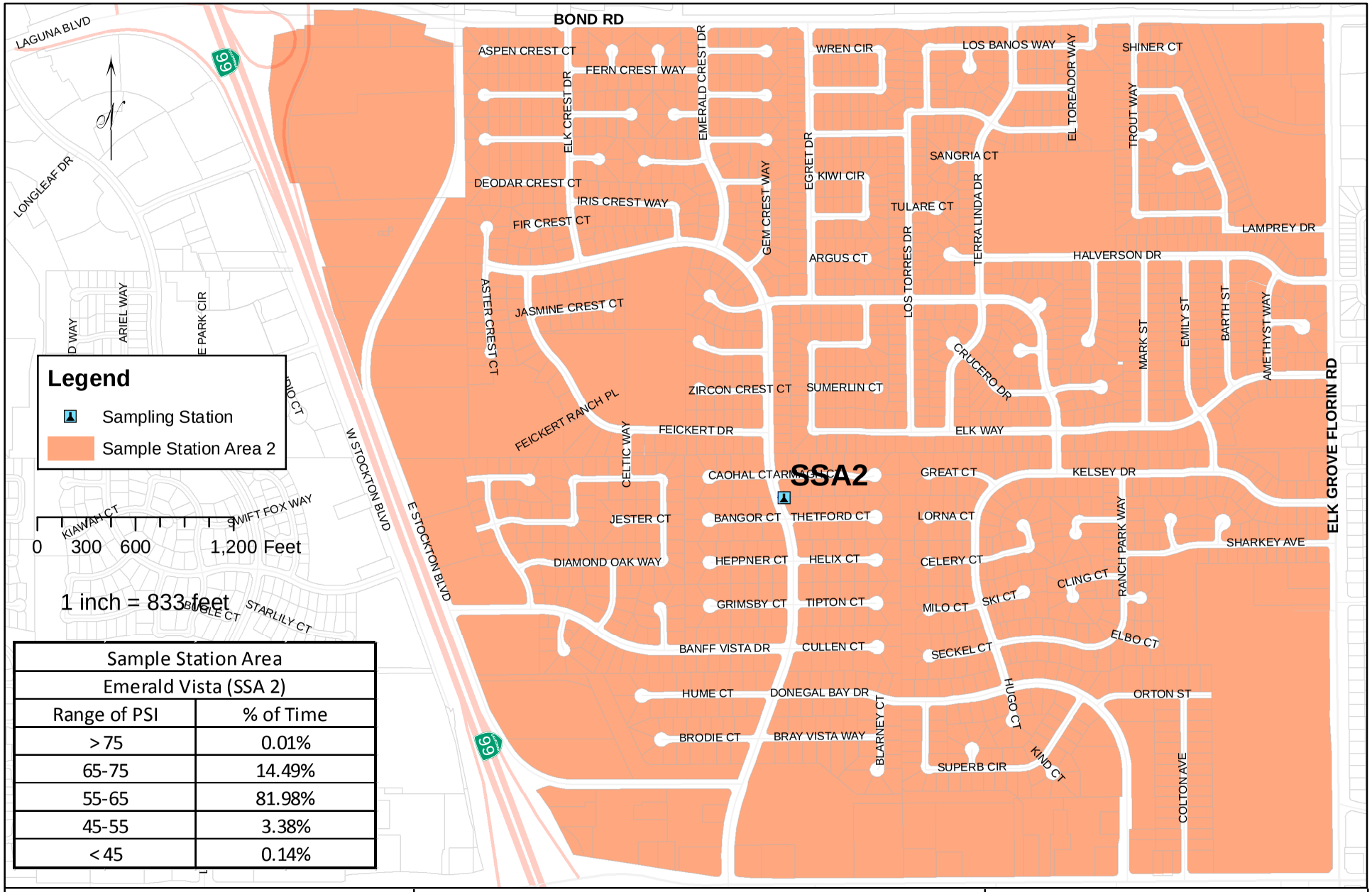


Sample Station #1
Note: Sample Station takes a reading every 5 minutes.
April 2016

Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402
Source:EGWD GIS database
Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Emerald Vista (SSA 2)	
Range of PSI	% of Time
> 75	0.01%
65-75	14.49%
55-65	81.98%
45-55	3.38%
< 45	0.14%

Sample Station #2

Note: Sample Station takes a reading every 5 minutes.

April 2016

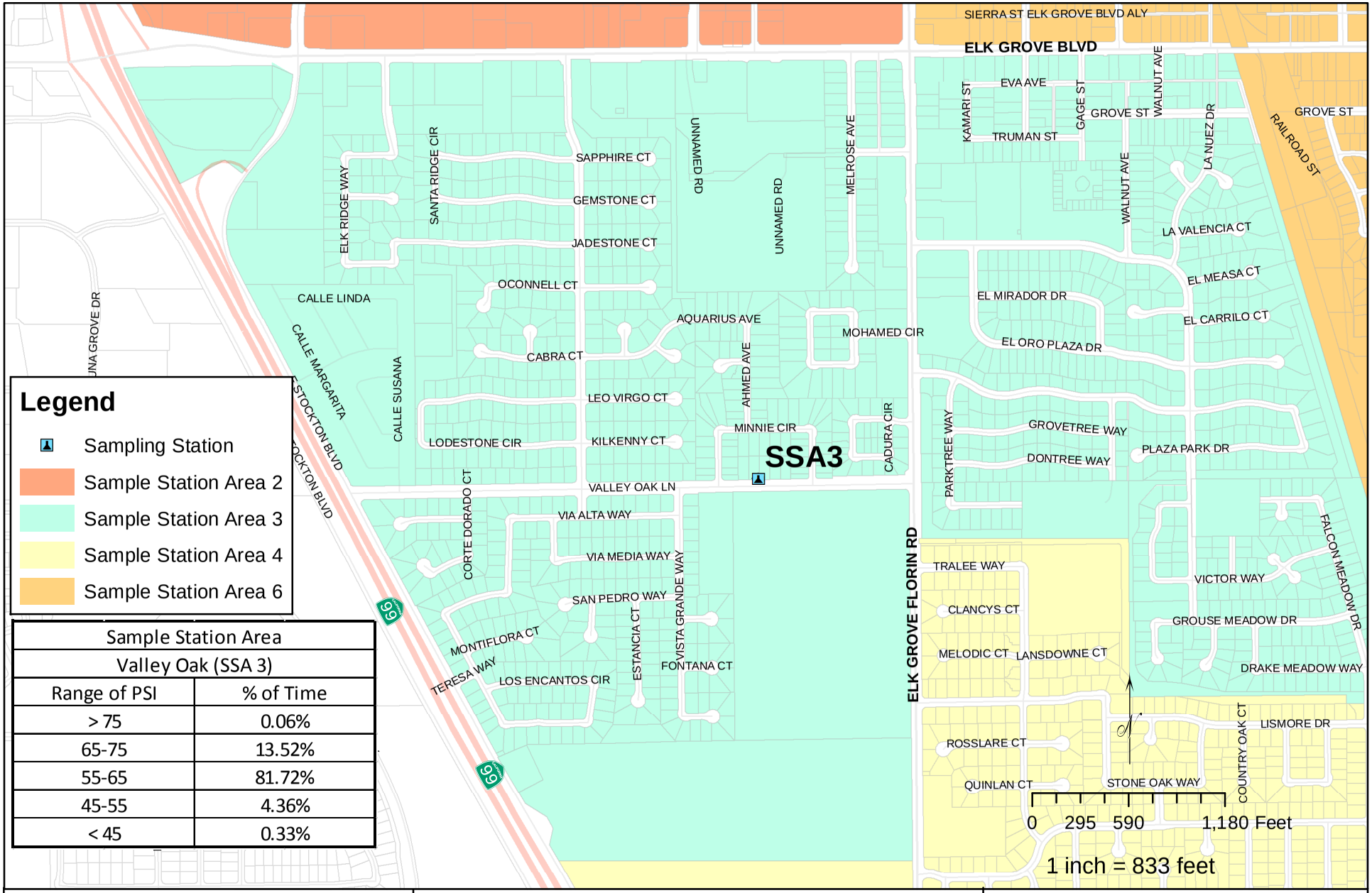
Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402

Source: EGWD GIS database

Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Valley Oak (SSA 3)	
Range of PSI	% of Time
> 75	0.06%
65-75	13.52%
55-65	81.72%
45-55	4.36%
< 45	0.33%

Sample Station #3

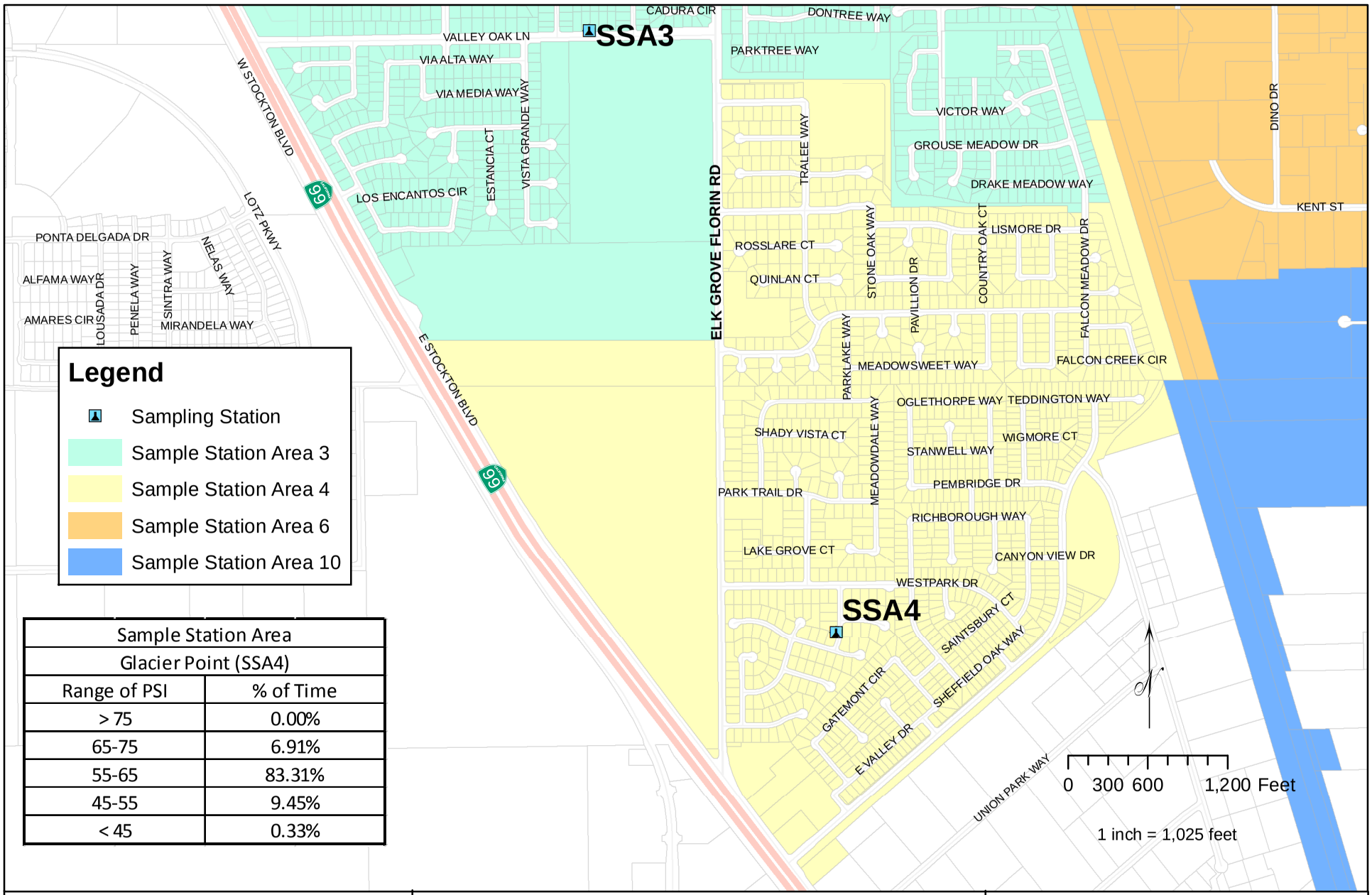
Note: Sample Station takes a reading every 5 minutes.

April 2016

Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402
Source: EGWD GIS database
Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Glacier Point (SSA4)	
Range of PSI	% of Time
> 75	0.00%
65-75	6.91%
55-65	83.31%
45-55	9.45%
< 45	0.33%

Sample Station #4

Note: Sample Station takes a reading every 5 minutes.

April 2016

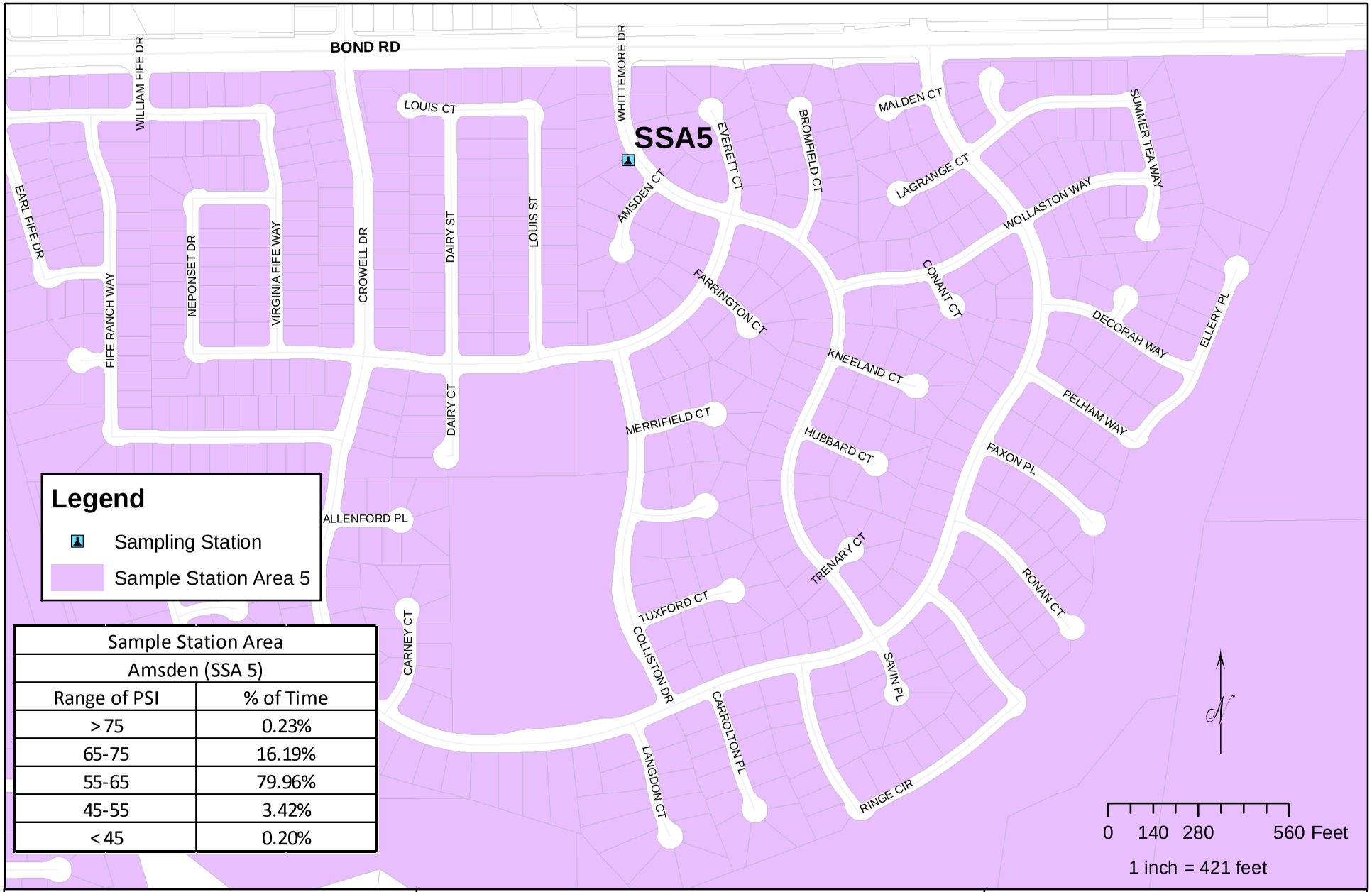
Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402

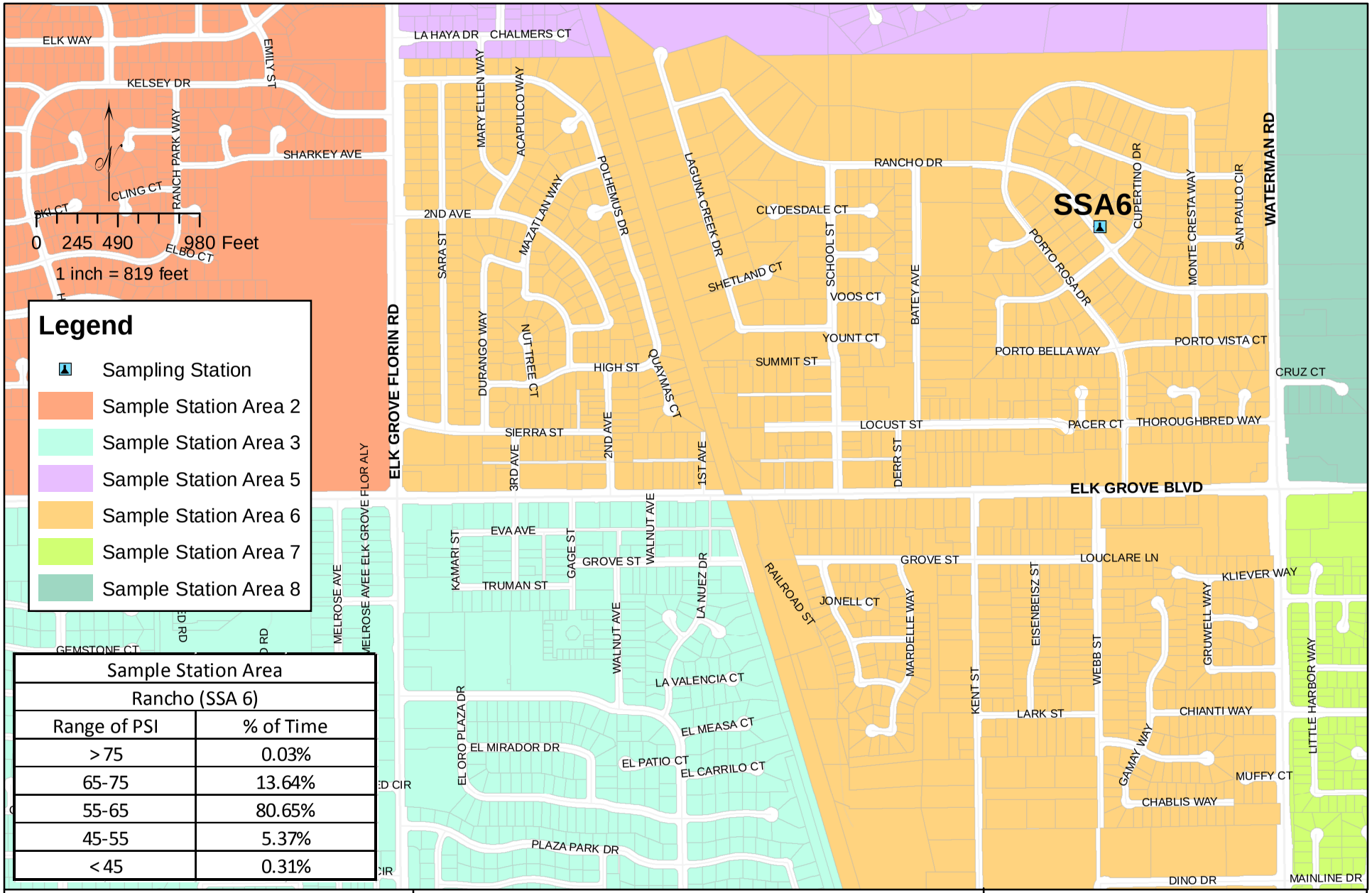
Source: EGWD GIS database

Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Amsden (SSA 5)	
Range of PSI	% of Time
> 75	0.23%
65-75	16.19%
55-65	79.96%
45-55	3.42%
< 45	0.20%

Sample Station #5	Elk Grove Water District	Projected Coordinate System: NAD 83 State Plane CA II FIPS 0402
Notes: Sample Station takes a reading every 5 minutes.	System Pressure Monitoring	Source: EGWD GIS database
April 2016		Created by: Travis Franklin May 5, 2016



Sample Station Area	
Rancho (SSA 6)	
Range of PSI	% of Time
> 75	0.03%
65-75	13.64%
55-65	80.65%
45-55	5.37%
< 45	0.31%

Sample Station #6

Note: Sample Station takes a reading every 5 minutes.

April 2016

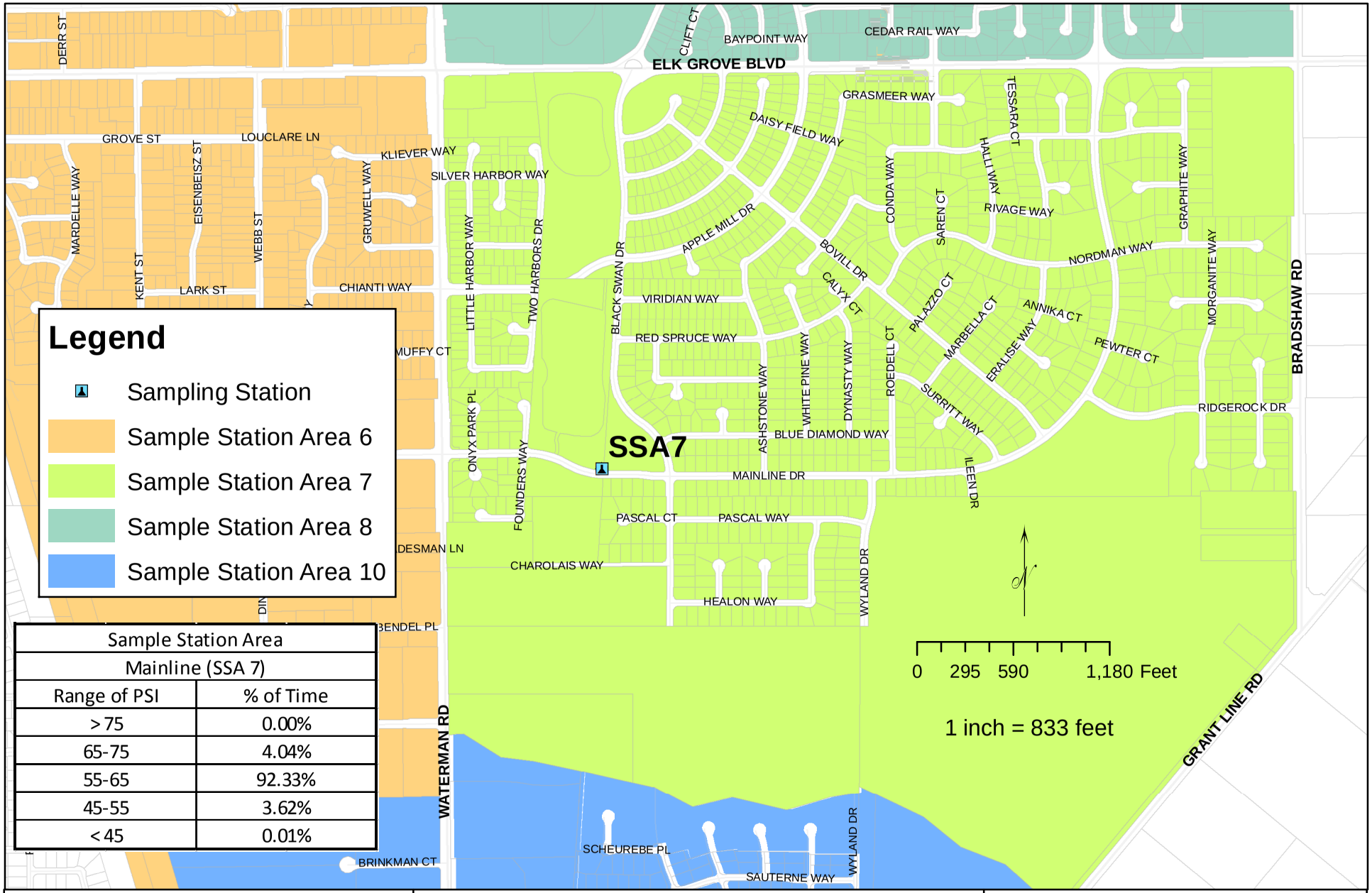
Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402

Source: EGWD GIS database

Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Mainline (SSA 7)	
Range of PSI	% of Time
> 75	0.00%
65-75	4.04%
55-65	92.33%
45-55	3.62%
< 45	0.01%

Sample Station #7

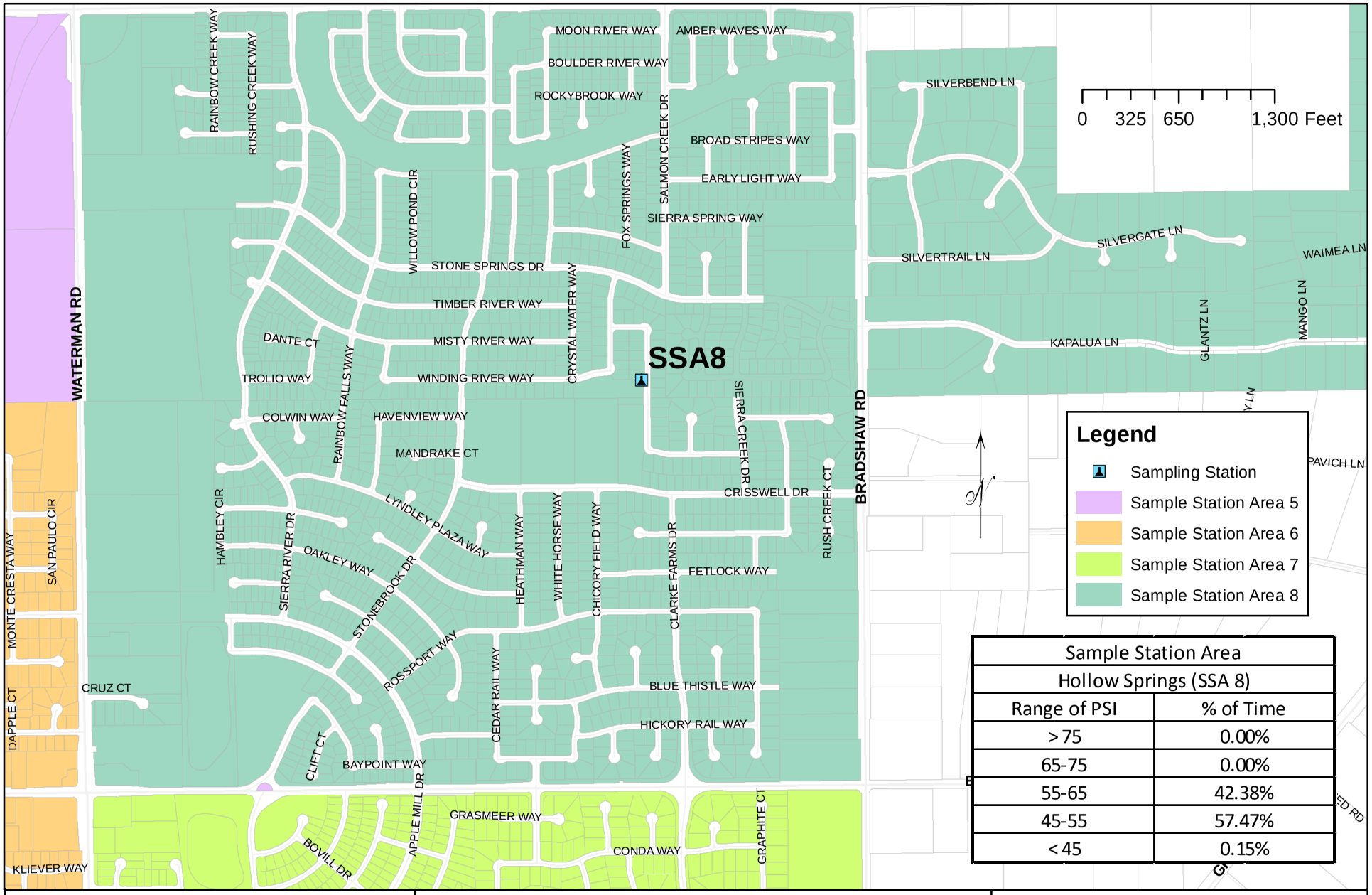
Note: Sample Station takes a reading every 5 minutes.

April 2016

Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402
Source: EGWD GIS database
Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Hollow Springs (SSA 8)	
Range of PSI	% of Time
> 75	0.00%
65-75	0.00%
55-65	42.38%
45-55	57.47%
< 45	0.15%

Sample Station #8

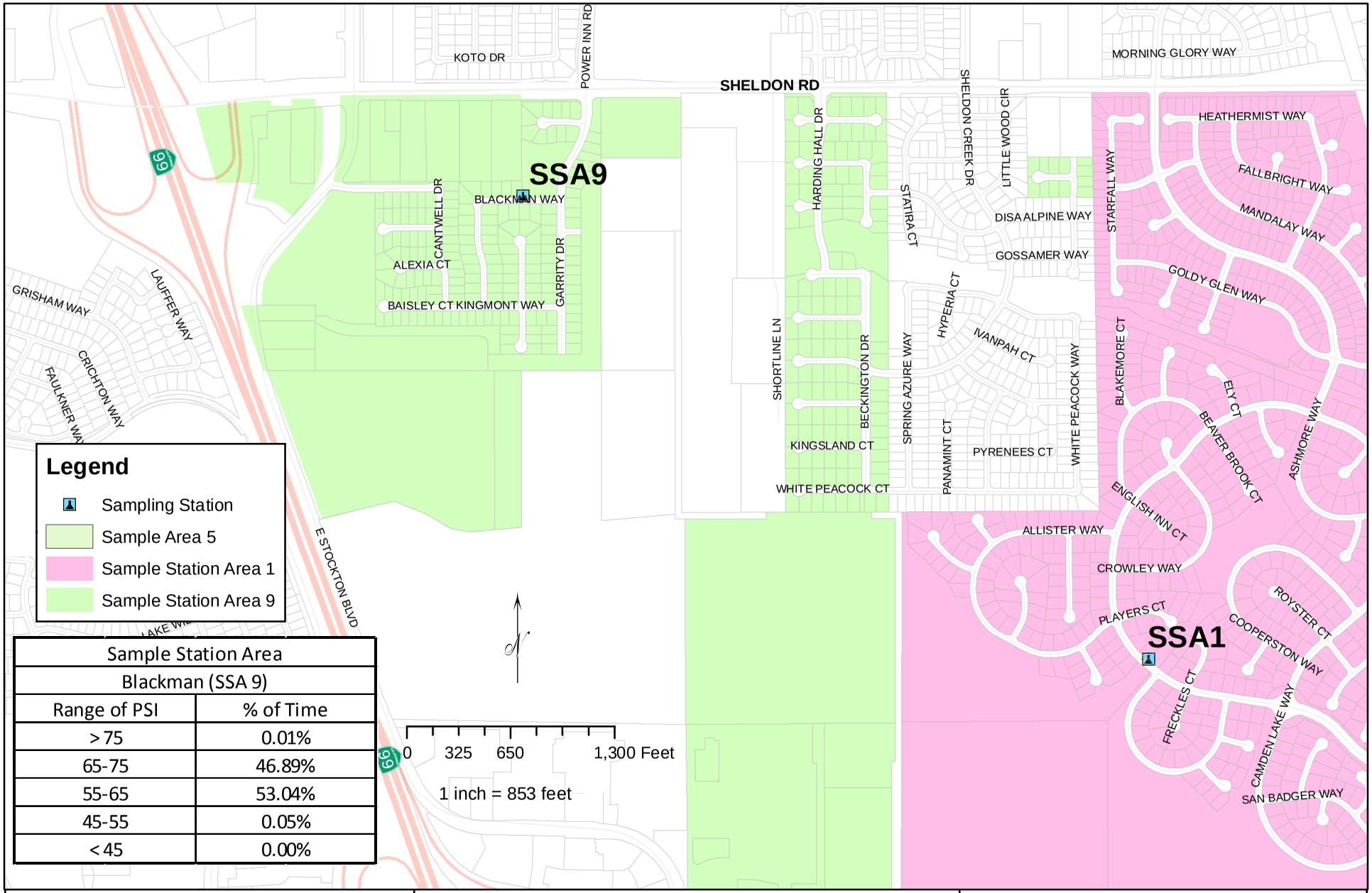
Note: Sample Station takes a reading every 5 minutes.

April 2016

Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402
Source: EGWD GIS database
Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Blackman (SSA 9)	
Range of PSI	% of Time
> 75	0.01%
65-75	46.89%
55-65	53.04%
45-55	0.05%
< 45	0.00%

Sample Station #9

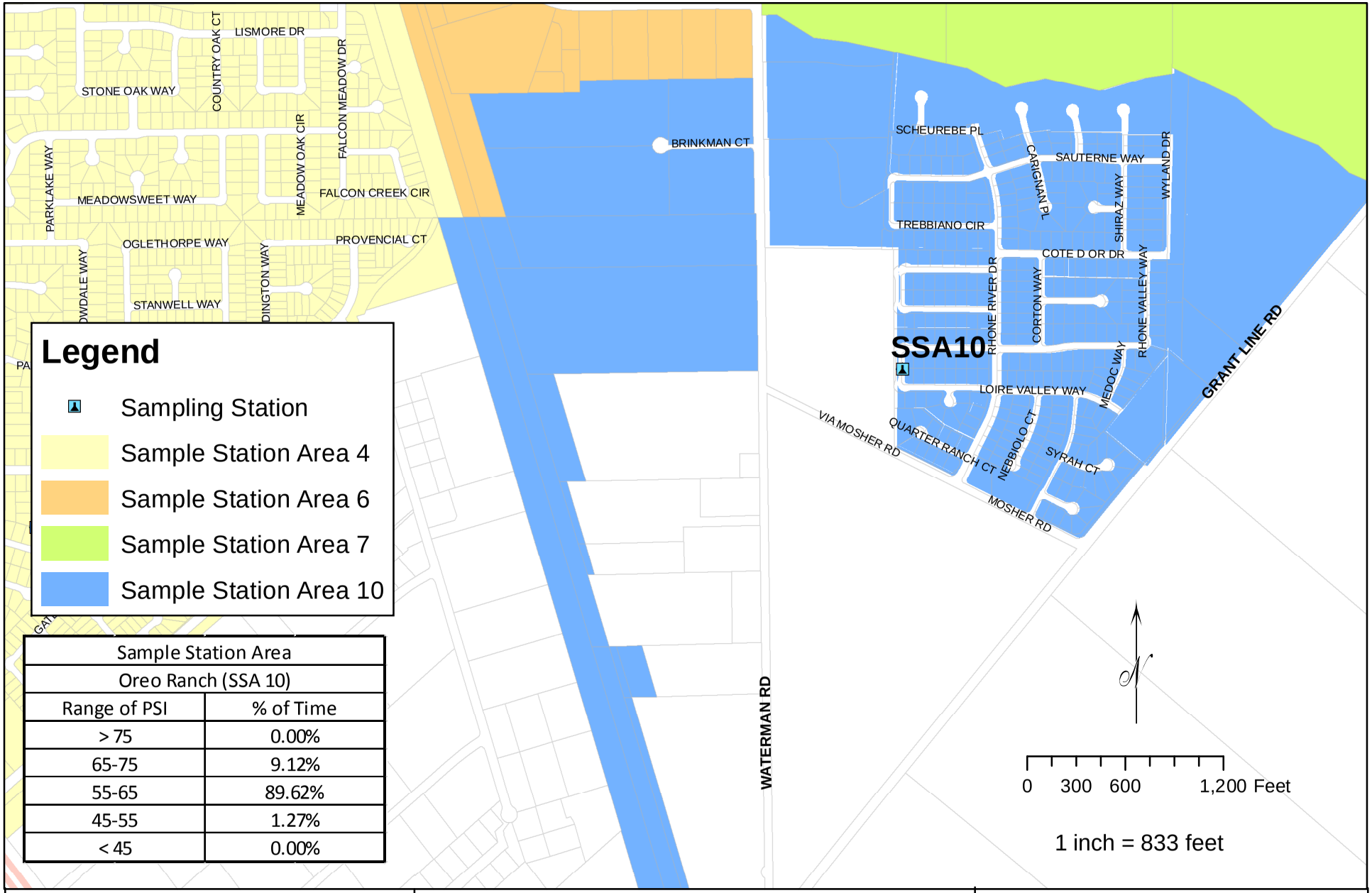
Note: Sample Station takes a reading every 5 minutes.

April 2016

Elk Grove Water District

System Pressure Monitoring

Projected coordinate system:
NAD 83 State Plane CA II FIPS 0402
Source: EGWD GIS database
Created by: Travis Franklin
May 5, 2016



Sample Station Area	
Oreo Ranch (SSA 10)	
Range of PSI	% of Time
> 75	0.00%
65-75	9.12%
55-65	89.62%
45-55	1.27%
< 45	0.00%

Sample Station #10

Note: Sample Station takes a reading every 5 minutes.

April 2016

Elk Grove Water District

System Pressure Monitoring

Projected Coordinate System:
NAD 83 State Plane CA II FIPS 0402

Source: EGWD GIS database

Created by: Travis Franklin

May 5, 2016

May 25, 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 April 27, 2016, the notable General Manager's activities included the following:

Florin Resource Conservation District

- Coordinate the FRCD's efforts to sponsor and participate with the Eco:Landscape workshop at the City of Elk Grove held on April 30, 2016.
- Expended significant efforts to explore the possibility of the FRCD in becoming a groundwater sustainability agency (GSA) for the FRCD jurisdictional area. Some of these efforts included:
    - Attending various sessions at the Association of California Water Agencies (ACWA) conference in Monterey to learn about GSA formation and the preparation of groundwater sustainability plans.
    - Attended the Sacramento Central Groundwater Authority (SCGA) Board meeting on May 11.
    - Attended the SCGA Subcommittee meeting on May 16
- Participated in a Statewide discussion, which included 13 resource conservation districts (RCD's) to discuss issues involving RCD's desiring to become GSA's.
- Prepared the May, 2016 Florin Resource Conservation Activities Staff Report.

Elk Grove Water District

- Met with CPS Consultants to complete the new employee classification study for the proposed Program Manager position.
- Met with the City of Elk Grove Public Works Director to discuss various issues between the City and the EGWD.
- Attended the ACWA Conference in Monterey to attend various water related sessions, such as those related to Statewide water issues and AB 52.
- Continued efforts to negotiate and complete the purchase of a property from the Wilton Rancheria Tribe.
- Worked with staff to develop the 2015 Consumer Confidence Report.
- Assisted Director Nelson in representing the FRCD/EGWD at the SCGA Board and Subcommittee meetings on May 11 and May 16, respectively.
- Initiated outside services to continue and enhance the EGWD Safety Program and conduct safety monitoring and training for the District.
- Conducted two private meetings with Board Members.
- Conferenced with the Finance Manager and the EGWD's actuary regarding Other Post-Employment Benefits liability and our budget allocation in FY 2016-17.

- Advanced efforts to prepare the FY 2016-17 EGWD Operating and Capital Improvement Program (CIP) budgets.
- Continued efforts to maintain certain activities, previously performed by the Management Analyst, such as the water conservation program and water waste investigations.
- Coordinated various efforts to mitigate problems arising from the Elk Grove power outage on May 17.

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, P.E.
GENERAL MANAGER

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Bruce M. Kamilos, Assistant General Manager

SUBJECT: **DRAFT 2015 URBAN WATER MANAGEMENT PLAN**

RECOMMENDATION

This item is presented for information only. There is no action requested of the Florin Resource Conservation District Board of Directors at this time.

Summary

The Elk Grove Water District (EGWD) contracted with Tully & Young to prepare the 2015 Urban Water Management Plan (UWMP). Tully & Young has completed a draft of the UWMP which is attached for your review. The following are the major findings and conclusions of the UWMP:

- EGWD's water supplies are sufficient to meet forecasted water demand through 2045.
- The UWMP 2020 water consumption target for EGWD's customer base will likely be achieved to comply with state-mandated conservation requirements.

This draft report is submitted to the Board to request your review and comments, and no formal action is requested of the Board at this time. It is anticipated that a final report will be presented to the Board on June 22 for your consideration and approval.

DISCUSSION

Background

Every five years, water agencies are required by the Urban Water Management Planning Act to prepare an Urban Water Management Plan (UWMP). In 2011, the Elk Grove Water District completed its most recent UWMP, entitled the Elk Grove Water District 2010 Urban Water Management Plan. By July 1, 2016, the EGWD must once again submit a new UWMP to the State.

The 2015 Urban Water Management Plans require urban water suppliers to report on their water supply's capacity to meet demand projected through year 2045. The UWMP is more that a "check-the-box" exercise. The UWMP analyzes demand forecasts with supply reliability and the results of the analysis can help with water asset and infrastructure planning. The UWMP also updates the urban water supplier's progress toward achieving state-mandated 2020 water conservation targets.

Present Situation

On January 12, 2016, the EGWD contracted with Tully & Young to update the UWMP. Tully and Young has now prepared the draft report and it is presented to the Board for your review and comments.

The major findings and conclusions of the 2015 UWMP are:

- EGWD's water supplies are sufficient to meet forecasted water demand through 2045. (2045 demand is only 5% greater than current demand, 7,800 acre-feet/year vs. 8,200 acre-feet/year)
- The state-mandated 2020 water consumption target for EGWD's customer base will likely be achieved.

State law requires that urban water suppliers meet 20% conservation targets from baseline data established in 2010, and then updated in 2015.

The 2010 UWMP established the following water consumption targets for EGWD. (Consumption is measured in GPCD; i.e., gallons per capita day).

- Baseline = 253
- 2015 Interim GPCD Target = 228
- 2020 GPCD Target = 202

The Department of Water Resources (DWR) requires that the 2015 UWMP refine conservation consumption targets using now available 2010 Census data. The revised consumption targets are:

- Baseline = 239
- 2015 Interim GPCD Target = 215
- 2020 GPCD Target = 191

Actual 2015 consumption was 111 GPCD. However, this low value reflected extraordinary conservation achieved by EGWD customers due to the drought in 2014 and 2015. Actual consumption for prior years is given for purpose of comparison.

- 2011 GPCD = 166
- 2012 GPCD = 177
- 2013 GPCD = 170
- 2014 GPCD = 136

The UWMP gives EGWD confidence that it is meeting its state-mandated conservation objectives. Furthermore, the UWMP supports EGWD's work to maintain and improve its water supply assets through its ongoing capital improvement program.

Upon receiving comments from the Board, staff will work with Tully & Young to complete the Final 2015 Urban Water Management Plan. It is anticipated that this final report will be presented to the Board for its consideration and approval, subject to holding a public hearing on the matter, at its regular Board meeting on June 22, 2016.

STRATEGIC PLAN CONFORMITY

The FRCD/EGWD Strategic Plan identifies that UWMPs must be completed in order to be eligible for DWR grants. Updating the UWMP conforms to the strategic plan.

FINANCIAL SUMMARY

There is no financial impact associated with this item.

Respectfully Submitted,

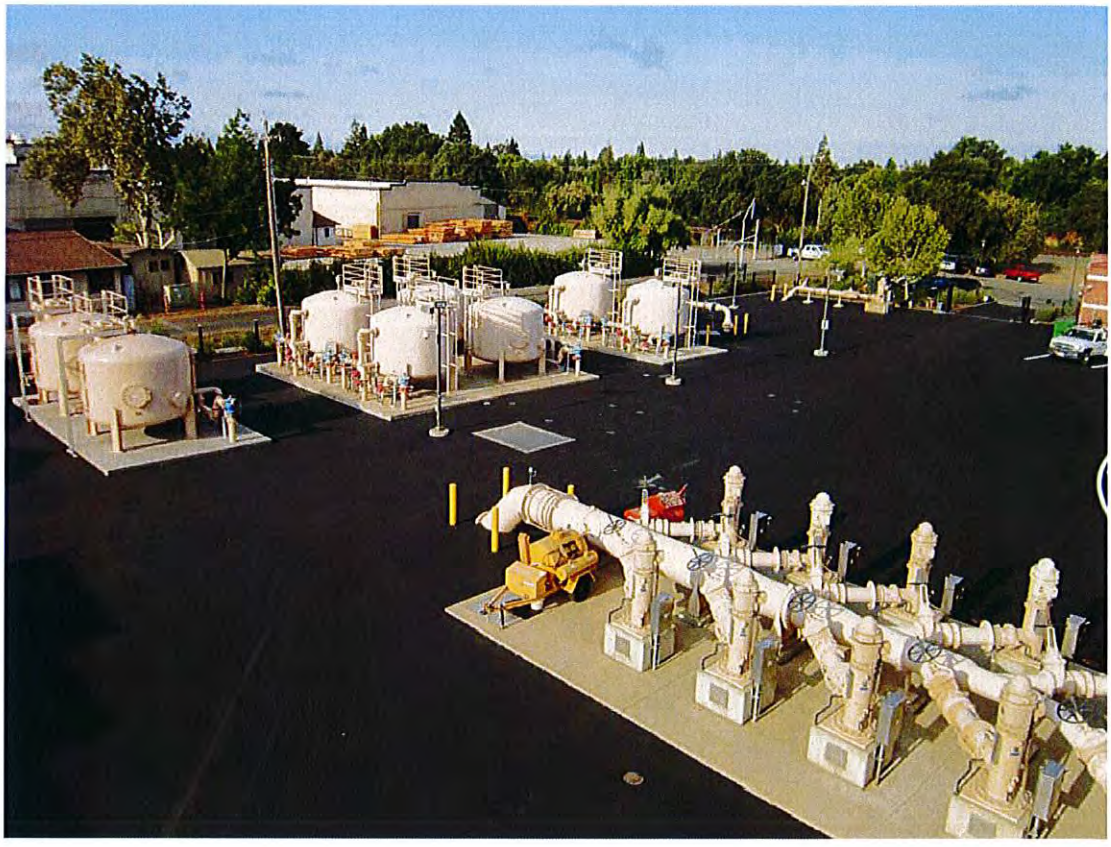
B. M Kamilos

BRUCE M. KAMILOS
ASSISTANT GENERAL MANAGER

Attachment

Elk Grove Water District 2015 Urban Water Management Plan

Administrative Draft
May 16, 2016



[PLACEHOLDER PAGE FOR FLY SHEET AND ENGINEER'S STAMP]

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CHAPTER 1. INTRODUCTION

The Elk Grove Water District (District) has been a water purveyor in the southern part of Sacramento County for over 115 years, and previously went by the names Elk Grove Water Service and Elk Grove Water Works. The District is a department of the Florin Resource Conservation District (FRCD), which purchased the water system in 1999.

The District services its customers in two service areas with Service Area 1 being served by pumped groundwater and Service Area 2 served by treated water purchased from the Sacramento County Water Agency (SCWA). SCWA delivers to the District both surface water and groundwater that is derived from its conjunctive use operations. The District service area covers approximately 13 square miles and is bounded by Sheldon Road to the north, Highway 99 to the west, Grant Line Road to the east, and the Union Industrial Park to the south.

Serving a population of over 42,000, the District has a broad range of responsibilities, including long-term water reliability planning, management of current groundwater assets, and distribution of potable water. The District's services are coordinated and managed within FRCD.

The District, originally created in 1893 to provide local water services and fire protection water resources, has continued to be a predominant water purveyor within the City of Elk Grove. FRCD was formed in 1953 and purchased Elk Grove Water works (the predecessor to the District) in 1999 to serve urban populations with water.

The District has prepared this 2015 Urban Water Management Plan (2015 UWMP) to comply with the Urban Water Management Planning Act (UWMPA) requirements for urban water suppliers.

This 2015 UWMP addresses the District's water management planning efforts to assure adequate water supplies to meet forecast demands over the next 25 years. As required

Note to DWR

The Elk Grove Water District has written this UWMP primarily as a water resources planning tool and secondarily to satisfy the requirements of the UWMPA.

The body of the document provides narratives and discusses data that DWR requests in its 2015 UWMP Guidebook, including changes to the California Water Code since 2010.

To facilitate review by DWR for compliance with the UWMPA, data from the body of the document has been transferred into DWR Tables consistent with the organization of the tables in Section E of the 2015 UWMP Guidebook Appendices. These tables are in **Appendix A-1**.

Also, this UWMP has been reviewed for adequacy according to the UWMP Checklist as contained in Section F in the 2015 UWMP Guidebook. A completed checklist is included in **Appendix A-2**.

by the UWMPA, the District's 2015 UWMP specifically assesses the availability of its supplies to meet forecast demands during average, single-dry and multiple dry years through 2045. Verification that future demands will not exceed supplies and assuring the availability of supplies in dry-year conditions are critical outcomes of this 2015 UWMP.

The 2015 UWMP is an update to the District's 2010 UWMP and presents new data and analysis as required by the California Department of Water Resources (DWR) and the California Water Code (CWC) since 2010. It is also a comprehensive water planning document which describes existing and future supply reliability, forecasts future demands, presents demand management progress, and identifies local and regional cooperative efforts to meet projected water use.

The current four-year drought has emphasized the importance of planning ahead to meet water demands with potentially at-risk water supplies. Such forward planning is an important outcome of the 2015 UWMP, which also addresses the evolving impact of drought on the District's water supply and operations.

1.1 Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMPA) requires every urban water supplier to prepare an urban water management plan pursuant to CWC Section 10610 et seq.[1] Because the District is an urban water supplier, it is preparing its 2015 UWMP consistent with the UWMPA. The 2015 UWMP provides a framework for water planning to minimize the negative effects of potential water shortages, and provides useful information to the public about the District and its water management programs.

Specifically, the 2015 UWMP describes and evaluates the reliability of the District's existing and planned water supplies to meet short-term and long-term customer water demands; especially the availability and sufficiency of surface and recycled water assets, and the vulnerability of these supplies to seasonal and climactic conditions.

The 2015 UWMP also revisits baseline per-capita water use data and target conservation values, first developed and presented in the 2010 UWMP as required by CWC §10608 et seq., and assesses compliance with those targets. This 2015 UMWP also includes narratives describing water demand management measures,[2] its long-term plan for efficient water use, and estimated future water savings based on water use projections, where available. Also included are discussions regarding distribution system water loss, information on the potential use of recycled water as a water source for the District, and

[1] An "urban water supplier" is 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 § 10617.
[2] As detailed in the CWC § 10631 (f)(1) and (2)

the District's comprehensive water shortage contingency analysis, which details stages of action to be undertaken by the District in response to water supply shortages.[3]

In short, this 2015 UMWP allows the District to assess and plan for on-going effective management of its water supplies to meet its evolving water demands.

1.2 Public Participation and Agency Coordination

The UWMPA requires a water purveyor to coordinate the preparation of its UWMP with other appropriate agencies in and around its service area. This includes other water suppliers that share a common source, water management agencies, and relevant public agencies. The District has prepared this 2015 UWMP in coordination with water utilities supplying wholesale water to the District, and has appropriately notified and coordinated with other appropriate local government agencies as listed in **Table 1-1**. Copies of correspondence are included in **Appendix B-3**.

Table 1-1 – Public and Agency Coordination

Coordinating Agencies	Coordinate regarding Demands	Sent Copy of Draft UWMP	Sent 60-Day Notice	Notice of Public Hearing
Cities, Counties, Retail Customers and Interested Parties				
Sacramento County			√	√
Sacramento County Water Agency	√	√	√	√
City of Elk Grove (Planning Dept.)	√	√	√	√
City of Elk Grove (Public Works Dept.)	√	√	√	√
Cosumnes Community Service District			√	√
Elk Grove Unified School District			√	√
Sacramento County Regional Sanitation District			√	√
General Public				√
Shared Groundwater Resource Interests				
Cal-Am Water Company			√	√
Sloughhouse Resource Conservation District			√	√
Golden State Water Company			√	√
Rancho Murrieta Community Service District			√	√
Omochumne Hartnell Irrigation District			√	√

1.2.1 Sacramento County Water Agency

The District's service area is completely encompassed by the Sacramento County Water Agency (SCWA). Due to its contractual and geographical relationship, SCWA plays a significant role in the District's water management. SCWA currently provides water to a portion of the District's service area; i.e., Service Area 2, through a mix of surface water and groundwater deliveries.

[3] A recent amendment to CWC § 10632 includes defining water features that are artificially supplied with water as part of this contingency analysis.

1.2.2 Central Sacramento County Groundwater Management Plan

SCWA was also a participant in the development of the Central Sacramento County Groundwater Management Plan (CSCGMP). In 2006, the CSCGMP was created in an effort to promote regional water supply planning and identify the groundwater basin's safe yield. As described in Section 3.2, the plan focused on the Central section of the Sacramento groundwater basin to ensure that water supplies were successfully managed and available into the future. The District extracts groundwater from the Central Basin for use by its customers.

1.2.3 Water Forum

Community leaders, along with water managers from Sacramento, Placer and El Dorado counties negotiated the Water Forum Agreement (WFA), which is a comprehensive package of linked actions that will achieve two coequal objectives: (1) Provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030; and (2) Preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. Pursuant to the Water Forum provisions, the District has also developed best management practices that are consistent with the Demand Management Measures in the 2015 UWMPA.

1.2.4 Regional Water Authority

The Regional Water Authority (RWA) is a joint powers authority that serves and represents the interests of 22 water providers in the greater Sacramento, Placer, El Dorado and Yolo County regions. The Authority's primary mission is to help its members protect and enhance the reliability, availability, affordability and quality of water resources. RWA has launched significant programs and services on a regional scale, including: (1) A water efficiency program designed to help local purveyors implement best management practices on a regional basis; (2) implementation of the American River Basin Regional Conjunctive Use Program to build and upgrade water facilities throughout the region to better manage surface and groundwater resources; and (3) development of an Integrated Regional Water Management Planning Program to continually identify the regional projects and partnerships that will help the region best meet its future water needs.

1.2.5 Additional Entities

The District has shared water interests with a several other entities due to its groundwater basin and conveyance facilities. These neighboring entities include Sacramento County, City of Elk Grove, Cosumnes Community Service District, Elk Grove Unified School District, and Sacramento County Regional Sanitation District. All of these entities, including the general public and adjacent water suppliers, were sent 60 day notices and

encouraged to attend the public hearing prior to the adoption of the 2015 UWMP. A copy of the letter is provided in **Appendix B-3**.

1.3 Plan Adoption

Prior to adoption, the District held a public hearing regarding its 2015 UWMP on [INSERT DATE]. Before the hearing, the District made a draft of the 2015 UWMP available for public inspection at the District's office and on the District's website. Pursuant to CWC Section 10642, general notice of the public hearing was provided through publication of the hearing date and time,[4] and posting of the hearing at the District's office.

As part of its public hearing, the District received community input regarding its implementation plan for complying with the water conservation requirements contained in CWC § 10608.20 et seq., including the implementation plan's economic impacts.[5] Also, at the public hearing, the District presented the method for determining its urban water use target pursuant to CWC § 10608.20(b).

The District adopted this 2015 UWMP on [INSERT DATE][6] A copy of the adopted 2015 UWMP will be provided to the County and the California State Library, and posted onto the District's website.

1.3.1 Additional Compliance

The District plans to submit all required documentation related to the UWMPA soon after adoption. These include the required DWR UWMP Tables as **Appendix A-1**, the DWR Checklist as **Appendix A-2**, the SB 7-7X compliance forms as **Appendix A-3**, and the AWWA Water Audit worksheet as **Appendix A-4**.

1.4 Previous Reports

The 2015 UWMP has been prepared using a number of related planning documents and previous reports, including, but not limited to:

- Elk Grove Water District 2010 UWMP;
- Central Sacramento County Groundwater Management Plan;
- City of Elk Grove's General Plan

[4] See **Appendix B-2** for copies of the published notices.
[5] CWC § 10608.26
[6] The resolution adopting the 2015 UWMP is in **Appendix B-1**.

1.5 Plan Organization

This UWMP is organized as follows:

- Chapter 2 provides a description of the District's (a) service area, including climate; demographic and population characteristics; and current and projected land-use changes integral to the demand forecasts, and (b) water system, including the potable and non-potable delivery systems.
- Chapter 3 describes the District's current and future water supplies and the reliability of the supplies.
- Chapter 4 details the demands on the District's system, including the past and future estimated demands.
- Chapter 5 provides information regarding the District's demand management measures.
- Chapter 6 discusses the District's water shortage contingency plan.
- Chapter 7 compares the District's supplies and demands in normal and dry years.

The appendices include background information, details, and necessary supporting documents.

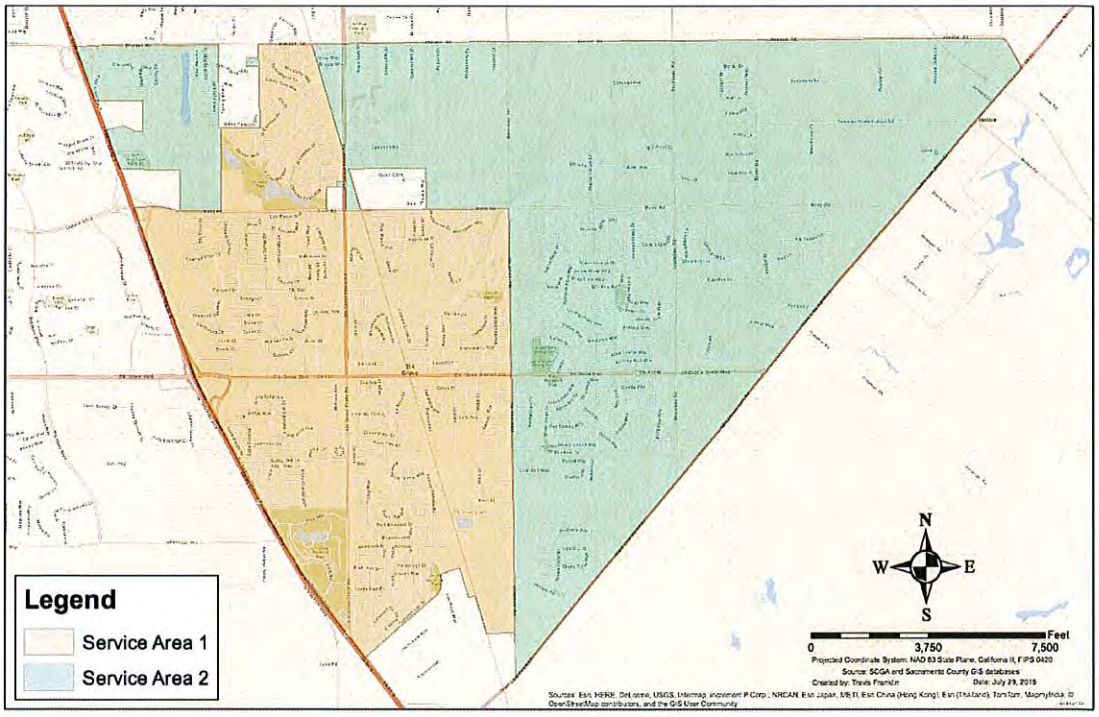
CHAPTER 2. WATER SYSTEM INFORMATION

2.1 District Service Area General Description

The Elk Grove Water District (District) is a public water agency that provides potable water directly to retail customers throughout the approximately 13 square mile District boundary. The District and surrounding area overlay the Sacramento Area Groundwater Basin, and specifically rests atop the Central Basin. The District is bounded by Sheldon Road to the north, Highway 99 to the west, Grant Line Road to the east, and the Union Industrial Park to the south. The District operates as a department within the Florin Resource Conservation District (FRCD) and is surrounded by the SCWA on all sides.

The District is separated into two service areas: Service Area 1 and Service Area 2. Service Area 1 is supplied by groundwater wells and treated by the District's water treatment plant. Service Area 2 is supplied by surface water and groundwater purchased from SCWA. **Figure 2-1** represents the District's service areas.

Figure 2-1 – Elk Grove Water District Service Area



2.1.1 Climate

Elk Grove Water District's climate is typical of California's Central Valley with hot, dry summers, and cool, wet winters. Climate data for the District was obtained from local reporting stations with the same microclimate characteristics as the District's service area.

Temperature data was obtained from the Western Regional Climate Center (WRCC) station at Sacramento Executive Airport, located about 17 miles northwest of the District's service area. The average annual temperature is about 61 degrees Fahrenheit. Typically, July and August are the hottest months of the year with an average daily temperature of about 75 degrees, though daytime high temperatures average close to 92 degrees. There are approximately 73 days a year when the high temperature exceeds 90 degrees. December and January are generally the coolest months of the year, with a mean annual temperature of about 46 degrees, and the average minimum dipping down to 38 degrees. Historically, there are about 18 days per year in which temperatures go below 32 degrees.

Precipitation data is also documented from the WRCC Sacramento Executive Airport station. For the period 1941-2015, average rainfall was measured at 17.21 inches. The wettest months are December, January and February, and the driest months are typically July and August.

Evapotranspiration (ETo) varies seasonally, and during dry years the significance of evapotranspiration is magnified because it continues to deplete surface and soil water supplies that are not being replenished by sufficient precipitation. The District monitors ETo closely. Standard monthly average ETo data was obtained from the California Irrigation Management Information System (CIMIS) station 131 located in Fair Oaks, California, which is about 20 miles northeast of the District's service area. Average annual ETo for the period 1998-2015 measured 50.56 inches.

Additional ETo data from California Model Water Efficient Landscape Ordinance (MWELO) is also reported in **Table 2.1**. Local agencies are to use the MWELO ETo values as the standard for approval of landscape plans associated with specific development projects. Since the City of Elk Grove (City) was not listed in the MWELO ETo Table, data from the nearby City of Sacramento was used.[7]

All evapotranspiration (ETo), rainfall, and temperature data is provided in **Table 2-1**.

2.1.2 Demographics and Population Characteristics

The population served by the Elk Grove Water District includes a mix of users and user classes, and follows the same demographic and population trends as the City. The District is comprised of single-family residential (84%), multi-family residential (2%), commercial (11.5%), with 2.5 percent of the area designated as industrial. The build out

[7] As outlined in the 2015 update to the MWELO § 492.4 (a) (1): For geographic areas not covered in MWELO Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

of the service area will consist of mainly residential, multi-family, and commercial land uses. The service area's currently averages about 3.7 persons per connection.

Table 2-1: Elk Grove Water District Climate Information[8]

Month	MWELO Appendix A ETo (inches)	CIMIS Standard Monthly Average ETo (inches)	Average Precipitation (inches)	Average Temperature (Fahrenheit)	Average Maximum Temperature (Fahrenheit)	Average Minimum Temperature (Fahrenheit)
January	1.00	1.12	3.56	45.7	53.5	37.8
February	1.80	1.70	3.07	50.4	59.9	41
March	3.20	3.29	2.44	53.9	64.6	43.1
April	4.70	4.49	1.17	58.6	71.4	45.9
May	6.40	6.36	0.5	65.3	79.9	50.7
June	7.70	7.40	0.18	71.3	87.2	55.4
July	8.40	7.95	0.03	75.5	92.7	58.2
August	7.20	7.05	0.06	74.6	91.5	57.8
September	5.40	5.17	0.25	71.8	87.7	55.8
October	3.70	3.37	0.93	63.9	77.7	50.2
November	1.70	1.63	2.04	53.1	63.7	42.6
December	0.90	1.05	3.02	46	53.8	38.2
Annual :	52.1	50.56	17.25	60.8	73.6	48.1

Historical and 2015 service area population estimates were generated using DWR's WUE data application. This application uses census data, service area boundaries, and person per connection data to calculate population estimates.[9]

Projected population and build-out estimates were derived using various SACOG reports and City General Plan data.[10] The historic and 2015 population as well as projected populations are presented in **Table 2-2**. The District service area is expected to reach build out by 2045, with most growth occurring prior to 2025, followed by a slow growth rate of less than 0.5 percent annually.

[8] From MWELO Appendix A data from Sacramento, CA. The ETo data taken from DWR CIMIS Data, Fair Oaks Station 131, 1998-2015. Precipitation and Temperature data from WRCC, Sacramento Executive Airport (047630) 1941-2015.

[9] Elk Grove Water District service area falls into Category 2 of DWR Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use

[10] City of Elk Grove General Plan with Amendments as of March 2015. Land Use Element, Housing Element, Economic Development Element data.

Table 2-2 – Historic and Projected Population

Year	Population	Year	Population
1995	22,234	2009	38,135
1996	22,776	2010	39,694
1997	23,319	2011	40,326
1998	23,863	2012	40,960
1999	24,408	2013	41,594
2000	24,954	2014	42,230
2001	26,444	2015	42,867
2002	27,940	2020 (est.)	44,902
2003	29,339	2025 (est.)	49,549
2004	30,831	2030 (est.)	50,530
2005	32,321	2035 (est.)	50,604
2006	33,817	2040 (est.)	50,678
2007	35,315	2045 (est.)	50,752
2008	36,567	Reached Build-out	

2.1.3 Current and Projected Land Use

As previously indicated, the District currently serves a variety of land use including residential, industrial, retail and commercial customers. The current and projected population shown in **Table 2-2** are a reflection of these land uses, with the increased population reflecting proposed development, as well as continued growth as represented by the City's General Plan and related documents. These anticipated land use changes are the foundation for forecasting the District's future water demands.

To develop a basis for the demands forecast in Chapter 4, the District sought and received input from the City's Planning Department regarding its desired representation of the City's General Plan within the District's service areas. Table 2-3 presents the anticipated growth by land-classification and 5-year horizon that the District will develop demand estimates to serve.

Table 2-3: Expected Growth within the District

Land-class		Future (Accounts or Acres)					
		2020	2025	2030	2035	2040	2045
Service Area 1	Residential						
	RD-5, new	16	36	44	44	44	44
	RD-20/Apt,	0	75	75	75	75	75
	Non-residential						
	Commercial Center	10	25	45	45	45	45
	Future Industrial	5	25	45	60	60	60
Service Area 2	Residential						
	Future No Yards	100	261	261	261	261	261
	Future RD-10	92	172	172	172	172	172
	Future RD-5	300	1000	1242	1242	1242	1242
	Future Large Lots	42	62	77	97	117	137
	Future Apartments	0	200	200	200	200	200
	Non-residential						
	New Commercial	10	20	27	27	27	27
	New Industrial	10	30	50	64	64	64
	Future Bus/Prof	2	2	2	2	2	2
	Future Schools	0	10	10	10	10	10
	Future Parks	10	21	21	21	21	21

2.2 Water Delivery System

The District has two service areas (see **Figure 2-1**). Service Area 1 utilizes water developed by the District and directly delivered to its customers. Service Area 2 obtains water from Sacramento County Water Agency (SCWA) that is either produced from SCWA's groundwater facilities or diverted and delivered through its surface water system. Both of these systems are described in greater detail in Chapter 3.

2.2.1 Potable Delivery System

Service Area 1 is supplied by several groundwater wells that deliver water to a potable groundwater treatment plant owned and operated by the District. The system includes the treatment plant, two storage tanks, the production wells serving the plant and various distribution system pipes and appurtenances. The water treatment plant, referred to as the Railroad Street Treatment and Storage Facility, has a maximum day capacity of 10.4 million gallons per day (MGD). The facility can pump up to 16,000 gallons per minute. Groundwater is delivered to the plant from the District's deep production wells, where it is treated before being delivered to customers.

Service Area 2 is provided treated and fluoridated water provided by SCWA owned and operated groundwater production wells that intertie into the District's Service Area 2

distribution system at multiple locations. In 2014 fluoride was at optimal levels in the SCWA distribution system. The optimal fluoride level and control range for the system is based on an annual average maximum daily air temperatures. In accordance with Title 22, Section 64433.2 of the State Board regulations, the optimal fluoride level is 0.8 mg/L and the fluoride control range from 0.7 mg/L - 1.3 mg/L.[11] The District is also responsible for the maintenance and operation of the transmission and distribution mains for Service Area 1 and the distribution mains for Service Area 2. There is a single water treatment plant within the Service Area 2 service boundary, however it is owned and operated by SCWA. This treatment plant is commonly referred to as the East Elk Grove Groundwater Treatment Plant.

2.2.2 Non-Potable and Recycled Water Systems

The District does not currently have any recycled water systems, nor does it receive recycled water from its SCWA contract.

[11] Elk Grove Water District 2014 Consumer Confidence Report

CHAPTER 3. WATER SUPPLY CHARACTERISTICS

3.1 Introduction

As discussed in Section 2.1, the District has limited options for water supplies given its boundaries and available resources. Although the Sacramento County Water Agency surrounds the District, it still has access to a large quantity of water through groundwater pumping. Through its groundwater pumping and a wholesale water contract with SCWA, the District meets its customer water needs.

3.2 Existing Water Supplies and Entitlements

The District has historically received its water supply through self-supplied groundwater and water purchased through the SCWA. The District relies solely on groundwater as the source of supply for Service Area 1, whereas Service Area 2 uses water supplied by SCWA (although this supply is also predominantly groundwater).

Groundwater is supplied to Service Area 1 by a series of three shallow wells and four deep wells, all located within the District's service area. Historically, the wells and underlying subbasin have not been categorized as an overdraft risk. However, new groundwater legislation – the Sustainable Groundwater Management Act (SGMA) – may impact the availability of groundwater to the District. Nevertheless, **Table 3-1** provides the historical supply produced by the Service Area 1 wells, accompanied by each wells maximum pumping capacity.

Table 3-1: Historical Groundwater Production By Well[12]

	Annual Production (acre-feet)									
Year	Well 14D	Well 4D	Well 11D	Well 1D	Well 3	Well 8	Well 12	Well 9	Well 13	Total
Capacity (GPM)	1630	1900	1850	1750	850	850		475	1000	
2010	1579	1079	730	0	133	246	37			3804
2011	1422	1367	848	718	42	182	37			4615
2012	896	1280	948	1007	194	706	396	155		5582
2013	804	1327	1185	249	594	337	0	698		5194
2014	271	1260	1375	90	268	418	out of service	437		4118
2015	313	1202	642	139	393	22		342	346	3398

Service Area 2, which is located within SCWA's Zone 40, has access to both SCWA's groundwater and surface water resources. But as a matter of practice, water served to customers in Service Area 2 is almost entirely derived from SCWA's production wells located within the service area.

[12] Based on recorded well production rate data

Service Area 2 is supplied water from the SCWA through a wholesale master water agreement with SCWA (see **Appendix C-1**). The original agreement was signed in 1995. In 2002, the parties "restated" the master water agreement in order to clarify the parties, terms and conditions. The Agreement provides that SCWA will provide a permanent supply of wholesale treated water to the District for use within the District's service area.[13] The contract has a 50 year term with an automatic renewal clause for another 50 years unless one party provides a 5 year notice of intent not to extend.[14] The agreement was developed to provide a way for new development in the District's service area and Florin Resource Conservation District's service area to access new water supplies being developed through the Zone 40 conjunctive use program.

In 2015, SCWA delivered 1,914 acre-feet of water to the District under this agreement.[15] Although SCWA has some surface water and recycled water assets, Service Area 2 is not currently supplied with recycled water and currently does not receive any significant amount of surface water. SCWA is developing substantial surface water supplies as part of the Freeport Regional Water Authority (FRWA), which may become available to Service Area 2 in the future. SCWA also delivers Aerojet remediated groundwater supplies derived from foreign sources of groundwater in the American River Watershed through the FRWA system.

Through the contract, the District agreed to purchase water from SCWA to serve its expanded retail area (Service Area 2). The development within the Service Area 2 is required to pay the Zone 40 Development Fee for new building permits, and a monthly user fee for Zone 40 capital projects, which support conjunctive use in the Central Basin. Importantly, the District does not have a water right other than the contract right to the water delivered through SCWA's system. Nevertheless, Zone 40's conjunctive use water supply is considered a permanent and reliable source based upon the language of the Agreement.[16]

3.2 Groundwater

The groundwater wells within the District's system extract water from aquifers between 200 and 1,000 feet below the ground elevation. The District holds groundwater

[13] First Amended and Restated Master Water Agreement Between Sacramento County Water Agency and Florin Resource Conservation District/Elk Grove Water Service, Successors-In-Interest to Elk Grove Water Works, June 28, 2002 at Article I and Article III (Hereafter "Agreement"). Elk Grove Water District is part of FRCD http://www.egws.org/index.html

[14] Agreement at Article VI.

[15] Based on water supply data from the District for 2015 delivery of water under SCWA contract.

[16] Agreement at Articles I and III.

appropriative water rights to all groundwater supplies derived from its wells that are delivered to its customers.[17]

The District is located in the Central Basin Area of the Sacramento County Groundwater Basin, as identified in the Central Sacramento County Groundwater Management Plan (CSCGMP). The Central Basin boundary was defined by CSCGMP and incorporated into the Sacramento County groundwater model used in the Water Forum process. The CSCGMP was formally adopted by the participating agencies in 2006. This document is attached in **Appendix C-2**. As stated in the CSCGMP, the Water Forum estimated the long-term average annual sustainable groundwater pumping yield from the entire Central Basin to be 273,000 acre-feet per year.

Numerous public and private water purveyors within Sacramento County pump groundwater through groundwater wells. This well pumping data is collected as part of the Water Forum Successor Effort's "Central Sacramento County Groundwater Forum," and is presented in the CSCGMP. This UWMP presents the expected groundwater pumping rates through 2030, if the groundwater extraction is not supplemented with additional surface water contracts. SCWA also completed a separate GMP under California Water Code Section 10750 for Zone 40[18] and there is a South Basin Sacramento County Groundwater Management Plan as well.[19] These two documents are informative to the CSCGMP analysis that constitutes the basis of the District's groundwater usage

3.2.1 Groundwater Characteristics and Conditions

Groundwater elevations are regularly monitored within the region by DWR. Some of these records date back to the early 1950s. Hydrographs in the vicinity of the District's service areas indicate that the groundwater elevations have declined from the early 1950s through the late 1970s. From approximately 1980, the groundwater elevations have remained relatively consistent, except for a temporary decline in the early to mid-1990s. The static depth to groundwater within the District currently ranges between 60 to 110 feet below the ground surface.

The aquifer system within the Central Basin consists of continental deposits of the late Tertiary to Quaternary age (DWR Bulletin 118). The major fresh water bearing geologic units are the Laguna Formation and the Mehrten Formation. The District has wells constructed in both of these formations. The Laguna Formation, which extends to a total depth of approximately 300 feet within the Central Basin, is used for private domestic wells and municipal water supply wells.

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[17] Groundwater derived from its wells and applied to "overlying lands" that are owned by the District are based on overlying groundwater rights.
[18] Developed in 2004
[19] Developed in 2011

In total the District has eight wells producing water for Service Area 1, though one is offline (see **Table 3-1**).

Combined with SCWA groundwater production, the District's customers have been served the total groundwater volumes shown in **Table 3-2**. It should be noted that the State's mandates reducing and restricting water use in light of the drought has impacted the volume of water used since 2013.

Future groundwater projections are estimated to mimic these recent values (absent the significant reductions in 2015) as explained in more detail in Chapter 4 (demands) and Chapter 7 (integration of supply and demand).

Table 3-2: Historical Groundwater Volume Pumped

Annual Production (acre-feet)			
Year	Self Produced	Purchased from SCWA	Total
2010	4,440	2,502	6,941
2011	4,615	2,885	7,499
2012	5,582	2,535	8,117
2013	5,194	2,718	7,912
2014	4,118	2,297	6,414
2015	3,398	1,914	5,311

3.2.2 Groundwater Management

To address the groundwater management of the District's current supplies, the analyses of both the Water Forum Agreement and the Central Basin Groundwater Management Plan must be assessed. In addition, the emerging rules associated with the Sustainable Groundwater Management Act – that will require formation of a Groundwater Sustainability Agency (GSA) and adoption of a Groundwater Sustainability Plan (GSP) – may impact the long-term management of the Central Basin. Nevertheless, because of the sustainable yield assessments and SCWA's and the District's conjunctive use operations functioning within those parameters, it is likely that groundwater cutbacks to the District will not be realized.

Central Sacramento County Groundwater Management Plan

As described above, the District overlies and extracts groundwater from the Central Basin from seven wells that range in total depth from 450 to 1,075 feet below ground surface. The public water systems and water service providers that extract water from the Central Basin besides the District include: the California American Water Company, City of Sacramento, SCWA, the Golden State Water Company, and numerous private

landowners that possess overlying groundwater rights linked to their property ownership. The Central Basin water providers and the groundwater basin boundaries are shown on **Figure 3-1** and **Figure 3-2**, respectively.

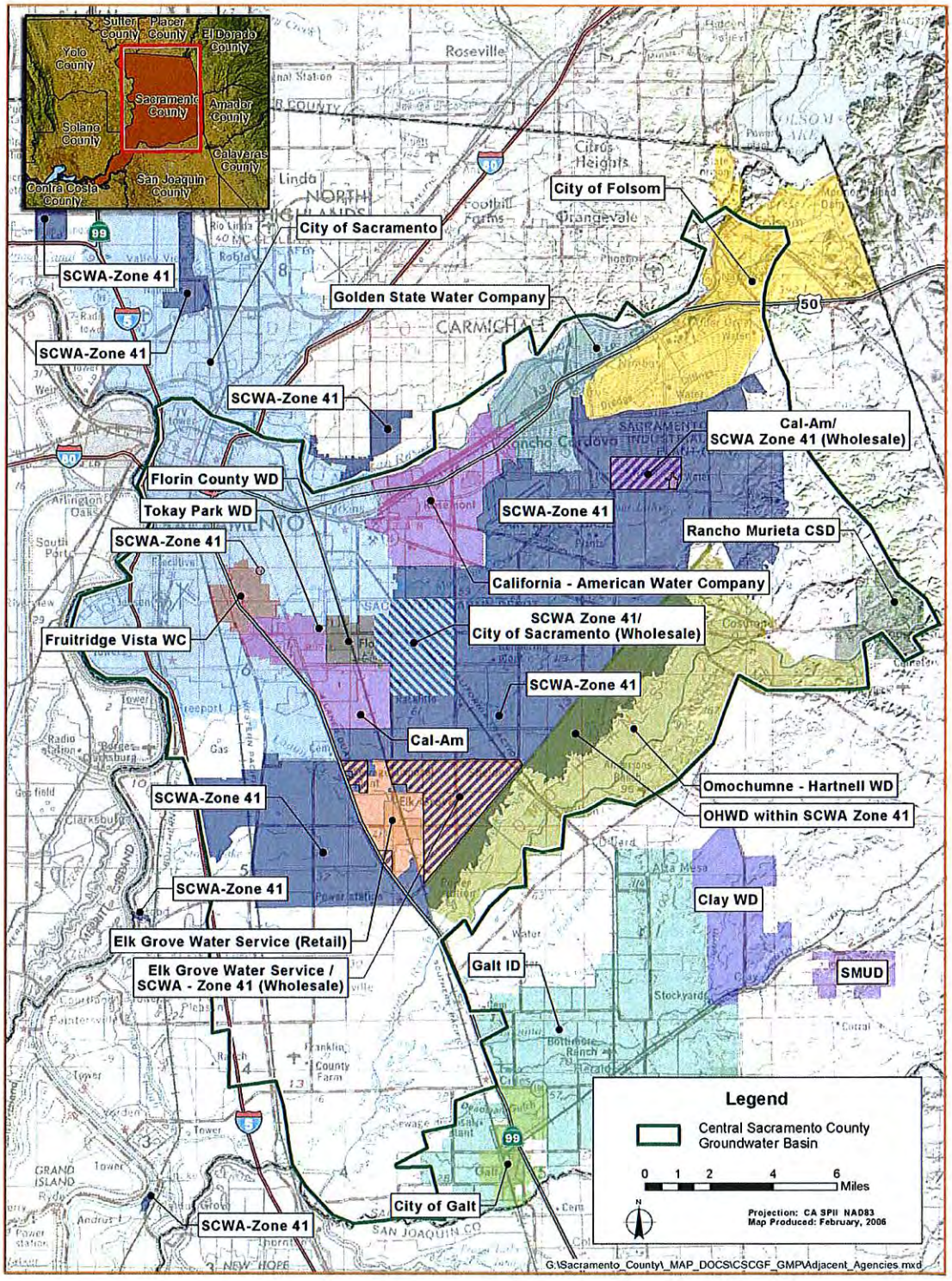
The Central Basin is not adjudicated or considered to be in a state of overdraft. Due to the active planning by water agencies and conjunctive use efforts, the basin will remain stable in the future. The CSCGMP provides for the long- term protection of groundwater quantity and quality within the region, and contains policies directing the development of surface water supplies, conservation, and other measures to service urban development as it occurs, thereby protecting the sustainable annual groundwater yield threshold of 273,000 AF.

Based upon the Central Basin's total projected water supplies for normal, single-dry, and multiple-dry years over a 20-year projection, as demonstrated in **Section 7**, the Central Basin will have sufficient water to meet estimated water demands for the build-out of the District's Service Area 1 and Service Area 2.

Sustainable Groundwater Management Act

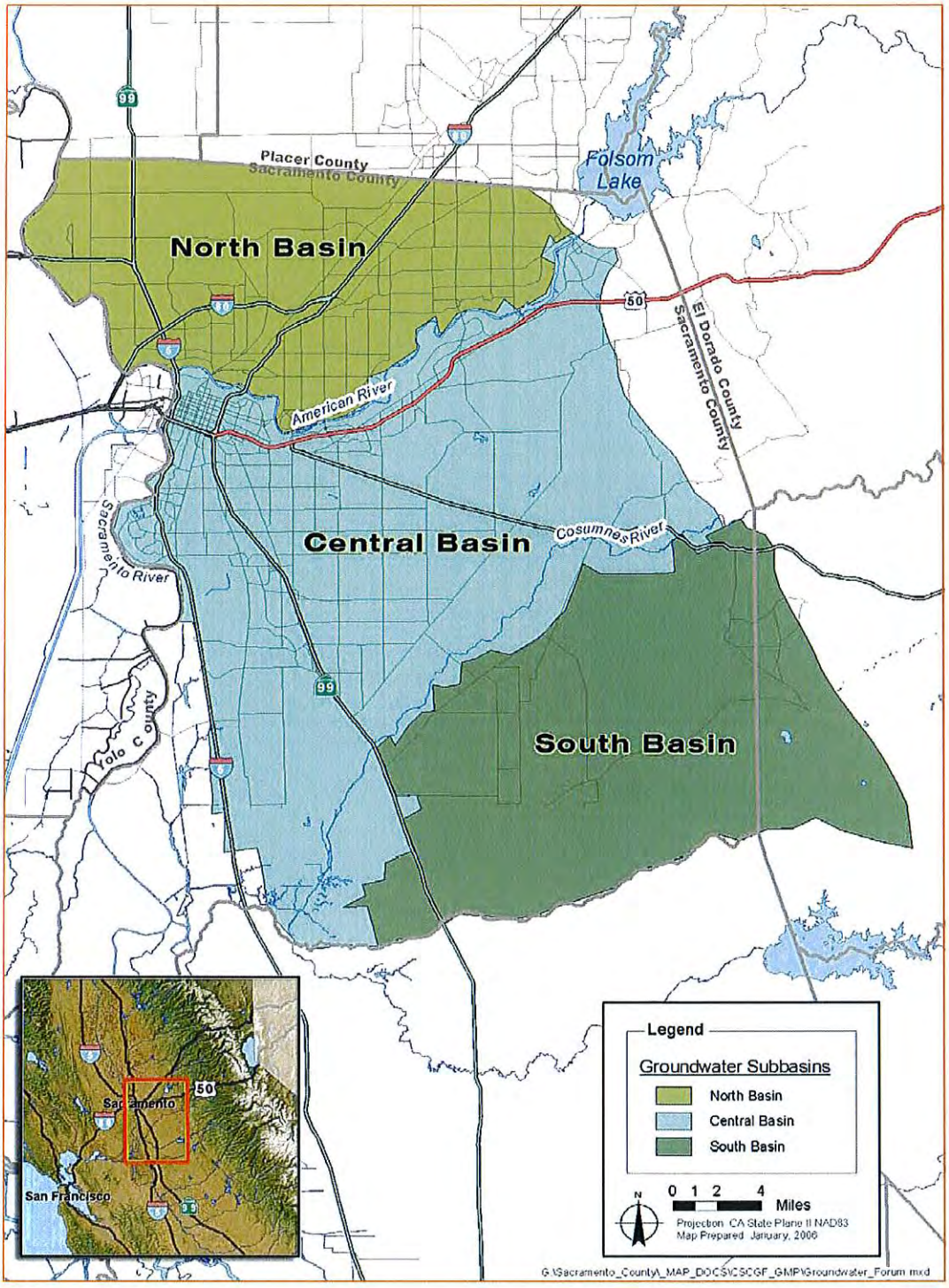
Under the Sustainable Groundwater Management Act, as discussed above, new state laws require the establishment of a GSA and a GSP. Although the Central Basin has an existing Groundwater Management Plan, the CSCGMP, that outlines planning protocols associated with current management efforts, the CSCGMP may not be the controlling planning document in the future. Moreover, the CSCGMP participating agencies have not yet been chosen to act as GSA. Once a GSA is formed, they will be required to develop a GSP. This may mimic the CSCGMP fundamental analyses but it is too early to tell if those analyses will meet the states' more stringent regulations.

Figure 3-1: Sacramento County Central Basin Water Purveyors[20]



[20] 2006 CSCGMP Figure 1-2

Figure 3-2: Regional Sacramento County Groundwater Basins[21]



[21] 2006 CSCGMP Figure ES-1.

3.2.3 Groundwater Quality

Water produced from the Laguna Formation and the Mehrten Formation is considered generally good quality with low total dissolved solids. Water produced from the Laguna Formation often meets all water quality standards, but exceeds the Maximum Contaminant Level (MCL) for arsenic within some areas of the Central Basin. The Mehrten Formation often contains manganese and odor, which exceed the MCLs. The upper portion of the Mehrten Formation, (between 300 feet to 700 feet within the District), occasionally exceeds the MCL for arsenic within the Central Basin. The lower portion of the Mehrten Formation, (between 700 feet to 1,300 within the District) generally has concentrations of arsenic that are under the MCL, but still require treatment to remove manganese and odor.

The quality of the groundwater supplied by the district meets the drinking water standards. The District provides centralized water quality treatment to remove manganese for the District's four deep wells. The three active shallow wells do not require treatment to meet drinking water standards.

3.3 Recycled Water

The District does not currently receive any recycled water. SCWA currently obtains and serves recycled water with its Zone 40 service area and expansion into the District's service area is feasible. However, at this time, there are no clear plans for this to occur or for the District to develop its own recycled water supply.

The recycled water SCWA does serve is produced from a partnership with Sacramento Regional County Sanitation District (SRCSD) and the Sacramento County Environmental Management Department. The water recycling facility is located within the City of Elk Grove and is being increased from a 3.5 MGD capacity to over 10 MGD. SRCSD performed a Water Recycling Opportunities Study (WROS) that identified five key target areas for potential recycled water uses. The District exists within the Target Area identified as Target Area 1 South Area.[22] However this area was found to have a decreased potential for future recycled water use due to its limited overall use potential, and infrastructure costs. Accordingly, based on the WROS, it is not anticipated that the District will use any recycled water for its service area presently and out into the future.

3.4 Desalinated Water

Desalination of ocean water is not physically or financially viable for the District at this time and it has no future plans to develop water supplies derived from desalination activities.

[22] Sacramento Regional County Sanitation District, Water Recycling Opportunities Study, February 2007.

3.5 Transfer and Exchange Opportunities

The District has opportunities for limited potable water transfers or exchanges. All of these transfer or exchanges would likely involve SCWA since SCWA controls the wheeling facilities that could deliver surface water assets to the District. Furthermore, the District could move water between Service Area 1 and Service Area 2 through numerous valves that the District generally keeps closed. Therefore, with some creative thinking and willing partnerships, the District could engage in numerous forms of water transfers that may have long-term regional benefit. Some examples of these are described below.

In Lieu Banking Arrangement with Surface Water Purveyor

The District could engage a water purveyor with surface water assets connected to the Sacramento River watershed and use those surface water assets in lieu of using its groundwater. In this scenario, the District would receive the right to divert water through a temporary water transfer agreement and appropriate regulatory steps.[23] The water would be diverted at the Freeport Regional Water Agency diversion facility and delivered directly to the District through SCWA's wheeling and treatment facilities. The benefit of this sort of transaction is that it would relieve pressure on the groundwater basin and preserve the groundwater supplies for dry periods when surface water assets are less available.

A second form of an in-lieu banking alternative might include assigning the rights to the banked groundwater to another agency. For instance, if Golden State Water Company could deliver some of its surface water assets directly to the District in normal and wet years, the District could assign a portion of its banked groundwater assets to Golden State Water Company for use in dry years. An in-lieu banking and exchange agreement can work where an entity shares resources in the Central Basin.

Third Party Water Exchange Arrangement

In other instances, water exchanges may benefit multiple parties through creative transfer arrangements. For example, if the District were to purchase water and deliver it directly to SCWA for SCWA's broader distribution in its service area, then SCWA is preserving groundwater assets that it might otherwise use for dry year availability. In this situation, SCWA may also reduce its treatment costs, etc. by increasing the utility of the FRWA (which has cost variables) as well as the per acre-foot cost of treatment at its Vineyard Water Treatment Plant. In other words, acquiring an asset and creating an exchange arrangement with SCWA may have multiple benefits not only to manage water use in dry

[23] There are different regulatory steps needed for different types of water rights and assets which would be further detailed at the time the transfer was proposed.

years but also in long term groundwater basin recovery and management of costs related to FRWA and Vineyard system operations.

3.6 Supply Reliability

The District's water supplies are stable and reliable. Both the groundwater supply and SCWA's surface water supply are well-preserved. As such, water service to Service Area 1 and Service Area 2 should remain stable in all year types.

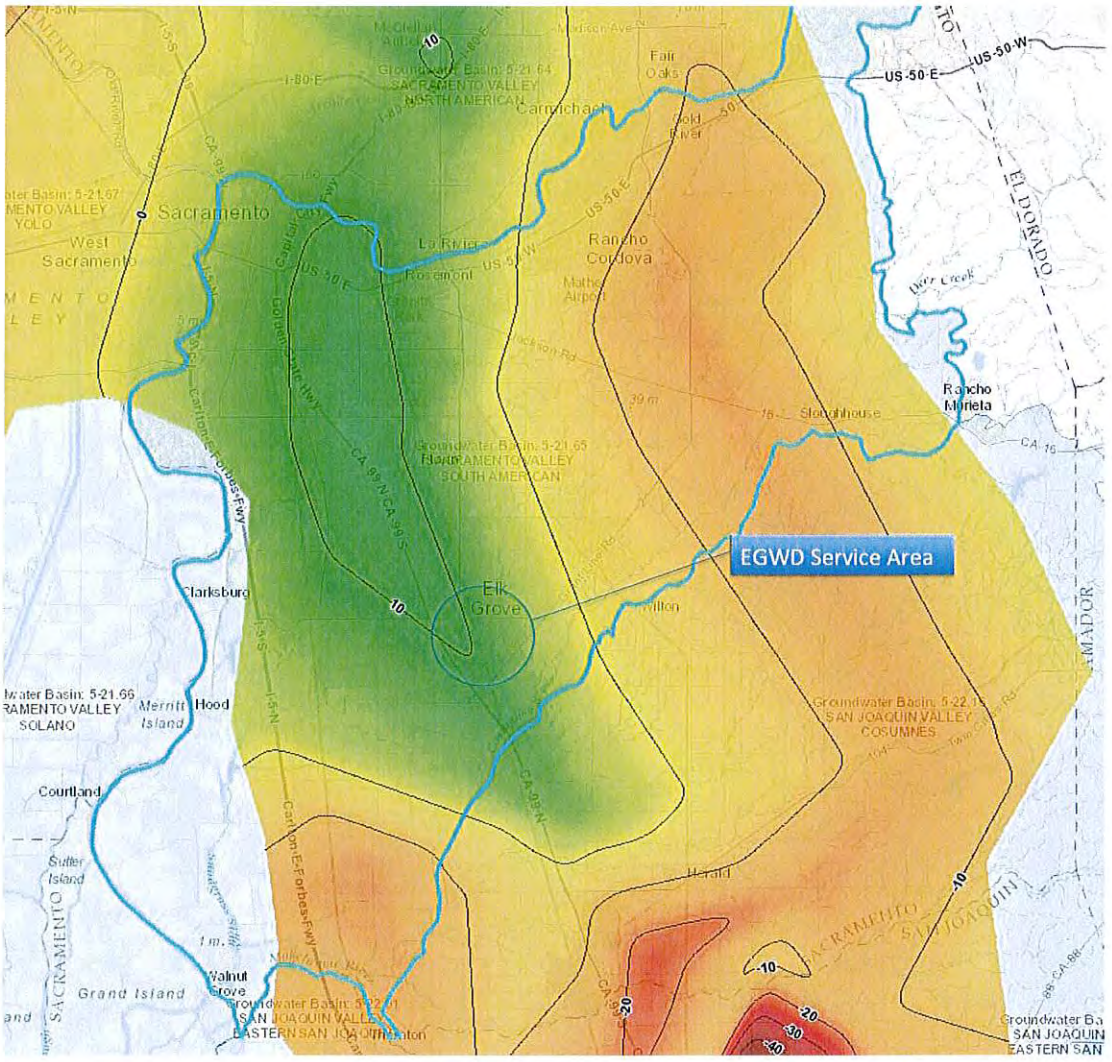
Under the CSCGMP, long-term groundwater quantity and quality protective measures have been performed throughout the basin by various agencies, including the District, in order to preserve groundwater assets. As shown in **Figure 3-5**, the District's service area overlays a sustainable reliable groundwater source. This figure shows the boundaries of the South American Sacramento Valley sub basin outlined in blue. The color gradation demonstrates that from 2005-2015, there has been no decrease to the basin's overall groundwater levels, and that, in fact, the groundwater levels in the District's service area have increased by approximately 10 feet during this 10-year period.

The groundwater supply's reliability for the District is further demonstrated in **Figure 3-6.** This figure confirms that the Central Basin's water levels have remained stable over the last two decades with the implementation of sound management practices. The stability of the groundwater wells has been further documented by SCGA's March 7th Board of Director's meeting, which concluded that each well has maintained stable levels. Graphic's of the most recent historical trends for each well can be found in **Appendix C-4.** The well monitoring data from a sampling of groundwater wells in the basin illustrate the Central Basin's overall good condition. Furthermore, the figures show that the wells closest to the District's actual service area, have actually increased in groundwater levels because of the District's and SCWA's conjunctive use actions.

The District covers approximately three percent of the entire Central Basin, taking this into account with CSCGMP overall estimated sustainable groundwater yield of 273,000 AFY, the District has 9,168 AFY of groundwater available within its service area.[24] This quantity of available groundwater is more than sufficient to meet the District's current water needs and accommodate the anticipated future water demands discussed in **Chapter 4**.

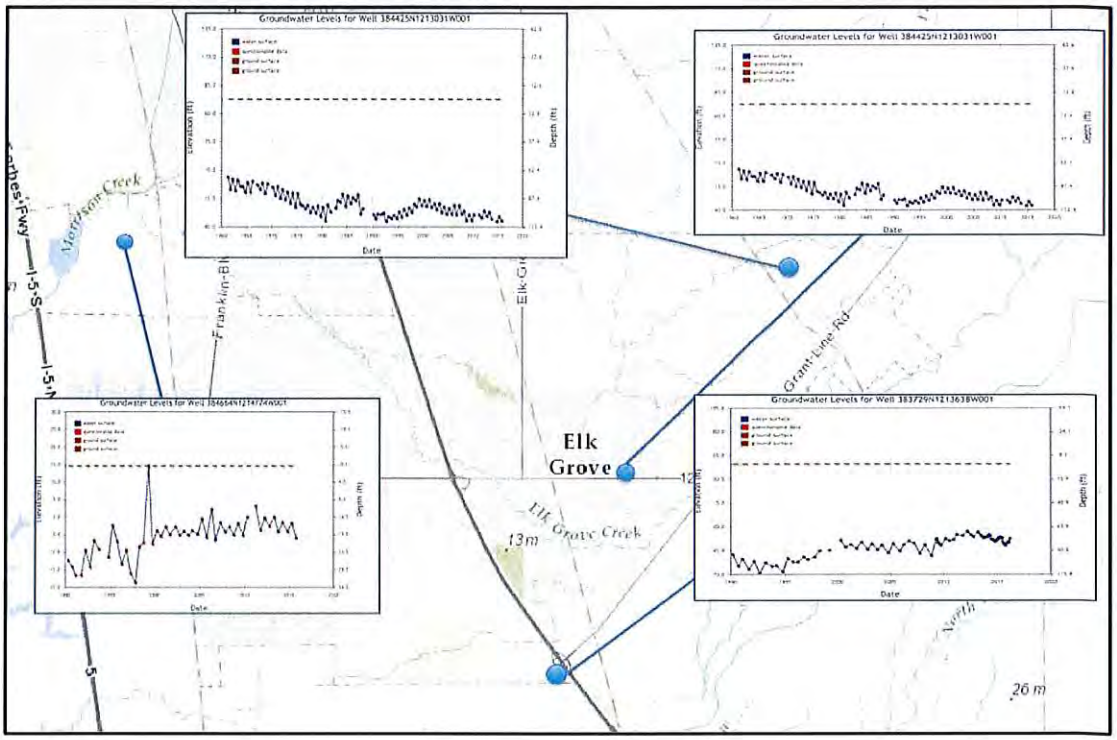
[24] Total groundwater calculated based on the acreage of the Central Basin and the District Service Area in conjunction with the SCSGMP groundwater safe yield amount.

Figure 3-5: Groundwater Level Changes from 2005 -2015[25]



[25] Figure created using the GICIMA tool available on DWR website at. https://gis.water.ca.gov/app/gicima/

Figure 3-6: Groundwater Historical Well Data[26]



In addition to the District's groundwater supply, its supply from SCWA is also reliable. As the Restated Master Water Agreement confirms, the District will be supplied water for Service Area 2 by SCWA under all conditions. There are no limits on the quantity of water available under this contract nor are there exceptions for drought or other forms of hydrological variability. The term of the contract is for 50 years (until 2052) and requires five years notice for any deduction or interruption in service. For the purpose of this 2015 UWMP, the estimate for the future water supply under contract provided by SCWA will be set to match the projected demand for Service Area 2, as presented in **Chapter 4**.

This permanent supply under the SCWA contract is comprised of groundwater and/or surface water. Any of the supplied water made up with groundwater would be drawn from within the Central Basin and as discussed above, the Central Basin has historically been maintaining approximately the same levels for over the last decade. Minimal surface water is used to make up the deliveries to the District. For the surface water portion of any water supplied, SCWA is in the process of developing FRWA to greatly increase its surface water supplies. This expansion of their surface water supply and

[26] Groundwater level data and graphics obtained from DWR's water groundwater data website.

planned increases in their recycled water capacities indicates that SCWA is a reliable water source.

3.6.1 Normal Year Water Supply Availability

The District's total available water supply will not vary in a normal year from what was discussed in **Section 3.2** and **Figure 3-1**. It is evident based on **Figure 3-5** and **Figure 3-6** that the groundwater supply would be stable in a normal year and that the basin may even gain an increase in its groundwater levels based on the trend of the last ten years. Similarly, the District's contract with SCWA for supplying water to Service Area 2 would not be impacted during a normal year.

3.6.2 Single Dry-Year and Multiple Dry Year Water Supply Availability

The District anticipates no change in the available water supply during a dry year. Dry-year supplies include supply reductions attributable to hydrologic droughts and regulatory curtailments. Should any supply issues arise with SCWA, the District would be able to ensure its supply needs are met by increasing its groundwater pumping. A more likely scenario is if SCWA has reductions in its surface water supply, it will increase groundwater production to meet its water needs including its contractual obligation with the District.

3.6.3 Water Supply Summary

The District has two water sources; pumped groundwater and wholesale water purchased from SCWA. For Service Area 1, all the water is provided through the District's eight groundwater wells. These wells are located within the Central Basin that is hydrologically stable and shows no signs of overdraft. Furthermore, the groundwater level underlying the District's service area has increased by approximately 10 feet in the last decade, as shown in **Figure 3-5**. These facts demonstrate that the groundwater supply is stable and will provide the District with reliable supplies to meet projected demands in all year types.

Service Area 2 is supplied through a wholesale water contract with SCWA. The water provided by SCWA is composed of both groundwater and surface water. SCWA is currently engaged expanding its available water sources through recycled water and greater surface water capacity, which may eventually result in more surface water in the wholesale delivery to Service Area 2. Moreover, transfer arrangements as described in Section 3.6.5 may also provide long-term benefits to the District and SCWA in furthering its common interest in encouraging regional water supply reliability.

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CHAPTER 4. WATER DEMAND CONDITIONS

Understanding water demand characteristics enables the Elk Grove Water District to reliably and cost-effectively manage its water supplies to meet customer needs. This section characterizes the District's retail customer demands over the next few decades. Specific water demand characteristics such as how demands vary among different land use classifications and under differing hydrologic conditions, all help illustrate customer needs under variable conditions. As such, this section is organized as follows:

- Review and refinement of the *2020 Urban Water Use Target* - This subsection presents the review and refinement of 2015 and 2020 water use targets as allowed under CWC §10608.20(g).[27]
- Compliance with *Interim 2015 Urban Water Use Target* – This subsection documents the derivation of the 2015 GPCD value and comparison to the 2015 interim target.
- Historic and Current Water Demands – This subsection presents data reflecting the historic and current water demand conditions for residential and non-residential customers in the District.
- Future Water Demands – This subsection presents the derivation of future demands for potable and non-potable water within the District's service area, including land-use classifications, unit demand factors, and estimation of non-revenue water.
- Summary of Water Demands – This subsection presents a summary of the projected current and future water demands in five-year increments.

4.1 Review and Refinement of GPCD Targets

As detailed in the District's 2010 UWMP, population, residential connections, and water production data were used to generate a gallon per capita day (GPCD) baseline of 253 gpcd. From this GPCD baseline, the District assessed and determined a *2020 Urban Water Use Target* and an *Interim 2015 Urban Water Use Target*. These values were determined to be 202 and 227, respectively, as presented in the 2010 UWMP.[28]

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[27] 10608.20(g): *An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).*

[28] Elk Grove Water District 2010 UWMP, p. 11 (available at: http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Elk%20Grove%20Water%20District/FINAL%20Elk%20GroveWD_2010-UWMP_6-22-11_Text.pdf)

According to the DWR Guidebook, a retail water purveyor who did not use actual 2010 Census data must re-calculate its baseline using the available 2010 Census data.[29] For the District's 2010 UWMP, the 2010 Census data was not fully available, causing the District to use other methods to estimate 2010 population.[30] Thus, the District must recalculate its baseline GPCD and re-establish its target and interim-target values with the available 2010 Census data.[31] Additionally the UWMP Guidebook added detail to the population analysis procedures.

To recalculate the annual GPCD values using the 2010 Census data, the District utilized the available population tool from DWR. Use of this tool requires uploading of specific files that define the District's service area for 1990, 2000, and 2010 – as each of those periods potentially have varied service area boundaries. The result of the analysis provided a new population value for 2010 and, based upon the prior connection data, new population estimates for the period 1995 through 2010. New population values divided into the previously determined gross water values (as documented in the 2010 UWMP) provided revised GPCD values for this period. **Table 4-1** provides a comparison of the yearly population and GPCD estimates from the 2010 UMWP and as revised using 2010 Census data.

Notable, the population from 1995 to 2000 was recalculated higher than the original values presented in the 2010 UWMP. This resulted in lower annual gpcd values than previously determined. Using the revised annual GPCDs, new values were calculated for five of the six 10-year time periods ending no earlier than December 31, 2004 and no later than December 31, 2009.[32] The comparative results are shown in **Table 4-2**. As expected, the use of 2010 Census data did have a significant effect on the estimated baseline values, lowering the highest average baseline value from 253 gpcd to a new value of 239 gpcd. Using the Method 1 target approach, the modified baseline results in a modified 2015 Interim GPCD Target and 2020 GPCD Target.

[29] "If an agency did not use 2010 U.S. Census data for its baseline population calculations in the 2010 UWMP (the full census data set was not available until 2012) the agency must re-calculate its baseline population for the 2015 UWMPs using 2000 and 2010 Census data. This may affect the baseline and target GPCD values calculated in the 2010 UWMP, which must be modified accordingly in the *2015 UWMP*." (2015 Urban Water Management Plans: Guidebook for Urban Suppliers, DWR, January 2016, p. 5-8)

[30] The District's 2010 UWMP used U.S. Census data, but calculated 2010 population based on residential connection information.

[31] According to CWC Section 10608.20(g), the City may also re-assess the methodology chosen to determine its 2015 and 2020 GPCD targets and update these targets, even if the 2010 population data was appropriate.

[32] The District did not include gross water use data beyond 2007, so only the first four of the six timeframes were averaged.

Table 4-1 – Revised Annual GPCD using 2010 Census Data[33]

	From 2010 UWMP			For 2015 UWMP	
Year	Gross Water	Population	GPCD	Revised Population	Revised GPCD
1995	6,116	20,205	270	22,234	246
1996	6,189	19,615	282	22,776	243
1997	5,938	20,458	259	23,319	227
1998	5,686	21,300	238	23,863	213
1999	6,476	21,065	274	24,408	237
2000	6,411	24,390	235	24,954	229
2001	6,958	24,390	255	26,444	235
2002	7,880	28,525	247	27,940	252
2003	7,972	30,040	237	29,339	243
2004	8,494	31,800	238	30,831	246
2005	7,915	32,950	214	32,321	219
2006	9,388	33,495	250	33,817	248
2007	9,962	33,900	262	35,315	252
2008	9,437	Not in 2010 UWMP		36,567	230
2009				38,135	n/a
2010	6,941	34,550	179	39,694	156

Table 4-2 – Comparison of baseline and target values

Baseline Period	Baseline Values		2015 Target		2020 Target	
	Original	Revised	Original	Revised	Original	Revised
1995-2004	253	237	228	213	202	190
1996-2005	248	234	223	211	198	187
1997-2006	245	235	220	211	196	188
1998-2007	245	237	221	214	196	190
1999-2008	n/a	239	n/a	215	n/a	191

Pursuant to CWC 10608.20(g) the District may choose to select a different method for calculating its 2020 GPCD target. Upon review of the analysis in the 2010 UMWP that resulted in the choice of Method 1, the District finds no reason to vary from the prior method choice. Thus, the District is officially using Method 1 to establish its 2020 GPCD target. However, to accurately reflect the use of the 2010 Census data, the District

[33] The 2010 UWMP did not include values for 1997, citing lack of data. This table presents 1997 as the average between 1996 and 1998 for simplicity. Also, the 2010 UWMP did not provide population data for 2008 or 2009, nor gross water use values for 2009.

will modify its 2020 GPCD Target to be 191 gpcd and its 2015 Interim GPCD Target to be 215 gpcd (see **Table 4-2**).

4.2 Compliance with 2015 Interim Target

Pursuant to CWC Section 10608.40, the District is to report to DWR on its progress in meeting its urban water use targets as part of its 2015 UWMP. As part of the progress reports, the District should include its "compliance daily per capita water use" (Compliance Value), which is the gross water use during the final year of the reporting period, reported in gallons per capita per day (gpcd).[34] Documentation of the Compliance Value must include the basis for determining the estimates, including references to supporting data. Furthermore, pursuant to CWC Section 10608.24(a), the District must demonstrate that it has met its 2015 Interim GPCD Target as of December 31, 2015 through its calculation of its 2015 Compliance Value.

Extending the population analysis that was revised during the reassessment of the baseline GPCD, the District is able to calculate its 2015 Compliance Value. **Table 4-3** presents the extended population calculation for 2011 through 2015, the associated gross water use in each year, and the resulting annual GPCD. As demonstrated, the District's 2015 Compliance Value is 111 gpcd, which is significantly below the 2015 Interim GPCD value of 215.

Table 4-3 – Annual GPCD for 2010 through 2015

Year	Population	Gross Water Use (af/yr)	GPCD
2010	39,694	6,941	156
2011	40,326	7,499	166
2012	40,960	8,117	177
2013	41,594	7,912	170
2014	42,230	6,414	136
2015	42,867	5,311	111

Though the 2015 Compliance Value seems impressive, the District does not believe it represents the actual progress toward its 2020 GPCD Target conditions due to two factors: (1) weather conditions in 2015, and (2) mandatory conservation requirements imposed by the State Water Resources Control Board. While normalizing for weather is recognized and suggested in statute[35], with a tool available from DWR to perform the

[34] CWC § 10608.12(e).
[35] CWC Section 10608.24(d)(1)(A)

calculation, the State mandated conservation likely had a greater downward effect on the 2015 Compliance Value.

Although adjustments for weather are allowed, they are not required.[36] Because the District's 2015 Compliance Value demonstrates that the District is in compliance with the statutes, it has elected to not adjust the 2015 Compliance Value for weather. However, it has chosen to adjust the value to understand what 2015 GPCD conditions may have been absent the State conservation mandate so that it can appropriately assess progress toward its 2020 Target GPCD.

One option for the District to understand its progress toward the 2020 Target GPCD is to look at the most recent "average" year, which would be 2012 or 2013. In both of these years there were no mandatory conservation measures, weather was not significantly different than average conditions (though 2013 was the beginning of the current drought cycled), and the region was recovering from the recent recession. The GPCD values for 2012 and 2013 were 177 and 170 gpcd respectively, already well below revised 2020 Target GPCD value of 191 gpcd and the revised 2015 Interim GPCD Target of 215 gpcd (see **Table 4-3**).

Another option is to adjust the 2015 GPCD value to remove the conservation achieved by the District during its efforts to comply with the State's mandate. The State had mandated the District meet a 28% conservation goal between June 2015 and February 2016. Through December 2015, the District successfully achieved a 36.1% cumulative savings (compared to 2013 conditions – which was the State's baseline).[37] There are multiple methods to normalize the 2015 water use for the months of June through December. Using a few simple multiplier approaches the actual gross water production in 2015 of 5,311 acre-feet would increase to between 6,500 and 7,000 acre-feet. Using an average of 6,750 acre-feet of normalized 2015 gross water production, the 2015 GPCD would adjust from 111 gpcd to 141 gpcd. This normalized value is still well below the 2015 Interim GPCD Target and the 2020 GPCD Target. From this information, the District concludes that it is on track to achieve its 2020 GPCD Target when it reports the 2020 Compliance Value in its next UWMP update. The District recognizes that a primary factor in this early success was efforts to becoming fully metered and charge customers based upon volumetric use, coupled with the District's strengthen conservation education and outreach programs.

[36] CWC Section 10608.24(d)(2)

[37] Based on report from the SWRCB available at: http://www.waterboards.ca.gov/water_issues/programs/conservation_portal/docs/2016feb/suppliercompliance_020216.pdf

4.3 Current and Forecast Water Demands

Based on available records for water production, water sales and deliveries, the District's water demands for the past five years were previously presented in **Table 4-3**. As demonstrated by the populations presented in the table, the District experienced about an 8 percent overall growth since the 2010 UWMP, about 1.5 percent annually. And, as described in Chapter 2, the District will continue to experience some modest growth during the 2015 UWMP planning horizon, primarily in Service Area 2.

Forecasting future demand requires assessing several factors: the future water use habits of existing customers that will lower their existing use, the land use plans demonstrating types of anticipated growth, and the various laws and regulations that govern future water use demand factors such as water-efficient fixtures, appliances, and landscaping.

4.3.1 Existing Customers

As described in Chapter 2, the District serves two primary areas within the City of Elk Grove with a variety of residential and non-residential customers with varying uses. Existing potable water customers are categorized into discrete residential and non-residential land-use classifications as presented in **Table 4-4**.

With account numbers and meter data, the existing unit demand factors for each potable water classification can be determined. This information provides a baseline for estimating the future demands of existing customers. **Table 4-4** provides the baseline demand factors for each land use category using 2013 account and meter data. The District believes 2013 was more representative of average conditions, and understood that the data would be skewed if 2014 or 2015 customer use data were used for baseline conditions. This is confirmed further when reviewing the GPCD values in **Table 4-3**.

Because a vast majority of the existing customers reside in Service Area 1 in homes built before the last decade, existing customers' future unit demand factors are assumed to change mostly from drivers such as fixture replacement, the District's conservation awareness and incentive programs, and other factors affecting a general increased awareness of water conservation. A reflection of the impact of these drivers is presented as the unit demand factors for new residences also provided in **Table 4-4**. The future demand factors reflect a reduction from the current value in all categories resulting from expected conservation. This reduction is reasonable as it reflects expected benefits of on-going customer conservation efforts, coupled with the use of 2013 for baseline conditions.

Table 4-4 – Existing Customer Characteristics

	Land-class	Current (Accounts or Acres)	Existing Customers: Current Demand Factors (af/account)	Existing Customers: Future Demand Factors (af/account)	Conservation
Service Area 1	Residential				
	RD-5 Late 80s	2889	0.58	0.50	14%
	RD-5 Late 70s	2301	0.51	0.43	15%
	RD-7	2308	0.44	0.38	13%
	Mobile Home Park	20	1.42	1.28	10%
	Apartments	37	3.79	3.35	12%
	Non-residential				
	Offices	60	0.28	0.26	5%
	Business Parks	89	1.50	1.35	10%
	Shopping Centers	75	2.63	2.25	14%
	General Commercial	7	3.85	3.30	14%
	Limited Commercial	9	1.22	1.04	14%
	Stand Alone Fast Food	2	4.87	4.17	14%
	Heavy Industry	12	1.62	1.38	14%
	Light Industry	93	0.29	0.25	14%
	Schools	61	1.86	1.77	5%
	Elk Grove HS	41	0.41	0.39	5%
	Exist Parks	46	1.97	1.78	10%
	Open Areas	18	3.58	3.07	14%
Service Area 2	Residential				
	RD-7	838	0.40	0.35	12%
	RD-3	625	0.57	0.48	17%
	RD-5	2269	0.49	0.42	14%
	Large Lots	205	1.35	1.14	15%
	No Yards	141	0.14	0.13	5%
	Apartments	8	3.93	3.37	14%
	Non-residential				
	Offices	2	0.17	0.16	5%
	Business Parks	4	1.84	1.58	14%
	Shopping Centers	42	2.14	1.83	14%
	Grocery Centers	10	3.63	3.45	5%
	Schools	99	2.34	2.11	10%
	Exist Parks	44	3.14	2.99	5%
	Open Areas	17	4.48	3.84	14%

4.3.2 Future Customers

There are several factors that affect the development of future unit water demand, which in turn affect the forecasted water demand for future customers. These factors range from state mandates such as the Cal Green Code and MWELO (discussed later in this section), to changes in the types of housing products being offered. These are incorporated into the determination of future unit water demand factors, discussed later in this chapter. Characteristics of the most important factors are described below

4.3.2.1 Factors Affecting Future Water Demands

These following factors are generally recognized to result in lower per unit demand factors for future residential and non-residential customers. A brief discussion of each follows:

Water Conservation Objectives:

On November 10, 2009, Governor Arnold Schwarzenegger signed SBX7 7, which required each urban water supplier to reduce their per-capita water use by 2020, with a statewide goal of achieving a 20-percent reduction by 2020.[38] As discussed previously, the District has established a 2020 Target GPCD in response to this requirement and is already in compliance with that target.

Achieving the District's 2020 conservation target will require the District to continue its on-going conservation efforts. But, as illustrated by the compliance analysis previously discussed, the District has already achieved its goal – even when normalizing the data for the last normal water year (2012 and 2013). New customers will likely further reduce the District's annual GPCD since the factors described below are designed to further reduce per capita water use.

Indoor Infrastructure Requirements

In January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the "CAL Green Code") that requires the installation of water-efficient indoor infrastructure for all new projects beginning after January 1, 2011. The Cal Green Code was revised in 2013 with the revisions taking effect on January 1, 2014. However these revisions do not have substantial implications to the water use already contemplated by the 2010 Cal Green Code.[39] The CAL Green Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed building or structure.

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[38] California Water Code § 10608.20

[39] "The 2010 CAL Green Code was evaluated for updates during the 2012 Triennial Code Adoption Cycle. The state evaluated stakeholder input, changes in technology, implementation of sustainable building goals in California, and

All new developments must satisfy the indoor water use standards directed by the CAL Green Code, which essentially require new buildings and structures reduce overall potable water use by 20 percent. Expected future customers will satisfy the standards through the use of appliances and fixtures such as high-efficiency toilets, faucet aerators, on-demand water heaters, or other fixtures as well as Energy Star and California Energy Commission-approved appliances.

California Model Water Efficient Landscape Ordinance

The Water Conservation in Landscaping Act was enacted in 2006, requiring the California Department of Water Resources (DWR) to update the Model Water Efficient Landscape Ordinance (MWELO).[40] In 2009, the Office of Administrative Law (OAL) approved the updated MWELO, which required a retail water supplier or a county to adopt the provisions of the MWELO by January 1, 2010, or enact its own provisions equal to or more restrictive than the MWELO provisions.[41]

In response to the Governor's executive order dated April 1, 2015, (EO B-29-15), DWR updated the MWELO and the California Water Commission approved the revised MWELO on July 15, 2015. The changes include a reduction to 55% for the maximum amount of water that may be applied to a landscape for residential projects, which reduces the landscape area that can be planted with high water use plants, such a turf. The MWELO applies to new construction with a landscape area greater than 500 square feet (the prior MWELO applied to landscapes greater than 2,500 sf).[42] For residential projects, the coverage of high water use plants is reduced to 25% of the landscaped area (down from 33% in the 2010 MWELO).

It is difficult to predict the ultimate impact of the MWELO requirements on future water demand. While the requirement is for development of a landscape design plan that uses plants and features that are estimated to use no more than 55 percent of ETo, some provision must be made for the inherent tendency to over-water even with irrigation controllers installed, piecemeal changes in landscape design, reductions in irrigation efficiency through product use, and limited resources for enforcement in the absence of dedicated irrigation meters.

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changes in statutory requirements. As such, the scope of the CAL Green Code was increased to include both low-rise and high-residential structures, additions and alterations." *Guide to the 2013 California Green Building Standards Code (Residential)*, California Department of Housing and Community Development, 2013.

[40] Gov. Code §§ 65591-65599

[41] California Code of Regulations (CCR), Tit. 23, Div. 2, Ch. 27, Sec. 492.4. The MWELO provides the local agency discretion to calculate the landscape water budget assuming a portion of landscape demand is met by precipitation, which would further reduce the outdoor water budget. For purposes of this 2015 UWMP, precipitation is not assumed to satisfy a portion of the outdoor landscape requirement because the determination of an appropriate effective precipitation factor is highly uncertain given the various landscape slopes, terrain composition, concurrent watering schedules, etc.

[42] CCR Tit. 23, Div. 2, Ch. 27, Sec. 490.1.

California Urban Water Conservation Council BMPs

The District is a signatory to the California Urban Water Conservation Council (CUWCC) Best Management Practices (BMP) Memorandum of Understanding (MOU). Due to this affiliation, the District has modified existing BMPs and implemented others to follow that of the CUWCC. These practices further reduce the District's demands. Further details on the District's conservation efforts can be found in **Chapter 5**.

4.3.2.2 Future Unit Demand Factors

When considering the various factors discussed above, coupled with a review of current customer use characteristics, the District has established the demand factors presented in **Table 4-5** for estimating future customer demand. With Service Area 1 mostly built-out, the majority of growth is expected in Service Area 2.

Table 4-5 – Future Customer Accounts and Demand Factors

	Land-class	Future (Accounts or Acres)	Future Demand Factors (af/account)
Service Area 1	Residential		
	RD-5 New	44	0.38
	RD-20 Apartment	75	0.21
	Non-residential		
	Future Comm. Center	45	1.20
	Future Industrial	60	1.50
Service Area 2	Residential		
	Future No Yards	261	0.12
	Future RD-10	172	0.21
	Future RD-5	1242	0.38
	Future Large Lots	137	0.95
	Future Apartments	200	0.21
	Non-residential		
	New Commercial	27	1.20
	New Industrial	64	1.50
	Future Business/Professional	2	0.70
	Future Schools	10	2.00
	Future Parks	21	3.00

4.3.3 Demand Forecast Summary

Water demand projections within the District's service area reflect the combination of continued conservation by existing customers and the addition of new customers over the planning horizon.

Table 4-6 provides the summation of this analysis and the resulting expected demands for each 5-year planning horizon.

4.3.4 Distribution System Water Losses

The demand factors presented earlier in this chapter represent the demand for water at each customer location. To fully represent the demand, distribution system losses must also be included. Often, distribution system losses represent water that is lost due to system leaks, fire protection, construction water, unauthorized connections, and inaccurate meters. Essentially, this is the water that is produced by the District's groundwater production wells that does not make it to the customer – either as a real loss or an apparent loss (e.g. such as may result when a customer meter underreports actual use).

In most instances, the predominant source of distribution system losses is from leaks that inevitably exist throughout the many miles of pipes that bring water to the District's customers.

Pursuant to CWC 10631(e)(3)(B), the District must quantify and report the distribution system loss for 2015 using methodology developed by the American Water Works Association (AWWA) and provided as a worksheet through DWR. Using the available worksheet, the District calculated a loss equal to [__] percent of the water supplied into the distribution system. The AWWA spreadsheets are included as **Appendix E-1**.

For purposes of estimating future demand from new connections, the distribution system loss is assumed to be 8 percent to reflect on-going District programs to address meter inaccuracies, and find and fix identified system leaks.[43]

[43] For purposes of estimating this quantity when viewed from the customer meter looking back to the "beginning" of the water supply distribution system, a slightly higher value is multiplied by the customer demands, then added to those demands to reflect a total projected demand.

Table 4-6 – Projected Water Demands

Land-class			Forecast Demand (af/yr)					
			2020	2025	2030	2035	2040	2045
Service Area 1	Single Family	Existing	3,563	3,385	3,320	3,320	3,320	3,320
		Future	6	14	17	17	17	17
		Subtotal	3,570	3,399	3,337	3,337	3,337	3,337
	Multi-Family	Existing	161	153	150	150	150	150
		Future	0	16	16	16	16	16
		Subtotal	161	169	166	166	166	166
	Non-Residential	Existing	419	399	386	386	386	386
		Future	20	68	122	144	144	144
		Subtotal	439	466	507	530	530	530
	Public	Existing	270	263	260	260	260	260
		Future	0	0	0	0	0	1
		Subtotal	270	263	260	260	260	261
		Subtotal	4,440	4,297	4,270	4,293	4,293	4,294
		System Loss	400	387	384	386	386	386
		Service Area 1 Total	4,839	4,684	4,655	4,679	4,679	4,680
Service Area 2	Single Family	Existing	1,924	1,836	1,779	1,779	1,779	1,779
		Future	173	475	581	600	619	638
		Subtotal	2,097	2,311	2,361	2,380	2,399	2,418
	Multi-Family	Existing	31	30	28	28	28	28
		Future	12	73	73	73	73	73
		Subtotal	43	103	102	102	102	102
	Non-Residential	Existing	127	122	118	118	118	118
		Future	28	70	109	129	129	129
		Subtotal	155	192	226	247	247	247
	Public	Existing	421	407	403	403	403	403
		Future	30	84	84	84	84	84
		Subtotal	451	490	487	487	487	487
		Subtotal	2,746	3,097	3,175	3,215	3,234	3,253
		System Loss	247	279	286	289	291	293
		Service Area 2 Total	2,993	3,375	3,461	3,504	3,525	3,545
Total District Demand			**7,832**	**8,059**	**8,116**	**8,183**	**8,204**	**8,226**

4.3.5 Low Income Water Demands

CWC Section 10631.1 requires water suppliers to include a projection of water use by lower income households as defined by Health and Safety Code Section 50097.5. The

housing element of the City's General Plan provides the income distribution used for this analysis.[44] This housing element, adopted in [____], uses data from U.S. Census Bureau 2005-2009 American Community Survey. The income limits for "lower income" come from U.S. Department of Housing and Urban Development's 2009 income guidelines.[45]

The percentage of low income was used from the same housing element table. According to the 2007-2011 American Community Survey (ACS), [update with City data]. Using [___] percent of the projected population, a demand factor from the multi-family housing units of approximately 0.21 acre-foot per year, and 3.7 people per housing unit, the current and future demand from "lower income" customers is estimated (see **Table 4-7)**. These demands are already incorporated in the demand forecast presented in **Table 4-6**.

Table 4-7 – Projected Low Income Household Water Demands

[44] City of Elk Grove General Plan- 2013-2021 Housing Element Update, p. ___

[45] The income guidelines place households who make less than 80% of the median family income for an area as "low income." This is in line with the CWC 10631.1 income threshold.

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CHAPTER 5. WATER DEMAND MANAGEMENT MEASURES

5.1 District Participation

CWC § 10631 requires that an UWMP include a description of the urban water supplier's water demand management measures. CWC § 10631 also provides that members of the California Urban Water Conservation Council (CUWCC) shall be deemed in compliance with the UWMPA demand management measure requirements by complying with all the provisions of the CUWCC MOU and by submitting the annual reports.[46]

The CUWCC MOU for Best Management Practices (BPM) is organized into five categories. Two categories, utility operations and education, are "Foundational BMPs" because they are considered to be essential water conservation activities by any utility and are adopted for implementation by all signatories to the MOU as ongoing practices with no time limits. The remaining BMPs are "Programmatic BMPs" and are organized into residential indoor and landscape, commercial/industrial/institutional (CII) indoor and landscape, and CII dedicated large landscape categories.[47] All the categories are outlined in **Table 6-1**.

The District is a current member of CUWCC and has submitted annual reports to the Council, complying with CWC § 10631. A copy of the most recent report from 2013-2014 is available in **Appendix D-1**. As a signatory to the CUWCC MOU, the District is committed to implementing best management practices (BMP) designed to achieve water conservation across existing and future demand sectors. The CUWCC MOU requires that a water utility implement only the BMPs that are economically feasible. The District's continued implementation of the CUWCC BMPs should reduce some of the unit demand factors for its existing connections and help maintain the unit demand factors for future connections.

[46] CWC § 10631(j)
[47] https://www.cuwcc.org/Resources/BMP-Resources

Table 5-1: CUWCC BPM Requirements[48]

FOUNDATIONAL BMPS
1. Utility Operations Programs
1.1 Operations Practices
Staff and maintain the position of a trained conservation coordinator
Enact and enforce an ordinance designed to prevent water waste
Enact and enforce an ordinance designed to promote water efficient design in new development
Enact and enforce an ordinance designed to facilitate water shortage response measures
1.2 Water Loss Control
Compile a standard water audit and balance annually
Improve data accuracy and completeness of water audit during first four years
During 5th through 10th year, demonstrate progress in water loss control
1.3 Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections
Initiate volumetric billing for all metered customers within one year after signing MOU
Complete meter installations for all connections no later than July 1, 2012
Assess feasibility of moving mixed-use metered landscape uses to dedicated landscape meters
Develop a written plan, policy or program to test, repair or replace meters
1.4 Retail Conservation Pricing
Develop water rates such that 70% of revenue is generated from volumetric billing
Develop conservation pricing for retail sewer service
2. Education Programs
2.1 Public Information Programs
Implement public information programs to promote water conservation and water-conservation benefits
2.2 School Education Programs
Educate students about water conservation and efficient water use
PROGRAMMATIC BMPS
3. Residential
Develop a Residential Assistance Program - including leak detection assistance, conservation surveys, and efficiency suggestions, as well as provision of high-efficiency appliances
Perform site-specific landscape water surveys
Provide financial incentives for, or institute ordinances requiring, purchase of efficient clothes washers
Provide incentives or ordinances for replacement of toilets using 3.5 or more gallons per flush
4. Commercial, Industrial and Institutional
Implement measures to achieve water savings for Commercial, Industrial and Institutional (CII) accounts of 10% compared to baseline water use (i.e., 2008 water use by CII accounts)
5. Landscape
Identify accounts with at least one dedicated irrigation meter and assign an ETo based budget of no more than an average of 70% of ETo for metered irrigation uses; "Recreational" areas may be so designated and may use up to 100% of ETo
Provide notices to irrigation meter customers comparing actual use to the water budget
Offer site-specific technical assistance to those accounts at least 20% over budget
Target and market landscape surveys to CII accounts with mixed-use meters, and those CII accounts with large landscapes and offer financial incentives to both

[48] https://www.cuwcc.org/Resources/BMP-Resources

CHAPTER 6. WATER SHORTAGE CONTINGENCY PLAN

As an urban water purveyor, the District must meet the minimum health and safety requirements of a drinking water purveyor at all times. The District has created a Water Shortage Contingency Plan (WSCP) to help meet this goal during water shortages. The full version of this plan can be found in **Appendix D-2**.

The strategy for allocating water during shortages for the District is complex. Detailed discussion of water supply, water shortage actions, catastrophic failure, financial impacts, and prohibitions during shortages is also provided in the District's WSCP. The District adopted its Water Shortage Contingency Plan through Ordinance No. 07-23-14-01. The ordinance provides for emergency water supply management related to general supply shortages due to severe droughts, infrastructure failure, or any other cause. While the current ordinance provides an adequate framework for managing supply shortages, it was also updated to reflect current conditions including the current drought and 20x20 legislation.[49] The District also coordinates regionally through the SCWA with respect to emergency water shortage planning and response.

6.1 Water Shortage Contingency Resolution

The District's current water shortage contingency plan allows for declaration of water shortages by the Board of Directors. When a shortage occurs, the District Board assesses if the stages of action discussed in **Section 6.2** should be implemented. In 2014, Ordinance No. 07-23-14-02 modified the outdoor irrigation schedule for the WSCP.[50]

6.2 Stages of Action and Reduction Goals

The District has developed a five-stage shortage contingency plan as shown in **Table 6-1**. Each stage corresponds to an increased demand reduction target to align with anticipated supply availability. The shortage contingency plan includes voluntary and mandatory actions that expand under each stage, depending on the cause, severity, and anticipated duration of the water supply shortage. The details of these stages are provided in the WSCP found in **Appendix D-2**.

[49] FRCD Ordinance 07-23-14-02
[50] FRCD Ordinance 07-23-14-02

Table 6-1: Drought Stages Contingency Plan

Stage	Water Supply Conditions	Response Actions
Stage 0 - Normal Water Supply	Normal water supplies	Regular water efficency measures
Stage 1- Water Alert	Slightly restricted water supplies	Added irrigation restrictions and up to a 10% water use reduction
Stage 2 - Water Warning	Moderatly restricted water supplies	Greater landscape irrigation restrictions, increased mandatory prohibited uses and up to a 25% water use reduction
Stage 3- Water Crisis	Highly restricted water supplies	No new water connections, excessive usage rate surcharge and up to a 50% water use reduction
Stage 4 - Water Emeregency	Severly restricted water supplies	Public health and safety restrictions and over 50% water use reduction

6.3 Mandatory Prohibitions on Water Waste

As part of the WSCP, intentional or unintentional water waste is prohibited and the beneficial use of water is encouraged.[51] Allowing cooling fixtures to leak, maintaining water features without recirculation devices, and the use of open hoses are a few examples of actions that would qualify as water waste under the regulation. Details on the prohibited types of use for each stage of action are also outlined below in **Section 6.5**.

6.4 Penalties

The District provides the stages of penalties for violators of the water waste regulation. The penalties are enforced through the application of FRCD Ordinance No. 06-24-15-01. For the first violation, the District shall issue a written notice of the violation to the customer. For the subsequent violation, a written warning of the violation is sent to the customer. For the third violation within the preceding 12 calendar months a $200 fine

[51] See **Appendix D-2**

will be imposed and a mandatory water audit will occur. Customers will also have the option of attending water school instead of owing the fine. For the fourth violation within the preceding 12 calendar months a $500 fine will be imposed and a flow restriction device will be installed. For the fifth violation within the preceding 12 calendar months a $500 fine will be imposed and water service will be shut off.[52]

6.5 Consumption Reduction Methods

CWC 10632 (a)(1) requires that all water purveyors establish stages of action to be undertaken in the event of a water shortage. The code section also specifies that a 50 percent reduction in supply must be considered and addressed. This specific supply reduction is addressed at Stage Four in **Section 6.5.4**. It should be noted that the following sections on each stage of action are a summary of the key points established by the District in its WSCP. For the full body of text and all the details of each stage please refer to these documents in **Appendix D-2.**

6.5.1 Stage Zero – Normal Water Supply

Stage Zero during normal water supply does not restrict customers use of water. Stage Zero does prohibit customers from wasting water. Water waste includes allowing irrigation water to run off onto an adjoining property, ditch, or gutter; watering within 48 hours of measurable rainfall; using hoses without automatic shutoff nozzles; washing down driveways and other paved areas; failing to repair water leaks; and using non-recirculated water in fountains and water features.

6.5.2 Stage One – Water Alert

If water supplies become slightly restricted and the District will be unable to meet all of its demands under normal supply conditions, the Plan calls for Stage 1 drought response. During this stage, customers are informed of possible shortages and asked to voluntarily conserve 10 percent. Additionally, some mandatory restrictions including irrigation restrictions by geographic zones based on a set schedule and not allowing any potable water use for dust control, compaction or trench jetting will be implemented.

6.5.3 Stage Two – Water Warning

Stage 2 is implemented in the event the District is unable to meet all its water demands under Stage 1. The District will continue to encourage community-oriented voluntary conservation measures, enforce some conservation measures and implement mandatory water use reduction. The District is also a member of the Regional Water Authority, which undertakes many regionally-based public outreach programs on behalf of its members to assure consistent messaging throughout the greater Sacramento region.

[52] See **Appendix D-2**

Stage 2 activities include a continuation of activities described under Stage 1 and 2, as well as greater conservation and water use restrictions. Stage 2 also restricts landscape watering to two days a week in a two-hour allowable block.

6.5.4 Stage Three – Water Crisis

Stage 3's primary purpose is to reduce water use by 50 percent. In addition to all the voluntary and mandatory restrictions previously implemented under the earlier stages, no new water connections will be added, the maximum system operating pressure is 40 psi and usage above a customers' allotment is billed at 150 percent the normal rate.

6.5.5 Stage Four – Water Emergency

Stage Four's purpose is to ensure the protection of the water supply for all public health and safety purposes. This stage will require reductions in water demand by over 50 percent. Under this stage, all previous conservation restriction will apply, and landscape irrigation will be allowed once a week within a one-hour window.

6.6 Revenue and Expenditure Impacts

When a drought or water shortage occurs, the District's costs will increase due to the additional activities and duties of instituting a stage of action. Not only will there be costs for materials, and time from permanent staff, but additional staff may need to be hired to assist in implementing the WSCP. As conservation measures and requirements increase and the water supply decreases, the District will potentially see a fall in revenue. To combat this and help pay for the expenses discussed above, a drought surcharge may be implemented by the District. This will help compensate for the loss of water revenue and pay for drought related costs. Additional revenue will further be provided by the penalties incurred by excessive water users as discussed in **Section 6.4** and the 150 percent rate increase in Stage 3.

6.7 Conservation Rate Structures

As discussed above in **Section 6.5.4**, a drought surcharge will be added to rates in the event of a water shortage when a customer exceeds their allocation of water.

6.8 Reduction Measuring Mechanism

The District became fully metered in the last few years, since completion of the 2010 UWMP. The District is now able to better measure and track reductions resulting from on-going conservation efforts or implementation of WSCP stages.

6.9 Catastrophic Supply Interruption

In addition to climate, other factors that can cause water supply shortages are earthquakes, chemical spills, dam failures, canal breaks, waterline ruptures, and energy outages at treatment and pumping facilities. With an integrated system that includes several groundwater wells and interties with SCWA, the District has taken adequate steps to protect its customers from unforeseen interruptions.

However, in conjunction with RWA and other interests, the District will continue to participate in the following:

- Regional Disaster Preparedness Plans
- Water System Vulnerability Assessment
- Emergency Response Plan

6.10 Minimum Supply Next Three Years

Pursuant to CWC Section 10632(a)(2), the District is required to estimate the water supplies available for the next three years, specifically 2016, 2017 and 2018. Because of diligent planning efforts, the District believes it has ample water supplies available to meet its demand during this time frame as detailed in **Section 3**. Any potential shortfall in supply that may occur will be addressed through combinations of demand reductions as detailed in the WSCP and the use of interties with neighboring purveyors.

However, because the District is fully reliant on groundwater and, as detailed in Chapter 3, groundwater conditions underlying the District are stable and sustainable, the District's supply during the next three years will simply equal the anticipated demand.

6.11 Current Drought

The current drought has impacted the District's drought and water shortage plans through Executive Orders and new statewide conservation goals. Executive Order B-29-15 required the District to achieve 25 percent water use reduction by June 2015. Similarly, the 2020 goal for a 20 percent reduction in water use encourages districts and end users to conserve more water. To comply with these conservation goals, the District has continued to promote conservation with all users. The District amended the WCSP in July 2014 with greater outdoor irrigation restrictions and implemented Stage 1.[53]

[53] FRCD Ordinance No. 07-23-14-02

The District is now in Stage 2 Plus in light of the continuing drought as of May 2015 (see **Appendix D-3**).[54] Stage 2 Plus seeks to have the District achieve a reduction in water usage by 28 percent, consistent with the State's conservation mandate placed upon the District. Furthermore, this stage requires that water shall only be served in dining establishments upon request, no irrigation of medians with potable water and no irrigation during and up to 48 hours after rainfall.

[54] See **Appendix D-4.**

CHAPTER 7. SUPPLY & DEMAND INTEGRATION

The purpose of this chapter is to compare the total water supply sources available to the District with the total projected water use over the next 25 years, in five-year increments, for a normal water year, a single-dry water year, and multiple dry water years.[55] Water supply and demand data presented in this section is presented in prior sections of this 2015 UWMP.

7.1 Average Water Year Conditions

Under this water supply scenario, the District would anticipate full availability of its groundwater supplies, both from SCWA and self-supplied. The resulting total supplies are set to match the forecasted demands from **Table 4-6** as shown in **Table 7-1**. As demonstrated, the District projects adequate water supplies through 2045 during average year conditions.

Table 7-1 – Supply and Demand Comparison (Average Year)

(acre-feet/yr)	Current	2020	2025	2030	2035	2040	2045
Supplies	8,142	7,832	8,059	8,116	8,183	8,204	8,226
Demands	8,142	7,832	8,059	8,116	8,183	8,204	8,226
Difference	--	0	0	0	0	0	0

7.2 Single Dry Year Conditions

In a single dry year condition, the District does not anticipate reductions to its groundwater supplies.

For purposes of this UWMP, the District's forecast water demands are expected to increase in a single dry year. This increase represents the generalized expansion of the landscape irrigation season due to limited rainfall – meaning customers begin demanding supplies from the District earlier in the spring than during a normal year when rainfall would otherwise satisfy landscape water needs. Though the increase is dependent on actual conditions, it is represented by adjusting the normal year annual forecast demand value upward by 5 percent for each 5-year increment to 2045. This adjustment reflects rudimentary relationships between, historic use variances and other conditions and is

[55] This is consistent with CWC Section 10635, but extends the period an additional 5 years to provide "20 year" analysis coverage for the intervening years between UWMP updates.

meant only to highlight the anticipated increase in demands for purposes of District planning.

As shown in **Table 7-2**, the District anticipates adequate water supplies through 2045 during single dry year conditions.

Table 7-2 – Supply and Demand Comparison (Single Driest-Year)

(acre-feet/yr)	Current	2020	2025	2030	2035	2040	2045
Supplies	--	8,224	8,462	8,441	8,429	8,450	8,473
Demands	--	8,224	8,462	8,441	8,429	8,450	8,473
Difference	--	0	0	0	0	0	0

7.3 Multiple Dry Year Conditions

For purposes of this 2015 UMWP, the District has assessed a three-year series of dry conditions. As detailed in Chapter 3, the District does not anticipate reductions in available groundwater supplies during these multiple dry years.

Demand, however, will vary across this planning scenario. This variance is represented by setting the forecast demands for the first of three years equal to the demand used in the single dry year scenario. In the second year, the District would anticipate that its water shortage contingency plan (WSCP) would be triggered, resulting in a demand reduction for that year. The District's WSCP Stage 1 reduction target of 10 percent is assumed (see Chapter 6). Similarly, in the third year, the District would expect further reductions resulting from implementing further WSCP actions. For this third year, the District's Stage 2 reduction target is assumed to reduce demands by 25 percent.

This resulting analysis has been represented in **Table 7-3**. During each multiple dry year period projected in **Table 7-3**, the District anticipates adequate water supplies being available over the course of multiple dry years.

Table 7-3 – Supply and Demand Comparison (multiple dry years)

	(acre-feet/yr)	2020	2025	2030	2035	2040	2045
Year 1	Supplies	8,224	8,462	8,441	8,429	8,450	8,473
	Demands	8,224	8,462	8,441	8,429	8,450	8,473
	Difference	0	0	0	0	0	0
Year 2		2020	2025	2030	2035	2040	2045
	Supplies	7,402	7,616	7,597	7,586	7,605	7,625
	Demands	7,402	7,616	7,597	7,586	7,605	7,625
	Difference	0	0	0	0	0	0
Year 3		2020	2025	2030	2035	2040	2045
	Supplies	6,168	6,347	6,330	6,322	6,338	6,354
	Demands	6,168	6,347	6,330	6,322	6,338	6,354
	Difference	0	0	0	0	0	0

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Stefani Phillips, Human Resource Administrator

SUBJECT: **NEW CLASSIFICATION REQUEST – PROGRAM MANAGER**

RECOMMENDATION

It is recommended that the Board adopt Resolution No. 05.25.16.01 approving the Florin Resource Conservation District/Elk Grove Water District Classification and Salary Study and authorizing associated changes to the Florin Resource Conservation District's Organization Chart and Elk Grove Water District Salary Schedule.

Summary

In April 2016, CPS HR Consulting was retained to perform a classification and salary study to evaluate a proposed position of Program Manager. The Classification and Salary Study ("Study") (Attachment 1) recommended the salary range for the position of Program Manager to be Grade 69 of the Florin Resource Conservation District (FRCD) Salary Schedule.

If approved, the Board would create one new position to be added to the organization chart, remove one existing position from the current organization chart, and amend the salary schedule to incorporate the position of Program Manager.

DISCUSSION

Background

In March 2016, the District's Management Analyst retired leaving the position vacant. With that vacancy, several members of the Leadership Team reviewed the District's organizational needs moving forward. From that review, the Leadership Team feels that the duties and responsibilities listed in the classification specifications for the position of Management Analyst will not fully meet the needs of the organization. A list of duties and responsibilities was developed for the vacant position and the title of Program Manager was proposed.

CPS HR Consultant was retained in April 2016 to perform a classification and salary study for the proposed position of Program Manager. The CPS HR Consultant met with the Human Resources Administrator to discuss the parameters of the position including the major job duties and responsibilities. A second meeting occurred between the CPS HR

Consultant, the General Manager, and the Human Resources Administrator to review and edit the draft Program Manager classification specifications.

The CPS HR Consultant presented the Draft Classification and Salary Study, which was thoroughly reviewed by the General Manager and Human Resources Administrator.

Present Situation

The attached Study is now complete and presented to the Board for your consideration.

The following actions are being recommended:

1. Create a new position of Program Manager

   This new position will create added depth and support at the highest level of the organization. The Study also recommends that the salary range for this position be set at Grade 69 based on a comparison of similar positions at comparable agencies.

2. Eliminate the Management Analyst position from the Florin Resource Conservation District Organization Chart

   If the new position of Program Manager is approved, the position of Management Analyst will not be a necessary role for the District. For this reason, the position of Management Analyst that is shown on the Florin Resource Conservation Districts Salary Schedule can be eliminated.

3. Modify the Florin Resource Conservation District Organization Chart to add the position of Program Manager

   The position of Program Manager will report to the General Manager seen in the attached Florin Resource Conservation District Organization Chart (Attachment 2). The classification specifications is also included in the Study the Board's review.

4. Amend the Elk Grove Water District Salary Schedule to incorporate the Program Manager position and to reflect the established salary grade and range

The salary schedule (Attachment 3) is attached for the Board's consideration. The hiring of a Program Manager is anticipated in August or September 2016. Amending the salary schedule to include Program Manager is a formality and no amendments will be necessary to the FY 2015-16 budget to accommodate the salary. The salary for the position of Program Manager will be reflected in the Elk Grove Water District Fiscal Year 2016-17 Budget.

STRATEGIC PLAN CONFORMITY

The Florin Resource Conservation District/Elk Grove Water District 2012-2017 Strategic Plan contains numerous goals for both the FRCD and the EGWD. The actions listed above comply generally with all of the District's values identified in the Strageic Plan and specifically with the EGWD goal of succession planning under the challenge of Workforce Development

FINANCIAL SUMMARY

The actions listed above will not impact the Elk Grove Water District FY 2015-16 Budget. The Elk Grove Water District FY 2016-17 Budget reflect the approved salary and benefit costs. At this time, no budgetary modifications are requested of the Board.

Respectfully Submitted,

STEFANI PHILLIPS
HUMAN RESOURCES ADMINISTRATOR

attachments

RESOLUTION NO. 05.25.16.01

RESOLUTION OF THE FLORIN RESOURCE CONSERVATION BOARD OF DIRECTORS APPROVING THE FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT CLASSIFICATION AND SALARY STUDY AND AUTHORIZING ASSOCIATED CHANGES TO THE FLORIN RESOURCE CONSERVATION DISTRICT'S ORGANIZATION CHART AND ELK GROVE WATER DISTRICT SALARY SCHEDULE

WHEREAS, the District retained CPS HR Consulting to perform a classification and salary study to evaluate a proposed position of Program Manager for the Florin Resource Conservation District/Elk Grove Water District; and

WHEREAS, CPS HR Consulting has prepared the Florin Resource Conservation District/Elk Grove Water District Classification and Salary Study ("Study") providing recommendations; and

WHEREAS, the General Manager and Human Resources Administrator have received and reviewed the Study; and

WHEREAS, based on their review of the Study and an overall review of internal organizational needs, the General Manager and Human Resources Administrator have recommended various changes to the Florin Resource Conservation District Organization Chart and Elk Grove Water District Salary Schedule; and

WHEREAS, the General Manager and Human Resources Administrator hereby recommends approval of the Classification and Salary Study and changes to the Florin Resource Conservation District Organization Chart and Elk Grove Water District Salary Schedule.

NOW, THEREFORE, BE IT RESOLVED that the Florin Resource Conservation District Board of Directors, hereby:

1. Approve the Classification and Salary Study; and

2. Authorize the following changes to the Florin Resource Conservation District Organization Chart and Elk Grove Water District Salary Schedule:

I. Create a new position of Program Manager
II. Eliminate the Management Analyst position from the Florin Resource Conservation District Organization Chart
III. Modify the Florin Resource Conservation District Organization Chart to add the position of Program Manager
IV. Amend the Elk Grove Water District Salary Schedule to incorporate the Program Manager position and to reflect the approved salary by the General Manager

PASSED, APPROVED, AND ADOPTED this 25th day of May 2016.

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Chuck Dawson
Chairman of the Board of Directors

ATTEST:

_____
Stefani Phillips
Secretary to the Board of Directors

CPS HR CONSULTING

Florin Resource Conservation District/ Elk Grove Water District

Program Manager Classification and Salary Study

May 25, 2016

SUBMITTED BY:

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Table of Contents

I. Background

In April 2016, the Florin Resource Conservation District/Elk Grove Water District (FRCD/EGWD) retained CPS HR Consulting (CPS HR) to develop a classification specification and base salary study for its proposed Program Manager classification. Although the position was originally classified as a Management Analyst position, the FRCD/EGWD wanted to increase the scope of the position to include more program management responsibilities. Specifically, the Program Manager position would be responsible for: developing grant applications; analyzing legislation; and acting as the District's Conservation Coordinator, Public Information Officer, and Safety Officer. There were no incumbents in the Program Manager classification when the study was initiated.

II. Classification Specifications

A CPS HR Consultant met with the FRCD/EGWD's Human Resources Administrator to discuss the parameters of the Program Manager position. At this meeting, the major job responsibilities of the proposed Program Manager classification were discussed. FRCD/EGWD shared background materials with CPS HR during this meeting, including the FRCD/EGWD Management Analyst classification specifications, FRCD/EGWD's classification specifications format, and classification specifications from other agencies with positions similar to the proposed Program Manager position. Based on the information received during the initial meeting, CPS HR proceeded to identify agencies with comparable Program Manager classifications. The agencies examined included other water districts and governmental agencies in Northern California. CPS HR developed the draft classification specifications for the Program Manager position based on information from the similar positions from comparable agencies. CPS HR then met with the FRCD/EGWD's Human Resources Administrator and the General Manager to review and edit the draft Program Manager classification specifications. The general job definition for the FRCD/EGWD Program Manager classification is as follows:

> Under supervision of the General Manager, this exempt position: provides project and program management for finance, operations, and administration; conducts administrative research; completes grant applications and manages grants; conducts legislative tracking; and coordinates and implements other District programs. This position will also oversee the conservation efforts of the FRCD and EGWD and be responsible for planning, coordinating, implementing, and enforcing the District's accident prevention and safety program in compliance with all Federal and State industrial safety codes, regulations, and standards. This position may also serve as

the organization's Public Information Officer and be responsible for planning, developing, and conducting external and internal information and education programs.

The finalized Program Manager classification specifications are included in Appendix A.

III. Identification of Comparable Classifications

When identifying comparable classifications, the intent is to provide general market trends by comparing the span of control; duties and responsibilities; and knowledge, skill, and ability (KSA) requirements to determine whether these are comparable enough to utilize as a match. With a balanced labor market and the use of whole job analysis, it is reasonable to assume that while some matches will have slightly higher responsibilities and some matches will have slightly lower responsibilities, the overall scope of duties and responsibilities of the combined matches will be balanced.

Upon development of the new Program Manager classification specification, CPS HR proceeded to survey other agencies to identify comparable classifications. CPS HR proceeded to survey water agencies, cities, and counties in Northern California. Table 1 lists the agencies in which the job classifications were surveyed and the comparable classifications that were identified. Note: agencies in which job descriptions were unobtainable for review are not included in the list of agencies surveyed in Table 1.

Table 1
Agencies Surveyed for Comparable Classifications

Agency	Classification Title
Sacramento County	Environmental Program Manager I
City of Stockton	Program Manager III
City of Sacramento	Program Specialist
City of Fairfield	Program Manager
San Joaquin County	Program Manager
Merced Irrigation District	No Matches Found

Agency	Classification Title
Santa Clara Valley Water District	No Matches Found
East Bay Municipal Utilities District	No Matches Found
Alameda County Water District	No Matches Found
Fresno Irrigation District	No Matches Found
San Benito County Water District	No Matches Found
Yuba County Water Agency	No Matches Found
Nevada Irrigation District	No Matches Found
El Dorado Irrigation District	No Matches Found
Sacramento Suburban Water District	No Matches Found
Placer County	No Matches Found
City of Tracy	No Matches Found
City of Vacaville	No Matches Found

The five matching classifications identified in Table 1 were considered comparable to the FRCD/EGWD Program Manager classification upon review of their associated job duties, KSA requirements, and minimum qualifications.

The classification specifications for the five comparable positions are included in Appendix B.

IV. Base Salary Study

The final step in the FRCD/EGWD Program Manager classification project was to conduct a base salary survey of comparable classifications. The two most common labor market salary indicators are:

- The labor market median represents the "middle" of the market. This is the data point at which half of the complete range of data is higher, and half of the complete range of data is lower. Within small data sets, the median data point is not skewed by high or low paying agencies in the market; thus, eliminating the highest and lowest payers would not impact the median data point.

- The labor market mean is the arithmetic average data point for the complete range of data. High and low paying agencies can impact this data point if their values significantly deviate from the salaries being paid be the other agencies.

The salary information for the five comparable Program Manager classifications identified above are compiled in Table 2.

Table 2
Base Salary Comparisons

Agency	Classification Title	Minimum Monthly Salary	Maximum Monthly Salary
Sacramento County	Environmental Program Manager I	$8,439.00	$9,303.78
City of Stockton	Program Manager III	$6,618.74	$8,498.64
City of Sacramento	Program Specialist	$6,702.14	$8,792.77
City of Fairfield	Program Manager	$7,725.64	$9,390.51
San Joaquin County	Program Manager	$6,527.73	$7,936.93
	Median		**$8,792.77**
	Mean		**$8,784.53**

Only the mean and median maximum salary are calculated in Table 2, as each agency generally has their own procedures for calculating the minimum salary level based on the number of steps there are in each grade for the classification. For the five comparable classifications, the mean and median maximum salaries are almost identical. The maximum median monthly salary level of $8,792.77 of the comparable classifications is equivalent to a yearly income of $105,513. The FRCD/EGWD salary schedule that best fits the median salary level of the comparable classes is Grade 69. Table 3 outlines the current FRCD/EGWD salary schedule for Grade 69.

Table 3
EGWD Salary Schedule for Grade 69

Pay Period	Step I	Step II	Step III	Step IV	Step V
Yearly	$87,152.00	$91,499.20	$96,075.20	$100,880.00	$105,934.40
Bi-Weekly	$3,352.00	$3,519.20	$3,695.20	$3,880.00	$4,074.40
Hourly	$41.90	$43.99	$46.19	$48.50	$50.93

V. Base Salary Recommendation

CPS HR Consulting recommends that the Program Manager salary level be equivalent to the FRCD/EGWD Salary Grade 69. Given the responsibilities and position requirements outlined in the proposed Program Manager classification specifications, the proposed salary level for the Program Manager classification appears to be consistent with the responsibilities and duties of the classifications in adjacent pay grade levels.

Appendix A

FRCD/EGWD Program Manager Classification Specifications

ELK GROVE WATER DISTRICT
JOB DESCRIPTION

Elk Grove Water District is an equal opportunity employer.
Employment is at-will.

POSITION:	**Program Manager**
DEPARTMENT:	Management
DIRECTLY REPORTS TO:	General Manager
FLSA:	Exempt
JOB DESCRIPTION DATE:	May 9, 2016

Job Definition

Under supervision of the General Manager, this exempt position: provides project and program management for finance, operations, and administration; conducts administrative research; completes grant applications and manages grants; conducts legislative tracking; and coordinates and implements other District programs. This position will also oversee the conservation efforts of the FRCD and EGWD and be responsible for planning, coordinating, implementing, and enforcing the District's accident prevention and safety program in compliance with all Federal and State industrial safety codes, regulations, and standards. This position may also serve as the organization's Public Information Officer and be responsible for planning, developing, and conducting external and internal information and education programs.

Examples of Duties:

The statements contained herein reflect general details as necessary to describe the principle functions of this job, the level of knowledge, the skills typically required, and the scope of responsibility. These are not to be construed as exclusive or all-inclusive. Other duties may be required an assigned.

General Administration

- Review and administer policies, procedures, and operations.
- Develop and direct the implementation of goals, objectives, priorities, and work standards.
- May supervise staff, including planning, assigning, reviewing, and evaluating work.
- Participate in collaborative efforts to improve work processes and objectives throughout the District.
- Recommend and implement policy and procedural improvements.

Public Information and Outreach

- Provide liaison and public information assistance to the General Manager.
- Serve as a contact for specific programs and projects.
- Facilitate internal and external customer relations.
- Represent the District and/or the General Manager in meetings, hearings, workshops and regulatory proceedings with representatives of governmental agencies, professional organizations, businesses, community organizations, and the public.
- Compose formal and informal written correspondence.
- Coordinate and prepare pamphlets, brochures, booklets, newsletters, bill inserts, reports, and other in-house and external publications.
- Communicate with the press and prepare press releases.
- Establish and maintain contacts with representatives of the news media.
- Respond to inquiries from the public, news media, local, state and federal government leaders, elected representatives, and other water agencies and associations.

Program/Project Management

- Plan, organize, direct, and control programs and projects with District-wide implications and ensure that internal and externally imposed program requirements are met.
- Conduct and prepare comprehensive reports.
- Prepare a variety of periodic progress and special reports related to programs and activities.
- Organize systems and procedures.
- Establish goals and objectives for the District for assigned programs and projects.
- Develop and maintain informational and statistical reports regarding assigned program performance, goal attainment, and service levels.

Fiscal Responsibilities

- Manage budgets for assigned programs.
- Prepare recommendations for annual grant and program budgets.
- Assist in budget preparation for programs and projects.
- Work with vendors and suppliers to obtain needed goods and services.

Grants/Contracts

- Prepare and/or assist in the preparation of grant applications.
- Write RFP/RFQs and contracts for goods and services.
- Assist in negotiating terms, conditions, and performance standards of contracts.
- Provide contract management.
- Assist in lobbying efforts to acquire grant funding.

Legislative Analysis

- Monitor new/revised/proposed legislation and developments related to the District.
- Perform legislative advocacy and support.

- Evaluate and interpret local, state, and federal regulations and their impact on District operations and programs.
- Devise strategies and procedures to ensure compliance with local, state, and federal regulations.
- Prepare periodic legislation status reports for the General Manager and the Board.

Conservation Activities
- Develop, implement, and manage water and other conservation programs.
- Analyze internal and external issues regarding local, regional, and statewide regional water policy.
- Provide periodic conservation reports to the General Manager and to the Board.
- Provide conservation education to schools and other forums.

Safety
- Plan, organize, implement, and evaluate the District's safety programs.
- Plan, introduce, and effectively carry out campaigns for prevention and reduction of accidents and injuries.
- Investigate occupational injuries or illnesses.
- Chair the District's Safety Committee.
- Analyze accident/injury reports.
- Study reports and data to discern trends and causes and develop recommendations for eliminating or mitigating hazards.
- Plan, develop, and conduct training on specific safety topics to District employees.
- Maintain records of safety training attended by employees.
- Develop and distribute safety-related information and materials.
- Schedule, perform, and document periodic safety inspections of District facilities and equipment.
- Maintain and edit the Employee Safety Manual and Injury & Illness Prevention Plan.
- Specify and requisition safety materials, tools, and equipment.
- Respond to emergency situations at District facilities.

Knowledge of:

General Administration
- Public administration principles, practices, and methods of administrative and organizational analysis.
- Business computer user applications, particularly as related to word processing and spreadsheets.
- Methods and practices of modern office management.
- Database formats and operation.

Public Information and Outreach
- District rules and practices for the public release of information.
- Functions and missions of publicly appointed Boards or Commissions.

Program/Project Management
- Policies, principles, and resources related to the program(s) to which assigned.
- Program monitoring and evaluation techniques.
- Advanced principles and practices of project/program development, management and administration.
- Advanced principles and practices of research, analysis, and report writing.
- Knowledge of the principles and techniques of analytical and statistical analysis.
- Water industry and conservation terminology, equipment, and procedures.
- Resource planning and forecasting principles, methods, practices, and techniques.

Fiscal Responsibilities
- Basic accounting/budgetary principles and practices.

Grants/Contracts
- Available grants and grant application procedures.
- RFP components and preparation techniques.

Legislative Analysis
- Applicable federal, state, and local laws, rules and regulations relating to water districts.

Conservation Activities
- Principles and practices of conservation management and planning.
- Principles and practices of environmental impact assessment and related regulatory processes.

Safety
- Federal, state, and local laws, rules, and regulations regarding occupational health and safety.
- Water utility safety practices (including Title 8 and the California Code of Regulations).

Ability to:

General Administration
- Establish, prioritize, and implement goals, objectives, policies, and work standards.
- Evaluate alternatives, apply logic, and reach sound conclusions when analyzing problems.
- Plan, assign, review, and direct the work of assigned staff.
- Prepare clear and concise management-level reports and correspondence.
- Use computers, computer applications, and software.
- Establish and maintain effective working relationships with people of diverse backgrounds.

- Communicate clearly and concisely, both orally and in writing.

Public Information and Outreach
- Develop and disseminate informational materials.
- Make clear and concise presentations to staff, the Board, and to the public.

Program/Project Management
- Analyze administrative, operational, or organizational problems and issues related to the program(s) to which assigned.
- Manage multiple programs, projects, priorities, and deadlines.
- Collecting and analyzing large volumes of data and reaching a conclusion supported by the research.
- Effectively plan, develop, and implement a program or project with a broad scope and high degree of complexity.
- Make program or project changes based on analysis of results, new legislation, or departmental changes.

Fiscal Responsibilities
- Prepare, administer, and monitor program/project budgets.

Grants/Contracts
- Prepare grant applications.
- Administer and monitor grants.
- Identify potential grant and funding sources.

Legislative Analysis
- Interpret complex rules, regulations, policies, laws, and ordinances.
- Research, interpret, and apply technical information, e.g. laws, standards, regulations, and policies.

Conservation Activities
- Analyze water policy issues.
- Make educational presentations to schools and other forums.

Safety
- Plan, organize, and evaluate the District's safety programs.
- Ability to investigate on-the-job accidents and work-related incidents.
- Ability to identify and correct unsafe working conditions and practices through on-site inspections.

Physical Requirements:

- Use fine gross motor coordination in performing data entries into the computer while sitting for prolonged periods of time.
- Hear normal conversation in person and on the telephone.
- Vision must be sufficient to accomplish the duties of the position, which may include operating a company vehicle.
- Sit for prolonged periods of time.
- Push and pull 25 pounds.
- Lift and carry 25 pounds.
- Travel infrequently by vehicle for District related duties and activities.
- Intermittently twist and reach office equipment.
- Coordinate eyes, hands, and fingers to perform semi-skilled tasks including typing and calculating

Desirable Education and Experience:

- Graduation of an accredited four-year college or university with a degree business or public administration or related field.
- Five plus (5+) years of general local government experience.
- Experience in budget preparation preferably in a management role for a minimum of two years.

License Required:

Possession of a valid Class C California Driver's License.

Appendix B

Comparable Classification Specifications from other Agencies

City of Sacramento

Class Title: Program Specialist

Bargaining Unit: Sacramento City Exempt Employees Association (SCXEA)

Class Code: 001799

Salary: $38.67 - $50.73 Hourly
$3,093.30 - $4,058.20 Biweekly
$6,702.14 - $8,792.77 Monthly
$80,425.70 - $105,513.20 Annually

DEFINITION **Benefits**

Under general direction the Program Specialist plans, directs, and supervises all of the activities of a major department or Citywide program or project with moderate visibility and impact; conducts studies and makes recommendations; monitors program compliance; represents the department in contacts with media, internal and external agencies, and organizations.

DISTINGUISHING CHARACTERISTICS

This advanced journey level class in the professional series is populated with multiple incumbents. The Program Specialist is distinguished from the next lower class of Program Analyst in that the Program Specialist manages multiple programs or moderately visible programs with greater department or Citywide impact. This class is distinguished from the next higher classification of Program Manager in that the Manager is responsible for administration and management of programs and projects with high visibility and substantial Citywide impact.

This class is distinguished from the class of Administrative Officer in that the latter is responsible for all internal administrative functions for a department.

SUPERVISION RECEIVED AND EXERCISED

General direction is provided by a department or division head. Some assignments require responsibility for direct or indirect supervision of lower level professional, technical, and clerical personnel. Some positions function as internal consultants and require coordination among multiple divisions in a department.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Plans, coordinates, and administers, a project or program with department or Citywide impact; supervises, trains and evaluates the work of professional, technical and clerical staff.
- Confers with department heads, division managers, members of professional staff, and other officials concerning the administrative needs and requirements related to the program or project; represents the program in contacts with news media,

business and civic organizations, other City departments, and various outside public and private agencies.

- Interprets new policies, procedures, and regulations, and develops new or amended programs or projects as need dictates, monitors program objectives to assure compliance with State and administrative regulations and program guidelines.
- Conducts studies and surveys, performs research and analysis and prepares recommendations for department management; monitors and evaluates program effectiveness and outcomes; creates and implements program policies and procedures; develops guidelines, forms and related documents.
- Reviews grant opportunities; compiles and analyzes information for preparation of grants, contracts and agreements; negotiates terms; implements, monitors and prepares reports on conduct and performance of grants.
- Identifies program, project or system enhancements; selects and coordinates installation of new and revised programs and systems.
- Provides exceptional customer service to those contacted in the course of work.
- Other related duties may also be performed; not all duties listed are necessarily performed by each individual holding this classification.

QUALIFICATIONS:

Knowledge of:

- Principles and practices of public administration and governmental finance, budgeting, and accounting.
- Procurement methods.
- Research techniques, methods and procedures.
- Methods and practices of modern office management.
- Principles and practices of program management and administration.
- Technical report writing.
- Methods of analysis.
- Principles and practices of supervision.

Skill in:

- Managing multiple tasks and deadlines.
- Customer service, including dealing with people under stress, and problem solving.
- Use of computers, computer applications, and software.

Ability to:

- Effectively plan, develop, and implement a comprehensive program with a broad scope and high degree of complexity.
- Supervise and direct professional, technical, and clerical staff.
- Analyze fiscal problems and make sound policy and procedural recommendations.
- Make effective presentations to public officials, committees, and outside agencies.
- Establish and maintain effective working relationships with employees and the general public.
- Prepare technical and analytic reports.
- Communicate effectively, orally and in writing.
- Make program or project changes based on analysis of results, new legislation, or departmental changes.
- Meet multiple deadlines.

EXPERIENCE AND EDUCATION

Experience:

Four years of progressively responsible professional-level administrative experience.

-AND-

Education:

A Bachelor's Degree from an accredited four-year college or university with major coursework in business or public administration or a closely related field.

Note: It is highly desirable the required years of professional-level experience be attained in a governmental jurisdiction.

Substitution:

Additional qualifying experience may substitute for the required education on a year for year basis.

SPECIAL QUALIFICATIONS

Driver License:

Possession of a valid California Class C Driver License at the time of appointment. Individuals who do not meet this requirement due to physical disability will be reviewed on a case-by-case basis.

CLASS HISTORY:

Adopted: 4/20/02
Revised:June 30, 2015
Abolished:
Title Change:
Maintenance Update: 12/2/05; Class Code: 01799

City of Fairfield

Class Title: Program Manager
Bargaining Unit: Fairfield General Management Association
Class Code: 2193
Salary: $44.57 - $54.18 Hourly
$3,565.68 - $4,334.08 Biweekly
$7,725.64 - $9,390.51 Monthly
$92,707.68 - $112,686.08 Annually

Description | Benefits

DEFINITION

Under general direction, organizes and manages major programs or projects with a high degree of visibility and substantial citywide impact; may supervise professional, technical, and clerical staff; coordinates administrative functions; and develops procedures, programs and methodologies.

WORKING CONDITIONS

Work is performed in an office setting with frequent interruptions, deadlines, complaints, and peak workload periods. Work may also include going out into the field for meetings and site evaluations. Position sometimes requires working nights and weekends.

PHYSICAL DEMANDS

Work may include prolonged sitting and standing, light to moderate lifting, reaching, stooping, pulling, and manual dexterity. Clear, understandable speech, visual and hearing acuity are also necessary.

DISTINGUISING CHARACTERISTICS

Incumbents in this classification exercise a broad range of authority over complex programs critical to a department's mission. Responsibilities require work beyond typical program or project management work. Incumbents must exercise substantial innovation and leadership in developing and managing programs or projects. The Program Manager is responsible for administration and management of major complex programs and projects with high visibility and substantial citywide impact.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from the Assistant City Manager May exercise direct supervision over professional, technical, and administrative support personnel as assigned.

Minimum Qualifications:

EDUCATION AND EXPERIENCE

Any combination equivalent to experience and education that would likely provide the require knowledge and abilities would be qualifying. A typical way to obtain the knowledge and abilities would be:

Education:

A Bachelor's degree from an accredited college or university with major course work in public administration, business administration or a closely related field is required.

Experience:

A minimum of five (5) years of professional governmental administrative and analytical experience.

LICENSE AND/OR CERTIFICATE

Possession of a valid California Class C driver's license is required.

Examples of Duties:

EXAMPLES OF DUTIES The duties of this position may include, but are not limited to the following:

Organizes, coordinates, and manages one or more major programs or projects with high visibility and citywide impact; coordinates administrative functions including budget preparation, financial management and contract administration for the program.
Develops procedures and methodologies within compliance requirements; interprets and applies existing policies to actual situations; coordinates development of work plans, selects and supervises staff; meets with staff to identify and resolve problems, assigns work activities, and evaluates work products.
Serves as principal contact for the program/project; confers with department heads, members of professional staff, and other officials concerning programs, regulations, procedures and policies; represents the City in a variety of meetings involving program coordination or regulatory requirements; may serve on commissions or non-profit boards as part of program service delivery.

Develops and maintains informational and statistical reports regarding program performance, goal attainment, and service levels; conducts customer service audits and delivers customer service training.
Works with vendors and suppliers; writes RFP/RFQs, contracts, and grant applications; negotiates terms, conditions and performance standards.

Knowledge & Abilities:

DESIRABLE QUALIFICATIONS

Knowledge of:

Principles and practices of public administration, including governmental finance, budgeting, personnel administration, procurement methods.
Methods and practices of modern office management.
Advanced principles and practices of research, analysis, and technical report writing.
Functions and missions of publicly appointed Boards or Commissions.
Principles and practices of supervision.
Advanced principles and practices of project/program development, management and administration
Principles and practices of supervision and training.

Ability to:

Collect and analyze large volumes of data and reach a conclusion supported by the research.
Build consensus among parties with competing or conflicting interests.
Supervise and motivate employees and generate department-wide cooperation in support of strategic goals and plans.
Effectively plan, develop, and implement a comprehensive program with a broad scope and high degree of complexity.
Manage highly complex subject matter.
Make program or project changes based on analysis of results, new legislation, or departmental changes.
Use of computers, computer applications, and software.
Prepare technical or analytical reports.
Interpret and apply regulatory practices, rules, and policies to actual situations.
Present ideas effectively, orally and in writing.
Establish and maintain effective working relationships with people of diverse backgrounds.
Meet deadlines in a highly political environment.
Exercise administrative supervision and direction over professional, technical, and clerical staff.

City of Stockton

Class Title: Program Manager III
Bargaining Unit: Unrep - Middle Management
Class Code: 02160
FLSA: Exempt
Salary: $6,618.78 - $8,498.64 Monthly
$79,425.36 - $101,983.68 Annually

DEFINITION | **Benefits**

Under administrative direction, performs a variety of professional level duties and responsibilities for implementation of Citywide strategic programs, including operational and/or other complex analyses; performs related duties as assigned.

CLASS CHARACTERISTICS:

Incumbents in this management level classification are responsible, in addition to the above, for directing and managing compliance by departments with the policies and procedures of the program(s) under the supervision of this class. Work is done under the direct authority of the City Manager or departmental senior management due to the critical nature of the policies and programs. Assignments allow for a high degree of autonomy and administrative decision making in their execution. This class is distinguished from the general administrative support classes in that the duties relate specifically to administration of specialized programs.

PRINCIPAL DUTIES (Illustrative Only):

1. Plans, organizes, directs, and controls programs and projects with Citywide implications; provides expert professional assistance to City management staff.
2. Reviews and enforces administrative policies, procedures, and operations; ensures that internal and externally imposed program requirements are met.
3. Develops and directs the implementation of goals, objectives, and work standards.
4. Supervises staff, planning, assigning, reviewing, and evaluating work; participates in the selection of staff and provides for their training and professional development.
5. Provides staff leadership and technical assistance to task forces, citizen advisory committees, commissions, or boards; confers with and provides technical assistance to City departments in areas of responsibility.

6. Prepares a variety of periodic progress and special reports related to programs and activities.

7. Represents the City in meetings with representatives of governmental agencies, professional, business and community organizations and the public.

8. Prepares recommendations for annual grant and program budgets; and/or provides input for and prepares various grant applications or annual performance report of activities.

9. May confer and negotiate with developers and property owners relative to the acquisition and disposition of property and improvements; may draft project contract language and performance specifications.

10. Monitors legislation and developments related to areas of responsibility; evaluates their impact on City operations and programs; recommends and implements policy and procedural improvements.

11. Performs related duties as assigned.

MINIMUM QUALIFICATIONS:

Education/Experience:

Possession of a Bachelor's degree from an accredited four-year college or university with major course work in business or public administration or a closely related field, or the field of the program to which assigned, and four (4) years of experience managing or supervising highly visible programs or projects with major departmental or citywide impact.

Other Requirements:

Specified positions may require possession of a valid California Class C driver's license.

Knowledge of:

- Policies, principles, and resources related to the program(s) to which assigned; program monitoring and evaluation techniques;
- Public administration principles, practices, and methods of administrative and organizational analysis;
- Applicable federal, state, and local laws, rules and regulations;
- Business computer user applications, particularly as related to data analysis and management;

- Principles and practices of employee selection, supervision, training, and professional development;
- Principles of grant application, proposal preparation, and monitoring and reporting techniques;
- Basic budgetary principles and practices.

Skill in:

- Analyzing administrative, operational, or organizational problems and issues related to the program(s) to which assigned; evaluating alternatives and reaching sound conclusions;
- Establishing, prioritizing, and implementing goals, objectives, policies, and work standards;
- Planning, assigning, reviewing, evaluating, and directing the work of assigned staff;
- Interpreting, explaining, and applying complex rules, regulations, policies, laws, and ordinances;
- Providing technical assistance and staff leadership to City departments, boards, and commissions;
- Preparing clear and concise management-level reports and correspondence;
- Making persuasive oral presentations of ideas and recommendations;
- Negotiating favorable contract terms for the City in assigned areas of responsibility;
- Effectively representing the interests of the City in meetings with public agencies, the business community, or others outside the City;
- Preparing, administering, and monitoring grant or program budgets;
- Exercising sound, independent judgment within established guidelines;
- Establishing and maintaining effective relationships with those contacted in the course of the work.

HISTORICAL NOTE:

Established/Excluded: 6/30/98

Resolution: CC98-0268
Spec Adopted: 8/27/03
Resolution: CC03-0513
CS Status: Unclassified
Unit: Unrepresented-MV

Sacramento County

Class Title: Environmental Program Manager I

Class Code: 28953

Salary: $48.50 - $53.47 Hourly
$8,439.00 - $9,303.78 Monthly
$101,268.00 - $111,645.36 Annually

Definition | Benefits

Positions in the Environmental Program Manager series perform the full scope of management work over programs concerned with present and future environmental issues related to safeguarding the public interest and ensuring the high quality standards necessary to protect both public health and the environment.

Distinguishing Characteristics:

Environmental Program Manager II is the second-line management level in the series. Under administrative direction, incumbents primarily function as division chiefs for a major division with the department. Incumbents develop and administer a division's budget, goals and objectives, and policies and procedures with greater emphasis on long-range planning and projecting and negotiating resource requirements. Incumbents typically lead and guide through subordinate managers and senior professionals.

Environmental Program Manager I is the first-line management level in the series. Under general direction, incumbents are responsible for the day-to-day management of the people and budget and the operational integration and coordination of environmental programs, components, and/or service areas that are highly sensitive and complex in nature. Staff oversight is usually delegated through supervisors and/or advanced practitioners and typically involves planning, organizing, executing, controlling and evaluating the final products and services. Incumbents function in a liaison capacity and coordinate program activities, products and services with other governmental agencies, county departments, and the private sector.

Examples of Duties, Knowledge, and Abilities:

Note: The following duties are typical of those performed by positions in this class series. Every incumbent may not necessarily perform all of the duties listed. Other related duties may also be performed.

Duties

Environmental Program Manager I and above:

1. Works closely with management staff and director to develop programs and services and formulate goals, objectives, policies, procedures, public relations and operating strategies for an assigned program or operational area.
2. Develops and administers a program budget and works with a division chief and/or director to coordinate the budget with division- and department-wide fiscal administration.
3. Plans, organizes, directs, and coordinates program's services to maximize accomplishment of goals and objectives and improve operational efficiency.

4. Plans and assigns projects, budgets staff time and funds; monitors processes and timelines; ensures completion of program and administrative objectives and submission of satisfactory products to division chiefs and director, other agencies, and the public.
5. Coordinates division and/or program activities and special projects with other government agencies concerned with environmental regulation and compliance.
6. Plans, organizes, and reviews work of scientific, professional and technical staff; supervises senior professional staff and other scientific or technical experts working on special projects.
7. Reviews and evaluates staff products and achievements; advises staff on complex environmental issues and regulatory and compliance problems.
8. Participates in and provides direction for selecting, developing, promoting, and evaluating subordinate staff; works with department personnel/human resources staff to investigate and resolve personnel matters; adjusts grievances and/or recommends appropriate actions to be taken.
9. Reviews legislation and prepares written analyses and recommendations; works with a division chief and/or director to develop new ordinances and regulations.
10. Works with management staff and director to develop and implement new policies, procedures, programs, trends, regulations, and guidelines related to environmental and public inspections, enforcement, compliance, and scientific studies.
11. Attends Board and Commission meetings to address program and environmental issues; testifies in court and before administrative bodies.
12. Meets with industry representatives to discuss problems and develop solutions to issues of mutual concern.
13. Ensures proper implementation of public information and education programs; responds to media inquiries and the most sensitive public complaints and inquiries.
14. Prepares administrative reports and ensures proper maintenance of program records, data, and reports.
15. May act for a division chief in his/her absence.

Environmental Program Manager II

1. Administers a variety of scientific and environmental compliance programs and services within a division.
2. Supervises division's operations through subordinate managers and senior professional staff.
3. Plans, organizes, directs, and coordinates division's operations, programs, and services to maximize accomplishment of goals and objectives
4. Develops and administers a division budget and works with director and other management staff to coordinate the budget with department-wide fiscal administration.
5. Oversees the development and control of program budgets by subordinate managers and supervisors.
6. May act for the director in his/her absence.

KNOWLEDGE OF:

- Laws, codes, regulations, and policies affecting the programs, services, and operations of the department
- Principles of environmental ecology
- Principles of environmental compliance assurance
- Effects of waste material on water quality and land quality and the interactions of waste with the environment
- Environmental practices with special reference to their general effect on human health and the quality of the environment
- Principles of chemistry and chemical reactions
- Statistical methods and analysis
- Principles and practices of scientific and technical problem solving
- Principles and methods of program development, project management, and program/project analysis and

evaluation
• Principles of public administration and public sector budget development and administration
• Principles, practices and techniques of staff management, supervision, mentoring, training, performance evaluations, discipline, employer-employee relations and conflict resolution
• Sacramento County Personnel Policies and Procedures
• Team dynamics and team building

ABILITY TO:

• Plan, organize, administer, and evaluate the operations and services of a division, program, or unit within the department
• Develop and administer a division or program budget; work with subordinate managers or supervisors in program budget development and administration
• Establish, monitor and control projects and schedules to meet goals and objectives
• Manage, supervise, train, and coach managers and senior level scientific and professional staff
• Maintain responsibility for staff evaluations; oversee and direct staff development and employee training; and respond to and adjust grievances
• Manage, direct, and organize the collection of environmental data and information
• Recognize problems, analyze and evaluate complex environmental data; develop recommendations or solutions and take appropriate actions
• Review and interpret impact of legislative changes
• Manage the development and presentation of scientific studies and reports
• Develop innovative solutions for difficult and complex environmental management problems
• Establish and maintain cooperative working relationships
• Effectively represent the department in contacts and relationships with the public, local business community and other government agencies and media

Minimum Qualifications:

Environmental Program Manager I

Either: Graduation from an accredited college or university with major in health science, public health, natural science, physical science, environmental science, or a related field.

-and-

Two years of supervisory experience at a level equivalent to the Environmental Specialist IV class within Sacramento County service.

Or: Possession of split off rights as granted by the Civil Service Commission and Board of Supervisors via SRA #90-85.

Note: Possession of a Master's Degree from an accredited college or university in health science, public health, natural science, business or public administration, physical science, environmental science, or a related field may substitute for one year of the required experience.

Environmental Program Manager II

Graduation from an accredited college or university with major work in health science, public health, natural science, physical science, environmental science, or a related field.

-and-

And: 1. Three years of supervisory experience at a level equivalent to the Environmental Specialist IV class within Sacramento County service.

Or: 2. One year of first-line management experience in the class of Environmental Program Manager I within Sacramento County service.

Note: Possession of a Master's Degree from an accredited college or university in health science, public health, natural science, business or public administration, physical science, environmental science, or a related field may substitute for one year of the required supervisory experience.

SPECIAL REQUIREMENTS
Applies to all classes

Physical Requirements:
Sit for extended periods; frequently stand and walk; normal manual dexterity and eye-hand coordination; corrected hearing and vision to normal range; verbal communication; use of office equipment including computers, keyboards, telephones, calculators, and copiers.

Work Schedule and Conditions:
Incumbents are subject to work in adverse weather conditions, emergency situations, and perform duties during other than normal working hours, as necessary.

General License Requirements:
All classes in this series require possession of, or ability to obtain a valid California Driver's License, Class C or higher, before the date of appointment. Failure to obtain and maintain this license constitutes cause for suspension or termination from the class in accordance with Civil Service Rules.

Professional Certification/ Registration Requirements:
Failure to obtain and maintain required certification/registration constitutes cause for suspension or termination from the class in accordance with Civil Service Rules.

Some positions may require possession of valid certification as a Registered Environmental Health Specialist, issued by the State of California.

Some positions may require possession of valid certifications, as deemed necessary by legislative mandate or appropriate regulatory authority in the State of California.

Probationary Period and Class History Information:

Environmental Program Manager I Six (6) Months
Environmental Program Manager II Six (6) Months

Adopted: 6/19/01
Revised: 8/27/13*
Retitled:
Class Code: 28953
Schematic Code: 13131C
EEO Code: 41
Rep Unit: 032

San Joaquin County Human Resources Division

Program Manager (#RM1153)

$37.66-$45.79 Hourly / $6,527.73-$7,936.93 Monthly / $78,332.80-$95,243.20 Yearly

Under general direction, performs complex administrative work in the management of a public assistance division; and does related or other work as required in accordance with Rule 3, Section 3 of the Civil Service Rules.

An employee in this class plans and directs a major division in income maintenance, staff services or social services, and supervises the work of administrative and technical staff who carry out program activities. An incumbent has responsibilities encompassing multiple programs and policy and decision-making authority with agency-wide impact. This class differs from Program Assistant II in that incumbents of the latter class perform technical or administrative supervisory work under direction and do not have overall responsibility for division management.

TYPICAL DUTIES Plans, organizes and directs the work of division staff; prioritizes and assigns work; analyzes staffing, work flow and procedures and adjusts as needed to maximize resource utilization. Conducts staff meetings; coordinates suggestions made by staff for revision or development of program activities; analyzes and interprets new policies and procedures to staff. Directs program appraisal activities to identify need for revision or development of program elements; analyzes program; develops procedures to increase program effectiveness. Meets with department director and deputy directors regarding program policies; participates in departmental committees to determine agency needs and develop policies and procedures, forms and training to meet needs. Maintains liaison with local and state agencies; may address public and private groups relative to public assistance programs; may participate in conferences or seminars. Reviews correspondence, reports and other material; prepares reports and correspondence; prepares budget and staffing.

Education: Graduation from a four-year college with major coursework in public or business administration, social sciences or related fields.

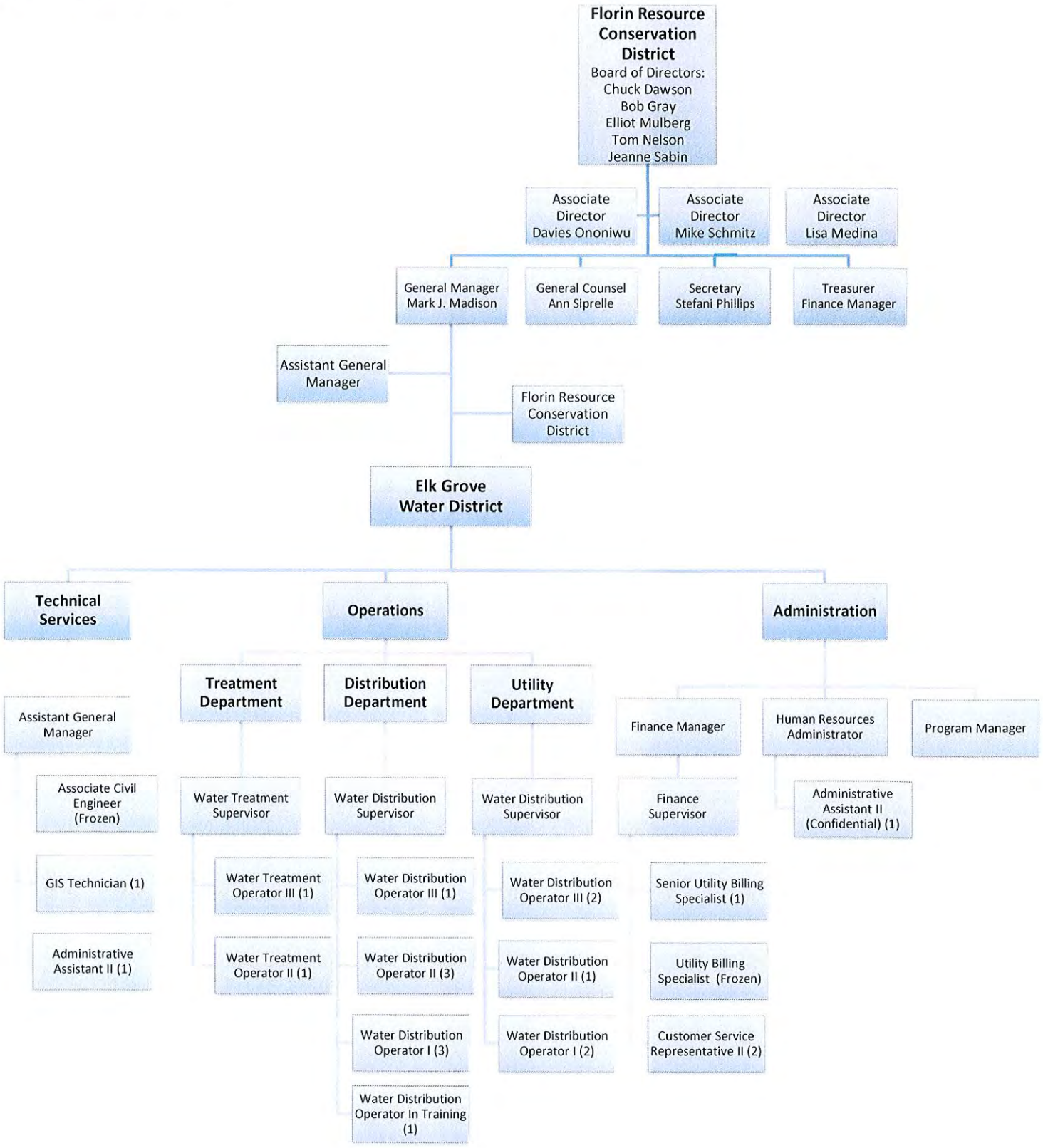
Experience: Three years either supervising a unit of staff engaged in determining eligibility or providing services in a public assistance department; or performing administrative duties equivalent to or higher than those performed at the level of Program Assistant I.

Substitution: Responsible experience performing duties which required considerable independence in compiling, organizing and evaluating reports may be substituted for education on a year-to-year basis.

ABILITY

Plan, direct and coordinate the activities of a division; perform complex, managerial duties; interpret and apply public assistance regulations; communicate effectively; establish and maintain effective working relationships with administrators and other employees; write clear, concise reports; analyze data and base recommendations on the analysis.

Florin Resource Conservation District
Organization Chart



JM 6/29/2015

ELK GROVE WATER DISTRICT

Non-Exempt Positions

Annual, Bi-Weekly & Hourly Wage

As of May 25, 2016

Position	Grade	Step I	Step II	Step III	Step IV	Step V
Administrative Assistant I	35	$38,022.40	$39,924.52	$ 41,920.75	$ 44,016.78	$ 46,217.62
		$ 1,462.40	$ 1,535.56	$ 1,612.34	$ 1,692.95	$ 1,777.60
		$ 18.28	$ 19.19	$ 20.15	$ 21.16	$ 22.22
Administrative Assistant II	41	$44,012.80	$46,217.60	$ 48,526.40	$ 50,960.00	$ 53,497.60
		$ 1,692.80	$ 1,777.60	$ 1,866.40	$ 1,960.00	$ 2,057.60
		$ 21.16	$ 22.22	$ 23.33	$ 24.50	$ 25.72
CIP Worker (Temporary)	46	$49,732.80	$52,228.80	$ 54,849.60	$ 57,574.40	$ 60,465.60
		$ 1,913.14	$ 2,008.80	$ 2,109.24	$ 2,214.70	$ 2,325.44
		$ 23.91	$ 25.11	$ 26.37	$ 27.68	$ 29.07
Conservation Coordinator	50	$54,849.60	$57,574.40	$ 60,465.60	$ 63,481.60	$ 66,664.00
		$ 2,109.24	$ 2,214.70	$ 2,325.44	$ 2,441.71	$ 2,563.79
		$ 26.37	$ 27.68	$ 29.07	$ 30.52	$ 32.05
Customer Service Specialist I	31	$34,486.40	$36,212.80	$ 38,022.40	$ 39,915.20	$ 41,912.00
		$ 1,326.47	$ 1,392.80	$ 1,462.44	$ 1,535.56	$ 1,612.34
		$ 16.58	$ 17.41	$ 18.28	$ 19.19	$ 20.15
Customer Service Specialist II	37	$39,915.20	$41,912.00	$ 44,012.80	$ 46,217.60	$ 48,526.40
		$ 1,535.56	$ 1,612.34	$ 1,692.95	$ 1,777.60	$ 1,866.48
		$ 19.19	$ 20.15	$ 21.16	$ 22.22	$ 23.33
Financial Services Specialist I	56	$63,481.60	$66,664.00	$ 69,992.00	$ 73,486.40	$ 77,168.00
		$ 2,441.71	$ 2,563.79	$ 2,691.98	$ 2,826.58	$ 2,967.91
		$ 30.52	$ 32.05	$ 33.65	$ 35.33	$ 37.10
Financial Services Specialist II	62	$73,486.40	$77,168.00	$ 81,016.00	$ 85,072.00	$ 89,336.00
		$ 2,826.58	$ 2,967.91	$ 3,116.31	$ 3,272.12	$ 3,435.73
		$ 35.33	$ 37.10	$ 38.95	$ 40.90	$ 42.95
GIS Technician I	51	$56,180.80	$58,988.80	$ 61,942.40	$ 65,041.60	$ 68,286.40
		$ 2,160.69	$ 2,268.72	$ 2,382.16	$ 2,501.26	$ 2,626.33
		$ 27.01	$ 28.36	$ 29.78	$ 31.27	$ 32.83
Intern I	7	$19,198.40	$20,155.20	$ 21,174.40	$ 22,235.20	$ 23,337.60
		$ 738.63	$ 775.56	$ 814.34	$ 855.06	$ 897.81
		$ 9.23	$ 9.69	$ 10.18	$ 10.69	$ 11.22
Intern II	24	$29,078.40	$30,534.40	$ 32,073.60	$ 33,675.20	$ 35,360.00
		$ 1,118.40	$ 1,174.40	$ 1,233.60	$ 1,295.20	$ 1,360.00
		$ 13.98	$ 14.68	$ 15.42	$ 16.19	$ 17.00
Meter Reader	37	$39,915.20	$41,912.00	$ 44,012.80	$ 46,217.60	$ 48,526.40
		$ 1,535.56	$ 1,612.34	$ 1,692.95	$ 1,777.60	$ 1,866.48
		$ 19.19	$ 20.15	$ 21.16	$ 22.22	$ 23.33

ELK GROVE WATER DISTRICT

Non-Exempt Positions

Annual, Bi-Weekly & Hourly Wage

As of May 25, 2016

Position	Grade	Step I	Step II	Step III	Step IV	Step V
Operations Foreman	60	$69,992.00	$73,486.40	$ 77,168.00	$ 81,016.00	$ 85,072.00
		$ 2,691.98	$ 2,826.58	$ 2,967.91	$ 3,116.31	$ 3,272.12
		$ 33.65	$ 35.33	$ 37.10	$ 38.95	$ 40.90
Operator in Training	37	$39,915.20	$41,912.00	$ 44,012.80	$ 46,217.60	$ 48,526.40
		$ 1,535.56	$ 1,612.34	$ 1,692.95	$ 1,777.60	$ 1,866.48
		$ 19.19	$ 20.15	$ 21.16	$ 22.22	$ 23.33
Senior Utility Billing Specialist	56	$63,481.60	$66,664.00	$ 69,992.00	$ 73,486.40	$ 77,168.00
		$ 2,441.71	$ 2,563.79	$ 2,691.98	$ 2,826.58	$ 2,967.91
		$ 30.52	$ 32.05	$ 33.65	$ 35.33	$ 37.10
Utility Billing Specialist	46	$49,732.80	$52,228.80	$ 54,849.60	$ 57,574.40	$ 60,465.60
		$ 1,913.14	$ 2,008.80	$ 2,109.24	$ 2,214.70	$ 2,325.44
		$ 23.91	$ 25.11	$ 26.37	$ 27.68	$ 29.07
Water Distribution Supervisor	60	$69,992.00	$73,486.40	$ 77,168.00	$ 81,016.00	$ 85,072.00
		$ 2,691.98	$ 2,826.58	$ 2,967.91	$ 3,116.31	$ 3,272.12
		$ 33.65	$ 35.33	$ 37.10	$ 38.95	$ 40.90
Water Distribution Operator I	46	$49,732.80	$52,228.80	$ 54,849.60	$ 57,574.40	$ 60,465.60
		$ 1,913.14	$ 2,008.80	$ 2,109.24	$ 2,214.70	$ 2,325.44
		$ 23.91	$ 25.11	$ 26.37	$ 27.68	$ 29.07
Water Distribution Operator II	51	$56,180.80	$58,988.80	$ 61,942.40	$ 65,041.60	$ 68,286.40
		$ 2,160.69	$ 2,268.72	$ 2,382.16	$ 2,501.26	$ 2,626.33
		$ 27.01	$ 28.36	$ 29.78	$ 31.27	$ 32.83
Water Distribution Operator III	56	$63,481.60	$66,664.00	$ 69,992.00	$ 73,486.40	$ 77,168.00
		$ 2,441.71	$ 2,563.79	$ 2,691.98	$ 2,826.58	$ 2,967.91
		$ 30.52	$ 32.05	$ 33.65	$ 35.33	$ 37.10
Water Treatment Supervisor	60	$69,992.00	$73,486.40	$ 77,168.00	$ 81,016.00	$ 85,072.00
		$ 2,691.98	$ 2,826.58	$ 2,967.91	$ 3,116.31	$ 3,272.12
		$ 33.65	$ 35.33	$ 37.10	$ 38.95	$ 40.90
Water Treatment Operator I	46	$49,732.80	$52,228.80	$ 54,849.60	$ 57,574.40	$ 60,465.60
		$ 1,913.14	$ 2,008.80	$ 2,109.24	$ 2,214.70	$ 2,325.44
		$ 23.91	$ 25.11	$ 26.37	$ 27.68	$ 29.07
Water Treatment Operator II	51	$56,180.80	$58,988.80	$ 61,942.40	$ 65,041.60	$ 68,286.40
		$ 2,160.69	$ 2,268.72	$ 2,382.16	$ 2,501.26	$ 2,626.33
		$ 27.01	$ 28.36	$ 29.78	$ 31.27	$ 32.83
Engineering Technician I	52	$57,574.40	$60,465.60	$ 63,481.60	$ 66,664.00	$ 69,992.00
		$ 2,214.40	$ 2,325.60	$ 2,441.60	$ 2,564.00	$ 2,692.00
		$ 27.68	$ 29.07	$ 30.52	$ 32.05	$ 33.65

ELK GROVE WATER DISTRICT

Non-Exempt Positions

Annual, Bi-Weekly & Hourly Wage

As of May 25, 2016

Position	Grade	Step I	Step II	Step III	Step IV	Step V
Water Treatment Operator III	56	$63,481.60	$66,664.00	$ 69,992.00	$ 73,486.40	$ 77,168.00
		$ 2,441.71	$ 2,563.79	$ 2,691.98	$ 2,826.58	$ 2,967.91
		$ 30.52	$ 32.05	$ 33.65	$ 35.33	$ 37.10
Water Utility Supervisor	60	$69,992.00	$73,486.40	$ 77,168.00	$ 81,016.00	$ 85,072.00
		$ 2,691.98	$ 2,826.58	$ 2,967.91	$ 3,116.31	$ 3,272.12
		$ 33.65	$ 35.33	$ 37.10	$ 38.95	$ 40.90
Water Utility Operator I	46	$49,732.80	$52,228.80	$ 54,849.60	$ 57,574.40	$ 60,465.60
		$ 1,913.14	$ 2,008.80	$ 2,109.24	$ 2,214.70	$ 2,325.44
		$ 23.91	$ 25.11	$ 26.37	$ 27.68	$ 29.07
Water Utility Operator II	51	$56,180.80	$58,988.80	$ 61,942.40	$ 65,041.60	$ 68,286.40
		$ 2,160.69	$ 2,268.72	$ 2,382.16	$ 2,501.26	$ 2,626.33
		$ 27.01	$ 28.36	$ 29.78	$ 31.27	$ 32.83
Water Utility Operator III	56	$63,481.60	$66,664.00	$ 69,992.00	$ 73,486.40	$ 77,168.00
		$ 2,441.71	$ 2,563.79	$ 2,691.98	$ 2,826.58	$ 2,967.91
		$ 30.52	$ 32.05	$ 33.65	$ 35.33	$ 37.10

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6/29/2015

ELK GROVE WATER DISTRICT

Exempt Positions

Annual Salary

As of May 25, 2016

Position	Grade	Step I	Step II	Step III	Step IV	Step V
Assistant General Manager	82	$ 119,704	$ 125,694	$ 131,976	$ 138,570	$ 145,517
Associate Civil Engineer	69	$ 87,152	$ 91,499	$ 96,075	$ 100,880	$ 105,934
Finance Manager	79	$ 111,238	$ 116,792	$ 122,637	$ 128,752	$ 135,200
Finance Supervisor	71	$ 91,499	$ 96,075	$ 100,880	$ 105,934	$ 111,238
General Manager	---	$ 185,000				
Human Resources Administrator	70	$ 89,336	$ 93,787	$ 98,488	$ 103,418	$ 108,576
Human Resources Specialist	62	$ 73,486	$ 77,168	$ 81,016	$ 85,072	$ 89,336
Management Analyst	66	$ 81,016	$ 85,072	$ 89,336	$ 93,787	$ 98,488
Operations Manager	75	$ 100,880	$ 105,934	$ 111,238	$ 116,792	$ 122,637
Program Manager	69	$ 87,152	$ 91,499	$ 96,075	$ 100,880	$ 105,934

May 25, 2016

TO: Chairman and Directors of the Florin Resource Conservation District

FROM: Jim Malberg, Finance Manager/Treasurer
Stefani Phillips, Board Secretary

SUBJECT: **FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT GENERAL LIABILITY, PROPERTY AND WORKERS COMPENSATION INSURANCE**

RECOMMENDATION

It is recommended that the Board adopt Resolution No. 05.25.16.02, of the Board of Directors of the Florin Resource Conservation District authorizing application to the Director of Industrial Relations, State of California for a Certificate of Consent to Self-Insure Workers' Compensation Liabilities; Resolution No. 05.25.16.03 of the Board of Directors of the Florin Resource Conservation District consenting to enter the Joint Protection Programs of the Association of California Water Agencies/Joint Powers Insurance Authority; and Resolution No. 05.25.16.04 of the Board of Directors of the Florin Resource Conservation District authorizing volunteer personnel workers' compensation insurance.

Summary

It is required that the Board of Directors of the Florin Resource Conservation District adopt three resolutions in order for the District to complete the application process to join the Association of California Water Agencies Joint Powers Insurance Authority (ACWA/JPIA) General Liability, Property and Workers Compensation Insurance Programs (Insurance Programs) in Fiscal Year 2016-17.

DISCUSSION

Background

At the Board Meeting on March 23, 2016 the Board authorized the General Manager to execute all necessary documents for the District to join the ACWA/JPIA General Liability, Property and Workers Compensation Insurance Programs as well as withdraw from the Special Districts Risk Management Authority (SDRMA) Insurance Programs. This action was contingent upon the ACWA/JPIA Executive Committee's approval of the Districts application which was approved March 30, 2016.

Present Situation

In order for the District to complete the application process to join the ACWA/JPIA Insurance Programs, the District must complete an application for a public entity certificate to self-insure as well as adopt the following resolutions:

1. Resolution No. 05.25.16.02, of the Board of Directors of the Florin Resource Conservation District authorizing application to the Director of Industrial Relations, State of California for a Certificate of Consent to Self-Insure Workers' Compensation Liabilities (application is attached as "Exhibit A").

   This resolution is required by the State in order for the District to participate in the ACWA/JPIA Insurance Program pool of self-insured agencies.

2. Resolution No. 05.25.16.03 of the Board of Directors of the Florin Resource Conservation District consenting to enter the Joint Protection Programs of the Association of California Water Agencies/Joint Powers Insurance Authority.

   This resolution is required by the ACWA/JPIA for the District to enter into the ACWA/JPIA Insurance Programs.

3. Resolution No. 05.25.16.04 of the Board of Directors of the Florin Resource Conservation District authorizing volunteer personnel workers' compensation insurance.

   This resolution is also required by ACWA/JPIA in order for any volunteers performing work for the District to be covered by workers' compensation insurance.

STRATEGIC PLAN CONFORMITY

The recommendation made 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

All insurance premium amounts are included each year in the annual operating budget and presented to the Board for approval. Total estimated premiums in FY 2016-17 are as follows:

	ACWA/JPIA
General Liability	$ 57,446
Property	22,454
Workers Compensation	112,612
Total	**$ 192,512**

Respectfully submitted,

JIM MALBERG
FINANCE MANAGER/TREASURER

STEFANI PHILLIPS
BOARD SECRETARY

Attachments

RESOLUTION NO. 05.25.16.02

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE FLORIN RESOURCE CONSERVATION DISTRICT AUTHORIZING APPLICATION TO THE DIRECTOR OF INDUSTRIAL RELATIONS, STATE OF CALIFORNIA FOR A CERTIFICATE OF CONSENT TO SELF INSURE WORKERS' COMPENSATION LIABILITIES

WHEREAS, at the meeting of the Board of Directors of the Florin Resource Conservation District, a Special District, organized and existing under the laws of the State of California, held on the 25th day of May, 2016, the following resolution was adopted:

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Florin Resource Conservation District:

That the General Manager is hereby severally authorized and empowered to make application to the Director of Industrial Relations, State of California, for a Certificate of Consent to Self Insure workers' compensation liabilities on behalf of the Florin Resource Conservation District/Elk Grove Water District and to execute any and all documents required for such application; and

I Stefani Phillips, the undersigned Secretary of the Board of said Florin Resource Conservation District, a Special District, that the foregoing is a full, true and correct copy of the resolution duly passed by the Board at the meeting of said Board on the day and at the place herein specified and that said resolution has never been revoked, rescinded, or set aside and is now in full force and effect.

PASSED, APPROVED, AND ADOPTED this _____ day of _____, 20____ by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

IN WITNESS WEREOF: I HAVE SIGNED MY NAME AND AFFIXED THE SEAL OF THIS

FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT

THIS _____ DAY OF_____. _____

_____

Stefani Phillips
Secretary to the Board of Directors

State of California
Department of Industrial Relations
Office of Self Insurance Plans
11050 Olson Drive, Suite 230
Rancho Cordova, CA 95670
Phone (916) 464-7000
FAX (916) 464-7007

Our File: _____

APPLICATION FOR A PUBLIC ENTITY CERTIFICATE OF CONSENT TO SELF INSURE

NOTE: All questions must be answered. If not applicable, enter "N/A".
Workers' compensation insurance must be maintained until certificate is effective.

APPLICANT INFORMATION

Legal Name of Applicant (show exactly as on Charter or other official documents):
Florin Resource Conservation District

Street Address of Main Headquarters:
9257 Elk Grove Blvd.

Mailing Address (if different from above):

Federal Tax ID No.:
68-0409700

City, State, Zip Code
Elk Grove, CA, 95624

TO WHOM DO YOU WANT CORRESPONDENCE REGARDING THIS APPLICATION ADDRESSED?

Name: Jim Malberg Title: Finance Manager / Treasurer

Company Name: Florin Resource Conservation District / Elk Grove Water District

Mailing Address: 9257 Elk Grove Blvd.

City: Elk Grove State: CA Zip + 4: 95624

Telephone Number: (916) 685-3556 Email: jmalberg@egwd.org

Type of Public Entity (check one):

☐ City and/or County ☐ School District ☐ Police and/or Fire District ☐ Hospital District ☐ Joint Powers Authority

☒ Other (describe): Special District

Type of Application (check one):

☒ New Application ☐ Reapplication due to Merger or Unification ☐ Reapplication due to Name Change

☐ Other (describe) _____

Date Self Insurance Program will begin: July 1, 2016

CURRENT PROGRAM FOR WORKERS' COMPENSATION LIABILITIES

☐ Currently Insured with State Compensation Insurance Fund, Policy Number:

Policy Expiration Date: _____ Yearly Premium: $ _____

Current Yearly Incurred (paid & unpaid) Losses: $ _____ (FY or CY)

☐ Currently Self Insured, Certificate Number: _____

Name of Current Certificate Holder: _____

☒ Other (describe): Special District Risk Management Authority (SDRMA)

JOINT POWERS AUTHORITY

Will the applicant be a member of a workers' compensation Joint Powers Authority for the purpose of pooling workers' compensation liabilities?

☒ Yes ☐ No If yes, then complete the following:

Effective date of JPA Membership: _____ JPA Certificate No.: 5807

Name and Title of JPA Executive Officer:
Andy Sells, Chief Executive Officer

Name of Joint Powers Authority Agency:
Association of California Water Agencies/Joint Powers Insurance Authority

Mailing Address of JPA:
2100 Professional Drive

City: State: Zip + 4:
Roseville, CA 95661

Telephone Number: 916-786-5742

PROPOSED CLAIMS ADMINISTRATOR

Who will be administering your agency's workers' compensation claims? (check one)

☒ JPA will administer, JPA Certificate No.: 5807

☐ Third party agency will administer, TPA Certificate No.: _____

☐ Public entity will self administer ☐ Insurance carrier will self administer

Name of Individual Claims Administrator:
Melody Tucker

Name of Administrative Agency:
Association of California Water Agencies/Joint Powers Insurance Authority

Mailing Address:
2100 Professional Drive

City: State: Zip + 4:
Roseville, CA 92661

Telephone Number: 916-786-5742 FAX Number: 916-786-0209

Number of claims reporting locations to be used to handle the agency's claims: 1

Will all agency claims be handled by the administrator listed on previous page? ☒ Yes ☐ No

AGENCY EMPLOYMENT

Current Number of Agency Employees: 31

Number of Public Safety Officers (law enforcement, police or fire): 0

If a school district, number of certificated employees: N/A

Will all agency employees be included in this self insurance program? ☒ Yes ☐ No
If no, explain who is not included and how workers' compensation coverage is to be provided to the excluded agency employees:

INJURY AND ILLNESS PREVENTION PROGRAM

Does the agency have a written Injury and Illness Prevention Program? ☒ Yes ☐ No

Individual responsible for agency Injury and Illness Prevention Program:
Name and Title:
Mark J. Madison, General Manager

Company or Agency Name:
Florin Resource Conservation District / Elk Grove Water District

Mailing Address:
9257 Elk Grove Blvd.

City:	State:	Zip + 4:
Elk Grove	CA	95624

Telephone Number: (916) 685-3556

SUPPLEMENTAL COVERAGE

Will your self insurance program be supplemented by any insurance or pooled coverage under a standard workers' compensation insurance policy? ☐ Yes ☒ No

If yes, then complete the following:

Name of Carrier or Excess Pool:

Policy Number:

Effective Date of Coverage:

Will your self insurance program be supplemented by any insurance or pooled coverage under a specific excess workers' compensation insurance policy? ☐ Yes ☒ No

If yes, then complete the following:

Name of Carrier or Excess Pool: _____

Policy Number: _____

Effective Date of Coverage: _____

Retention Limits: _____

Will your self insurance program be supplemented by any insurance or pooled coverage under an aggregate excess (stop loss) workers' compensation insurance policy? ☐ Yes ☒ No

If yes, then complete the following:
Name of Carrier or Excess Pool: _____

Policy Number: _____

Effective Date of Coverage: _____

Retention Limits: _____

RESOLUTION OF GOVERNING BOARD

See Attached Resolution-Page 5

CERTIFICATION

The undersigned on behalf of the applicant hereby applies for a Certificate of Consent to Self Insure the payment of workers' compensation liabilities pursuant to Labor Code Section 3700. The above information is submitted for the purpose of procuring said Certificate from the Director of Industrial Relations, State of California. If the Certificate is issued, the applicant agrees to comply with applicable California statutes and regulations pertaining to the payment of compensation that may become due to the applicant's employees covered by the Certificate.

Signature of Authorized Official: _____

Date: _____

Typed Name:
Mark J. Madison

Title:
General Manager

Agency Name:
Florin Resource Conservation District / Elk Grove Water District

Seal

(Emboss seal above or Notarize signature)

RESOLUTION NO. 05.25.16.03

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE FLORIN RESOURCE CONSERVATION DISTRICT CONSENTING TO ENTER THE JOINT PROTECTION PROGRAMS OF THE ASSOCIATION OF CALIFORNIAWATER AGENCIES/JOINT POWERS INSURANCE AUTHORITY

WHEREAS, pursuant to the provisions of Section 990, 990.4, 990.8, and 6500 of the Government Code, Florin Resource Conservation District/Elk Grove Water District (District) wishes to enter into an agreement with various other districts entitled "Joint Powers Agreement: Creating the Association of California Water Agencies/Joint Powers Insurance Authority" (the Authority), for the purpose of participating in the Joint Powers Insurance Authority created thereby, which since its formation has provided for and administered joint protection programs as more fully set forth in said agreement; and

WHEREAS, said joint protection programs offer significant advantages to this District in terms of cost, liability protection, property protection, workers' compensation protection, and services, and entering such programs, on the conditions hereinafter set forth, appears to be in the best interest of the District.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Florin Resource Conservation District:

Section 1. That the Florin Resource Conservation District / Elk Grove Water District hereby consents pursuant to the above-mentioned Joint Powers Agreement, and the resolutions and policies enacted in implementation of such Agreement, to enter said joint protection programs.

Section 2. That the District hereby elects to join the Liability, Property, and Workers' Compensation Programs sponsored by the Authority.

Section 3. That the District hereby selects $10, 000 as its Retrospective Allocation Point (RAP) for the first partial year of participation under the Authority's cost allocation formula for liability exclusive of Dam Failure Liability.

Section 4. That the District hereby selects $15,000 as its Retrospective Allocation Point (RAP) for the first partial year of participation under the Authority's cost allocation formula for workers' compensation liabilities.

Section 5. That the Treasurer of this District is hereby authorized to pay to the ACWA/Joint Powers Insurance Authority its first deposit premium.

Section 6. That the Secretary of the Board of Directors of the Florin Resource Conservation District is directed to certify a copy of this resolution and to forward the same resolution, the signed Joint Powers Agreement, and the JPIA deposit premium payment promptly by mail to the Association of California Water Agencies/Joint Powers Insurance Authority, P.O. Box 619082, Roseville, California, 95661, at which time coverage will commence the first day of July, 2016.

PASSED, APPROVED, AND ADOPTED this _____ day of _____, 20____ by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Chuck Dawson
Chairman of the Board of Directors

ATTEST:

_____
Stefani Phillips
Secretary to the Board of Directors

RESOLUTION NO. 05.25.16.04

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE FLORIN RESOURCE CONSERVATION DISTRICT AUTHORIZING VOLUNTEER PERSONNEL WORKERS' COMPENSATION INSURANCE

WHEREAS, this board desires to provide Workers' Compensation Insurance benefits for persons authorized by the Florin Resource Conservation District / Elk Grove Water District (District) to perform volunteer services for the District, and

WHEREAS, the Legislature of the State of California has provided through legislation (Labor Code Section 3363.5) authorization for the inclusion of such coverage in the District's workers' compensation insurance policy.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Directors of the Florin Resource Conservation District hereby adopts the policy that an unpaid person authorized to perform volunteer service for the District shall be deemed to be an employee of the District for the purposes of Workers' Compensation Insurance benefits provided for by law for any injury or illness sustained by them while engaged in the performance of services for the District under its direction and control.

The aforementioned resolution was passed by said Board of Directors the _____ day of _____, 20_____, by the following vote, to wit:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Chuck Dawson
Chairman of the Board of Directors

ATTEST:

_____
Stefani Phillips
Secretary to the Board of Directors