

REGULAR MEETING OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS

Agenda

Tuesday, June 15, 2021

6:00 PM

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 by email request at this time. 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."

Pursuant to the Sacramento County Shelter in Place order effective March 19, 2020, we are requiring all members of the public to participate virtually. Public participation and comment are limited to the following procedures:

A. The electronic submission of written comments in advance to the Board Secretary (stefani@egwd.org). Those comments will be read into the record for a maximum of three (3) minutes per comment.

B. Join Zoom Meeting: <https://zoom.us/j/84731009617> Meeting ID: 847 3100 9617

Dial by your location

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C. Please press Star+9 (*9) to raise your hand for Public Comment – 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.

CALL TO ORDER, ROLL CALL AND PLEDGE OF ALLEGIANCE

Public Comment

1. Proclamations and Announcements

Associate Director Comment

Public Comment

	Page Numbers
2. Consent Calendar	5-6
(Stefani Phillips, Board Secretary and Patrick Lee, Treasurer)	
a. Minutes of Regular Board Meeting of May 18, 2021	7-10
b. Minutes of Special Board Meeting of June 1, 2021	11-12
c. Accounts Payable Check History – May 2021	13-16
d. Board and Employee Expense/Reimbursements – May 2021	17
e. Active Accounts – May 2021	18
f. Bond Covenant Status for FY 2020-21 – May 2021	19
g. Year to Date Revenues and Expenses Compared to Budget – May 2021	20
h. CASH - Detail Schedule of Investments– May 2021	21
i. Consultants Expenses – May 2021	22
j. Major Capital Improvement Projects – May 2021	23

Associate Director Comment

Public Comment

Recommended Action: Approve Florin Resource Conservation District Consent Calendar items a – j.

3. Public Hearing - 2020 Urban Water Management Plan **24-145**
 (Travis Franklin, Program Manager)

Associate Director Comment

Public Comment

Recommended Action:

- 1. Approve Resolution 06.15.21.01, adopting the 2020 Urban Water Management Plan subject to the receipt and consideration of comments during the public hearing on this matter;**
- 2. Adopt Ordinance 06.15.21.01, to repeal and replace the previous Water Shortage Contingency Plan Ordinances 07.23.14.02, 04.28.10.01, and 06.21.06.01; and**
- 3. Adopt Ordinance 06.15.21.02, to repeal and replace an Enforcement Procedure for Violations of the Water Shortage Contingency Plan Ordinance 06.24.15.01**

4. Proposed Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget **146-246**
 (Patrick Lee, Finance Manager/Treasurer)

Associate Director Comment

Public Comment

Recommended Action: Adopt Resolution No. 06.15.21.02:

- 1. Approving the deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years; and**

2. Adopting the Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget projecting revenues of \$15.716 million and expenses of \$19.749 million and appropriating \$4.033 million from operating reserves to fund expenses over revenues for fiscal year 2021-22.

5. **Fiscal Year 2021-22 Investment Policy Guidelines**
(Patrick Lee, Finance Manager/Treasurer)

247-269

Associate Director Comment

Public Comment

Recommended Action: Adopt Resolution No. 06.15.21.03, approving the Fiscal Year 2021-22 Investment Policy Guidelines of the Florin Resource Conservation District and delegating investment authority to the Finance Manager/Board Treasurer.

6. **Backyard Water Mains Replacement Project – Sara Street Contract**
(Bruce Kamilos, General Manager)

270-421

Associate Director Comment

Public Comment

Recommended Action: Authorize the General Manager to execute a construction contract in the amount of \$622,075.42 with Flowline Contractors for the Backyard Water Mains Replacement Project – Sara Street.

7. **Future Florin Resource Conservation District Board Meetings**
(Bruce Kamilos, General Manager)

422-423

Associate Director Comment

Public Comment

Recommended Action: Provide direction on how and when future board meetings shall be held in person.

8. **Outside Agency Meetings Report**
(Bruce Kamilos, General Manager)

424-426

Associate Director Comment

Public Comment

Recommended Action: Consider replacing the standing Outside Agency Meetings Report with a standing General Manager's Report and provide direction to staff.

9. Legislative Matters and Potential Direction to Staff **427-434**
(Travis Franklin, Program Manager)

Associate Director Comment

Public Comment

10. Elk Grove Water District Operations Report – May 2021 **435-480**
(Bruce Kamilos, General Manager)

Associate Director Comment

Public Comment

11. Directors Comments

12. Closed Session

- a. POTENTIAL THREAT TO THE SECURITY OF ESSENTIAL PUBLIC SERVICES
(Section 54957(a))

Adjourn to Regular Meeting – July 20, 2021

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District
FROM: Stefani Phillips, Board Secretary and Patrick Lee, Treasurer
SUBJECT: **CONSENT CALENDAR**

RECOMMENDATION

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

SUMMARY

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

By this action, the Florin Resource Conservation District (FRCD) Board of Directors will approve FRCD Consent Calendar items a – j.

DISCUSSION

Background

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

Present Situation

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

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/Elk Grove Water District 2020-2025 Strategic Plan. The monthly Consent Calendar report provides transparency, which aligns with Goal No. 1, Governance and Customer Engagement, of the Strategic Plan 2020-2025.

CONSENT CALENDAR

Page 2

FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully Submitted,



STEFANI PHILLIPS
BOARD SECRETARY

And



PATRICK LEE
TREASURER

Attachments

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

Tuesday, May 18, 2021

The regular meeting of the Florin Resource Conservation District Board of Directors was called to order at 6:02 p.m. by Sophia Scherman, Chair via Zoom.

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

Directors Present: Sophia Scherman, Tom Nelson, Bob Gray, Lisa Medina, Elliot Mulberg
Directors Absent: None
Staff Present: Bruce Kamilos, General Manager; Patrick Lee, Finance Manager/Treasurer Stefani Phillips, Board Secretary; Travis Franklin, Program Manager; Amber Kavert, Administrative Assistant II (Confidential)
Staff Absent: Donella Murillo, Finance Supervisor
Associate Directors Present: Paul Lindsay
Associate Directors Absent: None
General Counsel Present: Ren Nosky, JRG Attorneys at Law
Consultants Present: Greg Young, Tully & Young

Public Comment

Nothing to report.

1. Proclamations and Announcements

Nothing to report.

2. Consent Calendar

- a. Minutes of Regular Board Meeting of April 20, 2021
- b. Minutes of Special Board Meeting of April 27, 2021
- c. Accounts Payable Check History – April 2021
- d. Board and Employee Expense/Reimbursements – April 2021
- e. Active Accounts – April 2021
- f. Bond Covenant Status for FY 2020-21 – April 2021
- g. Revenues and Expenses – Actual vs Budget FY 2020-21 – April 2021
- h. Cash Accounts – April 2021
- i. Consultants Expenses – April 2021
- j. Major Capital Improvement Projects – April 2021

Item c was pulled.

A few questions were asked regarding various items in the Accounts Payable Check History.

MSC (Nelson/Gray) to approve Florin Resource Conservation District Consent Calendar items a-j.
5/0: Ayes: Gray, Medina, Mulberg, Nelson and Scherman.

6. 2020 Urban Water Management Plan Update

Program Manager Travis Franklin presented the item to the Florin Resource Conservation District (FRCD) Board of Directors (Board) before handing it over to Greg Young, Tully & Young to present a PowerPoint.

In summary, the Elk Grove Water District (EGWD) contracted with Tully & Young and its subconsultant, Zanjero, to update the Urban Water Management Plan (UWMP). The major findings and conclusions of the 2020 UWMP are: 1) The EGWD's water supplies are stable and reliable. Both the groundwater supply and Sacramento County Water Agency's surface and groundwater water

supply are highly reliable over the 25-year UWMP planning horizon. As such, water service to Service Area 1 and Service Area 2 should remain stable in all year types. (Normal, Single Dry Year and Multi-Year Drought) and 2) The state-mandated 2020 water consumption target for EGWD's customer base was achieved (2020 Target GPCD = 191; 2020 Actual GPCD = 137). The UWMP gives EGWD confidence that it has a robust water supply to meet the current water needs and accommodate the anticipated future water demands in its service area. Staff will work with Tully & Young to complete the Public Draft 2020 Urban Water Management Plan for a public hearing and Board consideration on the matter at its regular Board meeting on June 15, 2021.

3. Elk Grove Water District Fiscal Year 2022-26 Capital Improvement Program

General Manager Bruce Kamilos presented the item to the Board.

In summary, the Fiscal Year (FY) 2022-26 Capital Improvement Program (CIP) describes capital improvement projects planned by the Elk Grove Water District (EGWD) over the next five (5) fiscal years. Staff presented the FY 2022-26 CIP at the Infrastructure Committee (IC) meeting held on April 6, 2021. Revisions to the CIP were made based on comments from that meeting. The notable changes made were: 1) a large portion, approximately fifty percent, of the requested FY 2021-22 CIP budget was related to the recently acquired administration building. Staff requested \$2,300,000 to construct tenant improvements to the building and an additional \$300,000 for the installation of a fiber optic cable between the building and the EGWD Railroad Water Treatment Plant and 2) another large portion of the requested FY 2021-22 CIP budget related to the Backyard Water Mains/Services Replacement project. Staff requested \$1,500,000 to complete this project which will employ a combination of EGWD work forces and contract work forces. The final version of the FY 2022-26 CIP was presented to the Board for consideration.

MSC (Nelson/Medina) to adopt Resolution No. 05.18.21.01, approving the Elk Grove Water District Fiscal Year 2022-26 Capital Improvement Program and the appropriation of \$5,055,000 from designated reserve funds to the Fiscal Year 2021-22 Capital Improvement Program budget. 5/0: Ayes: Gray, Medina, Mulberg, Nelson and Scherman.

4. Draft Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget

Finance Manager Patrick Lee presented the item to the Board.

In summary, each year staff develops a draft operating budget of estimated revenues and expenses and presents the document to the Finance Committee and Board. The Finance Committee met on April 27, 2021 to discuss the draft District FY 2021-22 Operating Budget development worksheet. The following changes were made to the draft District FY 2021-22 Operating Budget Development Worksheet since the April 27th Finance Committee meeting: 1) Salaries and Benefits increased by \$46,116 due to an update to reflect a Cost of Living Adjustment (COLA) of 3.97%, up from the 2.5% COLA originally used to calculate salary projections; 2) Office and Operational decreased by \$23,995 due to an increase for Software Program & Update of \$4,505 due to the addition of the annual maintenance fee for the GPS Data Collection Tool. Tools decreased by \$28,500 due to the removal of the GPS Data Collection Tool, which will be capitalized as part of the CIP Budget; and 3) Capital Expenditures increased the CIP Budget by \$288,000 (\$28,500 was added for the GPS Data Collection Tool and an additional \$265,000 was added for the Sara Street Backyard Watermain project, which will now occur in FY 2021-22 due to the need to re-bid the project).

Including the changes discussed above, the draft District FY 2021-22 Proposed Operating Budget projects total revenues of \$15.716 million and total expenditures of \$19.746 million. The expenditures in excess of revenues of \$4.030 million will be funded from operating reserves carried over from prior years.

Staff will bring back the Draft Florin Resource Conservation District/Elk Grove Water District FY 2021-22 Operating Budget to a Finance Committee Meeting before the regular board meeting in June.

5. On-Call Duty Policy Revision

Human Resources Administrator Stefani Phillips presented the item to the Board.

In summary, staff recommended on-call duty pay be increased from \$50 per day to \$75 per day to be competitive with the on-call pay provided by other water districts in the region. Staff performed inquiries with other districts in the region to learn about various conservation practices carried out by on-call operators, and in doing so, learned that the FRCD/EGWDs (District) on-call pay was lower, by comparison, than the majority of the agencies surveyed. On-call duties have expanded from what they have been in the past. In the past, employees assigned to on-call duty were required to receive calls, report for work whenever needed, and to keep their supervisor informed of the telephone number where they can be reached. Additionally, the on-call employee must respond by telephone within five (5) minutes of receiving notification of a call-out event and must respond in person within 45 minutes. In addition to the already established on-call duties, employees are now expected to periodically monitor water waste complaints sent to the District's "Report Water Waste" email listed on the District's website. The purpose of this additional task is to keep a watchful eye on potential emergency leaks that our customers may mistakenly report as a water waste event. This additional task requires another layer of vigilance that our employees must maintain while performing on-call duty.

After a lengthy discussion, the Board agreed to increase the on-call pay from \$50 to \$85 per day.

(Mulberg/Medina) to adopt Resolution No. 05.18.21.02, amending Section 4.2.10 On-Call Duty of the 2019 Elk Grove Water District Employee Policy Manual and increase on-call pay to \$85 per day. 4/1: Ayes: Medina, Mulberg, Nelson and Scherman. Noes: Gray

7. Amendment to Professional Services Agreement with SoftResources for Finance Needs Assessment

Mr. Lee presented the item to the Board.

In summary, on November 30, 2020 staff issued a Request for Proposals (RFP) for a Financial System Needs Assessment (Project) with proposals due by December 18, 2020. RFPs were posted on the California Society of Municipal Finance Officers (CSMFO) and the California Special Districts Association (CSDA) RFP forums, as well as on the District's website, resulting in three (3) total proposals received. Staff completed the review and evaluation of the proposals and selected the firm SoftResources based on their qualifications, understanding of the project and experience. The recommendation was made to the General Manager, who executed a professional services agreement (PSA) with SoftResources in an amount not to exceed \$47,136.

MSC (Medina/Nelson) authorize the General Manager to execute an amendment to the professional services agreement with SoftResources for an additional amount not-to-exceed \$8,000 for additional work to be included in the Financial Services Needs Assessment, bringing the total contract to a not-to-exceed amount of \$55,136. 5/0: Ayes: Gray, Medina, Mulberg, Nelson and Scherman.

8. Outside Agency Meetings Report

Staff and Board members spoke regarding the meetings they attended since the last regular board meeting.

9. Legislative Update and Potential Direction to Staff

Program Manager Travis Franklin updated the Board on legislative matters.

10. Elk Grove Water District Operations Report – April 2021

Mr. Kamilos presented the Elk Grove Water District (EGWD) Operations Report – April 2021 to the Board.

11. Directors Comments

Nothing to report.

Adjourn to Regular Board Meeting on June 15, 2021.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Board Secretary

AK/SP

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

Tuesday, June 1, 2021

The special meeting of the Florin Resource Conservation District Board of Directors was called to order at 6:00 p.m. by Sophia Scherman, Chair, by zoom conference.

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

Directors Present: Bob Gray, Tom Nelson, Elliot Mulberg, Lisa Medina, Sophia Scherman
Directors Absent: None
Staff Present: Bruce Kamilos, General Manager; Patrick Lee, Treasurer; Stefani Phillips, Board Secretary
Staff Absent: Donella Murillo, Finance Supervisor; Travis Franklin, Program Manager; Amber Kavert, Administrative Assistant II (Confidential)
Associate Directors Present: Paul Lindsay
Associate Directors Absent: None
General Counsel Present: Ren Nosky, JRG Attorneys at Law
Consultants Present: Shellie Anderson, Bryce Consulting

Public Comment

Nothing to report.

1. Florin Resource Conservation District/Elk Grove Water District Engineer Series Classification and Compensation Study

Human Resources Administrator Stefani Phillips introduced the item to the Florin Resource Conservation District (FRCD) Board of Directors (Board). She provided background on the item before introducing Shellie Anderson from Bryce Consulting to explain the findings from the Engineer Series Classification and Compensation study (Study).

In summary, the FRCD/Elk Grove Water District (District) retained Bryce Consulting to develop the Study under project management of the Human Resources Administrator. The purpose of the Study was to create an Engineer Series Classification that would create depth within the Technical Services Division and provide room for growth within the classification, as well as to enable the District the ability to retain an engineer at a senior level. Bryce Consulting completed the Study and concluded that the compensation for the Engineer Series Classification should be based on the Associate Engineer and Associate Civil Engineer classifications, as the two (2) classifications resulted in the most stable and consistent market data. Furthermore, it recommended that the Senior Civil Engineer be set utilizing an internal relationship of 15% above the Associate Civil Engineer. Typically, advanced journey level classifications are 10% to 15% above the journey level, depending on level of supervision exercised. By setting the salary 15% above the Associate Civil Engineer level, it recognized the increase in responsibilities and complexity of duties. The recommendation for setting the compensation is consistent with the market and industry standards.

MSC (Medina/Nelson) to Adopt Resolution No. 06.01.21.01: 1. Accepting the Engineer Series Classification and Compensation Study; 2. Authorizing the creation of the classifications, Associate Engineer and Senior Civil Engineer, contained in the Engineer Series Classification; and 3. Approving the recommended salary grades for the Associate Engineer and Senior Civil Engineer classifications to be incorporated into the proposed Salary Schedule. Ayes: 5/0: Gray, Medina, Mulberg, Nelson, and Scherman.

2. Draft Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget

General Manager Bruce Kamilos stated that staff will bring back an agenda item to discuss the District's reserves in the upcoming fiscal year and would not be addressed during the current meeting.

Finance Manager Patrick Lee explained the three (3) changes made from the May regular board meeting requested by the Board.

In summary, at the May regular board meeting, staff received comments and recommendations from the Board on the proposed FY 2021-22 Operating Budget. Those comments included: 1. grammatical corrections on various sections of the budget document; 2. the addition of percentage change on the schedule on page 20 of the budget document; and 3. the increase of on-call pay from \$75 per shift to \$85 per shift, resulting in an increase of \$3,650 to salaries and benefits. Including the changes discussed above, the draft District FY 2021-22 Proposed Operating Budget projects total revenues of \$15.716 million and total expenditures of \$19.749 million. The expenditures in excess of revenues of \$4.033 million will be funded from operating reserves carried over from prior years.

Adjourn to Regular Board Meeting on June 15, 2021 at 6:00 p.m.

Respectfully submitted,

Stefani Phillips

Stefani Phillips, Board Secretary
AK/SP

Check History Report
5/1/2021 to 5/31/2021
Elk Grove Water District

Check Number	Check Date	Vendor Number	Name	Check	Explanation
052911	5/5/2021	AFLAC	AFLAC	1,646.72	
052912	5/5/2021	AMAZON	AMAZON CAPITAL SERVICES	282.49	
052913	5/5/2021	AWWA2	California Nevada Section-AWWA	100.00	
052914	5/5/2021	BEN RES	BENEFIT RESOURCE, INC	127.50	
052915	5/5/2021	BG SOLU	SOLUTIONS BY BG INC.	9,581.25	Daily Tasks/Help Tickets
052916	5/5/2021	BSK4	BSK ASSOCIATES	2,223.00	Sampling - Treatment
052917	5/5/2021	CINTAS2	CINTAS	189.50	
052918	5/5/2021	COUNTY4	SACRAMENTO COUNTY UTILITIES	303.65	
052919	5/5/2021	COVER A	COVERALL NORTH AMERICA, INC	1,506.00	(2) Invoices - Janitorial Services - MOC/ADMIN
052920	5/5/2021	CR FID	FIDELITY NATIONAL TITLE	184.73	Account Closed - Customer Refund
052921	5/5/2021	CRF ALU	ANALISA LUCAS	18.40	Account Closed - Customer Refund
052922	5/5/2021	CRF AMB	AMRITPAL BIRRI	163.85	Account Closed - Customer Refund
052923	5/5/2021	CRF LEN	LENNAR HOMES CA, INC	70.29	Account Closed - Customer Refund
052924	5/5/2021	CRF MBO	MICHAEL BONHAM	25.50	Account Closed - Customer Refund
052925	5/5/2021	CRF R R	REALTY ROUNDUP	52.38	Account Closed - Customer Refund
052926	5/5/2021	CRF T&C	TOWN & COUNTRY CONTRACTORS	201.79	Account Closed - Customer Refund
052927	5/5/2021	CRF TAY	TAYLOR MORRISON	4.27	Account Closed - Customer Refund
052928	5/5/2021	CRF TAY	TAYLOR MORRISON	28.76	Account Closed - Customer Refund
052929	5/5/2021	CRFCHTI	CHICAGO TITLE	23.48	Account Closed - Customer Refund
052930	5/5/2021	CRFFTC	FIRST AMERICAN TITLE COMPANY	163.39	Account Closed - Customer Refund
052931	5/5/2021	DATAPRO	DATAPROSE LLC	981.34	Account Closed - Customer Refund
052932	5/5/2021	DATAPRO	DATAPROSE LLC	654.69	Public Meetings Insert
052933	5/5/2021	DATAPRO	DATAPROSE LLC	6,286.19	Customer Service Reopening Buck slip
052934	5/5/2021	EARL CO	EARL CONSULTING CO., LLC	1,068.75	April's Billing and Postage
052935	5/5/2021	GLADWEL	GLADWELL GOVERNMENTAL	7,740.00	Project Management - New ADMIN Building
052936	5/5/2021	GRAINGE	GRAINGER	241.93	Document Management
052937	5/5/2021	INLAND	INLAND BUSINESS SYSTEMS	1,074.47	Repairs and Maintenance - Copier - MOC
052938	5/5/2021	INLAND	INLAND BUSINESS SYSTEMS	437.00	Repairs and Maintenance - Copier - MOC
052939	5/5/2021	LIFE ST	LIFE STORAGE #669	169.00	
052940	5/5/2021	MFDB AC	MFDB ARCHITECTS INC.	1,450.00	EGWD ADMIN Building Tenant Improvements
052941	5/5/2021	OREILLY	O'REILLY AUTO PARTS	47.66	
052942	5/5/2021	RADIAL	RADIAL TIRE OF ELK GROVE	94.95	
052943	5/5/2021	REPUBLI	REPUBLIC SERVICES #922	1,799.48	
052944	5/5/2021	SIERRA	SIERRA OFFICE SUPPLIES	890.61	
052945	5/5/2021	SIGN CE	THE SIGN CENTER	170.21	
052946	5/5/2021	SMUD	SMUD	1,155.92	
052947	5/5/2021	SMUD	SMUD	2,189.96	
052948	5/5/2021	SMUD	SMUD	7,804.34	

*Denotes annual renewal of licenses, taxes, memberships, permits and subscriptions

052949	5/5/2021	SMUD	SMUD	10,321.43	
052950	5/5/2021	SMUD	SMUD	1,899.93	
052951	5/5/2021	SMUD	SMUD	46.18	
052952	5/5/2021	SMUD	SMUD	559.67	
052953	5/5/2021	SMUD	SMUD	7,148.34	
052954	5/5/2021	SMUD	SMUD	1,830.37	
052955	5/5/2021	SOFT RE	SOFTRESOURCES SOFTWARE	12,285.00	Progress Billing for Financial Systems Needs Assessment
052956	5/5/2021	SWRCB2	SWRCB-DWOCF	90.00	Certification Renewal - T3 Steve Shaw
052957	5/5/2021	T&T VAL	T&T VALVE AND INSTRUMENT	2,033.65	Materials & Supplies - Treatment
052958	5/5/2021	ULTRA	ULTRA TRUCK WORKS, INC	1,712.85	(3) Invoices - Materials & Supplies - OPS
052959	5/5/2021	WATER T	WATERTRAX USA, INC	10,762.52	*Annual Watertrax Subscription
052960	5/20/2021	AMAZON	AMAZON CAPITAL SERVICES	1,068.43	(10) Invoices - Materials & Supplies - OPS
052961	5/20/2021	AQUA	AQUA SIERRA CONTROLS, INC	1,498.87	*Annual Instrument Service and Calibrations
052962	5/20/2021	AQUA ME	AQUA-METRIC SALES, CO.	39,486.90	Meters
052963	5/20/2021	B KENT	BRANDON KENT	350.00	Boot Reimbursement
052964	5/20/2021	BADAWI	BADAWI & ASSOCIATES	11,614.50	FY 2021 Audit - Progress Billing - 45% of Contract
052965	5/20/2021	BAKERMA	BAKER MANOCK & JENSEN	114.00	Legal - April
052966	5/20/2021	BG SOLU	SOLUTIONS BY BG INC.	9,268.88	Daily Tasks/Help Tickets
052967	5/20/2021	BRENNTA	BRENNTAG PACIFIC, INC	1,130.56	Materials & Supplies - Treatment
052968	5/20/2021	BSK4	BSK ASSOCIATES	342.50	Sampling - Treatment
052969	5/20/2021	CFEFT	FIDELITY NATIONAL TITLE	26.35	
052970	5/20/2021	CHECK P	CHECK PROCESSORS, INC	338.30	Contracted Services - ACH Processing
052971	5/20/2021	CINTAS2	CINTAS	370.15	
052972	5/20/2021	CONSOLI	CONSOLIDATED COMMUNICATIONS	1,302.04	Ethernet Service/Phones-MOC/ADMIN
052973	5/20/2021	COUNTY	COUNTY OF SACRAMENTO	434,184.30	Sacramento County Water Billing - March & April 2021
052974	5/20/2021	COVER A	COVERALL NORTH AMERICA, INC	859.00	(2) Invoices - Janitorial Services - MOC/ADMIN
052975	5/20/2021	CR FIRA	FIRST AMERICAN TITLE	40.09	Account Closed - Customer Refund
052976	5/20/2021	CR FIRA	FIRST AMERICAN TITLE	3.48	Account Closed - Customer Refund
052977	5/20/2021	CR NORT	NORTH AMERICAN TITLE COMPANY	31.39	Account Closed - Customer Refund
052978	5/20/2021	CRF AGA	AGAVE BUILDERS, LLC	1,441.53	Account Closed - Customer Refund
052979	5/20/2021	CRF AMO	APRIL E. MONROE	33.72	Account Closed - Customer Refund
052980	5/20/2021	CRF DAL	THE JAMES DENNIS DALY & MARJORIE HOWARD DALY	52.41	Account Closed - Customer Refund
052981	5/20/2021	CRF DCL	DENISE CLARK	25.64	Account Closed - Customer Refund
052982	5/20/2021	CRF DNE	DIANE NEWCOMBE	150.44	Account Closed - Customer Refund
052983	5/20/2021	CRF DVA	DIANE VALDIVIA	3.11	Account Closed - Customer Refund
052984	5/20/2021	CRF FN	FIDELITY NATIONAL TITLE	47.60	Account Closed - Customer Refund
052985	5/20/2021	CRF JAD	JAY DAVIDSON	16.98	Account Closed - Customer Refund
052986	5/20/2021	CRF KAJ	KATHERINE JONES	13.26	Account Closed - Customer Refund
052987	5/20/2021	CRF KEA	KEITH ARMSTRONG	107.79	Account Closed - Customer Refund
052988	5/20/2021	CRF LEN	LENNAR HOMES CA, INC	86.37	VOID
052988	5/20/2021	CRF LEN	LENNAR HOMES CA, INC	86.37-	VOID
052989	5/20/2021	CRF LEN	LENNAR HOMES CA, INC	84.27	Account Closed - Customer Refund
052990	5/20/2021	CRF LEN	LENNAR HOMES CA, INC	63.07	Account Closed - Customer Refund
052991	5/20/2021	CRF RCA	RIZALDY CALAIM	61.88	Account Closed - Customer Refund
052992	5/20/2021	CRF SWA	SANDRA WARMINSKI	16.52	Account Closed - Customer Refund

*Denotes annual renewal of licenses, taxes, memberships, permits and subscriptions

052993	5/20/2021	CRF TAY	TAYLOR MORRISON	72.67	Account Closed - Customer Refund
052994	5/20/2021	CRF WLO	WILMA LOEFFLER	68.94	Account Closed - Customer Refund
052995	5/20/2021	CRF WOO	MATTHEW & ANGELA WOODRUM	6.97	Account Closed - Customer Refund
052996	5/20/2021	CRFFID1	FIDELITY NATIONAL TITLE	122.36	Account Closed - Customer Refund
052997	5/20/2021	CRFFTC	FIRST AMERICAN TITLE COMPANY	1.74	Account Closed - Customer Refund
052998	5/20/2021	CRFID10	FIRST AMERICAN TITLE CO	37.92	Account Closed - Customer Refund
052999	5/20/2021	CRFMPNE	MP NEXLEVEL OF CA, INC.	172.27	Account Closed - Customer Refund
053000	5/20/2021	CS AA	CARD SERVICES	184.88	Materials & Supplies - Utility Crew
053001	5/20/2021	CS BK	CARD SERVICES	504.77	ACWA 2021 Spring Virtual Conf, Software Programs, Supplies
053002	5/20/2021	CS DM	CARD SERVICES	68.98	Supplies, Software Programs
053003	5/20/2021	CS MJM	CARD SERVICES	1,484.65	Media Evaluation/Data Recovery
053004	5/20/2021	CS SH	CARD SERVICES	1,296.91	Meals, Certification Renewal, Materials, Supplies - Distribution
053005	5/20/2021	CS SP	CARD SERVICES	1,704.57	Training, Water Treatment Exam, Meals, Materials, Supplies
053006	5/20/2021	CS SS	CARD SERVICES	444.27	Training, Materials, Supplies - Treatment
053007	5/20/2021	DB COLS	DB CONSTRUCTIONAL LANDSCAPE	2,250.00	May Maintenance for all Wellsite's and Offices
053008	5/20/2021	FASTENA	FASTENAL COMPANY	661.02	(7) Invoices - Materials & Supplies - OPS
053009	5/20/2021	HERBURG	HERBURGER PUBLICATIONS, INC	66.00	Public Notice - Backyard Water Mains Replacement
053010	5/20/2021	ICONIX	ICONIX WATERWORKS (US) INC.	760.72	(3) Invoices - Materials & Supplies - Water Mains CIP
053011	5/20/2021	INT STA	INTERSTATE OIL COMPANY	3,315.15	(2) Invoices - Fuel
053012	5/20/2021	JAYS	JAY'S TRUCKING SERVICE	6,640.05	(3) Invoices - Materials & Supplies - Water Mains CIP
053013	5/20/2021	JRG	JRG ATTORNEYS, LLP	2,601.00	Legal - April
053014	5/20/2021	LIFE ST	LIFE STORAGE #669	183.00	Legal - April
053015	5/20/2021	MURPHY	MURPHY AUSTIN ADAMS	672.00	(6) invoices - Rental Equipment - Water Mains CIP
053016	5/20/2021	NTS	NTS MIKEDON. LLC	4,150.60	(10) Invoices - Materials & Supplies - Distribution Crew
053017	5/20/2021	OREILLY	O'REILLY AUTO PARTS	25.83	
053018	5/20/2021	PACE	PACE SUPPLY CORP	3,336.61	
053019	5/20/2021	PAPE'	PAPE'S MATERIAL HANDLING.	338.87	
053020	5/20/2021	PEST	PEST CONTROL CENTER INC	84.00	
053021	5/20/2021	PG&E	PACIFIC GAS & ELECTRIC	22.71	
053022	5/20/2021	PURCH	PURCHASE POWER	537.15	Postage Machine - ADMIN
053023	5/20/2021	RBI	ROBERTSON-BRYAN, INC	2,540.00	CCR 2020 Kickoff
053024	5/20/2021	RDO EQU	RDO EQUIPMENT CO.	764.70	Materials & Supplies - Water Mains CIP
053025	5/20/2021	REPUBLI	REPUBLIC SERVICES #922	77.48	
053026	5/20/2021	ROOCO	ROOCO RENTS	3,727.35	(2) Invoices - Materials & Supplies - Water Mains CIP
053027	5/20/2021	SIERRA	SIERRA OFFICE SUPPLIES	234.99	
053028	5/20/2021	SIGN CE	THE SIGN CENTER	133.31	
053029	5/20/2021	TEICH A	TEICHERT AGGREGATES	1,275.06	
053030	5/20/2021	TULLY	TULLY & YOUNG, INC.	17,565.00	April 2020 UWWMP Billing
053031	5/20/2021	ULINE	ULINE	50.24	
053032	5/20/2021	ULTRA	ULTRA TRUCK WORKS, INC	1,658.28	Materials & Supplies - OPS
053033	5/20/2021	USBANK	U.S. BANK EQUIPMENT FINANCE	702.32	ADMIN - Copier
053034	5/20/2021	VERIZON	VERIZON WIRELESS	878.04	
053035	5/20/2021	WALKER	WALKER KREATIVE	1,700.00	April Social Media Public Outreach Campaign
053036	5/26/2021	CCHTC	CHICAGO TITLE COMPANY	157.01	Account Closed - Customer Refund
053037	5/26/2021	CDW	CDW GOVERNMENT	210.27	
053038	5/26/2021	CINTAS2	CINTAS	490.77	

*Denotes annual renewal of licenses, taxes, memberships, permits and subscriptions

053039	5/26/2021	COEG	CITY OF ELK GROVE	1,013.54	Overhead Allocation - Pavement Restoration Service Line
053040	5/26/2021	CR FID	FIDELITY NATIONAL TITLE	36.37	Account Closed - Customer Refund
053041	5/26/2021	CRCH15	CHICAGO TITLE CO.	13.05	Account Closed - Customer Refund
053042	5/26/2021	CRF CBA	CHRISTOPHER BAIN	62.84	Account Closed - Customer Refund
053043	5/26/2021	CRF DLA	DANIEL LAMB	61.15	Account Closed - Customer Refund
053044	5/26/2021	CRF JMO	JOAN MONOSTORY	11.77	Account Closed - Customer Refund
053045	5/26/2021	CRF JPM	JAMES MACIAS & PATRICIA MACIAS	69.00	Account Closed - Customer Refund
053046	5/26/2021	CRF LEN	LENNAR HOMES CA, INC	86.37	Account Closed - Customer Refund
053047	5/26/2021	CRF LTI	LENNAR TITLE	86.37	Account Closed - Customer Refund
053048	5/26/2021	CRF SBO	STEVE BOUNTOUVAS	5.92	Account Closed - Customer Refund
053049	5/26/2021	CRF TAY	TAYLOR MORRISON	7.66	Account Closed - Customer Refund
053050	5/26/2021	CRF TNG	TRANG NHA T NGUYEN	61.72	Account Closed - Customer Refund
053051	5/26/2021	CRFFTC	FIRST AMERICAN TITLE COMPANY	13.09	Account Closed - Customer Refund
053052	5/26/2021	EG FORD	ELK GROVE FORD	467.43	Account Closed - Customer Refund
053053	5/26/2021	HANFORD	HANFORD SAND & GRAVEL, INC	2,109.47	Materials & Supplies - Water Mains CIP
053054	5/26/2021	INT STA	INTERSTATE OIL COMPANY	1,345.50	Fuel
053055	5/26/2021	NTS	NTS MIKEDON. LLC	201.23	
053056	5/26/2021	SIERRA	SIERRA OFFICE SUPPLIES	475.85	
053057	5/26/2021	TEICH A	TEICHERT AGGREGATES	1,566.84	(2) Invoices - Materials & Supplies - Water Mains CIP
053058	5/26/2021	ULTRA	ULTRA TRUCK WORKS, INC	375.00	
053059	5/26/2021	WEBCO	WEBCO COMMUNICATION, INC	1,776.00	*Annual ESI Telephone System Contract

Total: 677,818.95

*Denotes annual renewal of licenses, taxes, memberships, permits and subscriptions

**Active Account Information
As of 05/31/2021**

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	12,161	12,163	12,308	12,294	12,295	12,311	12,292	12,291	12,298	12,301	12,309	
Commercial	363	363	364	363	362	363	361	363	363	362	362	
Irrigation	178	178	178	181	180	180	181	181	183	184	183	
Fire Service	180	180	181	182	180	180	180	181	183	183	182	
Total Accounts	12,882	12,884	13,031	13,020	13,017	13,034	13,014	13,016	13,027	13,030	13,036	-

**Active Account Information
FY 2019/2020**

	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Water Accounts:												
Metered												
Residential	11,857	11,891	11,889	11,905	11,941	11,927	12,060	12,064	12,157	12,149	12,153	12,159
Commercial	363	363	365	365	362	362	362	365	363	363	367	363
Irrigation	170	170	170	173	175	175	175	174	176	177	177	178
Fire Service	181	181	181	183	181	181	181	181	181	181	180	180
Total Accounts	12,571	12,605	12,605	12,626	12,659	12,645	12,778	12,784	12,877	12,870	12,877	12,880

**Bond Covenant Status
For Fiscal Year 2020-21
As of 05/31/2021
Adjusted for Prepayments**

Operating Revenues:	
Charges for Services	\$ 15,095,373
Operating Expenses:	
Salaries & Benefits (1)	3,567,684
Seminars, Conventions and Travel	6,120
Office & Operational	955,810
Purchased Water	2,939,406
Outside Services	780,734
Equipment Rent, Taxes, and Utilities	396,501
Total Operating Expenses	8,646,255
Net Operating Income	\$ 6,449,118
Annual Interest & Principal Payments \$3,855,469	\$ 3,534,180 (2)
Debt Service Coverage Ratio, YTD Only:	1.82
Required	1.15

Notes

1. Reflects only YTD due to CalPERS, not entire prepayment for year
2. Reflects budget divided by number of months year to date.
However, first Principal/Interest Payments made in September.
Projected Annual Budget Coverage Ratio is **1.32**

Year to Date Revenues and Expenses Compared to Budget
As of 05/31/2021

	General Ledger Reference	YTD Activity	Annual Budget	11/12=91.67% % Realized
Revenues	4100 - 4900	\$ 15,095,373	\$ 15,424,142	97.87%
Operating Expenses				
Salaries & Benefits	5100 - 5280	3,725,032	4,373,018	85.18%
less Capitalized Labor		(149,773)	(376,961)	39.73%
Less CalPERS Prepayment for Remainder of Year: (1)		(7,575)		
Adjusted Salaries and Benefits:		\$ 3,567,684	\$ 3,996,057	89.28%
Seminars, Conventions and Travel	5300 - 5350	6,120	53,307	11.48%
Office & Operational	5410 - 5494	955,810	1,338,578	71.40%
Purchased Water est. (2)	5495 - 5495	2,939,406	3,198,404	91.90%
Outside Services	5505 - 5580	780,734	1,283,548	60.83%
Equipment Rent, Taxes, Utilities	5620 - 5760	396,501	464,380	85.38%
Total Operational Expenses		\$ 8,646,255	\$ 10,334,274	83.67%
Net Operating Income		\$ 6,449,118	\$ 5,089,868	126.71%
Non-Operating Revenues				
Interest Received	9910 - 9910	83,794	100,000	83.79%
Unrealized Gains/(Losses)	9911 - 9911	(14,133)	-	100.00%
Other Income/(Expense)	9920 - 9973	(1,463,667)	(1,709,239)	85.63%
Total Non-Operating Revenues		\$ (1,394,005)	\$ (1,609,239)	86.63%
Non-Operating Expenses				
Election Costs	9950 - 9950	1,887	250,000	0.75%
Capital Expenses (3):				
Capital Improvements	1705 - 1760	2,329,196	2,752,522	84.62%
Capital Replacements	1705 - 1760	361,385	855,000	42.27%
Unforeseen Capital Projects	1705 - 1760	66,379	100,000	66.38%
Total Capital Expenses:		\$ 2,756,959	\$ 3,707,522	74.36%
Bond Interest Accrued (4)	7300 - 7300	1,425,847	1,555,469	91.67%
Total Non Operating Expenses		\$ 4,184,693	\$ 5,512,991	75.91%
Bond Retirement (4):		\$ 2,108,333	\$ 2,300,000	91.67%
Total Expenditures		16,333,286	19,756,504	82.67%
Revenues in Excess of All Expenditures, including Capital		\$ (1,237,913)	\$ (4,332,362)	28.57%

Notes:

- The District prepays CalPERS for the employers' share of retirement costs for the entire year. By doing this, the District saves approximately 3.5% in its total CalPERS payments for the year. The adjusted salaries and benefits above shows what salaries and benefits would be if only the amount due to CalPERS YTD was paid YTD, with no prepayment.
- There is a lag in water billings from the Sacramento County Water Agency. Included above is an estimate of costs to date based on water used.
- YTD Activity includes \$149,773 in capitalized labor charged to capital projects.
- Bond retirement payments are made two times a year in September and March
- Accounts receivable balance, which represents the difference between the total amount billed and total amount collected, as of May 31, 2021 is \$464,675.03.

Consultant Expenses
As of 05/31/2021

Fiscal Retainer Contracts

Consultant	Description	Total Contract	Current Month	Paid to date	2020-2021 FY Budget	Percent of year (92%)
JRG Attorneys, LLP	Task orders	TBD	\$ 2,601	\$ 35,607		
Somach Simmons & Dunn	Task orders	TBD	\$ -	\$ -		
BAKER MANOCK & JENSEN	Task orders	TBD	\$ 114	\$ 5,551		
Liebert Cassidy Whitmore	Task orders	TBD	\$ -	\$ 11,123		
Murphy Austin Adams	Task orders	TBD	\$ 672	\$ 34,440		
Total			\$ 3,387	\$ 86,721	\$ 175,000	49.55%
Solutions by BG, Inc.	Task orders	725,050	\$ 18,850	\$ 196,586	\$ 265,050	74.17%

Major Contracts

Consultant	Description	Total Contract	Current Month	Paid to date	2020-2021 FY Budget	Percent of Contract Amount
*Earl Consulting	PSA	\$ 50,000	\$ 1,069	\$ 32,402		64.80%
MFDB Architects	PSA	\$ 192,500	\$ 1,450	\$ 46,600		24.21%
Stantec Consulting	PSA	\$ 98,212	\$ -	\$ 23,308		23.73%
Tully & Young	PSA	\$ 78,500	\$ 17,565	\$ 42,033		53.55%
		\$ 419,212	\$ 20,084	\$ 144,343		34.43%

*Change Order to Amend Contract for an additional \$10,000. Original Contract amount was \$40,000.

Major Capital Improvement Project
Budget vs Actuals
As of 5/31/2021

Capital Project	Total Project Budget	Total Project Exp to Date	Percent Spent	Capitalized Labor	Fund Type	Project Type	2020-21 Budget		May		YTD % Spent
							Budget	Project Exp	Budget	Project Exp	
Backyard Water Mains/Service Replacement	\$ 2,649,000	\$ 1,332,215	50.29%	\$ 127,761	R&R	Supply/Distribution	\$ 675,000	\$ 32,839	\$ 328,124	48.61%	
Well Rehabilitation Program (11D)	98,000	146,182	149.17%	-	R&R	Supply/Distribution	-	-	31,651	100.00% (2)	
Well Rehabilitation Program	120,000	1,609	1.34%	-	R&R	Supply/Distribution	120,000	109	1,609	1.34%	
PLC Bucket Replacements	50,000	-	0.00%	-	R&R	Treatment	50,000	-	-	0.00%	
Pavement Repair and Coat Seal	10,000	-	0.00%	-	R&R	Building and Site	10,000	-	-	0.00%	
Service Line Replacements	140,000	85,584	61.13%	-	CIP	Supply/Distribution	140,000	1,014	85,584	61.13%	
Chlorine Analyzers Shallow Wells	75,000	-	0.00%	-	CIP	Treatment	75,000	-	-	0.00%	
Well 4D Radio Antenna	30,000	-	0.00%	-	CIP	Treatment	-	-	-	0.00%	
RRW/TP Variable Frequency Drives	75,000	75,406	100.54%	-	CIP	Treatment	-	-	-	0.00%	
Security Cameras	25,000	-	0.00%	-	CIP	Treatment	25,000	-	-	0.00%	
9829 Waterman Rd	2,255,750	2,063,096	91.46%	-	CIP	Building and Site	2,277,522	2,519	2,063,096	90.59%	
Truck Replacements	135,000	89,716	66.46%	-	CIP	Building and Site	135,000	1,258	89,716	66.46%	
Vacuum Excavator	100,000	90,801	90.80%	-	CIP	Building and Site	100,000	-	90,801	90.80%	
Unforeseen Capital Projects	100,000	66,379	66.38%	22,012	-	-	100,000	-	66,379	66.38% (3)	
Sub-Total	\$ 5,862,750	\$ 3,950,986	67.39%	\$ 149,773	-	-	\$ 3,707,522	\$ 37,739	\$ 2,756,959	74.36%	

(1) Includes \$149,773 in capitalized labor through 5/31/2021

(2) Capital projects budgeted for in prior years, however, work carried over and completed in current year.

(3) Includes unforeseen capital projects, including:
 36" Transmission Main Repair \$ 55,849
 Camden Water Main Repair 10,529
 Total \$ 66,378

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District
FROM: Travis Franklin, Program Manager
SUBJECT: **PUBLIC HEARING - 2020 URBAN WATER MANAGEMENT PLAN**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors:

1. Subject to the receipt and consideration of comments during the public hearing on this matter, approve Resolution No. 06.15.21.01, adopting the 2020 Urban Water Management Plan;
2. Adopt Ordinance No. 06.15.21.01, repealing and replacing the previous Water Shortage Contingency Plan Ordinances 07.23.14.02, 04.28.10.01, and 06.21.06.01; and
3. Adopt Ordinance No. 06.15.21.02, repealing and replacing an Enforcement Procedure for Violations of the Water Shortage Contingency Plan Ordinance 06.24.15.01

SUMMARY

Every five (5) years, water agencies are required by the Urban Water Management Planning Act to prepare an Urban Water Management Plan (UWMP). In 2016, the Elk Grove Water District (EGWD) completed its current UWMP, entitled the Elk Grove Water District 2015 Urban Water Management Plan. By July 1, 2021, the EGWD must submit an updated UWMP to the State.

Staff has completed the update of the UWMP for the Florin Resource Conservation District (FRCD) Board of Directors' (Board) approval, subject to the comments received and considered during the public hearing, titled 2020 Urban Water Management Plan (2020 UWMP). If approved, staff will submit the 2020 UWMP (attached) to the California Department of Water Resources in compliance with State law.

Part of the 2020 UWMP preparation was to update EGWD's Water Shortage Contingency Plan (WSCP). If approved, this new plan will replace the existing plan and staff will implement this in future water shortage events.

PUBLIC HEARING - 2020 URBAN WATER MANAGEMENT PLAN

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DISCUSSION

Background

On June 21, 2006, the Board adopted a WSCP by Ordinance No. 06.21.06.01. The WSCP was updated on April 28, 2010 by adoption of Ordinance No. 04.28.10.01 as part of a regional cooperative effort to adopt WSCPs consistent with other agencies belonging to the Water Forum. On July 23, 2014, the WSCP was amended by Ordinance No. 07.23.14.01 in response to the State Water Resource Control Board's issuance of an emergency regulation for statewide urban water conservation.

On June 24, 2015, the Board adopted an Enforcement Procedure for Violations of the Water Shortage Contingency Plan Ordinance No. 06.24.15.01.

On November 18, 2020, the EGWD contracted with Tully & Young and its subconsultant, Zanjero, to update the UWMP.

The 2020 UWMP requirements have expanded since the 2015 update. The 2020 UWMP must include: (1) more robust water supply and demand analyses; (2) a five-year Drought Risk Assessment; (3) a detailed Water Shortage Contingency Plan; and (4) proof of compliance with the 20% by 2020 water conservation mandate.

Present Situation

The major findings and conclusions of the 2020 UWMP are:

- The EGWD's water supplies are stable and reliable. Both the groundwater supply and the Sacramento County Water Agency's surface and groundwater water supply are highly reliable over the 25-year UWMP planning horizon. As such, water service to Service Area 1 and Service Area 2 should remain stable in all year types. (Normal, Single Dry Year and Multi-Year Drought)
- The state-mandated 2020 water consumption target for EGWD's customer base was achieved.
 - 2020 Target GPCD = 191
 - 2020 Actual GPCD = 137

The 2020 UWMP gives EGWD confidence that it has a robust water supply to meet the current water needs and accommodate the anticipated future water demands in its service areas.

On June 1, 2021, a draft of the 2020 UWMP was made available for public viewing at the EGWD Administration Building and on EGWD's website. On May 28 and June 4,

PUBLIC HEARING - 2020 URBAN WATER MANAGEMENT PLAN

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2021, public notices were published in the Elk Grove Citizen newspaper advertising that a public hearing would be conducted at the June 15, 2021 FRCD regular board meeting to receive public comments on the 2020 UWMP.

As part of the 2020 UWMP, the WSCP was updated. A WSCP provides for emergency water supply management related to general supply shortages due to severe droughts, infrastructure failure, catastrophic supply interruption, or any other cause. This WSCP allows for declaration of supply shortages by the Board. When a shortage is identified, the Board assesses if a particular shortage stage (and corresponding response actions) should be declared. Upon Board declaration of a shortage stage, restrictions, regulations, prohibitions on uses, and enforcement measures are enacted. This new plan has six stages, incremental shortage steps, and reduction measures to allow flexibility depending on the shortage that exists.

The current Enforcement Procedure for Violations of the Water Shortage Contingency Plan Ordinance references items that will become outdated if the Board approves and adopts the new Water Shortage Contingency Plan.

Staff recommends that the Board approve Resolution No. 06.15.21.01, adopting the 2020 Urban Water Management Plan, subject to the receipt and consideration of comments during the public hearing on this matter.

Staff recommends that the Board adopt Ordinance No. 06.15.21.01, repealing and replacing previous Water Shortage Contingency Plan Ordinance No. 07.23.14.02, 04.28.10.01, and 06.21.06.01.

Staff recommends that the Board adopt Ordinance No. 06.15.21.02, repealing and replacing an Enforcement Procedure for Violations of the Water Shortage Contingency Plan Ordinance No. 06.24.15.01.

STRATEGIC PLAN CONFORMITY

This staff report conforms to Strategic Goal 3, Planning and Operational Efficiency, of the FRCD/EGWD 2020-2025 Strategic Plan which directs the EGWD to update the Urban Water Management Plan, including the development of a new Water Shortage Contingency Plan.

FINANCIAL SUMMARY

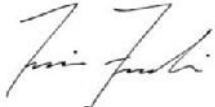
June 15, 2021

PUBLIC HEARING - 2020 URBAN WATER MANAGEMENT PLAN

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There is no financial impact associated with this item.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Travis Franklin".

TRAVIS FRANKLIN
PROGRAM MANAGER

Attachments

RESOLUTION NO. 06.15.21.01

**A RESOLUTION OF THE FLORIN RESOURCE CONSERVATION DISTRICT
BOARD OF DIRECTORS ADOPTING THE
2020 URBAN WATER MANAGEMENT PLAN**

WHEREAS, the Urban Water Management Planning Act requires that each water supplier update its plan at least once every five (5) years on or before July 1, in years ending in six (6) and one (1) ; and

WHEREAS, all water suppliers are required to complete and update an Urban Water Management Plan in order to be eligible for financial assistance administered by the Department of Water Resources; and

WHEREAS, the Florin Resource Conservation District (District) has prepared a thorough and complete update to the Urban Water Management Plan to serve the District as a long-range planning document for water supply; and

WHEREAS, the District's Urban Water Management Plan provides a source of information for Water Supply Assessments, Water Code Section 10613 et seq., and Written Verifications of Water Supply, Water Code Section 66473.7, where both statutes require detailed information regarding water availability to be provided to the City of Elk Grove or County of Sacramento decision makers prior to approval of specified large development projects; and

WHEREAS, the District has updated its Urban Water Management Plan.

**NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT
BOARD OF DIRECTORS DOES HEREBY RESOLVE:**

SECTION 1. The Board of Directors hereby adopts the foregoing recitals as true and correct and incorporates them herein by reference.

SECTION 2. The Board of Directors hereby adopts 2020 Urban Water Management Plan and orders it filed with the Board Secretary.

SECTION 3. The Board of Directors hereby authorizes and directs the District's General Manager to file the 2020 Urban Water Management Plan with the State of California, Department of Water Resources by July 1, 2021, in accordance with the Urban Water Management Planning Act.

SECTION 4. The Board of Directors hereby authorizes and directs the District's General Manager to implement the 2020 Urban Water Management Plan.

PASSED, APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 15th day of June, 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Sophia Scherman
Chair

ATTEST:

Stefani Phillips
Board Secretary

APPROVED AS TO FORM:

Ren Nosky
General Counsel

EXHIBIT “A”

“ELK GROVE WATER DISTRICT 2020 URBAN WATER MANAGEMENT PLAN.”

(APPENDICES NOT INCLUDED BUT ARE AVAILABLE ON EGWD’S WEBSITE)

[Attached behind this cover page]



Public Draft – May 2021

2020 Urban Water Management Plan



Prepared by:



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Executive Summary

Layperson's Description

After the devastating drought in the late 1970s, the California Legislature declared California's water supplies a limited resource, subject to ever-increasing demands and that the long-term, reliable supply of water is essential to protect California's businesses, communities, agricultural production, and environmental interests. The Legislature also recognized a need to strengthen local and regional drought planning and increase statewide resilience to drought and climate change. Thus, in 1983, the California Legislature created the Urban Water Management Planning Act (UWMPA).¹ The UWMPA requires urban water suppliers serving over 3,000 customers or supplying at least 3,000 acre-feet of water annually to prepare and adopt an urban water management plan every five years,² and demonstrate water supply reliability in a normal year, single dry year, and droughts lasting at least five years over a twenty-year planning horizon.³ The UWMPA also requires each urban water supplier to prepare a drought risk assessment and water shortage contingency plan.⁴ And last, beginning in July 2022, each urban water supplier must prepare an annual water supply and demand assessment.⁵ The California Legislature asserts that aggregating all of these legal requirements at the urban water supplier level will improve local, regional, and statewide water planning and water resilience.

At a practical level, the Urban Water Management Plan (UWMP) is the legal and technical water management foundation for urban water suppliers throughout California. A well-constructed UWMP will provide the supplier's elected officials, management, staff, and customers with an understanding of past, current, and future water conditions and management. The UWMP integrates local and regional land use planning, regional water supply, infrastructure, and demand management projects as well as providing for statewide challenges that may manifest through climate change and evolving regulations. Thoughtful urban water management planning provides an opportunity for the supplier to integrate supplies and demands in a balanced and methodical planning platform that addresses short-term and long-term planning conditions. In brief, the UWMP gathers, characterizes, and synthesizes water-related information from numerous sources into a plan with local, regional, and statewide practical utility.

¹ California Water Code Section 10610 *et seq.* (Chapter 1 added by Stats. 1983, Ch. 1009, Sec. 1).

² California Water Code Section 10610 *et seq.*

³ California Water Code Sections 10631-10635

⁴ California Water Code Sections 10632

⁵ California Water Code Sections 10632.1

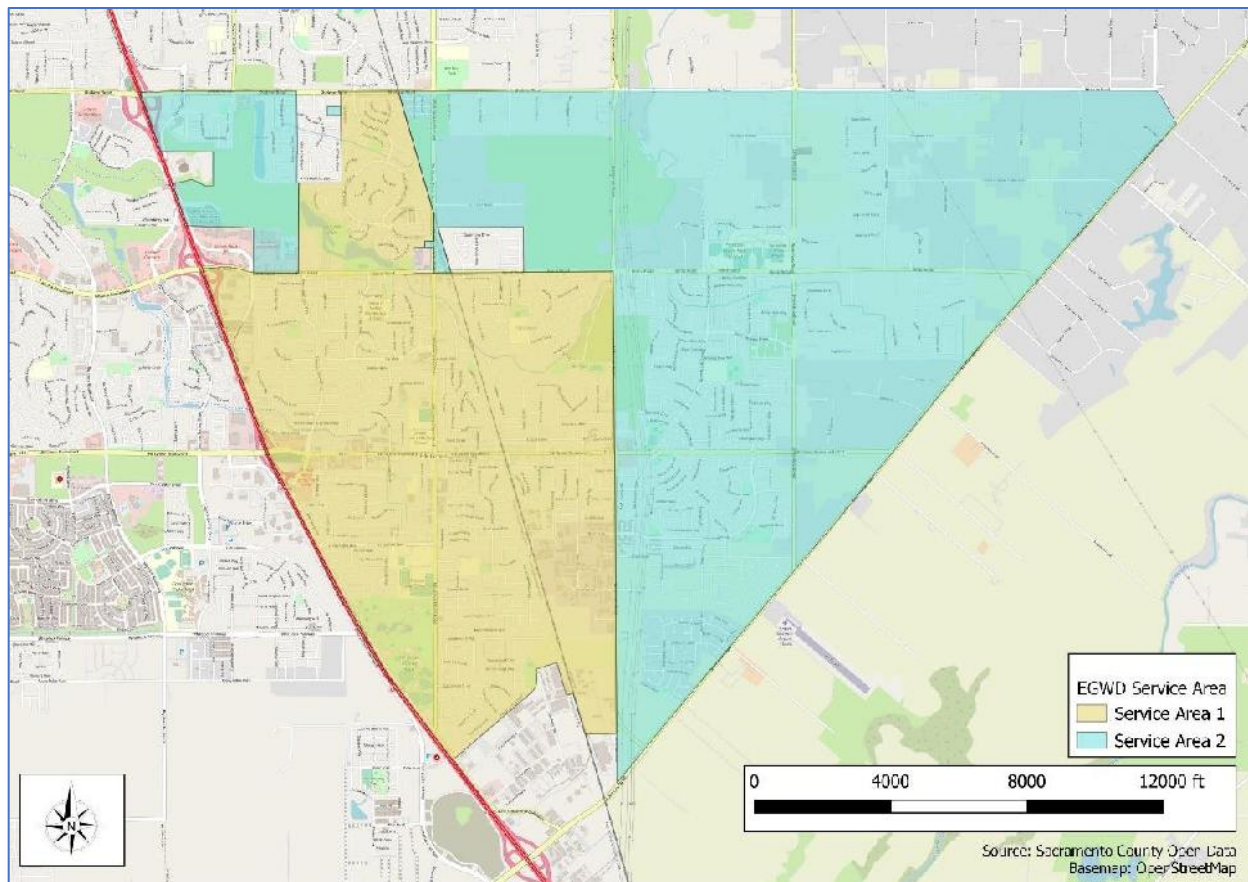
ES-1 Elk Grove Water District

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 service area boundary. 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. Formerly called Elk Grove Water Works, it was family owned until 1999 when it was purchased by the Florin Resources Conservation District (FRCD). The District's services are coordinated and managed within the FRCD, and it is governed by a five member, publicly elected Board of Directors.

Serving a population of over 45,000, 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 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 ES-1 represents EGWD's service areas.

Figure ES-1: Elk Grove Water District Water Service Area



ES-2 EGWD's Water Service Reliability

Elk Grove Water District has developed a robust water supply portfolio to serve its current and future demands. The District derives its water supplies from two sources – groundwater from the South American Subbasin and contract supplies through an agreement with Sacramento County Water Agency. The District's groundwater supplies are linked to a number of historical groundwater management actions, including formation of the Sacramento Central Groundwater Authority (SCGA) and more recently the development of the SCGA Groundwater Sustainability Agency (GSA) under the Sustainable Groundwater Management Act (SGMA). SCGA prepared the original groundwater management framework that has been included in the District's 2020 Urban Water Management Plan. SCGA's ongoing water management activities have stabilized the South American Subbasin's groundwater levels and helped preserve the District's access to those supplies for future generations.

SCGA GSA is updating the existing groundwater management plans, in cooperation with four other GSA's, to ensure that the South American Subbasin meets the SGMA sustainability objectives. The South American Subbasin Groundwater Sustainability Plan (GSP) will be completed in 2022 and will characterize and develop specific actions that meet the SGMA sustainability objectives. And although the new GSP may alter how and under what conditions the District may access groundwater supplies from the South American Subbasin, the District does not anticipate any actions that would reduce long-term reliability of the groundwater to meet its current and future demands.

The District also has a Master Water Agreement with Sacramento County Water Agency (SCWA) that it signed in 1995 and renewed in 2002 (Agreement). This Agreement obligates SCWA to provide water supplies to the District's service area. The Agreement has a fifty-year term and a right of renewal that stabilizes the long-term reliability of this supply to meet the District's current and future demands. Moreover, SCWA may deliver any of its water supplies – both surface water and groundwater – based on the terms of the Agreement, giving the District added reliability through SCWA's diverse water supply portfolio and conjunctive use actions. Taken together, the District's groundwater supplies and Agreement provide reliable supplies to meet the District's normal, single dry, and five-consecutive dry year water supply needs through 2045.

Chapter 1

Introduction

The Elk Grove Water District (EGWD or District) has been a water supplier in southern Sacramento County for over 120 years. 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. Formerly called Elk Grove Water Works, it was family owned until 1999 when it was purchased by the Florin Resources Conservation District (FRCD). The District's services are coordinated and managed within the FRCD, and it is governed by a five member, publicly elected Board of Directors.

Serving a population of over 45,000, the District has a broad range of responsibilities, including long-term water reliability planning, management of current groundwater assets, and distribution of potable water.

Ensuring an adequate supply of water is available to serve the existing and future needs for the District's residents and Commercial, Institutional and Industrial (CII) customers is a critical component of successful planning for EGWD. This Urban Water Management Plan (UWMP) draws on local, regional and statewide inputs to synthesize information from numerous sources into a reliable water management action plan designed to be referred to as management and Board level decisions arise and conditions change.

1.1 Background and Purpose

Elk Grove Water District has prepared this 2020 UWMP to comply with the Urban Water Management Planning Act (UWMPA) requirements for urban water suppliers. This 2020 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 by the UWMPA, the District's 2020 UWMP specifically assesses the availability of its supplies to meet forecast water uses during average, single-dry and five consecutive drought 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 2020 UWMP.

The 2020 UWMP is an update to the EGWD's 2015 UWMP and presents new data and analysis as required by the California Department of Water Resources (DWR) and the California Water Code (CWC) since 2015. These updates are detailed in Chapter 2 and throughout the rest of the UWMP. The 2020 UWMP is also a comprehensive water planning document that describes existing and future supply reliability, forecasts future water uses, presents demand management progress, and identifies local and regional cooperative efforts to meet projected water use.

The UWMP is designed to be a valuable water management and planning tool to guide and inform the EGWD’s Board of Directors, staff, customers and the State of California about its water management practices. It reflects the District’s planning assumptions and goals and should be used in combination with other planning resources and documents over the UWMP planning horizon.

The State of California’s drought vulnerability and the additional pressures of climate change and population growth have 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 2020 UWMP.

1.2 Basis for Plan Preparation

In addition to operating a Public Water System as described in California Health and Safety Code 116275, Elk Grove Water District qualifies as a Retail Urban Water Supplier as described in Water Code Section 10617, providing water for municipal purposes to more than 3,000 customers or 3,000 acre/feet of water per year. This qualification requires the preparation of an Urban Water Management plan every five years. The District’s Public Water System detail is listed in Table 1-1.

Table 1-1: Public Water System Information

Public Water System Number	Public Water System Name	Number of Municipal Connections 2020
CA341008	Elk Grove Water District	~ 12,890

The State Legislature passed numerous new requirements since the 2015 UMWP which are detailed throughout this 2020 UWMP⁶. Major updates to the requirements are listed below along with a reference to the corresponding section in which they are addressed in this document.

- ◆ **Five Consecutive Dry-Year Water Reliability Assessment:** The Legislature modified the dry-year water reliability planning from a “multiyear” time period to a “drought lasting five consecutive water years” designation. This statutory change requires a Supplier to analyze the reliability of its water supplies to meet its water use over an extended drought period. This new requirement is addressed in Chapter 3—Water Supply Characterization, Chapter 4—Water Use, and Chapter 5— Water Service Reliability Assessment.
- ◆ **Drought Risk Assessment (DRA):** Due to the extensiveness of recent California droughts and the variability associated with climate change predictions, the California Legislature created a DRA requirement for UWMPs. The DRA requires assessment over a five-year period from 2021 to 2025 that examines water supplies, water uses, and the resulting water supply reliability for five consecutive dry years. The DRA is addressed in Chapter 5— Water Service Reliability Assessment and Chapter 6—Water Shortage Contingency Plans.
- ◆ **Seismic Risk:** Evaluating seismic risk to water system infrastructure and facilities and having a mitigation plan is now required by the Water Code. Incorporating the water system into regional or county hazard mitigation planning is an important aspect of this new statute. Seismic risk is addressed in Chapter 6.

⁶ California Water Code Section 10608 to 10608.44; Section 10609 to 10609.38; Section 10610 to 10657

- **Water Shortage Contingency Plan** In 2018, the Legislature modified the UWMPA to require a Water Shortage Contingency Plan (WSCP) with specific elements. The WSCP is a document that provides a Supplier with an action plan for a drought or catastrophic water supply shortage. The WSCP is in Chapter 6 of this UWMP.
- **Groundwater Supplies Coordination** 2020 UWMPs are required to be consistent with Groundwater Sustainability Plans following the 2014 Legislature enactment of the 2014 Sustainable Groundwater Management Act (SGMA). The District's Groundwater Supplies are described in Chapter 3—Water Supply Characterization.
- **Lay Description** A synopsis of the fundamental determinations of the UWMP is a new statutory requirement in 2020. This section is intended for new staff, new governing members, customers, and the media, and it can ensure a consistent representation of the Supplier's detailed analysis.

1.3 Coordination and Outreach

As required by the Urban Water Management Planning Act (UWMPA) the District has coordinated with nearby agencies while developing this UWMP in order to ensure consistency with other related service area planning efforts such as General Plans, Water Master Plans (WMP) and Groundwater Sustainability Plans (GSP). This requirement includes coordination with (a) water suppliers that share a common water source, (b) relevant water management agencies that affect the District's water assets, and relevant public agencies that may have land use or other regulatory relationships with the District. The District has prepared this 2020 UWMP in coordination with regional water purveyors, including Sacramento County Water Agency, and has appropriately notified and coordinated with other appropriate local government agencies as listed in Table 1-2.

Elk Grove Water District is a member of the Regional Water Authority (RWA), a joint powers authority, created by water purveyors in the Sacramento region to have a unified approach to regional water issues. The RWA provides members and associates significant regional coordination to enhance water management practices.

As stipulated in Water Code Section 10621(b), every urban water supplier shall seek active involvement from diverse elements of the community. EGWD sought public participation with hearings and notices to members of the community. These coordination efforts and Statutory Requirements for Notice are also included in Table 1-2.

Table 1-2: Public and Agency Coordination

Coordinating Agencies	Coordinate Regarding Demands	Sent Copy of Draft UWMP	Sent 60-Day Notice	Notice of Public Hearing
Cities, Counties, Customers and Interested Parties				
Sacramento County			X	X
Sacramento County Water Agency	X	X	X	X
City of Elk Grove (Planning Dept.)	X	X	X	X
City of Elk Grove (Public Works Dept.)	X	X	X	X
Cosumnes CSD			X	X
Sacramento County Regional Sanitation District			X	X
General Public				X
Shared Groundwater Resource Interests				
Cal-Am Water Company			X	X
Sloughhouse RCD			X	X
Golden State Water Company			X	X
Rancho Murrieta CSD			X	X
Omochumne Hartnell ID			X	X

1.3.1 Water Supplier Information Exchange

Water Code Section 10631 requires wholesale and retail water agencies to provide each other with information regarding water supply and demand. SCWA provides wholesale water to the District, and as required by UWMPA, EGWD and SCWA exchange projected water demand in five-year increments for 20 years into the future. The District's service area is completely encompassed by SCWA. Due to its contractual and geographical relationship, SCWA plays a significant role in the District's water management.

1.3.2 Statutory Requirements for Notice

EGWD provided formal written notification to Sacramento County (County) and the City of Elk Grove that the District's UWMP was being updated. In accordance with the UWMPA, this notification was provided at least 60 days prior to the public hearing of the plan as required by Section 10642 of the Water Code. Electronic copies of the final UWMP will be provided to the County and City no later than 30 days after its submission to DWR.

1.4 UWMP Adoption

The District held a public hearing regarding its 2020 UWMP on June 15, 2021. Before the hearing, a draft was made available for public inspection at the District's office, and on its website. Pursuant to CWC Section 10642, general notice of the public hearing was provided through publication of the hearing date and time and posting of the hearing at the District's office.

The District adopted this 2020 UWMP on June 15, 2021. A copy of the adopted 2020 UWMP will be submitted to DWR, provided to the County and the California State Library, and posted onto the District's website.

The District plans to submit all required documentation related to the UWMPA through the DWR submittal website soon after adoption. These include the following required DWR Excel workbooks:

- ◆ "FINAL Submittal 2020 UWMP Tables 04.02.2021.xls"
- ◆ "FINAL SBX7-7 Verification Form 04.02.2021.xls"
- ◆ "FINAL Energy Use Tables 04.01.21.xls"

1.5 Document Organization

This UWMP is organized as follows:

- ◆ Chapter 2 provides a description of the District's service area, demographic characteristics and climate, and describes the future population the District anticipates needing to serve;
- ◆ Chapter 3 describes the District's current and future water supplies and the reliability of the supplies;
- ◆ Chapter 4 details the customer uses, including the past and future estimated uses, and describes the District's past and on-going demand management measures;
- ◆ Chapter 5 presents the District's water system service reliability into the future, including an assessment of reliability if a drought occurred over the next five consecutive years;
- ◆ Chapter 6 is the District's stand-alone water shortage contingency plan, incorporated as a chapter in this UWMP, but also available to be shared and utilized separate from the UWMP.

NOTE TO DWR:

The Elk Grove Water District has written this Urban Water Management Plan (UWMP) primarily as a water resources planning tool to effectively manage water supply, reliability and demand. This UWMP also satisfies all the requirements of the Urban Water Management Planning Act (UWMPA).

The body of the document provides narratives, analysis and data that DWR requests in its 2020 UWMP Guidebook, including changes to the California Water Code since 2015. Efforts have also been made to include enhancements to this document wherever possible as recommended in the 2020 UWMP Guidebook.

To facilitate review by DWR for compliance with the UWMPA, data from the body of the document has been transferred into required DWR submittal tables consistent with the organization of the tables in Appendix E of the 2020 UWMP Guidebook. These tables are separately uploaded to DWR's web portal. This UWMP has been reviewed for adequacy according to the UWMP Checklist as contained in Appendix F in the 2020 UWMP Guidebook.

Chapter 2

Water Service and System 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 service area 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 and is surrounded by the Sacramento County Water Agency (SCWA) on all sides.

2.1 Water Service Area

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 EGWD's service areas.

The District provides water service to approximately 12,890 residential, commercial/institutional, irrigation, and industrial service connections. Much of the development is low and medium density single-family housing, with accompanying retail commercial use. Table 2-1 provides the historical and current number of service connections by customer class for the entire District.

2.2 Service Area Climate

The District's climate is typical of California's Central Valley with hot, dry summers, and cool, wet winters. Climate data 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 service area. The average annual temperature is about 61 degrees Fahrenheit (°F). Typically, July and August are the hottest months of the year with an average daily temperature of about 75 °F, though daytime high temperatures average between 92-93 °F. There are approximately 73 days a year when the high temperature exceeds 90 °F. December and January are generally the coolest months of the year, with a mean annual temperature of about 46 °F, and the average minimum dipping down to 38 °F. Historically, there are about 18 days per year in which temperatures go below 32 °F.

Figure 2-1: Service Areas

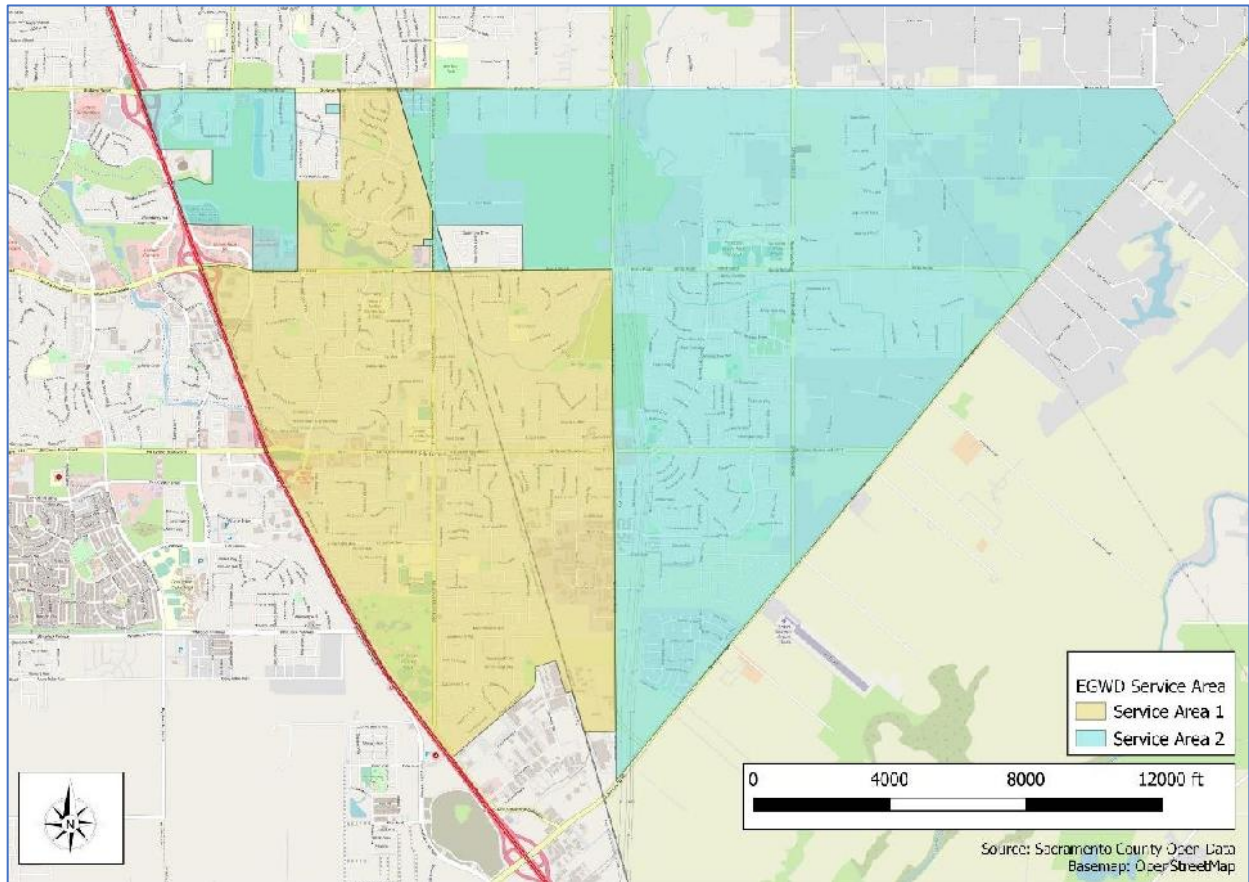


Table 2-1: Customer Water Service Connections

Customer Class	2015	2016	2017	2018	2019	2020
Single Family Residential	11,576	11,671	11,802	11,812	12,055	12,295
Multi-Family Residential	60	62	62	62	62	62
Commercial/Institutional	346	520	357	360	360	361
Industrial	43	0	43	43	43	43
Landscape Irrigation	105	105	115	119	119	121
Other	n/a	10	10	10	17	10
Total	12,130	12,263	12,389	12,406	12,656	12,882

Precipitation data is also documented from the WRCC Sacramento Executive Airport station. For the period 1941-2016⁷, average rainfall was measured at 17.24 inches. The wettest months are December, January and February, and the driest months are typically July and August.

Evapotranspiration (ET_o) 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

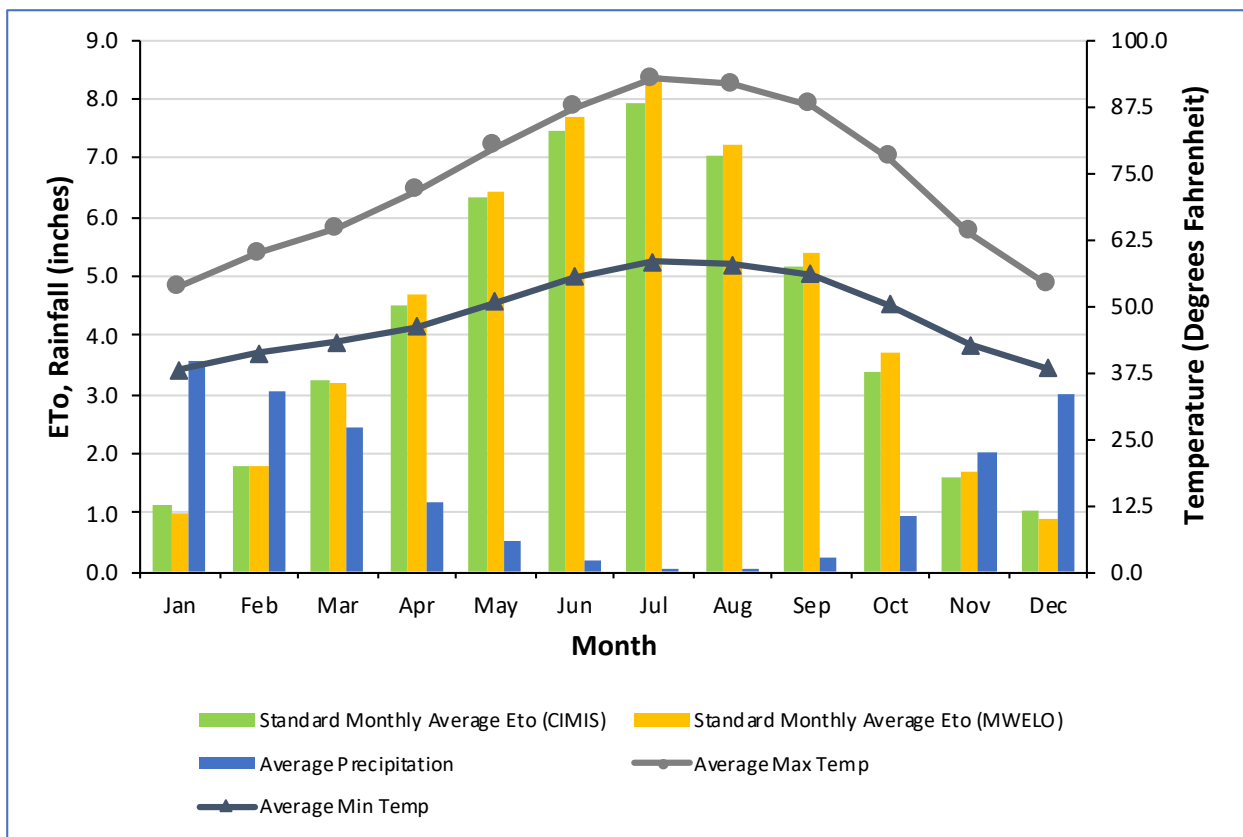
⁷ Period of Record: 11/10/1941 to 06/09/2016

by sufficient precipitation. EGWD 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 service area. Average annual ETo for the period 1998-2020 measured 50.54 inches.

Additional ETo data from California Model Water Efficient Landscape Ordinance (MWELo) is also reported in Table 2-2. 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 used⁸.

All ETo, rainfall, and temperature data is provided in Table 2-2 and Figure 2-2.

Figure 2-2: Monthly Average Climate for the Elk Grove Water District



⁸ 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, DWR, 1999.

Table 2-2: Elk Grove Water District Climate Information

Month	MWEL0 Appendix A ETo (in)	CIMIS Standard Monthly Average ETo (in)	Average Precipitation (in)	Average Temperature (°F)	Average Maximum Temperature (°F)	Average Minimum Temperature (°F)
January	1.0	1.12	3.56	45.7	53.5	37.8
February	1.8	1.78	3.07	50.4	59.9	41.0
March	3.2	3.24	2.44	53.9	64.6	43.1
April	4.7	4.52	1.17	58.6	71.4	45.9
May	6.4	6.35	0.50	65.3	79.9	50.7
June	7.7	7.44	0.18	71.3	87.2	55.4
July	8.4	7.91	0.03	75.5	92.7	58.2
August	7.2	7.03	0.06	74.6	91.5	57.8
September	5.4	5.14	0.25	71.8	87.7	55.8
October	3.7	3.36	0.93	63.9	77.7	50.2
November	1.7	1.61	2.04	53.1	63.7	42.6
December	0.9	1.04	3.02	46.0	53.8	38.2
Annual:	51.9	50.54	17.24	60.8	73.6	48.1

Totals may not add due to rounding.
 MWEL0 Appendix A data from Sacramento, CA.
 ETo data from DWR CIMIS Data, Fair Oaks Station 131, 1997-2020.
 Precipitation and Temperature data from WRCC, Sacramento Executive Airport (041630) 1941-2016.

2.2.1 Climate Change

While the California Water Code does not prescribe specific climate change planning and management measures for water suppliers, it does emphasize that climate change is appropriate to consider when assessing drought risk assessment, water conservation and use efficiency, and demand management and supply—both in a historical and projected context.

The service area climate is highly variable with respect to precipitation and temperature. The dry summer months make the state extremely susceptible to drought when a deficiency in precipitation materializes, especially in mountain snowpack. Much of the water supply comes from the mountains falling as winter rain or snow and is then stored as snowpack and subsequently captured in reservoirs and appropriated throughout the year.

As a member of the Regional Water Authority (RWA), the District participated in the American River Basin Study. Per DWR requirements regarding the inclusion of climate change analysis, pertinent excerpts from the referenced study are presented below.

American River Basin Study

In 2020, the American River Basin (Basin) region conducted a climate change study in partnership with local water purveyors and the United States Bureau of Reclamation (USBR). The purpose of the American River Basin Study (ARBS or Study) was to develop data tools and analyses, identify supply-demand imbalances, and climate change adaptation strategies specific to the Basin. Under the “new



normal” of a changing climate, the ARBS aims to improve the resolution of regional climate change data and to develop regionally-specific mitigation and adaptation strategies. More detail, along with the approved study can be found at www.pcwa.net/planning/arbs⁹.

The Study Area is bounded by the Sierra Nevada mountain range to the east, the Feather and Sacramento Rivers to the west, the Bear River to the north, and the Cosumnes River to the south. In addition to the American River Watershed, the Study Area encompasses the North and South American Groundwater Sub-basins, and Non-Federal Partners’ service areas outside of the American River Watershed.

Projected Future Conditions

Analysis of projected future climate conditions in the American River Basin and development of climate scenarios for the ARBS were based on an ensemble of bias-corrected and spatially downscaled climate projections.¹⁰ This ensemble has been used by the California Water Commission and DWR as the primary source of climate projection information in several recent studies, including the Water Storage Investment Program (WSIP) and California’s Fourth Climate Change Assessment.¹¹ Projected future climate conditions were evaluated and characterized based on the ensemble of downscaled climate projections.

Hydrology scenarios were used to develop streamflow inputs to CalSim 3.0, which was then used to evaluate changes in water supplies, demands, and management throughout the Central Valley Project (CVP) and State Water Project (SWP), including the Study Area. Demands for each water purveyor largely relied upon water purveyors’ information provided in Regional Drought Contingency Plan/Regional Water Reliability Plan¹² and 2015 UWMPs.

Temperature

Surface air temperatures are projected to increase steadily, with average summer temperatures increasing by approximately 7.2 degrees Fahrenheit (°F) by the end of the 21st century, and winter temperatures increasing by 4.9°F. Projections of daily maximum and minimum temperatures suggest similar warming trends during all seasons, with maximum temperatures projected to increase as much as 7.3°F during the summer months.

⁹Study not yet complete.

¹⁰Climate projections were developed using Global Climate Models from the Coupled Model Intercomparison Project Phase 5 (CMIP5) and downscaled using Localized Constructed Analogs (LOCA) method projected and coupled with two future emission scenarios (RCP 4.5 and RCP 8.5) available from Dr. David Pierce at the Scripps Institution of Oceanography.

¹¹ Pierce, D. W., J. F. Kalansky, D. R. Cayan. Climate, Drought and Sea Level Rise Scenarios for California’s Fourth Climate Change Assessment. August 2018.

¹² Regional Water Authority (RWA). North American Basin Regional Drought Contingency Plan, October 2017 and Regional Water Reliability Plan, May 2019

Precipitation

Annual precipitation projections show no significant trend in the median of change over the 21st century. Many of the available general circulation model (GCM) projections show change in precipitation, but there is no consistency in the magnitude and direction of projected change between models. Approximately half of the projections indicate a minor increase in annual precipitation and half indicate a minor decrease, highlighting the large uncertainty in future precipitation over this region. Although lacking a clear trend in projected annual precipitation, by the end of the 21st century the average fall and spring precipitation is expected to decrease, with winter and summer precipitation increasing. Increasing variability is also projected in winter and fall precipitation. Table 2-3 displays the projected (2070-2099) change in precipitation and temperature compared to 1980-2009 averages.

Table 2-3: Projected Change in Precipitation and Temperature Over the American River Basin Study Area Between 1980-2009 and 2070-2099

Season	Percent Change in Basin-Averaged Annual Mean Precipitation (%)	Change in Basin-Averaged Annual Mean Daily Air Temperature (°F)	Change in Annual Mean of Daily Maximum Air Temperature (°F)	Change in Annual Mean of Daily Minimum Air Temperature (°F)
Fall	-6.0	5.8	6.1	5.5
Winter	4.7	4.9	5.0	4.8
Spring	-11.9	5.8	6.3	5.1
Summer	10.4	7.2	7.3	7.0

Snowpack

Snow water equivalent (SWE) is a key indicator of water supplies in this region, where runoff is largely influenced by snowmelt. The increasing variability in precipitation combined with increases in surface air temperatures are key drivers in projections of a reduction in annual average SWE. Average SWE is forecasted to decrease by 50-85% across all climate scenarios and future time periods. In addition, areas that accumulate snow above Folsom Reservoir are also projected to have up to a 12-inch decrease in maximum snowpack by end of the century.

Evapotranspiration

Potential evapotranspiration (PET) serves as a key indicator of landscape and agricultural water demands, including consumptive use by evaporation and transpiration from bare soil, water surfaces, native vegetation, and crops. Average annual PET is expected to increase 1.2 to 6.2 inches across all climate scenarios and future time periods. PET is strongly correlated with air temperature and thus expected to increase more under the hot scenarios (hot-dry, hot-wet) than under the warm scenarios (warm-dry, warm-wet).

Runoff

Watershed runoff is a direct indicator of local water supply available, and is used to determine the availability of water for the State Water Project and Central Valley Project. Climate change projections indicate a pronounced shift in the distribution of runoff from May and June to earlier in the season (December to March), implying a transition in precipitation from snow to rainfall and/or earlier snowmelt and increasing the amount of runoff during the winter months. Peak runoff is expected to shift by more than a month earlier by mid to late century (Figure 2-3). Spring runoff will decrease due to reduced winter snowpack. Similar to the precipitation scenarios, there is large uncertainty in projected runoff where the ‘wet’ scenarios suggest an increase in annual runoff and the ‘dry’ scenarios suggest a decrease in annual runoff. The projected changes in basin wide runoff range from an increase of 486 thousand acre-feet (TAF) under the warm-wet scenario to a decrease of 203 TAF under the hot-dry scenario by the end of the century.

This 2020 UWMP includes additional climate change discussion in Chapters 3 and 4.

Figure 2-3: Distribution of Average Monthly Runoff for Historical Record (1922-2015) and Future Projections under Central Tendency Climate Scenario

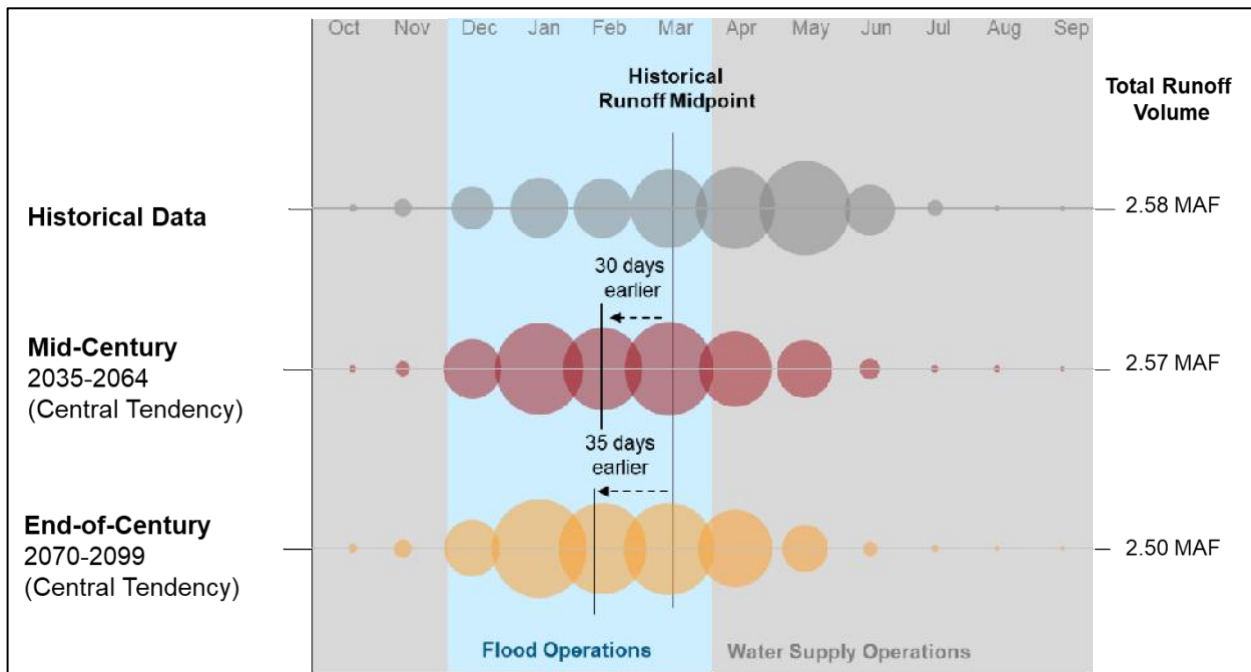


Table 2-4 lists the change in annual climatic and hydrologic indicators between historical baseline observations (1915 to 2015) and projected future conditions for the ARBS area.

Table 2-4: Change in Hydrologic Indicators between Historical Observations and Projected Future Hydrology

Time Period	Climate Scenario	Precip. (in)	T _{avg} (°F)	T _{max} (°F)	T _{min} (°F)	PET (in)	SWE avg. (in)	SWE max (in)	Runoff (TAF)
Historical Baseline									
1915-2015	Historical Observations	38.2	54.8	67.8	35.6	42.8	1.5	5.7	1,458
Variance from Historical Baseline									
2040-2069	Warm-Wet	1.9	4	6.2	1.6	1.6	-0.7	-2.3	701
	Central Tendency	0.1	5	8.1	2.1	2.7	-0.9	-2.8	-2
	Hot-Dry	-2.8	6.2	10.4	2.7	3.7	-1.1	-3.4	-206
2055-2084	Warm-Wet	3.8	4.7	7.4	2	2	-0.8	-2.5	199
	Central Tendency	-1.1	6.3	11.1	2.6	4.1	-1.08	-3.5	-93
	Hot-Dry	-3.4	7.9	13.3	3.7	5	-1.2	-3.8	-185
2070-2099	Warm-Wet	7	5.4	8.3	2.5	1.8	-0.9	-2.9	486
	Central Tendency	-0.6	6.5	11	2.8	3.9	-1	-3.3	-54
	Hot-Dry	-4.6	8.9	15.7	4.1	6.2	-1.3	-4.3	-203

2.3 Current and Projected Population, Land Use, Economy, and Demographics

Service area population and land use projections are critical to developing a useful planning framework as population dynamics and growth are a primary influence on water use. These projections directly influence planning measures for system supply, delivery, infrastructure, and demand management. Similarly, understanding the District’s economic, social, and demographic trends give valuable insight to water management and planning. This section of the UWMP addresses these factors to provide a supportable basis for forecasting future water use in Chapter 4.



2.3.1 Current Population and Historic Trends

The population served by the Elk Grove Water District includes a mix of users and user classes, and follows similar demographic and population trends as the City. EGWD’s customer base is comprised of single-family residential (95.4 percent), commercial and institutional (2.8 percent), landscape irrigation (0.9 percent), multi-family residential (0.5 percent), with 0.3 percent of customer connections designated as industrial. The build out of the service area will consist of mainly residential, multi-family, and commercial land uses.

Table 2-5 presents the recent and estimated current population for the District’s service area. Because the service area does not easily correlate to existing boundaries represented by the California Department of Finance in their historic and recent population analyses, the estimates in the table are derived using an occupancy rate and the residential connection data provided in Table 2-1.

The service area’s currently averages about 3.27 persons per connection.¹³ Also, because the existing multi-family connection information in Table 2-1 represents multiple residences for each connection, population projection needs the connection to adjust to residences prior to the average persons per connection to be applied. For the purposes of this UWMP, each multi-family connection reflects an average of 25 units.

Table 2-5: Estimated Population – Historical and Current

2015	2016	2017	2018	2019	2020
42,800	43,200	43,700	43,700	44,500	45,300

2.3.2 Current and Projected Land Use

As described previously, the District serves water into two areas: Service Area 1 and Service Area 2 (see Figure 2-1). Service Area 1 is nearly built-out, with mostly infill projects remaining. Service Area 2 expects to receive the majority of additional growth.

Recently, the City of Elk Grove released the public review draft of its 2021 through 2029 Housing Element, a proposed update to its General Plan.¹⁴ Using information published in the draft, an assessment was made to determine the likely number of new housing units – both single-family and multi-family – that may be constructed within the District’s service area. Since the City also projects growth for areas west of Highway 99, which receive water service from Sacramento County Water Agency, the total estimated new housing needed to be evaluated for whether it was occurring within the District’s service area. The analysis resulted in an estimated 2,400 new residential units added by 2029. This reflects about a 0.3% growth rate.

¹³ California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, 2020

¹⁴ https://www.elkgrovecity.org/UserFiles/Servers/Server_109585/File/Departments/SPI/Housing_2021/EG-Housing-Element_Public%20Review%20Draft_2021-04-13_TrackChanges.pdf



During the analysis of the City’s housing projections and comparing to additional projects currently permitted or under plan review, as available through the City’s planning department,¹⁵ the District anticipates minor additional growth will continue beyond the 2029 horizon in the City’s Housing Element. This growth will most likely be smaller infill residential projects as well as non-residential commercial and industrial growth that often lags the housing.

To accommodate future growth beyond the Housing Element, the District assumes additional housing units equal to about 25% of the Housing Element’s projected 2,400 new households would be constructed by 2045 – equal to an additional 500 units. Given the likely location for this growth in Service Area 2, which is characterized by mostly single-family homes, these 500 units will be assumed to all be single-family homes.¹⁶

To estimate non-residential growth, the existing mix of residential to non-residential connections can be a proxy for estimating the future mix for the incremental new connections. As noted previously, residential connections represent about 95% of the District’s customers, with non-residential uses representing 5%. With the addition of 2,400 residential units between 2020 and 2029 plus the additional 500 residential units by 2045, the existing ratio would result in 145 new non-residential connections by 2045. Using the existing ratio of sub-classifications of non-residential customers, the 145 additional connections are assumed to be spread among commercial, industrial and landscape irrigation connections.

Table 2-6 presents the expected new connections by customer classification over the UWMP’s planning horizon. Multi-family connections assume 25 households per connection.

Table 2-6: Cumulative New Connections

Customer Class	2025	2030	2035	2040	2045
Residential	1,200	2,400	2,600	2,800	2,900
Non-residential	60	120	130	140	145

¹⁵ <https://elkmap.maps.arcgis.com/apps/MapTour/index.html?appid=3c40052d00c34da6a10af32f609decb5>

¹⁶ For water use forecasting, this is a more conservative approach since multi-family units have lower per-unit water demand factors. Thus, if some of the future households are multi-family, the use will likely be less than forecast.



Table 2-7 presents the expected total connections by classification, combining the new residential and non-residential connections with the existing connections. This connection forecast will be used to estimate future water use, as detailed in Chapter 4.

Table 2-7: Expected Total Connections

Customer Class		2025	2030	2035	2040	2045
Existing	Single Family Residential	12,295				
	Multi-Family Residential	62				
	Commercial/Institutional	361				
	Industrial	43				
	Landscape Irrigation	121				
	Other	10				
New	Residential	1,200	2,400	2,600	2,800	2,900
	Non-residential	60	120	130	140	145
Total	Residential	13,557	14,757	14,957	15,157	15,257
	Non-residential	595	655	665	675	680

2.3.3 Economic Trends & Other Social and Demographic Factors

EGWD’s service areas are contained within the City of Elk Grove city limits. While the City’s boundaries include areas that are outside of EGWD’s service area, there is overall compatibility with respect to employment and growth characteristics.

Since the 1950’s, the region has experienced a strong urban growth, typical of post-World War II suburban and metropolitan areas. During the 1990’s, the City of Elk Grove’s population grew by more than 70%, while job growth mainly occurring in other parts of the greater Sacramento region.¹⁷ Major job sectors for the City’s population include government, healthcare, educations, and tech industries, with overall job growth averaging 11.5% annually during the period 2000 to 2013. It is estimated that the City is expected to see an increase in jobs of approximately 35.5% in 2040 when compared to the 2016 number of jobs.¹⁸

In the years prior to the COVID pandemic, some areas within the greater Sacramento Region experienced a substantially low unemployment rate. Figure 2-4 displays the Sacramento metropolitan area Labor Force and Employed populations as well as the resulting Unemployment Rate for the period 1990 through 2020. As seen on the figure, in September 2019, the region experienced the lowest unemployment rate for the period (3.1%). Commensurate with the impacts on the labor market due to the pandemic, 2020 saw the largest increase in the unemployment rate for the period, resulting in a high of 14% (April 2020).

¹⁷ City of Elk Grove. General Plan. December 2019 (amended).

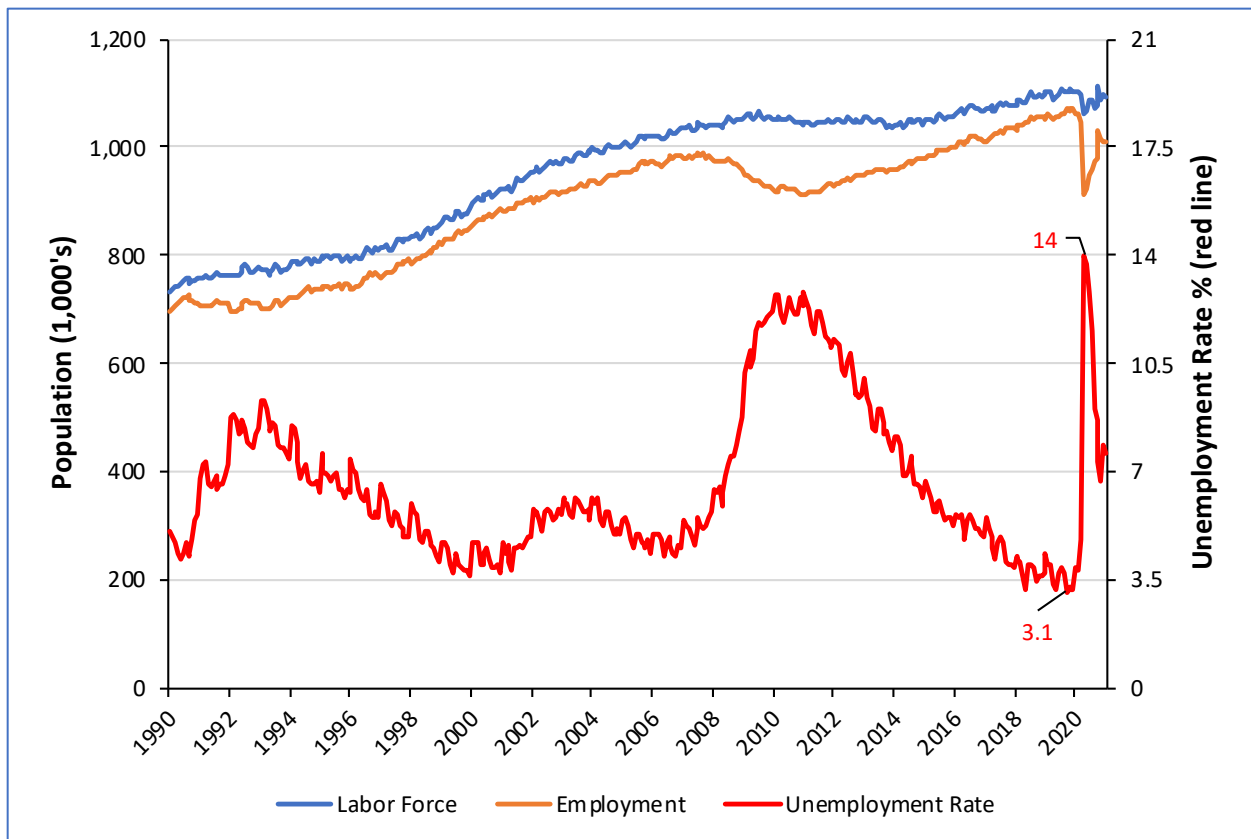
¹⁸ https://www.elkgrovecity.org/UserFiles/Servers/Server_109585/File/Departments/SPI/Housing_2021/EG-Housing-Element_Public%20Review%20Draft_2021-04-13_TrackChanges.pdf



The increased unemployment rate experienced during 2020 appears to be rebounding from the historic high. The rate of economic recovery for the region remains to be seen, indicating a high level of uncertainty with respect to pace and type of future economic job growth for the greater Sacramento region. Despite the recent increase in unemployment, the City’s policy toward development entails increasing jobs and economic opportunities while acknowledging the importance of housing and a resident workforce¹⁹.

The DWR DAC Mapping Tool does not identify any portions within the District service area as a “Disadvantaged Community.”²⁰ The City has an estimated median income of \$84,827²¹ while the threshold for Disadvantaged Community designation is less than \$56,982.

Figure 2-4. Sacramento Region Labor Statistics²²



Expected Population Based Upon Land-Use Planning

To forecast projected service area population as accurately as possible requires consideration of the past growth rate, local economic predictions, and current and projected land uses. Importantly, one of

¹⁹ City of Elk Grove Policy LU-1-2.

²⁰ <https://gis.water.ca.gov/app/dacs/>

²¹ https://www.elkgrovecity.org/visitors/about_elk_grove

²² Source: United States Bureau of Labor Statistics (Sacramento, Roseville, Arden-Arcade, CA)



the recent statutory updates to the UWMP Act states urban water suppliers “shall coordinate with local or regional land use authorities”²³ regarding land uses that may affect water management planning.

The District’s growth prospects are predominantly defined by the City’s Housing Element, with some minor continued growth, primarily for non-residential customers. Since boundaries used for various population projections made by the Department of Finance do not correlate to the District’s service areas, the projected population for this UWMP is estimated by adding the existing population presented in Table 2-5 to population based upon the total new residential connections shown in Table 2-7 multiplied by the persons-per-household occupancy rates.

The resulting future population is provided in Table 2-8.

Table 2-8: Projected Future Population

2020	2025	2030	2035	2040	2045
45,300	49,200	53,100	53,800	54,500	54,800

2.4 Delivery System Details

The District serves customers through an array of groundwater wells, water treatment plants and distribution pipelines.

Further discussion of these systems and the water supply used within each is included in Chapter 3, with current and future customer water use described in detail in Chapter 4.

2.4.1 Potable System

The District’s primary function is delivering potable water to its customers within each previously described service area (see Figure 2-1).

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, 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 EGWD’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. This supply is fluoridated. In accordance with Title 22, Section 64433.2 of the State

²³ CA Water Code Section 10631(a).

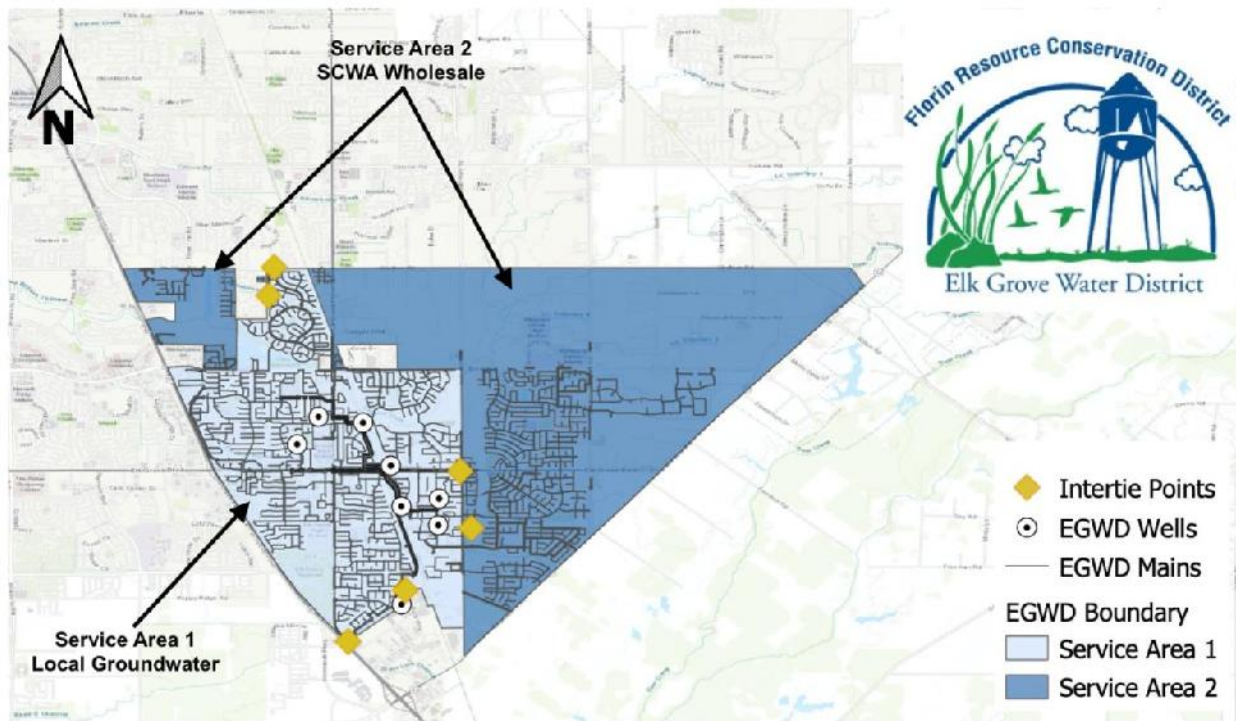
Board regulations, the optimal fluoride level is 0.7 mg/L and the fluoride control range from 0.6 mg/L - 1.2 mg/L.²⁴

The District is 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.

The primary potable water system facilities are shown in Figure 2-5.

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

Figure 2-5: Potable Water System



²⁴ https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html

2.5 Energy Intensity

Among the statutory changes enacted with new requirements for 2020 UMWPs, an urban supplier shall include information it can readily obtain related to the energy use to produce, treat and deliver water.²⁵ Referred to as “Energy Intensity Reporting” for urban water suppliers, energy Intensity is defined as: total amount of energy expended in kilowatt-hours (kWh) by the urban water supplier on a per acre-foot basis to take water from the location where the urban water supplier acquires the water to its point of delivery.

For purposes of UWMP reporting, the District uses the Total Utility Approach described in DWR’s 2020 UWMP Guidebook. This method sums the annual net energy consumed for all water management processes, divided by total volume of water in acre feet. These processes include diversion, conveyance, placement into storage, treatment, and distribution.

The total energy intensity is reported in Table 2-9.

Table 2-9: Energy Intensity – Total Utility Approach

Area	Energy Consumed (kWh)	Volume of Water Entering Process (AF)	Energy Intensity (kWh/AF)
Service Area 1	2,714,535	5,043	538
Service Area 2	0	3,065	0
Total kWh/AF	2,714,535	8,108	335

²⁵ California Water Code Section 10631.2(a).

Chapter 3 Water Supply

The Elk Grove Water District (EGWD or District) utilizes both groundwater and wholesale water delivered from Sacramento County Water Agency (SCWA). The District has limited options for water supplies given its geographic boundaries and local surface water bodies. Although SCWA surrounds the District and provides water to the District, Elk Grove Water District still has independent access to the groundwater basin and captures those supplies for use in its service area. Through its groundwater pumping and a wholesale water contract with SCWA, the District supplies water to meet its customers water needs.

3.1 Existing Water Supplies and Entitlements

As described in Chapter 2, the District provides water supplies to two service areas – Service Area 1 and Service Area 2 (see Figure 2-1).

The District has historically received its water supply through self-supplied groundwater and water purchased from SCWA. Specifically, the District relies solely on its own groundwater resources as the source of supply for Service Area 1, while Service Area 2 uses water supplied by SCWA. The supplies provided by SCWA may be derived from a number of water sources in SCWA’s water supply portfolio.

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. The groundwater production from these wells has been relatively stable and reflects the demands within that service area. Table 3-1 provides the last 5 years of historical supply produced by the Service Area 1 wells.

Table 3-1: Service Area 1 Wells and Historical Production

Year	Groundwater
2016	3,398
2017	3,665
2018	4,036
2019	4,131
2020	4,077

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 most likely derived from SCWA’s production wells located within the service area. Although SCWA does not trace each source molecule of the water assets provided to the District, the location of SCWA wells in close proximity to EGWD indicates that the delivered supplies are likely derived from groundwater resources.

Service Area 2 is supplied water from the SCWA through a wholesale Master Water Agreement (Agreement) with SCWA. The original agreement was signed in 1995. In 2002, the parties “restated” the 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.²⁶ 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.²⁷ 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. The delivery language in the Agreement states: “SCWA shall deliver all potable water necessary for FRCD’s retail customers in the Expanded Franchise Area, including water or fire protection consistent with SCWA design and operations standards in effect at the time a facility is constructed.”²⁸

Table 3-2 provides the last 5 years of historical supply delivered to Service Area 2 from SCWA under this Agreement.

Table 3-2: Service Area 2 Historical Water Supply Deliveries from SCWA

Year	SCWA Water
2016	2,107
2017	2,262
2018	2,327
2019	2,304
2020	2,572

3.2 Groundwater Basin and EGWD Groundwater Supplies

Groundwater supplies constitute a major component of the District’s water supply portfolio. The groundwater supplies are derived from the District’s own production facilities and well systems from SCWA that import water into EGWD’s service area. This section provides a description of the groundwater basin, characterizes the management structures related to various areas in the groundwater basin, and quantifies supplies available to the District from the groundwater basin.

3.2.1 Sacramento Valley – South American Subbasin

EGWD derives its groundwater supplies from the South American Subbasin of the Sacramento Valley Groundwater Basin. The South American Subbasin (5-21.65) covers approximately 388 square miles and is defined as the area bounded on the west by the Sacramento River, on the north by the American River, on the south by the Cosumnes and Mokelumne rivers, and on the east by the Sierra Nevada

²⁶ 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.

²⁷ Agreement at Article VI.

²⁸ Agreement at Article III.a.

Range. The eastern basin boundary is defined by the Sierra Nevada foothills and follows a north-south line extending from Folsom Reservoir to Rancho Murieta. Along this line, little groundwater flows into or out of the groundwater basin. The rivers that surround the South American Subbasin generally create a groundwater divide in the shallow subsurface although there is interaction between groundwater basins at greater depths. The western portion of the subbasin consists of nearly flat floodplain deposits from the surrounding rivers and tributaries.

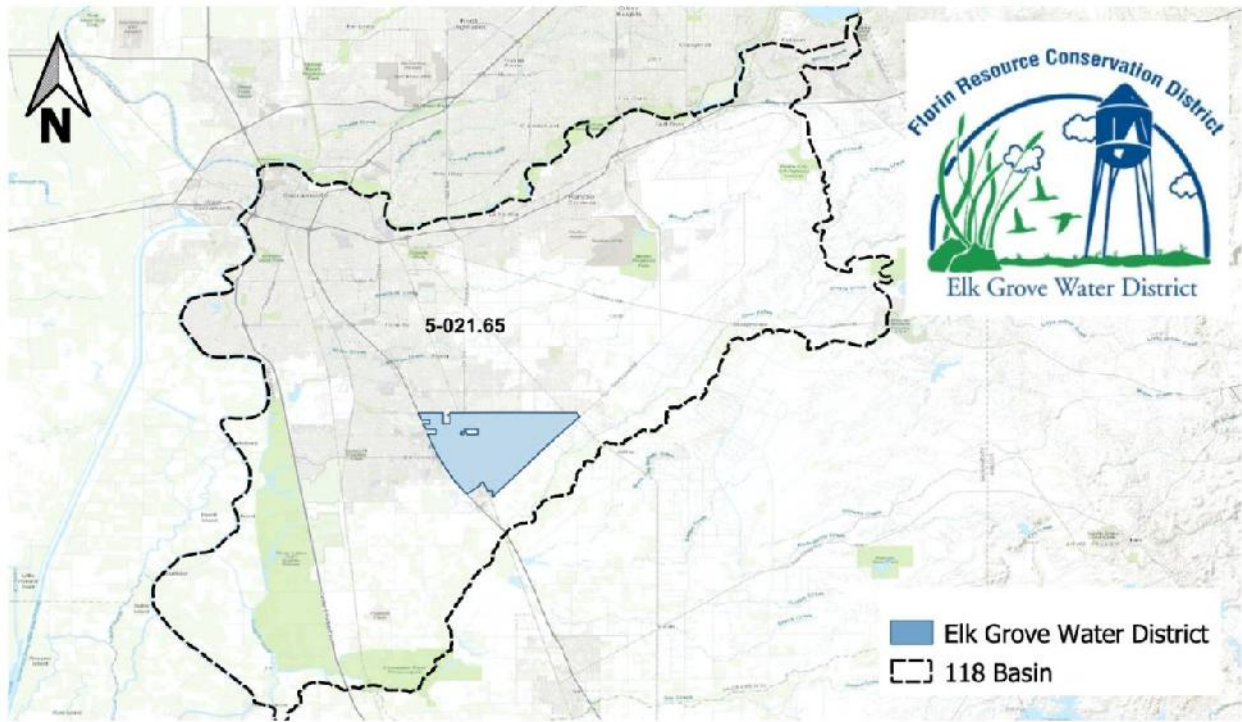
Bulletin 118-3 identifies and describes various geologic formations that constitute the water-bearing deposits underlying the District's service area. These formations include an upper, unconfined aquifer system consisting of the Victor, Fair Oaks, and Laguna Formations (now known as the Modesto Formation), and a lower, semiconfined aquifer system consisting primarily of the Mehrten Formation. These formations are typically composed of lenses of interbedded sand, silt, and clay, interlaced with coarse-grained stream channel deposits. The Mehrten formation outcrops near the Sierra Foothills along the eastern Central Basin boundary and is typically characterized as a black sandy lens.

Groundwater in the South American Subbasin generally occurs in a shallow aquifer zone (Laguna or Modesto Formation) or in an underlying deeper aquifer zone (Mehrten Formation). Within the subbasin, the shallow aquifer extends approximately 200 to 300 feet below the ground surface and, in general, water quality in this zone is considered to be good with the exception of arsenic detections in a few locations. The shallow aquifer is typically used for private domestic wells requiring no treatment unless high arsenic values are encountered, causing owners to possibly target other water-bearing strata.

The deep aquifer is separated from the shallow aquifer by a discontinuous clay layer that serves as a semi-confining layer for the deep aquifer. The base of the potable water portion of the deep aquifer averages approximately 1,400 feet below ground surface (bgs). Water in the deep aquifer typically has higher concentrations of total dissolved solids (TDS), iron, and manganese. Groundwater used in the South American Subbasin is supplied from both the shallow and deeper aquifer systems.

Figure 3-1 shows EGWD’s location in the South American Subbasin.

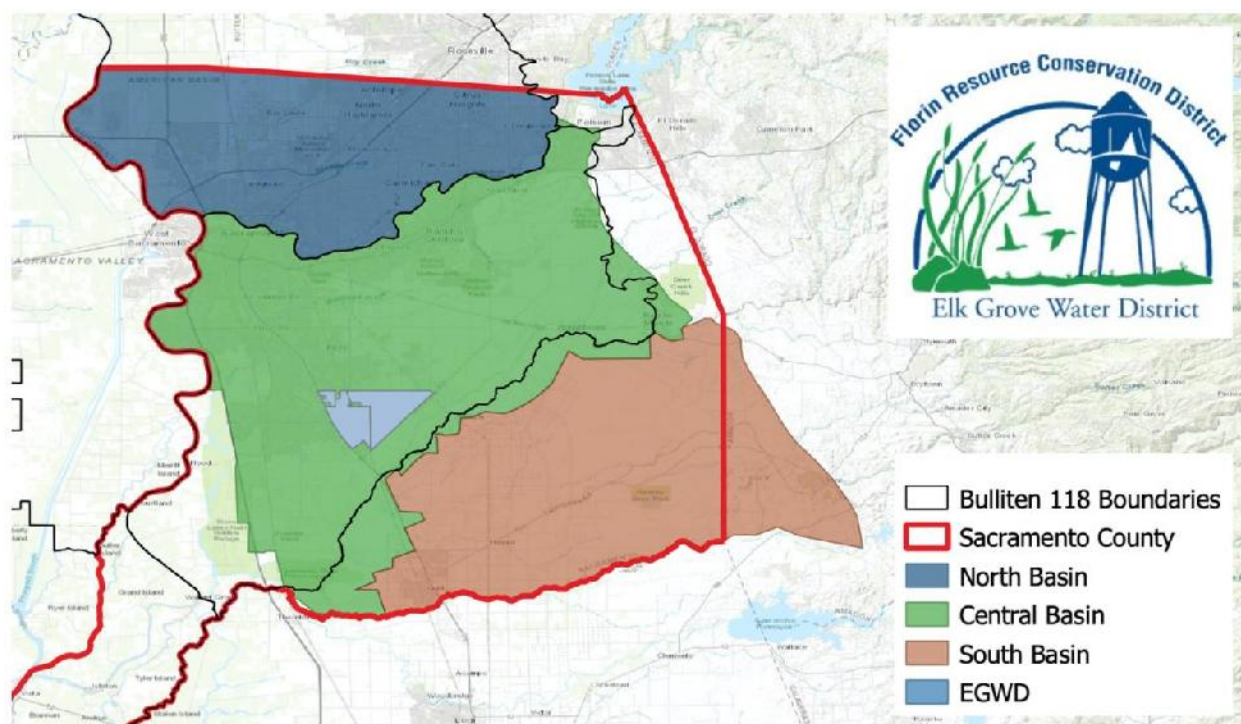
Figure 3-1: EGWD’s Location in South American Subbasin



The South American Subbasin was locally renamed under the 2000 Water Forum Agreement as the “Central Basin” and its total area is nearly identical to the area comprising the South American Subbasin.

Figure 3-2 shows the North Basin, Central Basin, and South Basin as characterized in local basin management and EGWD’s service area within the Central Basin.

Figure 3-2: Local Groundwater Basin Descriptions in Sacramento County

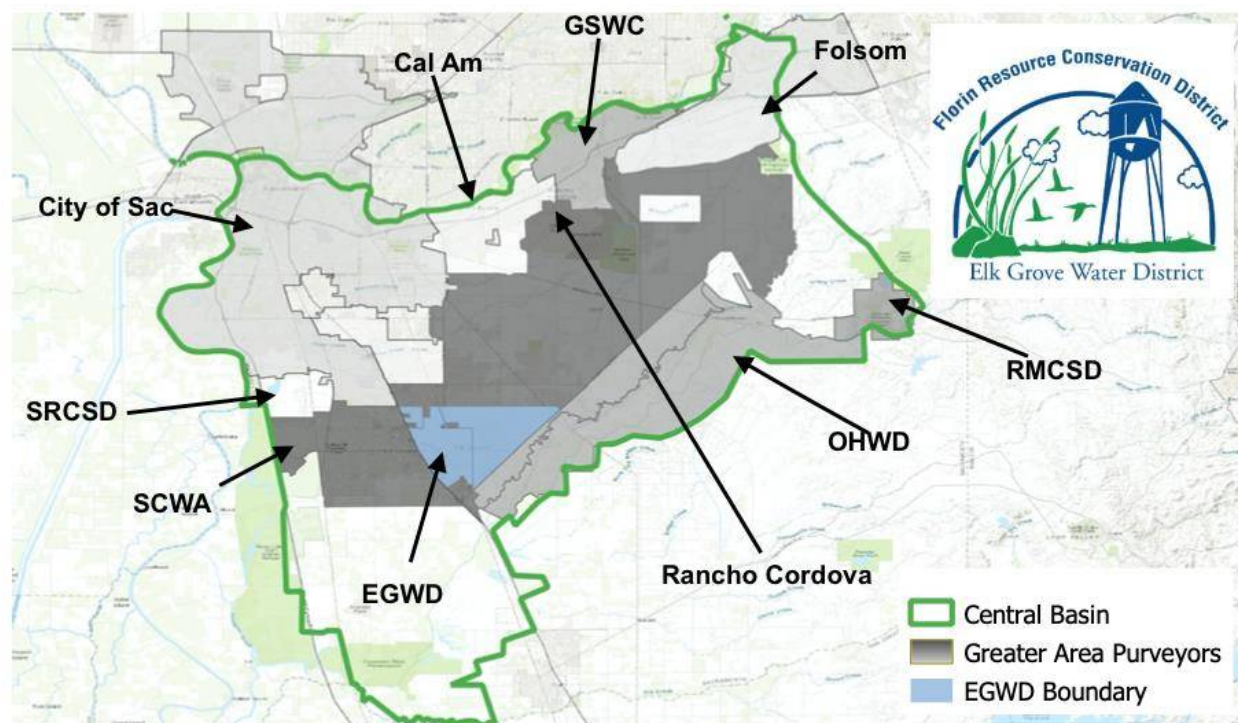


The groundwater wells within the District’s system extract water from aquifers between 200 and 1,000 feet below the ground elevation. The District holds appropriative groundwater rights to all groundwater supplies derived from its wells that are delivered to its customers and overlying rights where it pumps water for use on its owned and operated properties. Groundwater elevations are regularly monitored within the region by DWR and the Sacramento Central Groundwater Authority (SCGA). 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. These hydrographs are provided in Section 3.9 of this Chapter.

3.2.2 Central Basin Groundwater Management

The Sacramento Central Groundwater Authority (SCGA) was formed as a Joint Powers Authority in 2006 to manage groundwater in the Central Basin. SCGA incorporates a number of water service providers, including EGWD. Figure 3-3 shows the SCGA participating agencies.

Figure 3-3: SCGA Participating Agencies

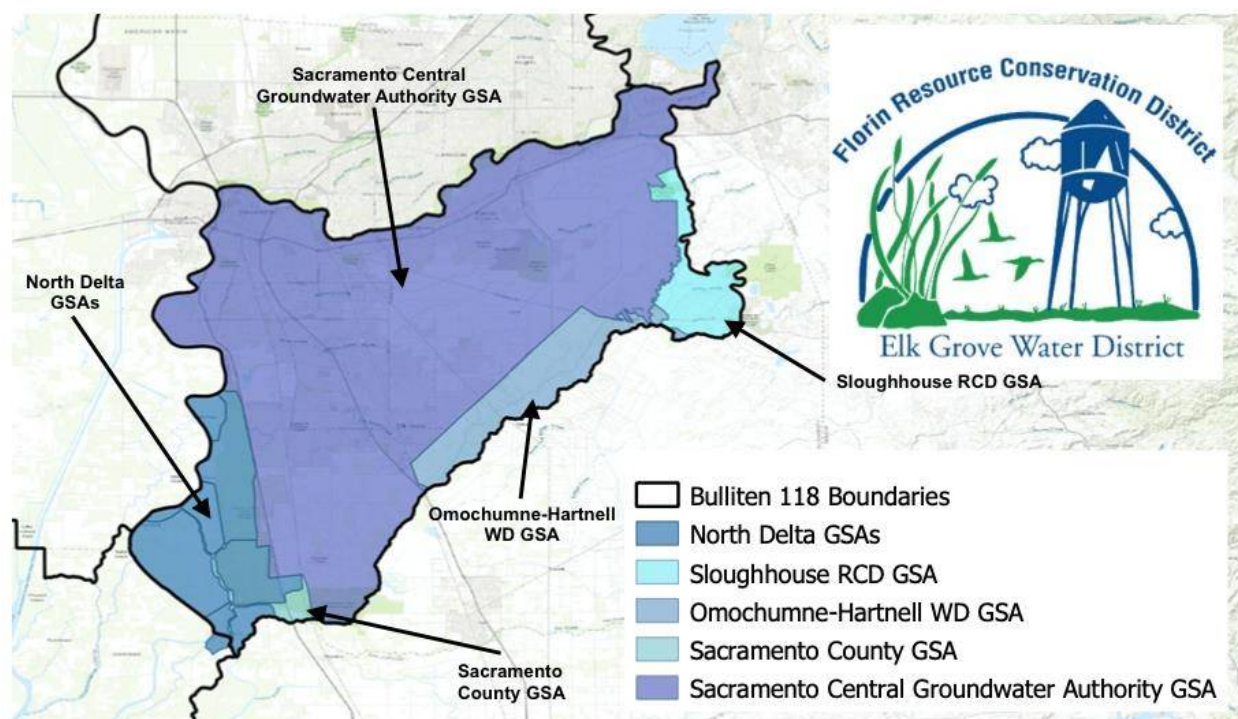


Cal Am - California American Water Company
 GSWC - Golden State Water Company
 RMCS - Rancho Murieta Community Service District
 OHWD - Omochumne-Hartnell Water District
 EGWD - Elk Grove Water District
 SCWA - Sacramento County Water Agency
 SRCS - Sacramento Regional Sanitation District

In 2006, SCGA developed a Groundwater Management Plan (GMP) under Assembly Bill 3030 (called an AB 3030 GMP). The 2006 GMP established parameters to maintain the long-term sustainable yield target of 273,000 acre-feet, detailed activities SCGA will take to sustainably manage the Central Basin, and evaluated groundwater management activities and their effectiveness.

The Sustainable Groundwater Management Act (SGMA) was signed into law in September 2014. The Sacramento Valley – South American Subbasin has six Groundwater Sustainability Agencies created to cover the entire basin area. Figure 3-4 shows the GSA’s jurisdictional areas. By January 2022, the GSAs must prepare a comprehensive Groundwater Sustainability Plan (GSP) to sustainably manage the South American Subbasin. EGWD groundwater production and use remains within the preliminary standards set in the 2006 GMP – the primary planning document guiding sustainability in the Central Basin subcomponent of the South American Subbasin. As such, at this time, the guiding principles in that document govern EGWD’s groundwater planning in the Central Basin.

Figure 3-4: South American Subbasin Groundwater Sustainability Agencies



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 require minimal treatment to meet drinking water standards. Tables 3-3, 3-4, and 3-5 show the water quality reports for the groundwater and surface water in Service Area 1 and Service Area 2.

Chapter 3 – Water Supply

Table 3-3: Service Area 1 Groundwater Quality (2019 Consumer Confidence Report)

CONSTITUENT	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	EGWD Service Area 1 (Groundwater)		
				RANGE	AVERAGE	YEAR SAMPLED
Arsenic	PPB	0.004	10	ND - 6.9	5.8	2018 - 2019
Barium	PPM	2	1	ND - 0.13	ND	2017
Chromium (Total)	PPB	(100)	50	ND	ND	2017
Hexavalent Chromium	PPB	0.02	N/A (a)	ND - 5.4	3.6	2017
Fluoride (Natural Source)	PPM	1	2	ND - 0.12	ND	2017
Nitrate (as N)	PPM	10	10	ND - 4.4	1.0	2019
Gross Alpha	pCi/L	0	15	ND - 6.3	ND	2017
Radium 226	pCi/L	0.05	5 (b)	ND - 1.1	ND	2017
Radium 228	pCi/L	0.019	5 (b)	1.3 - 2.9	2.4	2017
Uranium	pCi/L	0.43	20	ND - 2.2	1.0	2017
Control of Disinfection By-Product Precursors (TOC) (treated water) (c)	PPM	N/A	TT = 2	NR	N/A	N/A
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL FOUND		YEAR SAMPLED
Turbidity - Surface Water (c)	NTU	N/A	TT = 1 NTU	NR		N/A
	% Samples	N/A	TT = ≤0.3 NTU	NR		N/A

Table 3-4: Service Area 2 SCWA Groundwater Quality (2019 Consumer Confidence Report)

CONSTITUENT	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	EGWD Service Area 2 (SCWA Groundwater)		
				RANGE	AVERAGE	YEAR SAMPLED
Arsenic	PPB	0.004	10	ND - 6.2	ND	2015 - 2019
Barium	PPM	2	1	ND - 0.2	ND	2015 - 2019
Chromium (Total)	PPB	(100)	50	ND - 11	ND	2015 - 2019
Hexavalent Chromium	PPB	0.02	N/A (a)	ND - 9.7	2.3	2015 - 2019
Fluoride (Natural Source)	PPM	1	2	ND - 0.36	ND	2019
Nitrate (as N)	PPM	10	10	ND - 3.2	0.72	2019
Gross Alpha	pCi/L	0	15	ND - 3.3	ND	2015 - 2019
Radium 226	pCi/L	0.05	5 (b)	NR	N/A	N/A
Radium 228	pCi/L	0.019	5 (b)	NR	N/A	N/A
Uranium	pCi/L	0.43	20	ND - 2.7	ND	2015 - 2019
Control of Disinfection By-Product Precursors (TOC) (treated water) (c)	PPM	N/A	TT = 2	NR	N/A	N/A
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL FOUND		YEAR SAMPLED
Turbidity - Surface Water (c)	NTU	N/A	TT = 1 NTU	NR		N/A
	% Samples	N/A	TT = ≤0.3 NTU	NR		N/A



Table 3-5: Service Area 2 SCWA Surface Water Quality (2019 Consumer Confidence Report)

CONSTITUENT	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	EGWD Service Area 2 (SCWA Surface Water)		
				RANGE	AVERAGE	YEAR SAMPLED
Arsenic	PPB	0.004	10	ND	ND	2015 - 2019
Barium	PPM	2	1	ND	ND	2015 - 2019
Chromium (Total)	PPB	(100)	50	ND	ND	2015 - 2019
Hexavalent Chromium	PPB	0.02	N/A (a)	ND	ND	2015 - 2019
Fluoride (Natural Source)	PPM	1	2	ND	ND	2019
Nitrate (as N)	PPM	10	10	ND	ND	2019
Gross Alpha	pCi/L	0	15	ND	ND	2015 - 2019
Radium 226	pCi/L	0.05	5 (b)	NR	N/A	N/A
Radium 228	pCi/L	0.019	5 (b)	NR	N/A	N/A
Uranium	pCi/L	0.43	20	ND	ND	2015 - 2019
Control of Disinfection By-Product Precursors (TOC) (treated water) (c)	PPM	N/A	TT = 2	0.94 - 1.3	1.05	2018 - 2019
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL FOUND		YEAR SAMPLED
Turbidity - Surface Water (c)	NTU	N/A	TT = 1 NTU	0.099 (d)		2019
	% Samples	N/A	TT = ≤0.3 NTU	100% (e)		

3.2.4 EGWD Groundwater Supplies

EGWD’s Service Area 1 is an independent system that is currently served wholly through groundwater deliveries from the District’s wells. There are 7 active wells in the Service Area 1 system with an operational capacity of approximately 12 MGD. This translates to an approximate total pumping capacity of 8,000 AF with the consideration of a typical diurnal demand pattern.

The groundwater system makes the supplies available in Service Area 1 100% reliable in all year types. As shown in Table 3-6, EGWD anticipates the following groundwater production for normal, single dry, and five consecutive dry years through 2025. Table 3-7 shows the normal, single dry, and five consecutive dry years of production through 2045. Although the supplies shown in these two tables are the available supply based on the groundwater basin’s sustainable yield and EGWD’s system capacity, EGWD would only produce as much water as it needs to meet demands in a particular location.



Table 3-6: EGWD Service Area 1 Groundwater Supply through 2025

Year		Service Area 1 Groundwater Supply
Normal		8,000
Single Dry		8,000
Multi-Year Drought	2021 (1st year)	8,000
	2022 (2nd year)	8,000
	2023 (3rd year)	8,000
	2024 (4th year)	8,000
	2025 (5th year)	8,000

Table 3-7: EGWD Service Area 1 Groundwater Supply Potential through 2045

Total Supply		2025	2030	2035	2040	2045
Normal		8,000	8,000	8,000	8,000	8,000
Single Dry Year		8,000	8,000	8,000	8,000	8,000
Multi-Year Drought	Year 1	8,000	8,000	8,000	8,000	8,000
	Year 2	8,000	8,000	8,000	8,000	8,000
	Year 3	8,000	8,000	8,000	8,000	8,000
	Year 4	8,000	8,000	8,000	8,000	8,000
	Year 5	8,000	8,000	8,000	8,000	8,000

3.3 EGWD Contract Supplies with SCWA

As described previously in this chapter, EGWD holds a water service Agreement with SCWA. This Agreement obligates SCWA to deliver water to meet EGWD’s water supply needs through 2050. 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.²⁹ 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. In addition, SCWA could deliver water derived from its Water Rights Permit, CVP Contracts, other water rights, and Aerojet remediated groundwater supplies derived from foreign sources of groundwater in the American River Watershed through the FRWA system that could reach EGWD. The nature and extent of the parameters that would allow these surface water supplies to reach EGWD is beyond the scope of this document. The District agreed to purchase water from SCWA to serve its expanded retail area in Service Area 2 and SCWA will provide the water supplies to meet that need.

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

²⁹ As noted earlier in this Chapter, although SCWA does not monitor the location of each molecule of water in its delivery system, the proximity of SCWA’s wells to Service Area 2 most likely means that EGWD is served with groundwater.



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, SCWA’s conjunctive use water supply is considered a permanent and reliable source based upon the language of the Agreement.

The Agreement makes the supplies available in Service Area 2 100% reliable in all year types. As such, EGWD anticipates the following groundwater production for normal, single dry, and five consecutive dry years through 2025 in Table 3-8 and production through 2045 as shown in Table 3-9. These supplies are generally rounded in order to show that EGWD could call on more water from SCWA than it has historically used to meet its service area demands under the terms of the Agreement.

Table 3-8: EGWD Service Area 2 SCWA Agreement Supply through 2025

Year		Service Area 2 SCWA Supply
Normal		5,000
Single Dry		5,000
Multi-Year Drought	2021 (1st year)	5,000
	2022 (2nd year)	5,000
	2023 (3rd year)	5,000
	2024 (4th year)	5,000
	2025 (5th year)	5,000

Table 3-9: EGWD Service Area 2 Projected SCWA Agreement Supply through 2045

Total Supply		2025	2030	2035	2040	2045
Normal		5,000	5,000	5,000	5,000	5,000
Single Dry Year		5,000	5,000	5,000	5,000	5,000
Multi-Year Drought	Year 1	5,000	5,000	5,000	5,000	5,000
	Year 2	5,000	5,000	5,000	5,000	5,000
	Year 3	5,000	5,000	5,000	5,000	5,000
	Year 4	5,000	5,000	5,000	5,000	5,000
	Year 5	5,000	5,000	5,000	5,000	5,000

3.4 Recycled Water

The District does not currently receive any recycled water. Although SCWA currently obtains and serves recycled water within its Zone 40 service area and expansion into the District’s service area is feasible, 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. 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.

3.5 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.

3.6 Transfer and Exchange Opportunities

The District has opportunities for limited potable water transfers or exchanges. All of these transfers 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 has not activated. 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. 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 that could be used in EGWD's service area. 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 years but also in long-term groundwater basin recovery and management of costs related to FRWA and Vineyard system operations.

3.7 Climate Change

While the California Water Code does not prescribe specific climate change planning and management measures for water suppliers, it does emphasize that climate change is appropriate to consider when assessing drought risk assessment, water conservation and use efficiency, and demand management and supply – both in an historical and future-projection context. EGWD’s 2020 UWMP has incorporated climate change considerations into its water supply analysis, water demand analysis, water supply reliability assessment and water shortage contingency plan. The characterizations are imbedded into the characterizations of supply availability in normal, single dry, and five-consecutive dry year periods as well as the changes in demands that may result from climatological changes in those same periods. Moreover, the climate change characterizations are incorporated into future projected conditions through the 2045 planning horizon. The broad climate change considerations are noted in Chapter 2.

3.8 Planned Water Supply Projects

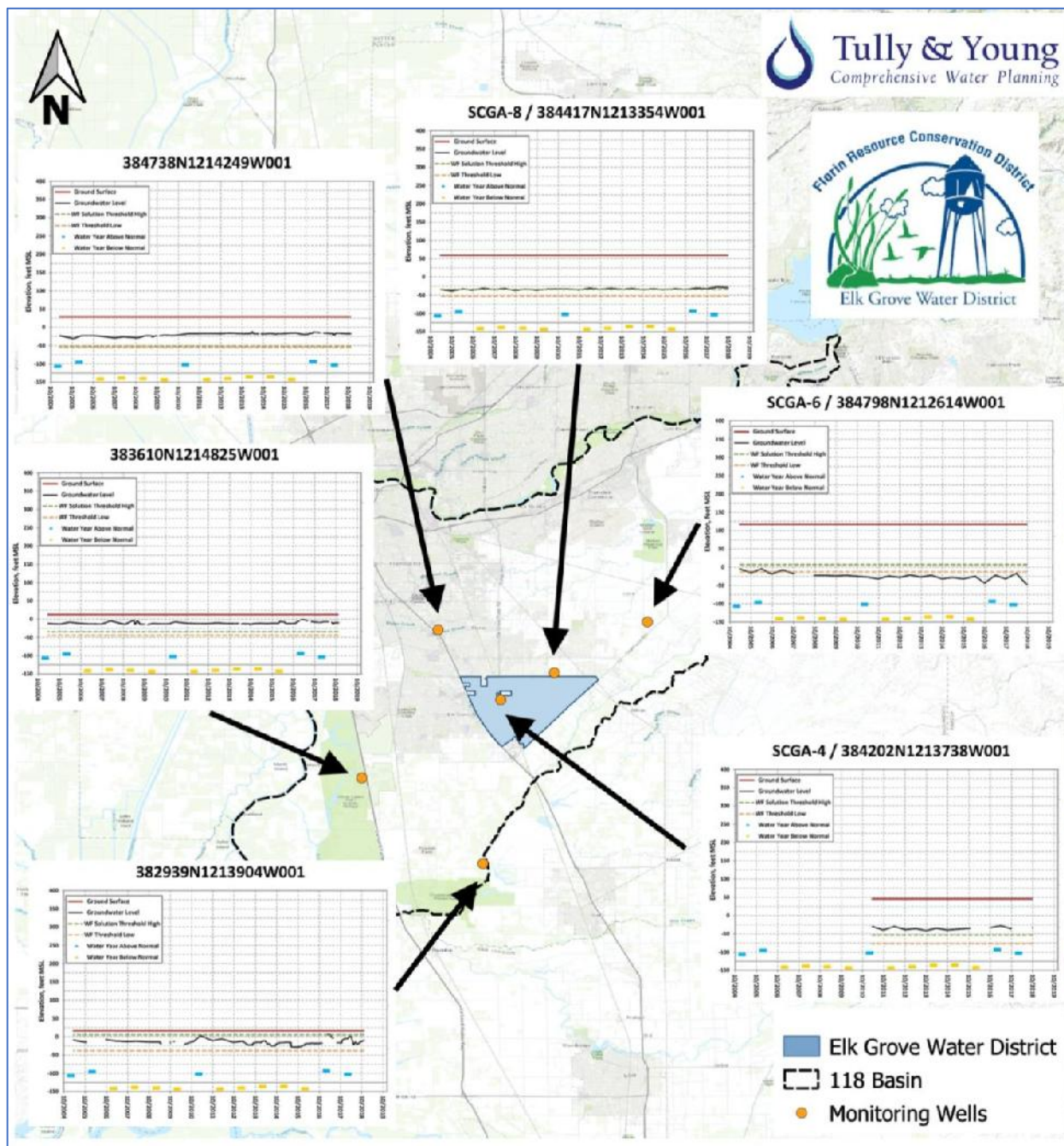
At this time, EGWD is not planning to develop any additional water supply sources in its service area.

3.9 EGWD 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 Central Basin’s water levels have remained stable over the last two decades with the implementation of sound management practices. 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.

Figure 3-5: Well Monitoring Data Showing Depth to Groundwater



The District’s groundwater supplies and contracted supplies with SCWA account for approximately 13,000 acre-feet per year from Central Basin’s estimated sustainable groundwater yield of 273,000 AFY . 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.

Table 3-10 shows the combined Service Area 1 and Service Area 2 supplies in normal, single dry, and five consecutive years through 2025. Table 3-11 shows the combined Service Area 1 and Service Area 2 supplies through 2045.

Table 3-10: EGWD Total Potential Supplies through 2025

Year		Total Supply
Normal		13,000
Single Dry		13,000
Multi-Year Drought	2021 (1st year)	13,000
	2022 (2nd year)	13,000
	2023 (3rd year)	13,000
	2024 (4th year)	13,000
	2025 (5th year)	13,000

Table 3-11: EGWD Total Potential Supplies through 2045

Total Supply		2025	2030	2035	2040	2045
Normal		13,000	13,000	13,000	13,000	13,000
Single Dry Year		13,000	13,000	13,000	13,000	13,000
Multi-Year Drought	Year 1	13,000	13,000	13,000	13,000	13,000
	Year 2	13,000	13,000	13,000	13,000	13,000
	Year 3	13,000	13,000	13,000	13,000	13,000
	Year 4	13,000	13,000	13,000	13,000	13,000
	Year 5	13,000	13,000	13,000	13,000	13,000

Chapter 4

Water Use

Understanding water use characteristics is essential to enable the District to reliably and cost-effectively manage its water supplies to continue to meet customer needs. This chapter characterizes the District's retail customer water needs – current and forecast over the next few decades. Characteristics such as how water uses vary among different land use classifications, throughout the year, and under differing hydrologic conditions, all help with that understanding.

A thorough characterization and analysis provides a realistic prediction of future water use based upon the District's past and current water use, in addition to considerations of anticipated growth, new regulations, changing climate conditions and trends in customer water use behaviors. A thorough analysis examines each water use sector for a variety of factors, then aggregates the information into a comprehensive projection of customer water use that becomes the foundation for integration with the District's water supplies (see Chapter 3) to assess long-term water system reliability (see Chapter 5).

Several legislative changes were enacted since the District completed its 2015 UWMP. The new requirements must be addressed in the 2020 UWMP in addition to completing requirements from the prior statutory language. While there have been many changes, the critically important items the District must address are highlighted below:

- ◆ Provide quantified distribution system losses for each of the 5 preceding years. [CWC 10631(d)(3)(A) and (C)]
- ◆ Include a drought risk assessment (DRA) for a drought period that lasts five consecutive water years, starting from the year following the assessment, which would be 2021 for this round of UWMPs. The DRA requires a comparison of water supplies with total projected water use. Therefore, the District must produce a projected water use for the years 2021 through 2025 as part of the water use projections up to 2045. [CWC 10635(b)]
- ◆ Conduct an annual water supply and demand assessment on or before July 1 of each year (following adoption of its 2020 UWMP) where the annual assessment includes current year unconstrained demand. The District will consider “unconstrained demand” as the expected water use in the upcoming year, based on recent water use, before any projected response actions it may trigger under its Water Shortage Contingency Plan (see Chapter 6). [CWC 10632.1]

This section is organized as follows:

- ◆ Current Customer Water Use – This subsection presents data reflecting the District’s residential and non-residential customers for 2016 through 2019 as well as the actual 2020 water use, and presents the District’s distribution system losses.
- ◆ Compliance with 2020 Urban Water Use Target – This subsection documents the derivation of the 2020 GPCD value and comparison to the 2020 GPCD target.
- ◆ Demand Management Measures – This subsection provides a narrative description of each water demand management measure implemented by the District over the past five years, and describes the District’s planned measures for the foreseeable future.
- ◆ Forecasting Customer Use – This subsection presents the derivation and results of future water use forecasts for potable and non-potable water within the District’s service area, including land-use classifications, unit demand factors, and estimation of distribution system losses. This subsection also estimates the variations in customer water use the District should expect during years with low rainfall as well as discusses longer-term climate change considerations.
- ◆ Forecasting Water Use for DRA and Annual Assessment – This subsection focuses on the subset of the customer water use forecast that is necessary for completing the 5-year Drought Risk Assessment (DRA) and defining the “unconstrained demand” for purposes of the District’s annual water supply and demand assessment.
- ◆ Projecting Disadvantaged Community Water Use – This subsection presents the estimated water use necessary to meet lower income households, pursuant to California Water Code 10631.1.

4.1 Current Customer Water Use

As described in Chapter 2, the District has been serving potable water to about 12,890 customer connections for the past several years. Under normal operations, all of the water supplied to its customers is drawn from the District’s groundwater wells, treated at one of the water treatment plants, and derived through connections to the Sacramento County Water Agency (see Chapter 3), and delivered through an array of pipelines (see Figure 2-5). The current customers, their recent and expected water use trends, and the District’s on-going demand management efforts targeting these customers provide a foundational basis for this UWMP’s water use forecast to 2045.

Furthermore, the actual water use in 2020 is the basis for determining the District’s compliance with its 2020 gallons per capita per day (GPCD) target established in its 2015 UWMP. This subsection presents this relevant information.

4.1.1 Customer Water Use: 2016 to 2019

Recent customer water use can help the District understand water use trends, effects of temporary use restrictions imposed during the most recent prolonged drought and recovery from such temporary restrictions, effects of long-term demand management measures, and other pertinent water use factors

relevant to its forecast of future water use. Water Code Section 10631(d)(1) also requires the District to quantify past customer water use.³⁰

Table 4-1 presents the District’s past potable water use by customer classification for 2016 through 2019. While the District tracks connections using five primary categories (see Table 2-1), it records water use by only two categories:

- ◆ Residential
- ◆ Commercial, Industrial and Institutional (CII)

This historic data also provides insight into the relative ratio of differing customer classifications to each other as well as seasonal variations. For instance, use across nearly all classifications was relatively consistent for 2016 through 2019. Yet, the CII sector has significantly lower use in winter and spring months compared to summer months. Furthermore, the residential classification illustrates two important characteristics: (1) it represents about 80% of the annual water use, and (2) it has summer demands that are three times the monthly volume needed in winter months.

Table 4-1: Customer Water Use: 2016 to 2019 (values in acre-feet)

	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Residential	2016	212	211	220	305	393	550	617	607	537	413	243	231	4,538
	2017	206	205	202	235	316	534	646	663	620	531	413	252	4,822
	2018	242	216	240	234	341	504	610	647	587	494	438	305	4,858
	2019	218	213	198	212	378	429	594	641	623	522	457	313	4,799
Commercial/ Institutional/ Industrial	2016	40	34	39	46	104	138	184	171	160	123	65	41	1,145
	2017	40	38	37	46	55	149	180	193	195	160	118	54	1,265
	2018	40	44	42	45	69	155	172	208	212	146	124	84	1,342
	2019	38	38	36	43	84	132	160	191	198	154	135	85	1,295
Total Metered Deliveries	2016	252	245	259	351	497	688	801	778	697	536	307	272	5,683
	2017	245	243	238	281	372	683	826	856	815	690	531	306	6,086
	2018	281	260	283	279	410	659	782	856	799	640	563	389	6,200
	2019	257	250	233	255	462	561	755	832	821	676	592	398	6,094

4.1.2 Customer Use in 2020

Customers served by the District are metered at their connection to the District’s potable water distribution system. These metered values are collected periodically for each customer account and summarized into annual reports prepared by the District and for reporting to the SWRCB Division of Drinking Water and to DWR.³¹ The 2020 actual customer use presented in Table 4-2 represents the summarized delivery to all the District’s customers. It does not, however, include the distribution

³⁰ California Water Code Section 10631(d)(1)

³¹ The annual SWRCB report is referred to as the ‘electronic Annual Report’ or eAR, and the annual DWR report is known as the Public Water System Statistics report.



system losses inherent in a pressurized water delivery system that occur during the District’s efforts to treat, store and route the water throughout the extensive distribution system to each customer’s connection.

Table 4-2: Total District Customer Use: 2020 (values in acre-feet)

Use Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Residential	220	219	296	277	428	546	662	674	644	566	478	329	5,338
Non-Residential	39	41	67	57	87	140	181	201	180	147	131	75	1,347
Subtotal	258	261	364	333	515	686	843	875	825	713	609	404	6,685

Further, comparing to the total values in Table 4-1, the 2020 annual customer use is about 10% higher than the 2017 through 2019 average use, which was fairly consistent. Comparing the specific customer classifications, the 2020 data displays three unique circumstances: (1) the increase was primarily in the residential sector, as the non-residential use only rose slightly, (2) residential use in March was nearly 40% higher than during prior years, with April and May also higher, and (3) summer use was nearly consistent with prior years, rising only a few percent in each month above average.

While new customers in 2020 would account for some of the increase,³² the higher-than-average use, especially starting in March, is likely due to the pandemic that dominated 2020 and the multiple advisories and even government-imposed restrictions that resulted in many people working from, learning from, or simply staying at home.

4.1.3 Existing Distribution System Losses

Distribution system water losses (also known as “real losses”) are the physical water losses from the District’s water distribution system up to the point of delivery to the customer’s system (e.g., up to the residential water meter).

Since 2016, the District has been required to quantify its distribution system losses using the American Water Works Association Method (Title 23 California Code of Regulations Section 638.1 et seq.). An electronic copy of the audit in Excel format is to be submitted to the Department by October 1 of each year for the prior year’s estimated system losses, using DWR’s online submittal tool pursuant to Code of Regulations Section 638.5. The District’s submittals for the last 5 years are shown in Table 4-3. The 2020 estimate has not been officially submitted to DWR as of the drafting of this UWMP but is estimated to be approximately 265 acre-feet over the year, or about 3.8% of the water entering the distribution system.

As can be anticipated given the dynamic functions of a pressurized potable water distribution system, the estimated annual distribution system loss as a percentage of water entering the system will vary year-to-year and month to month. On average, however, the District’s distribution system loss

³² As shown in Table 2-1, the District added about 200 residential customers in 2020, accounting for a small increase in use.



represents about 5.1% of the water entering the District’s distribution system. This average is conservatively used for purposes of forecasting water use to 2045.

Table 4-3: Distribution System Loss: 2016 through 2020

2016	2017	2018	2019	2020
6.2%	5.1%	4.7%	5.7%	3.8%
Average =				5.1%

4.2 Compliance with 2020 Urban Water Use Target

Pursuant to California Water Code Section 10608.24(b),³³ the District must demonstrate its 2020 water use met the GPCD target adopted in its 2015 UWMP. As set forth in the 2015 UWMP, the District’s 2020 GPCD target was established as 191 GPCD, derived as the “gross water use” divided by the population during a defined baseline period, and reduced pursuant to one of four methods defined under California Water Code Section 10608.20(b). The District’s 2020 actual GPCD must use the same methodology to derive “gross water use” for 2020, then divide by the estimated 2020 population presented in Chapter 2.

As presented in the District’s 2015 UWMP, gross water was determined to be the total water produced by the District’s wells plus the water purchased from Sacramento County Water Agency. This value was 2,264.288 million gallons – or 6,949 acre-feet. This value represents both the customer deliveries shown in Table 4-2 and the distribution system losses recorded in Table 4-3. As shown in Table 2-5, the District’s population in 2020 was estimated to be 45,300. This results in a calculated 2020 compliance value of 137 GPCD, which is less than the District’s established target. Thus, the District is in compliance with CWC Section 10608.24(b). The compliance calculation parameters are summarized in Table 4-4.

Table 4-4: Demonstration of Compliance with 2020 GPCD Target

2020 Volume into Distribution System =	6,949 acre-feet
Allowable Adjustments	0 acre-feet
2020 Gross Water Use =	6,949 acre-feet
2020 Population =	45,300 people
2020 Actual GPCD =	137
2020 Target GPCD =	191
Compliance Achieved?	Yes

4.3 Demand Management Measures

Pursuant to California Water Code Section 10631(e), the District needs to provide a narrative discussion of the water demand management measures it has implemented, is currently implementing, and plans to implement. The historic and on-going measures can help the District understand the effectiveness of

³³ 10608.24. (b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

managing existing customer uses so as to help guide refinements, emphasis, or augmentation that will help position the District to best meet its to-be-established water use objective.³⁴

Demand Management Measures (DMMs) are intended to facilitate the District’s management and reduction of customer demands. Further, the DMMs aid in maintaining supply reliability and have been relied upon in meeting customer use targets, including SBX7-7 and mandatory drought conservation targets. The DMMs were a key component in enabling the District to meet the State Water Resource Control Board’s mandatory conservation targets imposed during June 2015. For the period January 2015 through March 2017, the District was able to reduce total water use by nearly 5,000 AF of water (compared to 2013 baseline values).³⁵

The District’s demand management measures are highlighted in this subsection.

4.3.1 Foundational Demand Management Measures

This section describes the foundational demand management measures (DMMs) that underpin the District operations and customer deliveries. These particular DMMs represent adopted ordinances, policies, and long-standing budgeted conservation programs.

From 2009 through 2018, the District was a member of the California Urban Water Conservation Council (CUWCC). The CUWCC was created to increase efficient water use through urban water agencies partnerships, public interest organizations, and private entities. As a signatory to the CUWCC MOU for Best Management Practices (BMP), the District committed to implementing BMPs that were designed to achieve water conservation across demand sectors. The CUWCC required submission of annual reports aimed at reporting compliance with and implementation of the BMPs. As such, the District submitted annual BMP coverage reports from 2009 through 2018. The CUWCC is now merged with the California Water Efficiency Partnership (CalWEP). CalWEP maximizes urban water efficiency and conservation throughout California by supporting and integrating innovative technologies and practices; encouraging effective public policies; advancing research, training, and public education, and building collaborative approaches and partnerships. The original utility-based (foundational) DMMs described below represent standard practices the District has been implementing for many years. Future direction on BMP implementation for the District will be impacted by CalWEP.

Water Waste Prevention Ordinances

Water waste is prohibited in the District’s current Water Shortage Contingency Plan (WSCP), adopted April 2010 (Ordinance No. 04-28-10-01). Under the WSCP, customers are encouraged to use water efficiently through all stage declarations. The WSCP prohibits all users from unreasonable waste and includes graduated penalties for waste and/or unreasonable use during all stage declarations. For all conditions, including Normal Water Supply, restrictions on water waste include:

³⁴ Beginning in 2023, all urban water suppliers will be required to begin reporting their use compared to a “Water Use Objective” that is being established pursuant to the recently enacted California Water Code Section 10609.20.

³⁵ Elk Grove Water District’s Water Usage and Conservation Report dated April 19, 2017.

- ◆ Runoff prohibited.
- ◆ Watering after rainfall event prohibited.
- ◆ Automatic shutoff nozzles are required for all hoses.
- ◆ Washing driveways and other paved areas is prohibited.
- ◆ Pools, ponds, and fountains are required to use recirculated water.

In addition, the District’s website also allows for reporting of waste with the “Report Water Waste” link,³⁶ allowing for proactive response and improved management. The District has implemented this DMM over the planning period (through multiple versions of the WSCP) and will continue to actively manage water waste through 2045.

Metering

All of the District’s customers are metered and billed monthly. Metered water service rates are comprised of two parts: a fixed charge and commodity charge. The fixed charge is dependent on the meter size, while the commodity charge is based on volume of usage. In addition to the fixed charge, residential customers are subject to a tiered rate structure, based on metered usage. The District anticipates transitioning to automated metering infrastructure (AMI) within the next 5-10 years to provide more timely information to customers and for the District’s management needs.

Conservation Pricing

The District’s water rate structure is set to generate the necessary funds to efficiently operate the District’s water system and maintain reliable water supplies. In addition to a fixed charge based on meter size, the District utilizes a tiered rate structure for metered residential customer use. Usage above the base amount (Tier 1) is billed at a higher rate. The increased block rate structure promotes conservation by incentivizing use below the base amount. Non-Residential accounts (including Irrigation) are charged a constant per-unit cost for water service. In both rate structures, the total unit cost is the summation of commodity and capacity costs.

Public Education and Outreach

As part of its water conservation and efficiency program, the District implements a public information program through active participation in the Regional Water Authority’s (RWA) Regional Water Efficiency Program. In collaboration with 19 water provider members and other wastewater, stormwater and energy partners, RWA formed the Water Efficiency Program (WEP, or Program) in 2001 to bring cost effectiveness through economies of scale to public education and outreach activities.

The WEP operates on an average annual budget of \$530,000 and is supplemented by grant funding. Grants are an important funding resource for the Program. Since 2003, the Program has been awarded \$13.2 million in grant funding for public outreach and education as well as a variety of rebate programs,

³⁶ <https://www.egwd.org/report-water-waste/>

fixture direct install programs, system water loss, individualized customer usage reports, large landscape budgets and more. Of those funds, \$3.8 million was awarded between 2016 and 2020.

The main function of the WEP is to develop and distribute public outreach messages to customers in the region by collaborating with its water provider members. The Program distributes these messages on a regional scale through regional media and advertising buys and was honored with the United States Environmental Protection Agency WaterSense Excellence in Education and Outreach Award in 2016. From 2016-2020, the WEP created a series of public outreach campaigns. Below is a summary of each campaign and highlighted achievements.

Following the historic 2015 California drought, the WEP launched the “Rethink Your Yard” Campaign in 2016 with a focus on prioritizing landscape watering, putting trees first and transitioning thirsty lawn and landscaping to beautiful, low water use, River-Friendly landscapes. The Program advertised the campaign through online ads, social media, commercial radio, Raley Field (local baseball stadium) and local billboards. The campaign featured local homeowners with their newly redesigned yards on billboards throughout the region.

The campaign launched in 2017 focused on encouraging customers to understand and deliver the amount of water their landscape really needs and to make permanent equipment changes to improve efficiency such as installing weather-based irrigation controllers, more efficient sprinklers and drip irrigation. The Program partnered on this messaging with local nurseries through a “Get Growing this Fall” initiative to encourage residents to plant in the fall when days are cooler and plants don’t need as much water to establish roots.

From 2018 through 2020, the regional campaign focused on tackling the landscape overwatering problem with a “Check and Save” message encouraging residents to check the soil moisture with a moisture meter before turning on sprinklers. To support this message, the Program provided free moisture meters via an online request form and at events. In 2019, WEP distributed 3,000 moisture meters to customers throughout the region.

These campaigns are implemented through both paid advertising buys and earned media from public service announcements (PSAs). Every year the campaigns can be heard on local radio stations such as Capital Public Radio and online through Google, Facebook and YouTube advertisements. From 2016-2020, the WEP public outreach campaigns produced:

- ◆ Radio Advertising (2016-2020)
- ◆ 3,443 radio advertisements ran
- ◆ 17.2 million impressions
- ◆ Digital Advertising (Facebook, Google Display Network and Spotify) (2016-2020)
- ◆ 24.3 million impressions
- ◆ 262,900 clicks
- ◆ Additional advertising (billboards in 2016)
- ◆ 1.8 million digital advertisements ran
- ◆ 51.6 million impressions
- ◆ Public Service Announcements (Television and Radio) (2016-2020)

- ◆ 20 million impressions
- ◆ \$570,000 in value had they been purchased as advertising

The Program also continues messaging through its own Facebook page. From 2016-2020, the Program created about 60 Facebook posts a year featuring water saving tips and other relevant information. The WEP hosted several Facebook sweepstake contests including: Tree Hugger in 2016, where participants submitted pictures hugging a tree to raise awareness about the importance of healthy trees and the Under/Over Debate in 2020, where participants were asked to weigh in what is the proper way to hang toilet paper to raise awareness of toilet leaks. The winner of the Under/Over Debate sweepstakes received a case of toilet paper delivered via mail and gift card to a local hardware store.

The Program continues to utilize the public outreach website bewatersmart.info to reach customers throughout the region. The website contains regional and local water provider information on rebates and services, top ways to save, an interactive watering and water waste information map, a water-wise gardening database, recent press releases, the Sacramento Smart Irrigation Scheduler tool, and more.

Educational information and customer services were modified to address the COVID pandemic in 2020 including online water efficiency lessons for kids, a list of nurseries that offered curbside pick-up, virtual water wise house calls, and numerous virtual educational customer workshops. Between 2016 and 2020, the website averaged 96,000 unique visitors per year.

For more targeted outreach, the Program distributed quarterly e-newsletters to participating residents. The e-newsletters are filled with water savings tips, upcoming events and other interesting articles. They are usually timed around changes in the weather to help signal the need for residents to adjust their irrigation systems, such as day light savings coupled with a message to dial back sprinkler systems. The e-newsletter reaches 6,300 households.

Every year the WEP selects 3 public events to attend for the public to interact with local water efficiency staff. This provides an opportunity for the region to communicate its messages in person. Events have included the Sacramento Home & Landscape Show at Cal Expo, Creek Week, Harvest Day, Farm-to-Fork Festival and several Earth Day events. Additionally, RWA, in coordination with participating local water providers, hosts an annual Mulch Mayhem event in which customers can pick up a truck load of free mulch from selected locations throughout the region. All in-person regional events were canceled in 2020 due to the COVID pandemic.

The Program is also very active in communicating to local media outlets such as the Sacramento Bee. Between 2016 and 2020, RWA issued 50 press releases on WEP activities and regionally significant news and participated in nearly 30 radio public affairs interviews. The RWA and the WEP were mentioned in dozens of news articles published by local and regional media outlets both within and outside of the Sacramento region during the same time frame.

To support public outreach messaging and water savings tips, the Program also coordinated several regional rebate programs, which were partially funded by state and federal grants. A variety of rebate options were provided including toilets, clothes washers and irrigation. Collectively these rebates and

installations will produce an estimated lifetime (10 years) savings of 6 billion gallons of water and 6.4 million kilowatt hours (kWhs) of energy.

In addition to public outreach, the Program also coordinates school education activities. Since 2012, the Program has hosted the Water Spots Video Contest for high school and middle school students. The WEP provides a new contest theme each year and provides the region's teacher and students with relevant facts and images to help develop 30 second video PSAs. Students submit their videos to RWA who hosts a panel of local celebrities including Monica Woods from ABC 10 to decide on a first, second and third place winner. The top 10 scoring videos are then posted online for public voting to select a "people's choice" winner as well. Both teachers and student receive cash prizes and the winning videos are played at Raley Field during River Cats games and in select movie theaters throughout the region. The winning PSAs are incorporated into the WEP's media activities as well. Past themes include *WATER MYTHS BUSTED!*, *H2o Hero*, and *Show Off Your Water Smarts*. Between 2016 and 2019, 450 videos were submitted (average of 90 videos a year). The 2020 Water Spots Video Contest was canceled due to the COVID pandemic.

Beginning in 2017, the District began its Community Conservation Education (CCE) Program. Funded by the California Department of Conservation, the CCE Program is designed to increase the public's knowledge of resource conservation issues and improve ecosystem health on agricultural and urban land in the region. The CCE Program entails a Community Conservation Workshop Series concentrating on awareness and efficiency. In 2019, three workshops were held on rain gardens, irrigation, and Watersmart landscaping. Additionally, the CCE Program also involved the implementation of the Student and Landowner Education and Watershed Stewardship (SLEWS) Programs. Prior to its conclusion, the SLEWS Program offered opportunities for high school teachers and students to practice scientific skill, learn from natural resource professionals, and expand on classroom concepts. The hands-on experience included habitat restoration projects at the Stone Lakes Wildlife Refuge.

Implementation of this DMM is active and ongoing.

Programs to Assess and Manage Distribution System Real Loss

The District conducts annual Distribution System Water Audits (consistent with AWWA M36 methodology using software analysis) to characterize water system losses. The District's reported distribution system losses are presented in Table 4-3. Leak detection methods utilized by the District include monitoring of zone usage, zone pressure, and surface conditions. The District also has a long-term Capital Improvement Program (CIP) that replaces aging water mains. The District validates its water audit data annually to improve the accuracy of actual measured water losses occurring in the system per AWWA M36 methodology.

Water Conservation Program Coordination and Staffing Support

The District's Program Manager Department is also in charge of water conservation efforts. Recent accomplishments include the 2020-2025 Strategic Plan³⁷ and assistance in drafting and introducing Senate Bill 427³⁸. Goals and objectives of the Program Manager Department include:

- Implementation of EGWD's Water Conservation Program
- Seek to obtain available grant opportunities
- Track and monitor State and Federal legislation that may impact conservation efforts
- Work with RWA WEP Advisory Committee to develop and implement beneficial water efficiency programs
- Develop, implement, and conduct the District's Public Information and Outreach Program

The Program Manager Department has been fully staffed beginning in Fiscal Year 2016-17. Since that time, the Program Manager Department has been funded annually. The fiscal year 2020-2021 budget for the Program Manger Department amounts to about \$275,000, and includes funding for public outreach, legislation tracking/monitoring, and regional coordination, consistent with program goals and objectives.

Other Demand Management Measures

In addition to the foundational measures discussed previously, the District actively promotes demand management and water efficiency through several other measures.

Regional Water Authority Membership

The District has been a member of the Sacramento Regional Water Authority (RWA) since 2011 and a member of the RWA Water Efficiency Program since 2005. RWA is a member of the California Water Efficiency Partnership (CalWEP, formerly known as CUWCC), promoting conservation and efficient water use. RWA is a joint power agency originally formed in 2001 to assist local water suppliers in implementing the Water Forum Agreement (WFA), specifically the conjunctive use, groundwater management, and water conservation elements of the WFA. Representing the interests of water providers in Sacramento, Placer, and El Dorado counties, RWA's goals, missions, and support efforts have evolved, and now include drought assistance programs, integrated regional water management planning and implementation, and procurement of grant funding. RWA seeks to influence legislative and regulatory policies and actions that may affect the region, including water supply reliability through proactive advocacy. The integrated goals of planning, implementation, communication, and advocacy represent a comprehensive and cohesive approach to identify regional projects and partnerships that help the region meet its future water needs.

Practical Plumbing Handbook

³⁷ https://www.egwd.org/wp-content/uploads/EGWD_StrategicPlan_2020.pdf

³⁸ "Eggman" Water Theft Legislation to broaden the authority of Water Districts to impose fines and penalties for water theft.

The District provides the Practical Plumbing Handbook to inform customers on conservation, including solutions to common plumbing problems. Tips on leaky faucets, running toilets, and inefficiency landscaping systems are provided in the handbook. The handbook is offered to all customers.

Water Use Audit

The District offers free landscape irrigation water use audits to customers. A certified technician evaluates the customer’s irrigation system and prepares a report summarizing opportunities to increase irrigation efficiency. The District also offers indoor evaluations aimed at identifying inefficiencies. These audits allow customers to better understand conservation opportunities and efficient water use.

4.3.2 Recent DMM Activities

The District implements a robust suite of other demand management measures as described above, both within the District and as a part of the RWA WEP. The District’s water efficiency programs are available and tailored to both residential and commercial customers.

4.3.3 Planned DMM Activities

In its commitment to ongoing water conservation and proactive demand management activity, the District is developing a new set of programs and actions which will be used to achieve water use objectives in compliance with California Water Code Section 10609.20. Resources will be dedicated in the District budget for demand management activities which will help comply with these future water use objectives. Special consideration will be taken regarding changing urban water use patterns in the service area.

4.4 Forecasting Customer Use

Forecasting future water demands begins with an understanding of existing customer demands and trends, recognizing the additional customers expected through growth, and considering the factors that will influence the water use of both existing and new customers well into the future – especially factors that directly affect the efficiency of water use.

Pursuant to California Water Code 10610.4(c), an urban water supplier “*shall be required to develop water management plans to actively pursue the efficient use of available supplies.*” One challenge from this directive is reflecting how the pursuit of efficient use is best represented in the forecast water uses that are the cornerstone of good planning. As required by the Act, the future water uses of both existing customers and those added over the 25-year planning horizon should reflect the “efficient use” of water.

4.4.1 Representing Current Customer Water Use

Table 4-1 and Table 4-2 provided the actual customer water use for 2016 through 2020 by classification. From this information, an estimate of the representative “current” water use by existing customers has been developed. Knowing that actual use by existing customers varies slightly year-to-year based on a

variety of factors (e.g. total rainfall and the timing of spring rain events impacting when landscape irrigation may begin), the recent data provides a basis for estimating current water use. Applying a slight downward adjustment to the 2020 residential customer use data while maintaining the 2020 non-residential customer use data provides a basis for a proxy that represents “current” water use. This creates a baseline from which to estimate the future use of these existing customers.

Importantly, the 2020 residential actual use was adjusted in estimating representative “current” water use, since it appears to have been skewed by pandemic conditions during 2020 (see subsection 4.1.2). For purposes of the proxy estimate, the 2020 residential actual use was decreased by 5%. This slight adjustment to 2020 conditions may be conservatively high for existing customers, but the District also has a desire to conservatively assure long-term water system reliability (see Chapter 5).

This target total ‘current water demand’ was then estimated using customer-type demand factors and 2020 connection by classification (see Table 2-1) to generate a comparable estimate. This representative water use for current conditions provides the foundation for estimating the future needs of these existing customers. Table 4-5 provides the representative monthly and annual current water use, including distribution system losses.

Table 4-5: Representative Current Customer Water Use (acre-feet)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Residential	230	220	230	260	380	530	650	680	630	520	410	290	5,030
Non-Residential	60	60	60	70	100	140	170	180	160	140	110	80	1,330
Subtotal	290	280	290	330	480	670	820	860	790	660	520	370	6,360
Loss	15	14	15	17	25	34	42	44	40	34	27	19	326
Total	305	294	305	347	505	704	862	904	830	694	547	389	6,686

4.4.2 Factors Affecting Future Customer Use

There are several factors that affect the forecast of future customer use, ranging from State and local landscape regulations, building code requirements, and other water-use mandates, to changes in the types of housing products being offered. These factors are incorporated into determining appropriate per-dwelling unit or per customer connection water demand values for use in forecasting future water needs. Relevant characteristics of the factors are described here.

Water Conservation Objectives

In 2009, Governor Arnold Schwarzenegger signed Senate Bill No. 7 (SBX7-7), which established a statewide goal of achieving a 20 percent reduction in urban per capita water use by 2020 for urban retail water suppliers.³⁹ As presented previously, the District has met this mandated target.

Furthermore, the efforts undertaken by the District and its customers to meet these targets, as well as efforts throughout the State by other urban retail suppliers, have changed the availability and use of appliances, fixtures, landscapes and other water using features, through changes or additions to ordinances and/or through a continuing “conservation ethic.”

In response to the recent multi-year drought conditions, Governor Brown issued Executive Order B-37-16 in May 2016 entitled “*Making Water Conservation a California Way of Life.*” In May 2018, Governor Brown signed into law SB 606 and AB 1668, which imposed additional statutory requirements above and beyond the 20 percent by 2020 target reflected in the 2009 legislation. This is expected to result in continued efforts to increase water use efficiency and ultimately to reduce water demands of existing water users and continue to influence the expected demands of future water users.

Requirements in California Code

Beginning in January 2010, the California Building Standards Commission adopted the statewide mandatory Green Building Standards Code (hereafter the “CAL Green Code”) requiring the installation of water-efficient indoor and outdoor infrastructure for all new projects after January 1, 2011. The CAL Green Code was incorporated as Part 11 into Title 24 of the California Code of Regulations, and was revised in 2013 and in 2016 to address changes to the State’s Model Water Efficient Landscape Ordinance (“MWELO”) adopted during the drought.⁴⁰ Revisions to the CAL Green Code in 2019 modified sections to direct users to MWELO regulations contained in other regulatory sections.⁴¹

The CAL Green Code applies to the planning, design, operation, construction, use and occupancy of every newly constructed or remodeled building or structure. All new residential and non-residential customers must meet the water use requirements of the CAL Green Code as well as the outdoor requirements described by MWELO. The CAL Green Code’s requirements generally manifest through: (1) installation of plumbing fixtures and fittings that meet the 20 percent reduced flow rate specified in the CAL Green Code, or (2) by demonstrating a 20 percent reduction in water use from the building “water use baseline.”⁴² Future customers are expected to satisfy one of these two requirements

³⁹ California Water Code § 10608.20.

⁴⁰ The 2016 Triennial Code Adoption Cycle consisted primarily of the MWELO updates adopted in response to the drought. Indoor infrastructure changes were limited to some minor non-residential fixture changes and changes to the voluntary Tier 1 and Tier 2 requirements. Additionally, the Code was updated to match the new Title 20 Appliance Efficiency Regulations.

⁴¹ The 2019 updated sections to direct CAL Green code users to Title 23 of the California Code of Regulations to allow Title 23 to be the sole location of MWELO requirements.

⁴² See CAL Green Code. For Residential construction, Section 4.303.1 provides the residential water conservation standard and Table 4.303.2 identifies the infrastructure requirements to meet this standard. Table 4.303.1 and

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 and County Ordinance

The Water Conservation in Landscaping Act was enacted in 2006, and has since been revised and expanded multiple times by DWR resulting in today's MWELO.⁴³ In response to Governor Brown's executive order dated April 1, 2015, (EO B-29-15), DWR updated the MWELO and the California Water Commission approved the adoption and incorporation of the updated State standards for MWELO on July 15, 2015. MWELO requires a retail water supplier or a county to adopt the provisions of the MWELO or to enact its own provisions equal to or more restrictive than the MWELO provisions. The District uses the State's standard.

The changes included a reduction to 55 percent of reference evapotranspiration rates for the maximum amount of water that may be applied to residential landscapes, and non-residential projects to 45 percent, which effectively reduces the landscape area that can be planted with high water use plants, such a turf. For residential projects, the allowable maximum coverage of high-water use plants is reduced to 25% of the landscaped area (down from 33%). The newly updated MWELO also now applies to new construction with a landscape area greater than 500 square feet (the prior MWELO only applied to landscapes greater than 2,500 square feet).⁴⁴ The District reviews all new development for conformance with these standards.

Metering, Volumetric Pricing, and Water Budgets

California Water Code section 525 requires water purveyors to install meters on all new service connections after January 1, 1992. California Water Code Section 527 requires water purveyors to charge for water based upon the actual volume of water delivered if a meter has been installed. This action alone is not expected to substantially reduce water use. However, it is anticipated that the retail billing system will encourage and help maintain reasonable use (e.g. through implementation of a tiered rate structure and/or water budgets), so that individual customer water demands are reasonably not expected to increase over time.

Worksheets WS-1 and WS-2 are to be used in calculating the baseline and the reduced water use if Option 2 is selected. For non-residential construction, Section 5.303.2.3 provides the water conservation standard as well as the baseline and reduced flow rate infrastructure standards. Note that Worksheets WS-1 and WS-2 incorporate both residential and non-residential fixtures, yet the water use is still to be analyzed by "building or structure" as specified in Chapter 1, Section 101.3.

⁴³Gov. Code §§ 65591-65599

⁴⁴ CCR Title 23, Div. 2, Ch. 27, Sec. 490.1.

4.4.3 Customer Water Use Forecast

The following subsections detail the assumptions used to forecast customer water use and gross water needs for the District’s water service area, separated into the needs of (a) existing water use customers, and (b) new potable water use customers.

Existing Customer Future Use

To be conservative and assure the analysis of water system reliability is adequate (see Chapter 5), the District is maintaining the annual “current” retail customer potable water use as shown in Table 4-5, a total delivered quantity of about 6,360 acre-feet, with a total production need of about 6,690 acre-feet when considering system losses. Additionally, as recognized with the analysis of 2020 gpcd use, the existing customers have undertaken significant reductions to date.

While these existing customers may undertake a variety of conservation measures – actively through decisions to modify a behavior or a water use, or passively through the purchase of appliances and fixtures that simply use less water – they may also maintain their use as-is. Holding the current use as a constant for all existing customers into the future will provide a conservative number that can be re-evaluated prior to the 2025 UWMP and the compliance with forthcoming water use objectives.⁴⁵

New Customer Future Use

Chapter 2 detailed the District’s anticipated new residential and non-residential growth over the UWMP planning horizon. This growth provides the basis for the estimated future customer water needs. The District anticipates these new customer connections will be built in accordance with all applicable building codes including the Cal Green Code discussed previously, and relevant District regulations.

For this UWMP, two distinct customer classifications are anticipated: (1) residential, and (2) non-residential. Residential customers will include both single-family dwelling units built under a variety of densities and multi-family residential dwelling units. Non-residential uses are expected to include a blend of commercial, institutional, industrial and active landscapes, such as parks, in ratios similar to the District’s current residential-to-non-residential customers.

Values developed for each distinct land use are based on several sources of information, details of which are provided in the following subsections.

New Residential Customer Water Use

Table 2-6 summarized the District’s anticipated new residential growth over the UWMP planning horizon – split among single-family and multi-family through 2030 consistent with existing ratios, then only growing as single-family to 2045. This growth provides the basis for the estimated future customer

⁴⁵ Per California Water Code Section 10609.20, urban water suppliers shall calculate a water use objective composed of, among other factors, aggregated efficient indoor water use based upon standards of no more than 55 gpcd.

water needs, as the non-residential customers will be a ratio of the new residential customers. Table 4-6 presents the relevant growth information.

The District anticipates these new residential elements will be built in accordance with all applicable building codes including the Cal Green Code discussed previously, and relevant District ordinances.

Table 4-6: Anticipated New Residential Units (from Table 2-6)

Customer Class	2025	2030	2035	2040	2045
Residential	1,200	2,400	2,600	2,800	2,900
Single-family (88%)	960	1,920	2,120	2,320	2,420
Multi-family (12%)	240	480	480	480	480

Distinct demand factors are provided for the following residential uses:

- Indoor Residential Use – this category identifies the generally anticipated water use for single-family and multi-family dwelling units.
- Outdoor Residential Use – this category addresses the landscape water demands commonly anticipated for the two primary dwelling unit types.

For purposes of this UWMP, residential unit water demand factors are described as “the acre-feet of water use annually per dwelling unit” – or acre-feet/dwelling unit (“af/du”). Additionally, as described in Chapter 2, the growth beyond 2030 is presumed to only be single-family residences.

Residential indoor water demands are estimated using an assumed value of 55 gallons-per person per day, multiplied by the assumed occupancy rates for anticipated residential densities for single-family or multi-family classifications. The assumed per-person rate of 55 gallons per day is derived from California Water Code Section 10609.4(a)(3), which states a value of 55 gallons per capita (i.e., per person) per day (“gpcd”) be used for estimating indoor residential use targets, though the value is stated to drop to 50 gpcd by 2030.⁴⁶

Based on this per-capita assumption, the following indoor per-dwelling unit value is assumed for each new residential unit:

- Single-family residential indoor use: 0.20 acre-feet per year based upon an assumed occupancy of 3.27 people per unit (see Chapter 2).
- Multi-family residential indoor use: 0.12 acre-feet per year based upon an assumed occupancy of 2 people per unit (see Chapter 2)

Outdoor residential water use is primarily a factor of lot size and the type and extent of landscaped area. The District’s anticipated growth will likely include a range of residential densities (e.g., houses per acre) and therefore an estimated “typical” lot is assumed for purposes of forecasting.

⁴⁶ Water Code Section 10609.4(a) also establishes the indoor residential water use ‘standard’ to be 52.5 gpcd beginning in 2025 and as low as 50 gpcd by 2030, though the Water Code also provides provisions for the water use target to revert above 50 gpcd. For purposes of this UWMP, the higher value of 55 gpcd is assumed.

For purposes of this UWMP, each new single-family residential unit is anticipated to have a total gross area of 7,000 square-feet, with 3,500 square-feet anticipated to be irrigable after accounting for the home footprint, driveways, walkways, other hardscapes, and non-irrigated areas. Multi-family units, which typically have shared common landscape areas, are assumed to have 400 square-feet of irrigable area per unit.

Outdoor demands for new residential dwelling units are calculated based on regulations defined under the MWEL. The MWEL provides for determining the Maximum Applied Water Allowance (MAWA) where the maximum is calculated as 55 percent of the reference evapotranspiration for the area for every square foot of landscaped area, resulting in the following equation:

MAWA = (ETo)(0.62)(0.55 x LA), where ETo is the reference evapotranspiration in inches per year, and LA is the landscape area in square-feet. 0.62 is a conversion factor to gallons. The resulting value is in "gallons per year."

A primary factor in this calculation is evapotranspiration ("ET"). The methodology directs the use of ET from a reference crop, such as maintained grass – a value referred to as ETo. For this UWMP, the ETo is 52.6 inches per year (4.4 feet per year).⁴⁷

Using the MAWA equation, outdoor demand factors for each residential lot category are calculated:

- ◆ Single-Family Residential – Anticipated single-family dwellings are conservatively assumed to be constructed on lots averaging 7,000 sf, with an average landscape area of 3,500 sf. The resulting outdoor demand factor is forecast to be 0.20 acre-feet per dwelling unit per year.
- ◆ Multi-Family Residential – Anticipated multi-family dwellings will have larger common areas, assumed to equate to 400 sf of landscape area per unit. The resulting outdoor demand factor is forecast to be 0.02 acre-feet per dwelling unit per year.

Combining the assumed indoor and outdoor residential demand factors results in the following estimated use for each new connection:

- ◆ Single-Family Residential – 0.20 af/du for indoor plus 0.20 af/du for outdoor combines for an annual demand factor of 0.40 af/du.
- ◆ Multi-Family Residential – 0.12 af/du for indoor plus 0.02 af/du for outdoor combines for an annual demand factor of 0.14 af/du.

New Non-Residential Customer Water Use Factors

Non-residential per-connection demand factors were also estimated for purposes of forecasting the water needs of anticipated commercial, institutional, industrial and irrigated landscape customers.

However, since the District does not record water use unique to each non-residential connection classification, a weighted average of the total non-residential connections (see Table 2-1) and the

⁴⁷ ETo is from the CIMIS Station 235 (Verona) available at: <https://cimis.water.ca.gov/Default.aspx>

recorded non-residential use was calculated to be representative of future per-connection water needs. For purposes of this 2020 UWMP, this was determined to be 2.5 acre-feet per connection.

The resulting forecast future water use of existing and new non-residential customers is provided in Table 4-7.

4.4.4 Summary of Forecast Water Use

Based upon the estimated water use of the existing and new customers, the District anticipates a continued increase in potable water use over the planning horizon. Table 4-7 presents the resulting customer water use forecast. Values in the table have been rounded to the nearest 10 acre-feet to recognize the approximate nature of this forecast. This information will be used to evaluate the District’s water system reliability in Chapter 5.

Table 4-7: Forecast Future Water Use (values in acre-feet per year)

Land-class		2025	2030	2035	2040	2045
Existing	Residential	5,030	5,030	5,030	5,030	5,030
	Non-residential	1,330	1,330	1,330	1,330	1,330
	Subtotal	6,360	6,360	6,360	6,360	6,360
New	Residential	420	840	920	1,000	1,040
	Non-residential	150	300	330	350	360
	Subtotal	570	1,140	1,250	1,350	1,400
Total	Residential	5,450	5,870	5,950	6,030	6,070
	Non-residential	1,480	1,630	1,660	1,680	1,690
	Distribution System Loss	370	410	410	420	420
	Total	7,300	7,910	8,020	8,130	8,180

4.4.5 Adjusting Water Use Forecasts for Single-Dry and Multiple Dry Conditions

The demand forecasts presented in the prior subsection represent expected water needs under normal hydrologic conditions. To credibly forecast potential maximum future water use, the forecasted normal-year water uses must be modified to reflect anticipated increases in demand during drier conditions.

Conservative modifications to the forecasted normal year water use to more likely reflect use conditions during drier and dry years are warranted to help adequately address water service reliability in Chapter 5. For purposes of this UWMP, the following adjustments are made:

- Single dry year: Landscape irrigation needs would increase to reflect the generalized earlier start of the landscape irrigation season due to limited rainfall in the single driest year. Since this increase only applies to the outdoor portion of a customer’s forecast use, an adjustment factor of 5% is applied to the total normal-year forecasts to conservatively reflect the expected increase in demand for water for landscaping.
- Multiple dry years: During multiple dry years, demands are also expected to increase similar to the single dry year. For multiple dry year conditions, the single dry year increase of 5% is held in

each of the subsequent years. This is representative of an “unconstrained demand” as should be represented when evaluating whether Water Shortage Contingency Plan actions may be warranted.⁴⁸

These values are reflected in tables provided for the Drought Risk Assessment and Annual Reliability Assessment presented in later subsections.

4.4.6 Climate Change Considerations

Including climate change analysis into a water use analysis will assist the District in understanding the potential effects on long-term reliability, which in turn, allows the District to proactively begin planning appropriate responses. For example, hotter and drier weather may lead to an increased demand in landscape irrigation, especially during spring and fall months, increasing the pressure on water supplies that may have availability restrictions during these periods. Chapter 2 provides a more detailed discussion of potential effects of climate change on the District’s supplies and customer water needs.

The potential for water needs to be higher is reflected in the consideration of the single dry year increase of 5% that is used for the water service reliability analysis, as discussed previously. Whether the elevated single dry year water forecast becomes more akin to the “normal” demand will become more apparent as the District continues to assess monthly water use trends throughout its service area.

4.5 Forecasting Water Use for the DRA and Annual Assessment

The California Legislature created two new UWMP requirements to help suppliers assess and prepare for drought conditions: The Drought Risk Assessment,⁴⁹ and the Annual Water Supply and Demand Assessment.⁵⁰ These new planning requirements were established in part because of the significant duration of recent California droughts and the predictions about hydrological variability attributable to climate change.

The Drought Risk Assessment (DRA) requires assessing water supply reliability over a five-year period from 2021 to 2025 that examines water supplies, water uses, and the resulting water supply reliability under a reasonable prediction for five consecutive dry years.

As a slight variant, the Annual Water Supply and Demand Assessment (Annual Assessment) undertakes a similar analytical exercise as the DRA but is to focus on actual, and not hypothetical, conditions anticipated for the upcoming water year in which the Annual Assessment is being performed. The previously presented water use forecasts facilitate both of these planning exercises as described in the following subsections.

4.5.1 Projecting Water Use for 5-year Drought Risk Assessment

⁴⁸ California Water Code Section 10632(a)(2) states water suppliers should use “unconstrained demand” when performing their annual water supply and demand assessment.

⁴⁹ California Water Code Section 10635(b)

⁵⁰ California Water Code Section 10632.1

A critical component of new statutory language for the 2020 UWMP cycle is the requirement to prepare a five-year DRA using a supplier-defined hypothetical drought conditions expected to occur from 2021 through 2025. This drought condition is meant to allow suppliers to test the resiliency of their water supply portfolio and their Water Shortage Contingency Plan actions to meet severe conditions.

DWR recommends that suppliers first estimate expected water use for the next five years without drought conditions (also known as unconstrained demand). In other words, unconstrained demand is water demand absent any water supply restrictions and prior to implementing any short-term WSCP demand reduction actions. If normal water use includes water conservation programs, either currently implemented or planned for implementation, estimated water use values would incorporate the effect of those conservation programs when reporting projected water use during this period.

Total water use for 2021, for example, is developed by modifying the water use representation for “current” conditions (see Table 4-5) taking into consideration the anticipated factors affecting water use, with each subsequent year further adjusted, as appropriate. Adjustments year-to-year reflect several factors the District anticipates may occur, including increases from growth. To make these adjustments, the difference in annual water use between the “current” condition and the forecast potable use in 2025 is prorated equally across each of the years 2021 through 2025, so that the same 2025 forecast water use is matched.

With an initial annual estimate, each year is further adjusted to reflect anticipated increases in the “unconstrained demand” during a single dry year. As noted previously, this is reflected by applying a 5% increase to the total potable water use forecast. The resulting unconstrained demand during a dry year for 2021 through 2025 are shown in Table 4-8.

Table 4-8: Forecast DRA Water Use for 2021 through 2025 (acre-feet per year)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2021	330	310	330	370	540	750	920	970	890	740	580	420	7,150
2022	330	320	330	380	550	770	940	980	900	760	600	420	7,280
2023	340	330	340	380	560	780	950	1,000	920	770	610	430	7,410
2024	340	330	340	390	570	790	970	1,020	940	780	620	440	7,530
2025	350	340	350	400	580	810	990	1,040	950	800	630	450	7,690

4.5.2 Projecting Water Use for Annual Assessments

The District will need to perform an Annual Assessment and submit the findings to DWR beginning in 2022. To evaluate the plausible water service reliability conditions for 2021 or 2022, described in Chapter 5, requires two separate representative “current” water use conditions to be developed. The first condition uses the “current” water use characterization included in Table 4-5. These demands represent the water use under a normal condition. Alternatively, a “single-dry year current” forecast is also calculated to provide the District with representative current unconstrained demands. This second characterization of current water use applies the same single-dry year adjustment described previously, represented by a 5% increase in the current water use values. Table 4-9 provides the Normal Year and Single Dry Year current water use for the District’s water service area. These are used in Chapter 5.



Table 4-9: Normal and Single Dry Year “Current” Water Use (acre-feet)

Year Type	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Normal	305	294	305	347	505	704	862	904	830	694	547	389	6,686
Single Dry	320	309	320	364	530	740	905	949	872	729	574	408	7,020

4.6 Projecting Disadvantaged Community Water Use

Pursuant to CWC Section 10631.1, retail suppliers are required to include the projected water use for lower income households in 2020 UWMPs. Per California Health and Safety Code Section 50079.5, a lower income household has an income below 80 percent of area median income, adjusted for family size. For purposes of this UWMP, annual median income was derived from 2019 U.S. Census Bureau and determined to be about \$95,000 for the District.⁵¹ Therefore, 80% of this is estimated to be about \$76,000 per year. According to the detailed data, approximately 38% of the households earn at or below this 80-percentile income.

For purposes of estimating the future water needs, 38% of the total single-family and multi-family connections are presumed to represent disadvantaged households, resulting in 28% of the future total potable water use. Applying this condition to the forecast water use for the entire District results in the estimate provided in Table 4-10.

Table 4-10: Estimated Low-Income Water Use Forecast (acre-feet)

	2025	2030	2035	2040	2045
Total Potable Use	7,300	7,910	8,020	8,130	8,180
Low Income Use	2,071	2,231	2,261	2,291	2,307
% of Total Potable	28%	28%	28%	28%	28%

⁵¹ This data is from the Household Income in the Past 12 Months (In 2019 Inflation-adjusted Dollars) American Community Survey 1-year estimates; <https://censusreporter.org/profiles/16000US0622020-elk-grove-ca/>

Chapter 5

Water System Reliability

This chapter provides the Elk Grove Water District’s water system reliability findings as required under Water Code Section 10635 and provides reliability information that the District may use in completing an annual supply and demand assessment pursuant to Water Code Section 10632.1.

Assessing water service reliability is the fundamental purpose for the District in preparing its 2020 UWMP. Water service reliability reflects the District’s ability to meet the water needs of its customers under varying conditions. The District’s 2020 UWMP considers the reliability of meeting customer water use by analyzing plausible hydrological variability, regulatory variability, climate conditions, and other factors that impact the District’s water supply and its customers’ water uses. The reliability assessment looks beyond past experience and considers what could be reasonably foreseen in the future. This chapter synthesizes the details imbedded in the Chapters 3 and 4 and provides a rational basis for future decision-making related to supply management, demand management, and project development. This chapter presents three system reliability findings:

- ◆ Five Year Drought Risk Assessment: The 2021 through 2025 Drought Risk Assessment (DRA) for the District’s service area.
- ◆ Long-Term Service Reliability: The reliability findings for a Normal Year, Single Dry Year, and Five Consecutive Drought Years in five-year increments through 2045.
- ◆ Annual Reliability Assessment: The reliability findings for an existing condition for both a Normal Year and Single Dry Year that can inform an annual supply and demand assessment for 2021 or 2022.

In short, the District has reliable water supplies available for its service area through 2045.

5.1 Five Year Drought Risk Assessment

The Drought Risk Assessment is a new requirement for the 2020 UWMP cycle. The DRA requires a methodical assessment of water supplies and water uses under an assumed drought period that lasts five consecutive years. The District has prepared an assessment of the water supplies and demands for its system.

The District is in a unique position to have ample water supplies to meet current and growing customer demand. Specifically, with the buffering capacity over time of the groundwater basin and its stability coupled with the SCWA contract (see Chapter 3), the District is not susceptible to drought conditions. Nevertheless, the District continues to encourage its customers to use water efficiently and continues to see lowering per-capita water use (see Chapter 4). Although the District has sufficient supplies to meet

its five consecutive dry year demands, other regulatory constraints, like the declaration of a drought emergency by the Governor of the State of California, may require the District to reduce its water service to its customers. Table 5-1 below shows the District’s DRA that integrates its supplies for 2021 through 2025 as described in Chapter 3 and reflects the dry year unconstrained water uses described in Chapter 4. As the table shows, the District has sufficient water assets available in years.

Table 5-1: Five Year Drought Risk Assessment

	2021	2022	2023	2024	2025
Supply	13,000	13,000	13,000	13,000	13,000
Demand	7,150	7,280	7,410	7,540	7,670
Difference	5,850	5,720	5,590	5,460	5,330

5.2 Long Term Service Reliability

The Urban Water Management Planning Act directs urban water purveyors to analyze water supply reliability in a normal, single dry, and five consecutive dry years over a 20-year planning horizon. The 2020 UWMP Guidebook recommends extending that period to twenty-five (25) years to provide a guiding document for future land use and water supply planning through the next UWMP cycle.

5.2.1 Long Term Service Reliability

The District’s long term service reliability reflects the recommended 25-year planning horizon anticipating a normal, single dry, and five consecutive dry years from 2020 through 2045.

Normal and Single Dry Conditions 2025-2045

The District’s future water supplies in normal and single dry conditions reflect the same conditions described for the DRA and as detailed in Chapter 3. Specifically, the District has sufficient and reliable water supplies to meet forecast customer water needs through 2045 considering water use forecasts for both normal and dry condition. All of this information is detailed in Chapter 4 and reflected in the numbers shown in the tables below. Table 5-2 shows the normal year supplies and demands on an annual timestep from 2025 through 2045.

Table 5-2: Normal and Single Dry Year Water Supply and Demand through 2045

Normal Year	2025	2030	2035	2040	2045
Supply	13,000	13,000	13,000	13,000	13,000
Demand	7,300	7,910	8,020	8,130	8,180
Surplus Supply	5,700	5,090	4,980	4,870	4,820

Single Dry Year	2025	2030	2035	2040	2045
Supply	13,000	13,000	13,000	13,000	13,000
Demand	7,665	8,306	8,421	8,537	8,589
Surplus Supply	5,335	4,695	4,579	4,464	4,411

Five Consecutive Dry Years 2025 – 2045

The District defines a drought condition lasting five consecutive years as one that requires the District to reduce water service to its customers. The District's groundwater supplies coupled with its contract supplies from SCWA have limited constraints in dry years and are considered reliable. However, although the District has sufficient supplies to meet its five consecutive dry year demands, other regulatory constraints, like the declaration of a drought emergency by the Governor of the State of California, may require the District to reduce its water service to its customers. Nevertheless, the District assumes that these conditions that would require less water supply deliveries to the District's customers do not manifest in assessing the supply availability in the future.

The District also assumes that dry year demand conditions would remain unconstrained during the dry conditions causing a slight increase in the actual demand from District's customers. This characterization of water demands provides a conservative estimation of demand conditions in a five-year drought scenario. Together, the supply availability as paired against the slightly increased demand conditions demonstrate that the District has sufficient supplies to meet five consecutive dry year conditions through 2045. Table 5-3 below shows the annual water supply and demand conditions in five consecutive dry years from 2025 through 2045.

Table 5-3: Five Consecutive Dry Years Water Supply and Demand through 2045

		2025	2030	2035	2040	2045
Year 1	Supply	13,000	13,000	13,000	13,000	13,000
	Demand	7,670	8,310	8,420	8,540	8,590
	Surplus Supply	5,330	4,690	4,580	4,460	4,410
Year 2	Supply	13,000	13,000	13,000	13,000	13,000
	Demand	7,793	8,432	8,442	8,562	8,600
	Surplus Supply	5,207	4,568	4,558	4,438	4,400
Year 3	Supply	13,000	13,000	13,000	13,000	13,000
	Demand	7,916	8,554	8,464	8,584	8,610
	Surplus Supply	5,084	4,446	4,536	4,416	4,390
Year 4	Supply	13,000	13,000	13,000	13,000	13,000
	Demand	8,038	8,676	8,486	8,606	8,620
	Surplus Supply	4,962	4,324	4,514	4,394	4,380
Year 5	Supply	13,000	13,000	13,000	13,000	13,000
	Demand	8,161	8,798	8,508	8,628	8,630
	Surplus Supply	4,839	4,202	4,492	4,372	4,370



5.3 Annual Reliability Assessment

The District may consider current supply and demand conditions and perform an annual water supply and demand assessment (Annual Assessment) pursuant to Water Code Section 10632.1 to evaluate real-time or near-term circumstances that are different than the DRA scenario. This assessment would evaluate actual current water supply and use conditions. For purposes of this UWMP, the “current” water use conditions as described in Chapter 4 are compared to the availability of the District’s existing water supplies as described in Chapter 3. Two scenarios are illustrated:

- ◆ Normal Year condition: reflecting the availability of supplies under normal conditions and the “current” water uses.
- ◆ Single-Dry Year condition: reflecting the availability of supplies under a severe, single-dry year and elevated “current” water uses reflecting increased demands expected in a single dry year.

5.3.1 Normal Year Supply and Current Water Use

Elk Grove Water District’s current normal year water supply and demand conditions represent the expected water supply and demand conditions that would likely occur based upon a reasonable assessment of regional and statewide hydrology and limited regulatory constraints. Under these conditions, the District anticipates that its access to its groundwater supplies and supplies provided under its contract with SCWA would be fully available.

The District’s characterization of current water use conditions represent an historical assessment of water use within the District as well as reasonable characterizations of growth and potential customer use patterns. The combination of these considerations present a normal water year use assessment that is incorporated into this reliability determination. Demands in normal conditions are generally lower in wetter months and higher in drier months. The demands also account for reasonable water conservation measures derived from improved efficiencies in indoor fixtures, improved management of outdoor landscape irrigation, and a general awareness of the value of long-term water conservation at the consumer level. These demand conditions are described in significant detail in Chapter 4 and reflected in the monthly demand assessments shown below.

Table 5-4 below shows the normal year water supply and demand conditions for the District’s service area.

Table 5-4: Normal Year Water Supply and Demand

Normal Year	Current
Supply	13,000
Demand	6,686
Surplus Supply	6,314

5.3.2 Single Dry Year Supply and Dry-Year Current Demand

The District defines a single dry year condition as one that may require reduced water deliveries to customers caused by regulatory decrees, as noted in 5.2.1. Nevertheless, the District’s water supplies are reliable in single dry year conditions based upon the groundwater basin management as well as the contract with SCWA for water supplies as noted in Chapter 3.

Single dry year demands include the anticipated demands based upon historical trends in water usage in drought conditions by the District’s customers. Demands in dry conditions may increase in the normally wetter months as limited rainfall cause an increase in customer uses for outdoor irrigation. These conditions are described in Chapter 4 and reflected in the demand tables below. The analysis uses the “current” water use, adjusted as described in Chapter 4.

Table 5-5 below shows the single dry year water supply and demand conditions.

Table 5-5: Single Dry Year Water Supply and Demand

Single Dry Year	Current
Supply	13,000
Demand	7,020
Surplus Supply	5,980

5.4 Water Supply Reliability Summary

The District’s water supply portfolio is capable of meeting the water uses in its service area in normal, single dry, and five consecutive dry years from 2020 through 2045.

Chapter 6

Water Shortage Contingency Plan

The Elk Grove Water District (EGWD) is committed to meeting the health and safety requirements of a drinking water purveyor at all times. EGWD maintains this Water Shortage Contingency Plan (WSCP) to help meet this goal during water shortages.

This WSCP provides for emergency water supply management related to general supply shortages due to severe droughts, infrastructure failure, catastrophic supply interruption, or any other cause. EGWD coordinates regionally through Regional Water Authority (RWA) and Sacramento County Water Agency (SCWA) with respect to emergency water shortage planning and response.

This WSCP allows for declaration of supply shortages by the Board of Directors (Board). When a shortage is identified, the Board assesses if a particular shortage stage (and corresponding response actions) should be declared. Upon Board declaration of a shortage stage, restrictions, regulations, prohibitions on uses, and enforcement measures are enacted.

6.1 Legal Authorities

The Florin Resources Conservation District, established and governed by Division 9 of the California Public Resources Code (PRC), owns and operates a water utility called the Elk Grove Water District. EGWD's authority includes the "development and distribution of water" (PRC 9151) and is authorized to manage and administer any water conservation or distribution project within or adjacent to EGWD (PRC §9415). Upon approval by the Board of Directors, EGWD is authorized to include plans and specifications that include terms and conditions with respect to conservation of water (PRC §9816).

The aforementioned powers derived from EGWD's organizing statutes are in addition to general powers granted to water distributors in CWC §§350-359. CWC §350 authorizes the governing body of a distributor of a public water supply to declare a water shortage emergency whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent there would be insufficient water for human consumption, sanitation, and fire protection. Upon a finding of such an emergency condition, the distributor can adopt such regulations and restrictions on the delivery and consumption of water as will conserve the water supply for the greatest public benefit, with particular regard to domestic use, sanitation, and fire protection (CWC §353). The regulations and restrictions remain in force and effect until the supply of water available for distribution within such area has been replenished or augmented, and restrictions may include the right to deny new service connections and discontinue service for willful violations (CWC §355 and §356).

EGWD also coordinates with any city or county within which it provides water supply services for the possible proclamation of a “local emergency” under California Government Code, California Emergency Services Act (Article 2, Section 8558).

6.2 Water Supply Reliability Analysis

EGWD supply consists of both self-supplied groundwater as well as purchased supplies from Sacramento County Water Agency (SCWA). EGWD’s Service Area 1 relies on production of groundwater, whereas Service Area 2 relies on purchased supplies from SCWA. Both supply sources can be impacted by climate factors, catastrophic events, and regulatory measures. EGWD evaluates its overall water supply reliability through its Urban Water Management Plan, as well as through other regional and SCWA planning efforts.

EGWD’s groundwater supplies are projected to be available for pumping during drought periods. The groundwater supply is the Sacramento Valley South American Groundwater Basin, referred to as the Central Basin Area of the Sacramento County Groundwater Basin, as identified in the Central Sacramento County Groundwater Management Plan. The Central Basin is sustainably managed by all the region’s pumpers in coordination with the region’s groundwater sustainability agencies. EGWD does not currently project any groundwater shortages during a drought lasting up to five years. However, the ability to pump the groundwater may be limited by regulatory or legal requirements put in place during a drought. EGWD will address these restrictions as they materialize and modify its water shortage supply strategy, as necessary.

EGWD also receives supply from the Sacramento County Water Agency. Although SCWA maintains surface water and groundwater supply for its entire service area, the supply from SCWA is almost entirely from SCWA production wells located within EGWD’s service area. SCWA’s recent planning efforts indicate no expected limitations in its ability to access the groundwater resources used to serve EGWD’s Service Area 2, including during drought conditions. As the case with EGWD’s own groundwater production constraints, this supply may be impacted by regulatory or legal requirements imposed during a drought. EGWD will work with SCWA to address these restrictions and develop the appropriate response strategy, as necessary.

6.3 Annual Water Supply and Demand Assessment Procedures

EGWD conducts an annual analysis of supply and demand projections to help inform water resources management decisions for the coming year. The analysis incorporates numerous data sources used as evaluation criteria to project probable demands and supply availability for the coming year. Sources to consider include:

- Projected weather conditions
 - Precipitation versus historical on monthly basis
- Projected Unconstrained Demand
 - Production versus historic on monthly basis
 - New customer growth

- Identify artificially supplied water features separate from swimming pools and parks
- GPCD tracking
- Projected Supply Availability
 - SCWA projected supply
 - Groundwater production capacity
- Regulatory Conditions
 - State mandated conservation orders
 - Groundwater Sustainability Agency (GSA) information

The general procedure is listed below. EGWD may modify this process based on available data, significant events, process restrictions, or other external factors that may impact the process.

1. Compile existing weather data to characterize past 12 months conditions. During the dry year scenario, the EGWD anticipates no impact in the ability to produce groundwater supplies, including supplies from SCWA.
2. Estimate unconstrained EGWD demands based on recent and representative customer use data. Development of unconstrained demand will incorporate recent use patterns (unit factors for each customer type) and anticipated customer growth.
3. Assess the wholesaler supply based on wholesaler projections for current year and dry year scenarios.
4. Assess available capacity of groundwater production facilities.
5. Identify and incorporate any applicable constraints (infrastructure, regulatory, etc.) regarding receiving wholesaler supply or groundwater production.
6. Compare projected wholesaler supplies and available groundwater production facilities with anticipated EGWD demands.
7. Develop, analyze, and propose water resource management strategies to address the projected demand to supply comparison, including reference to the water shortage stages identified in this WSCP.
8. Present Annual Water Supply and Demand Assessment (and resulting conservation stage declaration, if applicable) to Board.

The general proposed timeline is as follows:

- ◆ Begin assessment by District staff – March/April
- ◆ Present assessment to Board of Directors – May
- ◆ Submit to State per CWC §10632.1 – No later than July 1

6.4 Water Shortage Stages

The following subsections and tables present information on EGWD's supply scenarios, including Normal Water Supply and the six water shortage stages. Results from the annual Water Supply and Demand Assessment are used to declare a respective shortage stage.

6.4.1 Normal Water Supply

EGWD's water supply and distribution system is able to meet all the water demands of its customers in the immediate future. Regulations for Normal Water Supply are applicable to all stages and include the following:

- ◆ 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 measurable 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.
- ◆ Pools, ponds, and fountains – All swimming pools, ponds, fountains, or other decorative water feature shall use recirculated water.

The penalties for water waste during this stage (Normal Water Supply) are as follows:

- ◆ First and Second Violation – Customer is notified of a violation.
- ◆ Third Violation – Written warning sent to customer.

The following practices are encouraged by EGWD:

- ◆ Irrigation – Limit landscape irrigation to not more than 3 days per week.
- ◆ Irrigation hours – Landscaping irrigation is discouraged between the hours of 12:00 p.m. and 6:00 p.m. during the summer months (May – October).
- ◆ Serving of Water – Restaurants shall serve water to customers only upon request.
- ◆ Water Leaks – Leaking pipes, fixtures or sprinklers shall be repaired promptly.

Stage 1 – 10% Supply Shortage

Actions include regulations from Normal stage plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 10 percent gap between supplies and demands.

Customers Actions to Reduce Demand up to 10 Percent

- Reduce total water use by 10%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.
- Users of construction water meters will be monitored for efficient water use.
- Restaurants shall serve water only upon request.
- Pipeline flushing is prohibited except in the case of an emergency, public health and for essential operations or unless specifically authorized by the District.
- Addresses ending in an odd number irrigate on Tuesday, Friday, and Sunday. Customers are encouraged to **voluntarily** reduce irrigation to Tuesday and Friday.
- Addresses ending in an even number irrigate on Monday, Thursday, and Saturday. Customers are encouraged to **voluntarily** reduce irrigation to Monday and Thursday.

District Actions

- Communicate mandatory reduction targets to customers.
- Leak repair receives higher priority.
- Increase drought awareness through additional public outreach measures that notify public and customers for declared stage, requirements, and available conservation program support.
- Decrease system flushing frequency.
- Increased monitoring of customer use.
- Accelerate infrastructure repairs and improvements.
- Water Shortage enforcement measures, including fines and charges, for non-compliance with this WSCP's requirements will be implemented in accordance with established District Policies and Procedures

Stage 2 – 20% Supply Shortage

Actions include regulations from Stage 1 plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 20 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 20 Percent

- Reduce total water use by 20%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired within two working days or less if warranted by the severity of the problem.
- Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD's service area and would have to be obtained elsewhere.
- Addresses ending in an odd number irrigate on Tuesday, Friday from 8pm-8am.
- Addresses ending in an even number irrigate on Monday, Thursday from 8pm-8am.
- Pools, ponds, and fountains – Water use for ornamental ponds and fountains is prohibited. No potable water from EGWD's system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams until the Stage 2 – Water Warning has been declared over.

District Actions

- Communicate mandatory reduction targets to customers.
- Implement water conservation patrols.
- Reach out to top consumers about conservation measures.

Stage 3 – 30% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 30 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 30 Percent

- Reduce total water use by 30%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.
- Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD's service area and would have to be obtained elsewhere.
- Installation of new turf lawn and/or landscaping is prohibited.
- Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.
- Addresses ending in an odd number irrigate on Tuesday, Friday from 10pm-4am.
- Addresses ending in an even number irrigate on Monday, Thursday from 10pm-4am.

District Actions

- Communicate mandatory reduction targets to customers.
- No commitments will be made to provide service for new water service connections unless the Department of Water Resources Model Water Efficient Landscape Ordinance, found at: <http://www.water.ca.gov/wateruseefficiency/docs/MWEL09-10-09.pdf>, is followed and the plans have been approved by the county or city building department which has jurisdiction over the property location. Any authorized landscape for new connections is subject to all restrictions set forth in Stage 3.

Stage 4 – 40% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 40 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 40 Percent

- Reduce total water use by 40%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- No potable water from the District's system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting.
- Addresses ending in an odd number irrigate on Tuesday from 10pm-4am.
- Addresses ending in an even number irrigate on Thursday from 10pm-4am.

District Actions

- Communicate mandatory reduction targets to customers.
- System Pressure – Maximum psi at wells and treatment plants will be reduced to 55.

Stage 5 – 50% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 50 percent gap between supplies and demands.

Customers - Actions to Reduce Demand up to 50 Percent

- Reduce total water use by more than 50%. Contact EGWD for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.
- Turf irrigation is prohibited.

District Actions

- Communicate mandatory reduction targets to customers.
- New connections - No new connections will be added to the system until the Stage 5 has been declared over.
- System Pressure – Maximum system operating pressure will be reduced to 50 psi.

Stage 6 – Over 50% Supply Shortage

Actions include regulations from preceding stages plus those listed below. Actions will be identified to address each specific shortage situation to eliminate the gap between supplies and demands.

Customers - Actions to Reduce Demand greater than 50 Percent

- Health and safety use of water only.
- Landscape irrigation is prohibited.

District Actions

- Communicate mandatory reduction targets to customers.
- Other actions as identified specific to the shortage condition.
- Declare Water Shortage Emergency in accordance with Section 350 of Division 1, Chapter 3 Water Shortage Emergencies of the California Water Code.

6.5 Enforcement and Variances

EGWD provides the stages of penalties for violators of the water waste regulation. The penalties are enforced through the application of FRCD Ordinance No. 06.15.21.XX. For each violation within a 12-month period under normal water supply conditions, violations are as follows:

- First and Second Violation – Customer is notified of a violation.
- Third Violation – Written warning sent to customer.

When a conservation stage 1-3 is declared, fines for each violation within a 12-month period are as follows:

- First Violation – Customer is notified of a violation.
- Second Violation – Written warning sent to customer.
- Third Violation – \$200 fine and customer is scheduled for mandatory water audit.
- Fourth Violation – \$500 fine.
- Fifth Violation – \$500 fine and water service is shut off. A Connection fee is assessed to reactivate water service.
- Similar fines and charges may be implemented by EGWD as needed to enforce restriction on specific prohibitions on water uses.

When conservation stage 4 - 6 is declared, fines for each violation within a 12-month period are as follows:

- First Violation – Customer is notified of a violation with a written warning.
- Second Violation – \$500 fine and customer is scheduled for mandatory water audit.
- Third Violation – \$500 fine and water service is shut off. A Connection fee is assessed to reactivate water service.
- Similar fines and charges may be implemented by the District as needed to enforce restriction on specific prohibitions on water uses.

Once a water shortage stage has been declared, EGWD will enforce compliance through a multitude of measures commensurate with each reduction goal. EGWD will either implement measures per this



Water Shortage Contingency Plan or will provide further discrete requirements through approval of ordinances.

Does EGWD have a variance/Appeal Process? For shortage stage fines, not for water theft

The variance and appeal process regarding this WSCP is found in Section 5 of Ordinance 06.24.15.01.

6.6 Communication Protocols

EGWD maintains an established and effective communications program to inform its customers, neighbors, and other stakeholders of issues, updates, and policies. Implementation of the WSCP will utilize the existing communication program structure to inform customers and others of the declared shortage stage and respective actions and restrictions in place.

The Board meetings addressing the Annual Water Supply and Demand Assessment and/or a potential water shortage declaration will be noticed per normal Board meeting public notification procedures. The meeting will also be announced through regular press release protocols.

Once a shortage stage as been declared by the Board of Directors, EGWD will notify its customers and others through a range of efforts. The stage and restrictions will be identified in a press release, as well as customer billing statements. EGWD's website will be updated to feature the shortage declaration, restrictions, and resources available to customers from EGWD and other entities to help meet the restrictions. Subsequent Board of Directors meetings will include a review of the shortage condition, customer response results, and discussion and recommendations for potential modifications.

EGWD will also coordinate with the City of Elk Grove, Sacramento County, Sacramento County Water Agency, and Regional Water Authority, to declare a local emergency with respect to anticipated water supplies and demands in the event conditions necessitate.

6.7 Financial Consequences of WSCP

EGWD understands the potential for decreased revenues and increased costs during prolonged water shortage conditions and enforcement of excessive residential water use during a drought (compliance with Chapter 3.3, Division 1 of the CWC). The decreased revenues can be expected due to a reduction in water sales. Volumetric revenue is approximately 38 percent of total revenue⁵². Assuming a reduction in sales commensurate with the particular WSCP stage declaration, a decrease in total revenues in the range of 2-4 percent per stage may be expected.

Additional monitoring, public outreach, and enforcement is expected to increase total costs to EGWD in declaring a water shortage. These additional efforts are prioritized for current staff, and other normal work efforts and projects are delayed or reassigned. If conditions warrant, EGWD will seek the

⁵²EGWD's 2018 Water Rate Study

assistance through additional staffing from third-party service providers. These costs depend on the level of support and will be evaluated on a case-by-case basis.

EGWD maintains a strong financial management position. However, it is reasonable to expect financial impacts or changes in cash flow during a prolonged water shortage condition. EGWD will enact a range of management and financial resources depending on the specific situation that include:

- ◆ Capital project deferment
- ◆ Operational and maintenance expense deferment
- ◆ Increased revenues from fines and penalties
- ◆ And others as identified

6.8 Monitoring and Reporting

The WSCP aims to ensure demands are reduced and/or supply is augmented to balance supply and demand. EGWD will enact various actions commiserate with each respective stage. EGWD will then monitor results to maintain the supply/demand balance. Similar to the supply and demand projections used to establish a shortage condition, EGWD will monitor the same data to determine effectiveness and efficacy. District staff will report to the Board of Directors at least quarterly on status and results. Data reporting will include:

- ◆ Actual demands to projected demands per customer class and on total.
- ◆ Actual supply availability and utilized to projected availability per each supply source.
- ◆ Projected supply availability for next 12 months per supply source.
- ◆ Any specific requirements identified by the State in the future.
- ◆ Data will also be submitted to the State per any future reporting requirements.

Progress and efficacy will be summarized from the results data. EGWD will evaluate the need for any changes or modifications to the declared water shortage stage or actions based on the results. EGWD may determine to enact additional measures, develop ordinances, or update the WSCP as a whole. Any WSCP update or modification will be conducted through the Board of Directors meeting process, unless specific conditions require otherwise.

6.9 Response Action Estimates

The following table presents the individual estimated demand savings of each response action. Actual savings will likely vary greatly based on external influences, shortage stage level, and general customer understanding of drought severity. It is assumed the savings estimates are not additive, but when implemented together as a program with all the actions in each respective stage, they will eliminate the supply to demand shortage gap.

Table 6-1: Shortage Response Action Measures Estimates

Stage	Shortage Response Action	Potential Shortage Gap Reduction
1	Customer – Asked to reduce total water use by 10%.	up to 10%
1+	Customer – Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.	0-1%
1+	Customer – Users of construction meters will be monitored for efficient water use.	0-2%
1	Customer – Limit irrigation to three days per week. Asked to voluntarily reduce to two days a week.	3-8%
1+	District – Leak repairs receives higher priority.	0-3%
1+	District – Increase drought awareness through additional public outreach measures that notify public and customers for declared stage, requirements, and available conservation program support.	3-5%
1+	District – Increased monitoring of customer use.	0-1%
1+	District – Accelerate infrastructure repairs and improvements.	0-3%
1+	District – Increased enforcement measures, including fines and charges, for non-compliance with WSCP.	0-4%
1	District - Flushing is prohibited except in the case of an emergency, public health and for essential operations or unless specifically authorized by the District.	0-2%
2	Customer –Reduce total water use by 20%.	up to 20%
2	Customer – Leaking pipes or faulty sprinklers shall be repaired within two working days or less if warranted by the severity of the problem.	0-1%
2	Customer – Irrigation shall be limited to two days per week.	5-15%
2+	Customer – Water use for ornamental ponds and fountains is prohibited. No potable water from EGWD’s system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams.	0-1%
2+	Customer – Water for flow testing and construction purposes from fire hydrants and blow-offs is prohibited.	0-1%
2+	District – Implement water conservation patrols.	3-5%
3	Customer – Reduce total water use by 30%.	up to 30%
3+	Customer – Leaking pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.	0-1%
3+	Customer – Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD’s service area and would have to be obtained elsewhere.	0-1%
3+	Customer – Flushing of sewers and fire hydrants is prohibited except in the case of emergency and for essential operations or unless specifically authorized by EGWD.	0-2%
3+	Customer – Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.	0-1%
3	Customer – Irrigation shall be limited to two days per week (within six-hour block).	15-20%
3+	Customer – Installation of new turf lawn and/or landscape is prohibited.	0-3%
3+	District – No commitments will be made to provide service for new water service connections unless the DWR MWEL0 is followed, and the plans have been approved by the appropriate building department(s).	1-5%



Stage	Shortage Response Action	Potential Shortage Gap Reduction
4	Customer – Reduce total water use by 40%	Up to 40%
4	Customer – Irrigation is allowed only once per week (within six-hour block).	20-30%
4	Customer – No potable water from EGWD’s system shall be used for construction purposes including but not limited to dust control, compaction or trench jetting.	0-2%
4	District – Maximum psi at wells and treatment plans will be reduced to 55.	1-4%
5	Customer – Reduce total water use more than by 50%.	Up to 50%
5+	Customer – Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.	0-1%
5	Customer – Turf irrigation is prohibited.	25-40%
5	District – No new connection will be added to the system.	2-4%
5	District – Maximum system operating pressure will be reduced to 50 psi.	1-4%
6	Customer – Health and safety use of water only.	up to 50%
6	Customer – Landscape irrigation is prohibited.	25-40%
6	District – Other actions as identified specific to the shortage condition.	varies
6	District – Declare Water Shortage Emergency in accordance with Section 350 of Division 1, Chapter 3 Water Shortage Emergencies of the California Water Code.	varies

6.10 WSCP Refinement Procedures

EGWD’s WSCP is an adaptive plan that allows for active refinement to particular shortage conditions. The general procedures for refinement are presented below.

1. For each shortage response action, compare expected results with actual shortage response and identify any shortfall or over achievement.
2. Revise expected reduction for a specific shortage response action based on updated information.
3. Assess the aggregate expected reductions (from revised shortage response actions) for each shortage stage.
4. Revise stage declaration or modify stage shortage response actions to balance demands with supplies.

The procedures presented above will be relied upon during all shortage stage declarations, ensuring an adaptive WSCP, capable of being relied upon under various circumstances, is produced.

6.11 Plan Adoption, Submittal, and Availability

The WSCP (including subsequent updates) shall be adopted in accordance with standard EGWD procedures, including requirements for public participation (public hearing), and approval by the Board. Upon adoption, the WSCP will be submitted to DWR no later than 30 days after and made available for inspection at EGWD office and website.

6.12 Seismic Risk Assessment and Mitigation Plan (Catastrophic interruption in supplies)

Sacramento County has completed a Local Hazard Mitigation Plan (LHMP) under the federal Disaster Mitigation Act of 2000 (Public Law 106-390). Per DWR requirements, a copy of the most recent adopted LHMP by each entity is included in EGWD's UWMP (Appendix D).

Sacramento County is currently in the process of updating the LHMP 2016. The update includes participation with other entities, including Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, Isleton, Rancho Cordova, and other special districts. The update is anticipated to be completed and finalized during 2021. Upon adoption of the LHMP update, EGWD will submit to DWR.

The LHMP 2016 Hazard Identification Assessment for the City of Elk Grove characterizes the earthquake and liquefaction probability as "occasional" (between 1 and 10 % chance of occurrence in the next year or has a recurrence interval of 11 to 100 years) and "unlikely" (less than 1 percent chance of occurrence in the next year, or has a recurrence interval of greater than 100 years), respectively. Earthquake and liquefaction significance is listed to be "medium" (moderate potential impact) and "low" (minimal potential impact), respectively.

ORDINANCE NO. 06.15.21.01

**AN ORDINANCE OF THE FLORIN RESOURCE CONSERVATION DISTRICT
BOARD OF DIRECTORS REPEALING AND REPLACING
THE PREVIOUS WATER SHORTAGE CONTINGENCY PLAN
ORDINANCE NO. 07.23.14.02, 04.28.10.01, AND 06.21.06.01**

WHEREAS, on June 21, 2006 the Florin Resource Conservation District (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; and

WHEREAS, on July 23, 2014, the District amended the Water Shortage Contingency Plan to comply with emergency regulations for statewide water conservation; and

WHEREAS, the District has updated its Water Shortage Contingency in order to comply with the requirements of the 2020 Urban Water Management Plan; and

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS DOES HEREBY ORDAIN AS FOLLOWS:

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

Section 2. Water Shortage Contingency Plan. As of the effective date of this Ordinance, the Board of Directors shall have the authority to activate the Water Shortage Contingency Plan, attached hereto as Attachment A.

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

PASSED, APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 15th day of June 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Sophia Scherman
Chair

ATTEST:

Stefani Phillips
Board Secretary

APPROVED AS TO FORM:

Ren Nosky
General Counsel

EXHIBIT “A”

“ELK GROVE WATER DISTRICT WATER SHORTAGE CONTINGENCY PLAN.”

[Attached behind this cover page]

Elk Grove Water District Water Shortage Contingency Plan



Adopted: June 2021

[excerpt from Chapter 6 of 2020 Urban Water Management Plan]

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Chapter 6

Water Shortage Contingency Plan

The Elk Grove Water District (EGWD) is committed to meeting the health and safety requirements of a drinking water purveyor at all times. EGWD maintains this Water Shortage Contingency Plan (WSCP) to help meet this goal during water shortages.

This WSCP provides for emergency water supply management related to general supply shortages due to severe droughts, infrastructure failure, catastrophic supply interruption, or any other cause. EGWD coordinates regionally through Regional Water Authority (RWA) and Sacramento County Water Agency (SCWA) with respect to emergency water shortage planning and response.

This WSCP allows for declaration of supply shortages by the Board of Directors (Board). When a shortage is identified, the Board assesses if a particular shortage stage (and corresponding response actions) should be declared. Upon Board declaration of a shortage stage, restrictions, regulations, prohibitions on uses, and enforcement measures are enacted.

6.1 Legal Authorities

The Florin Resources Conservation District, established and governed by Division 9 of the California Public Resources Code (PRC), owns and operates a water utility called the Elk Grove Water District. EGWD's authority includes the "development and distribution of water" (PRC 9151) and is authorized to manage and administer any water conservation or distribution project within or adjacent to EGWD (PRC §9415). Upon approval by the Board of Directors, EGWD is authorized to include plans and specifications that include terms and conditions with respect to conservation of water (PRC §9816).

The aforementioned powers derived from EGWD's organizing statutes are in addition to general powers granted to water distributors in CWC §§350-359. CWC §350 authorizes the governing body of a distributor of a public water supply to declare a water shortage emergency whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent there would be insufficient water for human consumption, sanitation, and fire protection. Upon a finding of such an emergency condition, the distributor can adopt such regulations and restrictions on the delivery and consumption of water as will conserve the water supply for the greatest public benefit, with particular regard to domestic use, sanitation, and fire protection (CWC §353). The regulations and restrictions remain in force and effect until the supply of water available for distribution within such area has been replenished or augmented, and restrictions may include the right to deny new service connections and discontinue service for willful violations (CWC §355 and §356).

EGWD also coordinates with any city or county within which it provides water supply services for the possible proclamation of a "local emergency" under California Government Code, California Emergency Services Act (Article 2, Section 8558).

6.2 Water Supply Reliability Analysis

EGWD supply consists of both self-supplied groundwater as well as purchased supplies from Sacramento County Water Agency (SCWA). EGWD's Service Area 1 relies on production of groundwater, whereas Service Area 2 relies on purchased supplies from SCWA. Both supply sources can be impacted by climate factors, catastrophic events, and regulatory measures. EGWD evaluates its overall water supply reliability through its Urban Water Management Plan, as well as through other regional and SCWA planning efforts.

EGWD's groundwater supplies are projected to be available for pumping during drought periods. The groundwater supply is the Sacramento Valley South American Groundwater Basin, referred to as the Central Basin Area of the Sacramento County Groundwater Basin, as identified in the Central Sacramento County Groundwater Management Plan. The Central Basin is sustainably managed by all the region's pumpers in coordination with the region's groundwater sustainability agencies. EGWD does not currently project any groundwater shortages during a drought lasting up to five years. However, the ability to pump the groundwater may be limited by regulatory or legal requirements put in place during a drought. EGWD will address these restrictions as they materialize and modify its water shortage supply strategy, as necessary.

EGWD also receives supply from the Sacramento County Water Agency. Although SCWA maintains surface water and groundwater supply for its entire service area, the supply from SCWA is almost entirely from SCWA production wells located within EGWD's service area. SCWA's recent planning efforts indicate no expected limitations in its ability to access the groundwater resources used to serve EGWD's Service Area 2, including during drought conditions. As the case with EGWD's own groundwater production constraints, this supply may be impacted by regulatory or legal requirements imposed during a drought. EGWD will work with SCWA to address these restrictions and develop the appropriate response strategy, as necessary.

6.3 Annual Water Supply and Demand Assessment Procedures

EGWD conducts an annual analysis of supply and demand projections to help inform water resources management decisions for the coming year. The analysis incorporates numerous data sources used as evaluation criteria to project probable demands and supply availability for the coming year. Sources to consider include:

- Projected weather conditions
 - Precipitation versus historical on monthly basis
- Projected Unconstrained Demand
 - Production versus historic on monthly basis
 - New customer growth
 - Identify artificially supplied water features separate from swimming pools and parks
 - GPCD tracking
- Projected Supply Availability
 - SCWA projected supply
 - Groundwater production capacity
- Regulatory Conditions
 - State mandated conservation orders
 - Groundwater Sustainability Agency (GSA) information

The general procedure is listed below. EGWD may modify this process based on available data, significant events, process restrictions, or other external factors that may impact the process.

1. Compile existing weather data to characterize past 12 months conditions. During the dry year scenario, the EGWD anticipates no impact in the ability to produce groundwater supplies, including supplies from SCWA.
2. Estimate unconstrained EGWD demands based on recent and representative customer use data. Development of unconstrained demand will incorporate recent use patterns (unit factors for each customer type) and anticipated customer growth.
3. Assess the wholesaler supply based on wholesaler projections for current year and dry year scenarios.
4. Assess available capacity of groundwater production facilities.
5. Identify and incorporate any applicable constraints (infrastructure, regulatory, etc.) regarding receiving wholesaler supply or groundwater production.
6. Compare projected wholesaler supplies and available groundwater production facilities with anticipated EGWD demands.
7. Develop, analyze, and propose water resource management strategies to address the projected demand to supply comparison, including reference to the water shortage stages identified in this WSCP.
8. Present Annual Water Supply and Demand Assessment (and resulting conservation stage declaration, if applicable) to Board.

The general proposed timeline is as follows:

- ◆ Begin assessment by District staff – March/April
- ◆ Present assessment to Board of Directors – May
- ◆ Submit to State per CWC §10632.1 – No later than July 1

6.4 Water Shortage Stages

The following subsections and tables present information on EGWD's supply scenarios, including Normal Water Supply and the six water shortage stages. Results from the annual Water Supply and Demand Assessment are used to declare a respective shortage stage.

6.4.1 Normal Water Supply

EGWD's water supply and distribution system is able to meet all the water demands of its customers in the immediate future. Regulations for Normal Water Supply are applicable to all stages and include the following:

- ◆ 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 measurable 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.

Water Shortage Contingency Plan

- ◆ 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.
- ◆ Pools, ponds, and fountains – All swimming pools, ponds, fountains, or other decorative water feature shall use recirculated water.

The penalties for water waste during this stage (Normal Water Supply) are as follows:

- ◆ First and Second Violation – Customer is notified of a violation.
- ◆ Third Violation – Written warning sent to customer.

The following practices are encouraged by EGWD:

- ◆ Irrigation – Limit landscape irrigation to not more than 3 days per week.
- ◆ Irrigation hours – Landscaping irrigation is discouraged between the hours of 12:00 p.m. and 6:00 p.m. during the summer months (May – October).
- ◆ Serving of Water – Restaurants shall serve water to customers only upon request.
- ◆ Water Leaks – Leaking pipes, fixtures or sprinklers shall be repaired promptly.

Stage 1 – 10% Supply Shortage

Actions include regulations from Normal stage plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 10 percent gap between supplies and demands.

Customers Actions to Reduce Demand up to 10 Percent

- Reduce total water use by 10%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.
- Users of construction water meters will be monitored for efficient water use.
- Restaurants shall serve water only upon request.
- Pipeline flushing is prohibited except in the case of an emergency, public health and for essential operations or unless specifically authorized by the District.
- Addresses ending in an odd number irrigate on Tuesday, Friday, and Sunday. Customers are encouraged to **voluntarily** reduce irrigation to Tuesday and Friday.
- Addresses ending in an even number irrigate on Monday, Thursday, and Saturday. Customers are encouraged to **voluntarily** reduce irrigation to Monday and Thursday.

District Actions

- Communicate mandatory reduction targets to customers.
- Leak repair receives higher priority.
- Increase drought awareness through additional public outreach measures that notify public and customers for declared stage, requirements, and available conservation program support.
- Decrease system flushing frequency.
- Increased monitoring of customer use.
- Accelerate infrastructure repairs and improvements.
- Water Shortage enforcement measures, including fines and charges, for non-compliance with this WSCP’s requirements will be implemented in accordance with established District Policies and Procedures

Stage 2 – 20% Supply Shortage

Actions include regulations from Stage 1 plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 20 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 20 Percent

- Reduce total water use by 20%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired within two working days or less if warranted by the severity of the problem.
- Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD’s service area and would have to be obtained elsewhere.
- Addresses ending in an odd number irrigate on Tuesday, Friday from 8pm-8am.
- Addresses ending in an even number irrigate on Monday, Thursday from 8pm-8am.
- Pools, ponds, and fountains – Water use for ornamental ponds and fountains is prohibited. No potable water from EGWD’s system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams until the Stage 2 – Water Warning has been declared over.

District Actions

- Communicate mandatory reduction targets to customers.
- Implement water conservation patrols.
- Reach out to top consumers about conservation measures.

Stage 3 – 30% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 30 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 30 Percent

- Reduce total water use by 30%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.
- Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD’s service area and would have to be obtained elsewhere.
- Installation of new turf lawn and/or landscaping is prohibited.
- Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.
- Addresses ending in an odd number irrigate on Tuesday, Friday from 10pm-4am.
- Addresses ending in an even number irrigate on Monday, Thursday from 10pm-4am.

District Actions

- Communicate mandatory reduction targets to customers.
- No commitments will be made to provide service for new water service connections unless the Department of Water Resources Model Water Efficient Landscape Ordinance, found at: <http://www.water.ca.gov/wateruseefficiency/docs/MWEL09-10-09.pdf>, is followed and the plans have been approved by the county or city building department which has jurisdiction over the property location. Any authorized landscape for new connections is subject to all restrictions set forth in Stage 3.

Stage 4 – 40% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 40 percent gap between supplies and demands.

Treated Water and Municipal Water Customers - Actions to Reduce Demand up to 40 Percent

- Reduce total water use by 40%. Contact EGWD or visit egwd.org for tips and techniques to reduce indoor and outdoor water use.
- No potable water from the District’s system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting.
- Addresses ending in an odd number irrigate on Tuesday from 10pm-4am.
- Addresses ending in an even number irrigate on Thursday from 10pm-4am.

District Actions

- Communicate mandatory reduction targets to customers.
- System Pressure – Maximum psi at wells and treatment plants will be reduced to 55.

Stage 5 – 50% Supply Shortage

Actions include regulations from preceding stages plus those listed below. When implemented as a whole program, these actions together are expected to eliminate up to a 50 percent gap between supplies and demands.

Customers - Actions to Reduce Demand up to 50 Percent

- Reduce total water use by more than 50%. Contact EGWD for tips and techniques to reduce indoor and outdoor water use.
- Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.
- Turf irrigation is prohibited.

District Actions

- Communicate mandatory reduction targets to customers.
- New connections - No new connections will be added to the system until the Stage 5 has been declared over.
- System Pressure – Maximum system operating pressure will be reduced to 50 psi.

Stage 6 – Over 50% Supply Shortage
Actions include regulations from preceding stages plus those listed below. Actions will be identified to address each specific shortage situation to eliminate the gap between supplies and demands.
Customers - Actions to Reduce Demand greater than 50 Percent <ul style="list-style-type: none"> • Health and safety use of water only. • Landscape irrigation is prohibited.
District Actions <ul style="list-style-type: none"> • Communicate mandatory reduction targets to customers. • Other actions as identified specific to the shortage condition. • Declare Water Shortage Emergency in accordance with Section 350 of Division 1, Chapter 3 Water Shortage Emergencies of the California Water Code.

6.5 Enforcement and Variances

EGWD provides the stages of penalties for violators of the water waste regulation. The penalties are enforced through the application of FRCD Ordinance No. 06.15.21.XX. For each violation within a 12-month period under normal water supply conditions, violations are as follows:

- First and Second Violation – Customer is notified of a violation.
- Third Violation – Written warning sent to customer.

When a conservation stage 1-3 is declared, fines for each violation within a 12-month period are as follows:

- First Violation – Customer is notified of a violation.
- Second Violation – Written warning sent to customer.
- Third Violation – \$200 fine and customer is scheduled for mandatory water audit.
- Fourth Violation – \$500 fine.
- Fifth Violation – \$500 fine and water service is shut off. A Connection fee is assessed to reactivate water service.
- Similar fines and charges may be implemented by EGWD as needed to enforce restriction on specific prohibitions on water uses.

When conservation stage 4 - 6 is declared, fines for each violation within a 12-month period are as follows:

- First Violation – Customer is notified of a violation with a written warning.
- Second Violation – \$500 fine and customer is scheduled for mandatory water audit.
- Third Violation – \$500 fine and water service is shut off. A Connection fee is assessed to reactivate water service.
- Similar fines and charges may be implemented by the District as needed to enforce restriction on specific prohibitions on water uses.

Once a water shortage stage has been declared, EGWD will enforce compliance through a multitude of measures commensurate with each reduction goal. EGWD will either implement measures per this Water Shortage Contingency Plan or will provide further discrete requirements through approval of ordinances.

Does EGWD have a variance/Appeal Process? For shortage stage fines, not for water theft

The variance and appeal process regarding this WSCP is found in Section 5 of Ordinance 06.24.15.01.

6.6 Communication Protocols

EGWD maintains an established and effective communications program to inform its customers, neighbors, and other stakeholders of issues, updates, and policies. Implementation of the WSCP will utilize the existing communication program structure to inform customers and others of the declared shortage stage and respective actions and restrictions in place.

The Board meetings addressing the Annual Water Supply and Demand Assessment and/or a potential water shortage declaration will be noticed per normal Board meeting public notification procedures. The meeting will also be announced through regular press release protocols.

Once a shortage stage has been declared by the Board of Directors, EGWD will notify its customers and others through a range of efforts. The stage and restrictions will be identified in a press release, as well as customer billing statements. EGWD's website will be updated to feature the shortage declaration, restrictions, and resources available to customers from EGWD and other entities to help meet the restrictions. Subsequent Board of Directors meetings will include a review of the shortage condition, customer response results, and discussion and recommendations for potential modifications.

EGWD will also coordinate with the City of Elk Grove, Sacramento County, Sacramento County Water Agency, and Regional Water Authority, to declare a local emergency with respect to anticipated water supplies and demands in the event conditions necessitate.

6.7 Financial Consequences of WSCP

EGWD understands the potential for decreased revenues and increased costs during prolonged water shortage conditions and enforcement of excessive residential water use during a drought (compliance with Chapter 3.3, Division 1 of the CWC). The decreased revenues can be expected due to a reduction in water sales. Volumetric revenue is approximately 38 percent of total revenue¹. Assuming a reduction in sales commensurate with the particular WSCP stage declaration, a decrease in total revenues in the range of 2-4 percent per stage may be expected.

Additional monitoring, public outreach, and enforcement is expected to increase total costs to EGWD in declaring a water shortage. These additional efforts are prioritized for current staff, and other normal work efforts and projects are delayed or reassigned. If conditions warrant, EGWD will seek the assistance through additional staffing from third-party service providers. These costs depend on the level of support and will be evaluated on a case-by-case basis.

EGWD maintains a strong financial management position. However, it is reasonable to expect financial impacts or changes in cash flow during a prolonged water shortage condition. EGWD will enact a range of management and financial resources depending on the specific situation that include:

- ◆ Capital project deferment
- ◆ Operational and maintenance expense deferment
- ◆ Increased revenues from fines and penalties
- ◆ And others as identified

¹EGWD's 2018 Water Rate Study

6.8 Monitoring and Reporting

The WSCP aims to ensure demands are reduced and/or supply is augmented to balance supply and demand. EGWD will enact various actions commiserate with each respective stage. EGWD will then monitor results to maintain the supply/demand balance. Similar to the supply and demand projections used to establish a shortage condition, EGWD will monitor the same data to determine effectiveness and efficacy. District staff will report to the Board of Directors at least quarterly on status and results. Data reporting will include:

- ◆ Actual demands to projected demands per customer class and on total.
- ◆ Actual supply availability and utilized to projected availability per each supply source.
- ◆ Projected supply availability for next 12 months per supply source.
- ◆ Any specific requirements identified by the State in the future.
- ◆ Data will also be submitted to the State per any future reporting requirements.

Progress and efficacy will be summarized from the results data. EGWD will evaluate the need for any changes or modifications to the declared water shortage stage or actions based on the results. EGWD may determine to enact additional measures, develop ordinances, or update the WSCP as a whole. Any WSCP update or modification will be conducted through the Board of Directors meeting process, unless specific conditions require otherwise.

6.9 Response Action Estimates

The following table presents the individual estimated demand savings of each response action. Actual savings will likely vary greatly based on external influences, shortage stage level, and general customer understanding of drought severity. It is assumed the savings estimates are not additive, but when implemented together as a program with all the actions in each respective stage, they will eliminate the supply to demand shortage gap.

Table 6-1: Shortage Response Action Measures Estimates

Stage	Shortage Response Action	Potential Shortage Gap Reduction
1	Customer – Asked to reduce total water use by 10%.	up to 10%
1+	Customer – Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.	0-1%
1+	Customer – Users of construction meters will be monitored for efficient water use.	0-2%
1	Customer – Limit irrigation to three days per week. Asked to voluntarily reduce to two days a week.	3-8%
1+	District – Leak repairs receives higher priority.	0-3%
1+	District – Increase drought awareness through additional public outreach measures that notify public and customers for declared stage, requirements, and available conservation program support.	3-5%
1+	District – Increased monitoring of customer use.	0-1%
1+	District –Accelerate infrastructure repairs and improvements.	0-3%

Water Shortage Contingency Plan

Stage	Shortage Response Action	Potential Shortage Gap Reduction
1+	District – Increased enforcement measures, including fines and charges, for non-compliance with WSCP.	0-4%
1	District - Flushing is prohibited except in the case of an emergency, public health and for essential operations or unless specifically authorized by the District.	0-2%
2	Customer –Reduce total water use by 20%.	up to 20%
2	Customer – Leaking pipes or faulty sprinklers shall be repaired within two working days or less if warranted by the severity of the problem.	0-1%
2	Customer – Irrigation shall be limited to two days per week.	5-15%
2+	Customer – Water use for ornamental ponds and fountains is prohibited. No potable water from EGWD’s system shall be used to fill or refill new swimming pools, artificial lakes, ponds, or streams.	0-1%
2+	Customer – Water for flow testing and construction purposes from fire hydrants and blow-offs is prohibited.	0-1%
2+	District – Implement water conservation patrols.	3-5%
3	Customer – Reduce total water use by 30%.	up to 30%
3+	Customer – Leaking pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.	0-1%
3+	Customer – Use of reclaimed water for construction purposes is encouraged. Reclaimed water is not currently available within EGWD’s service area and would have to be obtained elsewhere.	0-1%
3+	Customer – Flushing of sewers and fire hydrants is prohibited except in the case of emergency and for essential operations or unless specifically authorized by EGWD.	0-2%
3+	Customer – Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.	0-1%
3	Customer – Irrigation shall be limited to two days per week (within six-hour block).	15-20%
3+	Customer – Installation of new turf lawn and/or landscape is prohibited.	0-3%
3+	District – No commitments will be made to provide service for new water service connections unless the DWR MWELO is followed, and the plans have been approved by the appropriate building department(s).	1-5%
4	Customer – Reduce total water use by 40%	Up to 40%
4	Customer – Irrigation is allowed only once per week (within six-hour block).	20-30%
4	Customer – No potable water from EGWD’s system shall be used for construction purposes including but not limited to dust control, compaction or trench jetting.	0-2%
4	District – Maximum psi at wells and treatment plans will be reduced to 55.	1-4%
5	Customer – Reduce total water use more than by 50%.	Up to 50%



Stage	Shortage Response Action	Potential Shortage Gap Reduction
5+	Customer – Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.	0-1%
5	Customer – Turf irrigation is prohibited.	25-40%
5	District – No new connection will be added to the system.	2-4%
5	District – Maximum system operating pressure will be reduced to 50 psi.	1-4%
6	Customer – Health and safety use of water only.	up to 50%
6	Customer – Landscape irrigation is prohibited.	25-40%
6	District – Other actions as identified specific to the shortage condition.	varies
6	District – Declare Water Shortage Emergency in accordance with Section 350 of Division 1, Chapter 3 Water Shortage Emergencies of the California Water Code.	varies

6.10 WSCP Refinement Procedures

EGWD’s WSCP is an adaptive plan that allows for active refinement to particular shortage conditions. The general procedures for refinement are presented below.

1. For each shortage response action, compare expected results with actual shortage response and identify any shortfall or over achievement.
2. Revise expected reduction for a specific shortage response action based on updated information.
3. Assess the aggregate expected reductions (from revised shortage response actions) for each shortage stage.
4. Revise stage declaration or modify stage shortage response actions to balance demands with supplies.

The procedures presented above will be relied upon during all shortage stage declarations, ensuring an adaptive WSCP, capable of being relied upon under various circumstances, is produced.

6.11 Plan Adoption, Submittal, and Availability

The WSCP (including subsequent updates) shall be adopted in accordance with standard EGWD procedures, including requirements for public participation (public hearing), and approval by the Board. Upon adoption, the WSCP will be submitted to DWR no later than 30 days after and made available for inspection at EGWD office and website.

6.12 Seismic Risk Assessment and Mitigation Plan (Catastrophic interruption in supplies)

Sacramento County has completed a Local Hazard Mitigation Plan (LHMP) under the federal Disaster Mitigation Act of 2000 (Public Law 106-390). Per DWR requirements, a copy of the most recent adopted LHMP by each entity is included in EGWD’s UWMP (Appendix D).

Sacramento County is currently in the process of updating the LHMP 2016. The update includes participation with other entities, including Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, Isleton, Rancho Cordova, and other special districts. The update is anticipated to be completed and finalized during 2021. Upon adoption of the LHMP update, EGWD will submit to DWR.

The LHMP 2016 Hazard Identification Assessment for the City of Elk Grove characterizes the earthquake and liquefaction probability as “occasional” (between 1 and 10 % chance of occurrence in the next year or has a recurrence interval of 11 to 100 years) and “unlikely” (less than 1 percent chance of occurrence in the next year, or has a recurrence interval of greater than 100 years), respectively. Earthquake and liquefaction significance is listed to be “medium” (moderate potential impact) and “low” (minimal potential impact), respectively.

ORDINANCE NO. 06.15.21.02

AN ORDINANCE OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS REPEALING AND REPLACING AN ENFORCEMENT PROCEDURE FOR VIOLATIONS OF THE WATER SHORTAGE CONTINGENCY PLAN ORDINANCE NO. 06.24.15.01

WHEREAS the Florin Resource Conservation District (District) Board of Directors believes that enforcement of the mandatory measures established by the District's Water Shortage Contingency Plan (Plan) is necessary to achieve the District's water conservation goals; and

WHEREAS this Ordinance establishes a procedure for enforcing the mandatory measures established by the Plan, including an appeal process; and

WHEREAS Government Code Section 53069.4 authorizes the District to issue administrative citations for violations of the District's ordinances; and

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS DOES HEREBY ORDAIN AS FOLLOWS:

1. The following enforcement procedure:

ENFORCEMENT OF WATER SHORTAGE CONTINGENCY PLAN

Section 1 Definitions

- (a) "Administrative Citation" shall mean an administrative citation issued pursuant to this section to remedy a violation.
- (b) "Day" shall mean a calendar day.
- (c) "Enforcement Officer" shall mean any employee or agent of the District designated by the General Manager to enforce any Mandatory Measure.
- (d) "General Manager" shall mean the General Manager or his designee. "Mandatory
- (e) Measure" shall mean any mandatory measure established by the Plan.
- (f) "Plan" shall mean the Water Shortage Contingency Plan.
- (g) "Responsible Person" shall mean a person who causes a Plan violation to occur, or allows a violation to exist or continue, by his or her action or failure to act, or whose agent, employee, or independent contractor causes a violation to occur, or allows a violation to exist or continue. For the purposes of this Ordinance, there may be more than one Responsible Person for a violation.

Section 2 Penalties and Fines for Violation

- (a) Any Responsible Person violating any provision of the Water Shortage Contingency Plan may be issued an Administrative Citation by an Enforcement Officer as provided herein.
- (b) Each day a violation of the Plan occurs constitutes a separate and distinct offense.

A civil fine shall be assessed by means of an Administrative Citation issued by an Enforcement Officer and shall be payable directly to the Florin Resource Conservation District.
- (c) Civil fines shall be assessed in the amounts specified by the Water Shortage Contingency Plan.
- (d) Each Administrative Citation shall contain the following information:
 - (1) The name of the person charged with any violation of the Plan.
 - (2) The date or dates on which the person violated the Plan.
 - (3) The Mandatory Measure(s) of the Plan so violated.
 - (4) The location where the violation occurred.
 - (5) The amount of the fine imposed or to be imposed for each violation of the Plan.
 - (6) A notice of the procedure to request an administrative hearing to contest the citation.
 - (7) The name and signature of the person who issued the citation.
 - (8) The date the citation is issued.
 - (9) Any other information deemed necessary by the General Manager or Enforcement Officer for enforcement or collection purposes.

Section 3 Payment and Collection of Fines

- (a) Payment of a civil fine assessed for a violation of the Plan shall be due within 21 days from the date of issuance of the citation and shall be in the form of check or money order made payable to the Florin Resource Conservation District. The citation number shall be designated on the check or money order. Payment shall be delivered or mailed to: Florin Resource Conservation District, 9257 Elk Grove Blvd., Elk Grove, California, 95624.

- (b) Payment of any fine or fines shall not excuse the Responsible Person from complying with the Mandatory Measures so violated. The issuance of a citation or payment of any fine, or both, shall not bar the District from instituting any other enforcement action or remedy to obtain compliance with the provisions of the Plan so violated, including the issuance of additional citations.

Section 4 Failure to Pay Administrative Fines

- (a) The District may collect any past due administrative citation fine or late payment penalty and interest by use of all available legal means. Without limiting the generality of the foregoing, all such fines or late payments shall constitute civil debts and may be recovered in an action at law, or a lien may be filed by the District against the real property where the violation(s) occurred.
- (b) Any person who fails to pay to the District any fine imposed pursuant to this Ordinance on or before the date that fine is due also shall be liable for the payment of a late payment charge in the amount of ten percent of the fine. Thereafter, the amount of the fine, and the penalty, shall accrue interest at ten percent per annum until paid.

Section 5 Appeal of Administrative Citation

- (a) The recipient of a citation issued pursuant to this section may contest the citation. A notice of appeal and request for hearing contesting an Administrative Citation issued for a violation of this Ordinance shall be accompanied by an advance deposit of the total amount of the fine, which shall be refunded if it is determined, after a hearing, that the person charged in the Administrative Citation was not responsible for the violation(s) or that there was no violation(s) as charged in the citation.
- (b) The Chair of the Board shall designate the hearing officer for the Administrative Citation hearing. The hearing officer may be a District employee, but in that event the hearing officer shall not have had any responsibility for the investigation, prosecution or enforcement of this Ordinance and shall not have had any personal involvement in the proceeding to be heard or possess any disqualifying interest in the outcome of the proceeding.
- (c) The hearing before the hearing officer shall be set for a date that is not less than 15 and not more than 60 calendar days from the date that the notice of appeal is filed in accordance with the provisions of this Ordinance. The person requesting the hearing shall be notified of the time and place set for the hearing at least 10 calendar days prior to the date of the hearing.

- (d) At least ten (10) days prior to the date of the hearing, the recipient of an Administrative Citation shall be provided with copies of the citations, reports and other documents submitted or relied upon by the Enforcement Officer. No other discovery is permitted. Formal rules of evidence shall not apply.
- (e) The hearing officer shall only consider evidence that is relevant to whether the violation(s) occurred and whether the party contesting the Administrative Citation has caused, maintained, or allowed the violation(s) of the Plan on the date(s) specified in the Administrative Citation.
- (f) The Administrative Citation and any additional documents submitted by the Enforcement Officer shall constitute prima facie evidence of the respective facts contained in those documents.
- (g) The person contesting the Administrative Citation shall be given the opportunity to testify and present witnesses and evidence concerning the Administrative Citation.
- (h) The unexcused failure of any recipient of an Administrative Citation to appear at the Administrative Citation hearing shall constitute a forfeiture of the fine and a failure to exhaust his/her administrative remedies.
- (i) The hearing officer may continue the hearing and request additional information from the Enforcement Officer or the recipient of the Administrative Citation prior to issuing a written decision.
- (j) After considering all the evidence and testimony submitted at the hearing, the hearing officer shall issue his or her written decision on the contested Administrative Citation within ten business days. The written decision shall be filed with the District Secretary and a copy thereof shall be mailed to the recipient of the citation. The decision of the hearing officer shall either uphold or deny the Administrative Citation or any portion thereof, and state the facts and reasons supporting the decision. The decision of the hearing officer shall be final.
- (k) If the hearing officer determines that the Administrative Citation should be upheld, the fine amount on deposit with the District shall be retained by the District.
- (l) If the hearing officer determines that the Administrative Citation should be canceled or reduced and the fine was deposited with the District, the District shall promptly refund the amount of the deposited fine or excess together with interest at the average rate earned on the District's investment portfolio for the period the fine amount was held by the District.

Section 6 Right to Further Appeal by Judicial Review

Any person aggrieved by an administrative decision of a hearing officer on an Administrative Citation may obtain review of the administrative decision by filing an appeal with the Sacramento County Superior Court in accordance with the timelines and provisions as set forth in California Government Code section 53069.4."

2. The District finds that this Ordinance is not subject to the California Environmental Quality Act ("CEQA") pursuant to Section 15378(c)(3) of the State CEQA Guidelines, California Code of Regulations, Title 14, Ordinance 3. The Ordinance is not a project as defined in State CEQA Guidelines Section 15378 because pursuant to Section 15378(b), the creation of government funding mechanisms or other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment is not a project.
3. Further, this Ordinance preserves the status quo and therefore has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.
4. The provisions of this Ordinance are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this Ordinance, or the application thereof to any person or circumstance shall be held invalid, such invalidity shall not affect the other provisions of this Ordinance or the application of those provisions.
5. This Ordinance shall become effective immediately upon its adoption by the Board of Directors.

PASSED, APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 15th day of June 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Sophia Scherman
Chair

ATTEST:

Stefani Phillips
Board Secretary

APPROVED AS TO FORM:

Ren Nosky
General Counsel

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District

FROM: Patrick Lee, Finance Manager/Treasurer

SUBJECT: **PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors adopt Resolution No. 06.15.21.02:

1. Approving the deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years; and
2. Approving the Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget projecting revenues of \$15.716 million and expenses of \$19.749 million and appropriating \$4.033 million from operating reserves to fund expenses over revenues for fiscal year 2021-22.

SUMMARY

The Florin Resource Conservation District/Elk Grove Water District (District) staff, guided by District Board of Directors (Board), has developed the proposed District Fiscal Year (FY) 2021-22 Operating Budget for the Board's consideration. Although the 2018 Water Rate Study adopted by the Board on July 18, 2018, recommends a 3.0% revenue rate adjustment effective January 1, 2022, the proposed District's FY 2021-22 Operating Budget does not reflect the revenue rate adjustment because it is deemed not necessary, and staff is recommending that the Board defer the 3.0% revenue rate adjustment into future years.

By this action, the Board would adopt Resolution No. 06.15.21.02; 1) approving the deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years; and 2) adopting the proposed District FY 2021-22 Operating Budget (attached) projecting revenues of \$15.716 million and expenses of \$19.749 million and appropriating \$4.033 million from operating reserves to fund expenses over revenues for fiscal year 2021-22.

PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET

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DISCUSSION

Background

The District has a fiscal year that runs from July 1 to June 30. Staff initiated a process in April to prepare the District's FY 2021-22 Operating Budget, which should be adopted by June 30, 2021. Staff has continued a process that involves multiple Board of Director meetings to conduct reviews with public participation. Staff presented the first draft of the District FY 2021-22 budget development worksheet to the Finance Committee at the April 27, 2021, Special Board Meeting. A second draft of the District FY 2021-22 budget development worksheet and a first draft of the proposed District FY 2021-22 Operating Budget was presented to the Board at the May 18, 2021, Regular Board Meeting. A second draft of the proposed District FY 2021-22 Operating Budget was presented to the Board at the Special Board meeting on June 1, 2021.

During the various meetings, staff received comments and recommendations from the Board and made the requested changes as directed. These changes, as well as the deferral of the 3.0% revenue rate adjustment, are included in the proposed District FY 2021-22 Operating Budget (attached) and is being brought to the Board for recommended adoption.

Present Situation

Staff is presenting the proposed District FY 2021-22 Operating Budget to the Board for adoption.

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

STRATEGIC PLAN CONFORMITY

This item, and all other budget related activities, conforms to the FRCD/EGWD's 2020-25 Strategic Plan. Adoption of an annual EGWD balanced budget is specifically identified as a goal in the Fiscal Responsibility section of the Strategic Plan.

PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET

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FINANCIAL SUMMARY

The District's budget for FY 2021-22 projects total operating revenues of approximately \$15.716 million and total expenses of approximately \$19.749 million including Capital Improvement and Capital Repair & Replacement Reserve contributions of approximately \$5.055 million. The projected expenses in excess of revenues are approximately \$4.033 million which will be funded from operating reserves carried over from prior years.

Despite many non-discretionary cost increases, staff undertook efforts to find cost reductions as well as minimize increases and these are reflected in the FY 2021-22 budget. The budget has an increase in total expenses of \$14,737 (0.07%) from the adopted budget for FY 2020-21. The major highlights are listed below, and comparisons made are against the budgeted amounts for FY 2020-21:

- Revenues for FY 2021-22 is budgeted at \$15.716 million, an increase of \$291,952 (1.89%) from prior year's budget based on the following assumptions:
 - A deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years. This revenue rate adjustment was recommended by the 2018 Water Rate Study adopted by the Board on July 18, 2018.
 - No changes in consumption levels.
 - Increase in the number of accounts based on the most recent billing cycle.
 - A 10% conservation factor in residential revenues due to the unknown nature of drought conditions.
 - A 5% conservation factor in non-residential revenues due to the unknown nature of drought conditions.
- Total Salaries and Benefits budgeted is \$4.620 million, an increase of \$246,596 (5.64%) from prior year's budget mainly due to:
 - An increase in Exempt Salaries of \$69,954 (12.13%) due to:
 - A Cost of Living Adjustment (COLA) of 3.97% based on the April 2021 Consumers Price Index.
 - Longevity and merit pay increases for eligible employees.
 - An increase in Non-Exempt salaries of \$244,003 (15.86%) due to:
 - Longevity and merit pay increases for eligible employees.
 - A COLA of 3.97% based on the April 2021 Consumers Price Index.
 - An increase in on-call pay from \$50 per shift to \$85 per shift.
 - An increase in medical benefits of \$23,462 (2.95%) based on estimated medical premium increases provided by Joint Power Insurance Authority

PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET

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- (JPIA) averaging 6% for any employee who has not yet met the medical subsidy cap.
 - A decrease in Retirement Benefits of \$91,822 (25.42%) due to the pay down of the District's unfunded accrued liability in December of 2020.
- Seminars, Conventions and Travel budgeted is \$48,859, a decrease of \$4,448 (8.34%) from prior year's budget due the Association of California Water Agencies (ACWA) Spring Conference being held in Sacramento resulting in no travel costs.
- Total Office and Operational Costs budgeted is \$1.345 million, an increase of \$6,693 (0.50%) from prior year's budget mainly due to:
 - An increase in Advertising of \$10,500 for more frequent bill inserts and anticipated recruiting advertising.
 - A decrease in Association Dues of \$28,759 (18.60%) due to a decrease in Sacramento Central Groundwater Authority (SCGA) dues.
 - An increase in Building Maintenance of \$55,000 (86.61%) for well site and property landscaping and maintenance, which was previously budgeted as contracted services.
 - An increase in Materials of \$25,000 (25.77%) for anticipated materials to complete distribution valve changeouts.
 - A decrease in Meters of \$40,000 (30.77%) due to an anticipated decrease in new meters related to new development.
- Purchased Water budgeted is \$3.511 million, an increase of \$312,916 (9.78%) from prior year's budget due mainly to:
 - An estimated 3.1% rate increase in the wholesale water rate as provided the Sacramento County Water agency (SCWA).
 - An increase in the number of new accounts in Service Area 2 due to new development.
 - A 10% contingency factor due to the unknown nature of new development in Service Area 2.
- Total Outside Services budgeted is \$1.150 million, a decrease of \$133,190 (10.38%) from prior year's budget due mainly to:
 - An increase in Water Conservation Services of \$30,000 (100.00%) due to anticipated Conservation Monitoring services due to drought conditions.

PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET

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- A decrease in Engineering Services of \$55,000 (47.83%) due the anticipated Ground Water Recharge project no longer being viable.
 - A decrease in Special Projects of \$100,000 (100.00%) due to the postponement of Well 3 destruction.
- Total Equipment Rent, Taxes and Utility budgeted is \$561,740, an increase of \$97,360 (20.97%) from prior year's budget due mainly to:
 - An increase in Occupancy of \$72,000 (100.00%) due to leaseback of 9257 Elk Grove Blvd. while the District's new administrative building is being remodeled.
 - An increase of \$10,200 (2.57%) in Electricity based on anticipated electricity rate increases through Sacramento Municipal Utility District.
- Capital Improvement Funding includes contributions to the Repair & Replacement Reserve, as well as the Capital Improvement Reserve for a total of \$5.055 million. This represents an increase of \$1.369 million from prior year's budget and is based on actual funding needs from the FY 2022-26 Capital Improvement Program (CIP).
- Bond interest expenses will decrease by \$112,970 (7.26%) while bond principal retirements will increase by \$140,000 (6.09%).
- No Elections Costs anticipated for FY 2021-22.
- This budget anticipates capitalizing \$400,192 of Salaries and Benefits for capital improvements constructed by the Distribution and Utility Divisions, which are funded in the Five-Year CIP. Capitalized labor is estimated at 60% of the total salaries and benefits of the Utility Division.
- The budget, as recommended, will meet bond covenant requirements as follows:
 - Covenant – 1.26 (1.15 required)
- The Board adopted a Five-Year CIP which only appropriated funding for the CIP projects scheduled in FY 2021-22.
- Staff has determined that Grants or Special Funding are not currently available for the District. Therefore, no revenues from these income sources are included in this budget document.

June 15, 2021

**PROPOSED FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER
DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET**

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The attached District FY 2021-22 Operating Budget contains many schedules and graphs detailing the proposed budget. Staff is recommending that the Board of Directors adopt Resolution No. 06.15.21.02, approving the revenue rate adjustment deferral and adopting the proposed District FY 2021-22 Operating Budget.

Respectfully submitted,



PATRICK LEE
FINANCE MANAGER/TREASURER

Attachment

RESOLUTION NO. 06.15.21.02

A RESOLUTION OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS APPROVING THE DEFERRAL OF THE 3.0% REVENUE RATE ADJUSTMENT EFFECTIVE JANUARY 1, 2022, INTO FUTURE YEARS AND APPROVING THE FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET PROJECTING REVENUES OF \$15.716 MILLION AND EXPENSES OF \$19.749 MILLION AND APPROPRIATING \$4.033 MILLION FROM OPERATING RESERVES TO FUND EXPENSES OVER REVENUES FOR FISCAL YEAR 2021-22

WHEREAS, the Florin Resource Conservation District (FRCD) is a Resource Conservation District organized pursuant to Division 9 of the California Public Resources Code, Sections 9001, et seq. (Resource Conservation Law); and

WHEREAS, the FRCD is formed for the purposes delineated in the Public Resources Code Section 9001 and all things necessary to carry out the provisions of the Resource Conservation Law and adopted FRCD/Elk Grove Water District (District) Bylaws; and

WHEREAS, the FRCD has held several public meetings to review the proposed revenues and expenses for the District for the Fiscal Year (FY) July 1, 2021, through June 30, 2022; and

WHEREAS, the 2018 Water Rate Study adopted by the Board of July 18, 2018, recommends a 3.0% revenue rate adjustment effective January 1, 2022; and

WHEREAS, the District FY 2021-22 Operating Budget reflects the deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years as it is deemed not necessary for FY 2021-22; and

WHEREAS, the District Board of Directors (Board) has received and considered the proposed District FY 2021-22 Operating Budget submitted by the Finance Manager/Treasurer on June 15, 2021.

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS DOES HEREBY RESOLVE:

SECTION 1. The Board of Directors hereby adopts the foregoing recitals as true and correct and incorporates them herein by reference.

SECTION 2. The Board of Directors hereby approves the deferral of the 3.0% revenue rate adjustment effective January 1, 2022, into future years.

SECTION 3. The Board of Directors hereby approves the total revenues of \$15,716,094 and total expenses of \$19,749,469 for the proposed Florin Resource Conservation District/Elk Grove Water District FY 2021-22 Operating Budget.

SECTION 4. The Board of Directors hereby authorizes the General Manager to redistribute allocated budgeted amounts between line items within the budget categories.

SECTION 5. The Board of Directors hereby approves the FY 2021-22 Rate and Fee Schedule which includes no revenue rate adjustments effective January 1, 2022.

SECTION 6. The Board of Directors hereby approves the FY 2021-22 Salary Schedule which includes a 3.97% cost of living adjustment.

SECTION 7. The Board of Directors hereby adopts the Florin Resource Conservation District/Elk Grove Water District Fiscal Year 2021-22 Operating Budget, attached hereto as Exhibit "A and made a part hereof.

SECTION 8. The Board Secretary shall certify to the adoption of this Resolution.

SECTION 9. This Resolution shall take effect immediately upon its adoption.

PASSED, APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 15th day of June 2021 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Sophia Scherman
Chair

ATTEST:

Stefani Phillips
Board Secretary

APPROVED AS TO FORM:

Ren Nosky
General Counsel

EXHIBIT “A”

**“FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER
DISTRICT FISCAL YEAR 2021-22 OPERATING BUDGET”**

[Attached behind this cover page]



Fiscal Year 2021-22 Operating Budget



Florin Resource Conservation District/Elk Grove Water District

9257 Elk Grove Boulevard
Elk Grove, CA 95624
(916) 685-3556
www.egwd.org

Board of Directors

Sophia Scherman, Chair
Tom Nelson, Vice-Chair
Bob Gray, Director
Lisa Medina, Director
Elliot Mulberg, Director

Appointed Official

Bruce Kamilos, General Manager

Leadership Team

Stefani Phillips, Human Resources Administrator/Board Secretary
Patrick Lee, Finance Manager/Board Treasurer
Donella Murillo, Finance Supervisor
Travis Franklin, Program Manager
Steve Shaw, Water Treatment Supervisor
Sean Hinton, Water Distribution Supervisor
Alan Aragon, Water Distribution Supervisor

GOVERNING VALUES

Board members and employees of the Florin Resource Conservation District and Elk Grove Water District commit to the following values:

- **Transparency:** We recognize that transparency is the foundation of good governance. We are committed to openness and accountability in all District endeavors.
- **Leadership:** We are a team. The community is supported through mutual cooperation and respect. Great ideas come from many sources and we listen with an open mind.
- **Caring:** We care about the quality of our water, we care about our customers' satisfaction and we care about the quality of the working environment.
- **Integrity:** We are honest with one another, with our customers and with our industry partners. We maintain a quality operation that is fiscally sound and forthright. We want the trust and respect of our community and ratepayers.
- **Professionalism:** We are committed to standards of excellence, accuracy and superior conduct.
- **Vision:** We recognize that decisions we make today impact the future of this District and our community. We value our community's natural resources and actively seek ways to improve our services through local control and stewardship.



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Fiscal Year 2021-22 Operating Budget**

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Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget



To: Florin Resource Conservation District Board of Directors

From: Bruce Kamilos, General Manager

Date: June 15, 2021

Subject: **FLORIN RESOURCE CONSERVATION DISTRICT/ELK GROVE WATER DISTRICT
FY 2021-22 OPERATING BUDGET**

For your consideration, I respectfully submit the proposed annual Florin Resource Conservation District/Elk Grove Water District (District) Operating Budget for the fiscal year beginning July 1, 2021. This proposed operating budget reflects a collaborative effort between staff and the Board, as well as allowing for input from the public during several meetings.

Fiscal Year (FY) 2020-2021 proved to be challenging as the District dealt with the surge of the COVID-19 pandemic while trying to maintain and provide critical water services. Businesses and schools shut their doors and residents were ordered to shelter in place. The fallout included many businesses closing down, workforce reductions, schools moving to distance learning, employers implementing telecommute working protocols and an overall economic recession.

The economic recession was evident as District delinquent accounts started to increase due financial hardships experienced by District ratepayers. District ratepayers joined the growing number of families who could no longer afford their utilities or rent, forcing the Governor to issue an executive order establishing a moratorium on rent evictions and utility shutoffs. To assist District customers who were experiencing these financial hardships, the District Board of Directors issued a resolution waiving door tag fees and late payment penalties.

To address the COVID-19 Pandemic, the District took a proactive approach by developing and implementing a COVID-19 Risk Minimization and Outbreak Response Plan. The five-tiered risk level plan was developed to coincide with the State of California Department of Public Health and the Center for Disease Control's identified risk levels based on the spread of the virus. The Plan included precautionary measures and actions required within each tier to minimize and/or address the spread of the virus within the District. As part of the actions taken, the

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

District closed its front lobby to minimize public contact and prevent the spread of the virus. Although all non-critical services were also put on hold, the District continued to perform all customer service functions over the phone and electronically. Even with a limited operations workforce, the District maintained the critical functions necessary to meet its commitment to the community of Elk Grove of supplying its customers with high quality, safe water along with outstanding customer service.

Not all that occurred in FY 2020-21 was overshadowed by the pandemic, however. Although the economy was in a recession, proper planning and years of prudent financial management allowed the District to utilize reserve funds to pay down the District's unfunded accrued liability with CalPERS in the amount of approximately \$1.7 million. The paydown of the unfunded accrued liability has the potential to save the District an estimated \$1.3 million in interest payments over the next 30 years.

FY 2020-21 also proved successful for the District in its search for a new administrative building. The District was able to close escrow on the property located at 9829 Waterman Road in Elk Grove, CA in October of 2020. This new administrative building will provide the District's Board of Directors with a place to hold their monthly Board meetings, as well as provide the District's staff with an appropriate facility to provide top tiered customer service.

The Board of Directors and Staff of the District remain committed to prudent, conservative financial practices, with goals of continuing to reduce long-term debt and funding capital improvements on a pay-as-you-go basis.

The District has also completed efforts to review its rates and fees with the intent of attaining long-term stability and maintaining sufficient debt service coverage required by its outstanding bond covenant.

I would like to thank staff for their conscientious efforts in prudent management of District resources to meet the demands of great customer service and responsible facilities maintenance. I want to also thank the Board of Directors for their leadership and continued interest in prudent fiscal management.

In summary, the District will continue to maintain financial discipline during FY 2021-22, and this reflects a concerted effort by the Board and staff to maintain our customer rates and charges as low as possible.



BRUCE KAMILOS, P.E.
GENERAL MANAGER

INDUSTRY ANALYSIS AND CURRENT STATUS

Issues Currently Affecting the Water Industry. The American Water Works Association (AWWA) 2020 State of the Water Industry Report has identified the top five issues facing the water industry as: 1) renewal and replacement of aging infrastructure; 2) financing for capital improvements; 3) long-term water supply availability; 4) public understanding of the value of water systems and services; and 5) watershed/source water protection.

The District is proactively addressing these top five issues identified by AWWA. As part of its five-year CIP, the District is replacing aging infrastructure such as old water mains each and every year. In addition, the District, through its Asset Management Plan, annually assesses the condition of all of its assets to determine when projects should be undertaken to replace assets. The District currently has a pay-as-you-go policy to fund replacement of aging assets. To address long-term water supply availability, the District prepares an urban water management plan every five years as required by law that verifies its ability to meet long-term water demands. To improve public understanding of the value of water, water systems and services, the District periodically issues a newsletter to its customers and participates in two large annual events where people in our community gather. To ensure watershed/source water protections, the District is working with the Sacramento Regional Water Authority to prepare a Regional Water Reliability Plan that addresses, in part, source water protection in the American River Basin. The District is also preparing a Risk and Resiliency Plan which will link to the United States Bureau of Reclamation American River Basin Study which forecasts the long-term effects of climate change.

Changing Water Demands. Although more efficient use of water is a major goal of the industry, in areas where customer growth is slow or nonexistent, declining water use left unaddressed can decrease operating revenue and affect how costs are recovered through rates and charges. In some cases, utilities must explain to customers that their rates must go up even as their community uses the same amount of water or less water.

The District has experienced gradual decreases in water consumption from 2014 to 2016 due to the drought starting in 2014. In 2017, when the emergency drought declaration was lifted by the Governor, the District started to experience gradual increases in water consumption. This gradual increase, however, was offset by certain conservation efforts, such as installing water efficient appliances and landscaping, which result in long-term water use reductions. Water consumption still has not returned to the pre-drought levels experienced in 2013 and earlier.

Cost Recovery and Affordability. Faced with increasing capital needs and potential funding shortfalls, many utilities must increase the rates they charge for water services in the immediate future. The affordability of water has become a significant issue for low-income households and a higher priority for water utilities that struggle to reconcile the need to

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

adequately fund infrastructure while not overburdening those who cannot afford rate increases.

The District completed a 5-year water rate study during the summer of 2018, setting forth the incremental rate adjustments for years 2019 through 2023, necessary to continue to fund debt service costs, operating costs and anticipated repairs and replacement costs of aging infrastructure of the water utility. Through prudent financial management, cost control and the implementation of certain cost reduction programs, the District was able to hold off rate adjustments in 2019 and 2020 and to defer the 3.0% rate adjustment scheduled in 2021. The District is further investigating whether rate adjustments in the final 2 years of the study can be deferred to maintain affordability while still providing sufficient revenues to maintain operations.

Long Term Water Supply Availability. The District, like all other municipal water providers, must complete an Urban Water Management Plan (UWMP) every five (5) years. The next UWMP is due to the State by June 30, 2021, and it must project out the District's water supply and demand forecast for a twenty-year period. This UWMP will also consider growth impacts and potential shortages resulting from drought and climate change. The District is also partnered with other Sacramento regional water agencies, led by the Regional Water Authority (RWA), to develop a Regional Water Reliability Plan which will also forecast long-term water supply needs and develop projects and programs to maintain long-term reliability. The District is also a member of the Sacramento Central Groundwater Authority (SCGA) which is charged with developing a Groundwater Sustainability Plan (GSP) to seek sustainability of the South American Subbasin through 2042. As the District is nearly exclusively reliant on the groundwater basin for its water supply, this Groundwater Sustainability Plan and the associated management of the South American Subbasin is of vital importance to the District.

Regulatory Compliance. The importance of current and future regulatory compliance continues to be a main concern of the water industry. New regulatory compliance requirements challenge the ability of water utilities to meet such requirements financially and operationally while continuing to maintain affordability to customers, with regulations surrounding perfluorinated alkyl substances (PFAS) and nonpoint source pollution being the top two concerns.

Local, State, and Federal regulatory compliance continues to be a concern of the water industry. New standards challenge the ability of water utilities to meet such requirements financially and operationally while continuing to maintain affordability to customers. The District continues to closely track these new requirements and is prepared to meet them if implemented.

ABOUT THE FLORIN RESOURCE CONSERVATION DISTRICT

Introduction

In the spring of 1950, the Florin Farm Center Committee for Organization of a Soil Conservation District, a committee of Florin farmers, submitted a proposal for the formation of the Florin Soil Conservation District to the Sacramento County Board of Supervisors, requesting approval and submission of that proposal to the State Soil Conservation Commission. The specific intents of the new soil conservation district would be efficient use of irrigation water, improved drainage, flood control and other land improvements. With the necessary approvals, the committee met with other agricultural interests and local landowners until they had thoroughly identified all properties wanting to be within the District boundaries.

On June 23, 1953, a public election determined the establishment of the Florin Soil Conservation District (FSCD) and its first five-member board of directors. The very first work plan, written in 1953, identified the importance of wise irrigation use and the necessity in not depleting the area's underground water supplies. In 1954, the board executed a Memorandum of Understanding with the USDA, beginning a long and productive partnership.

California Resource Conservation Districts are authorized by Division 9 of the California Public Resources Code. Chapter 3, Article 9 of Division 9 details the general powers of a district. An expansion of those powers was the impetus in changing the names of the Soil Conservation District to Resource Conservation Districts in 1971, resulting in the Florin Resource Conservation District (FRCD).

ABOUT THE ELK GROVE WATER DISTRICT

Introduction

In 1893, after several fires threatened the small town of Elk Grove, CA, local residents banded together and founded the Elk Grove Water Company. The water company began business with twelve owners and 10 customers. The Jones family later purchased the water company in the early 1900's and operated the utility as a private company known as the Elk Grove Water Works. The FRCD acquired the Elk Grove Water Works in 1999 from the Jones family and created the Elk Grove Water District (EGWD), which is a Department of the FRCD. This acquisition changed the governance of the water utility from private ownership to a publicly owned and operated agency. The EGWD is structured as an enterprise fund of the FRCD.

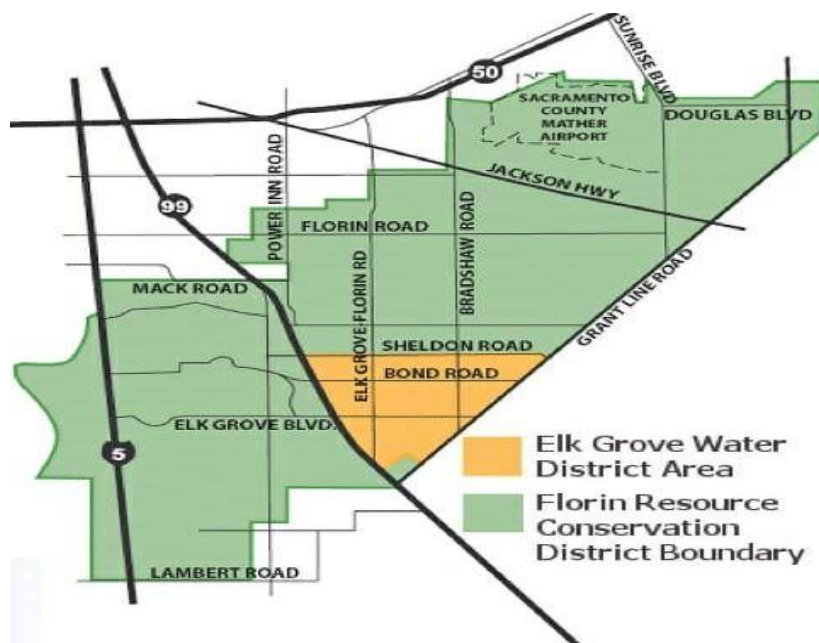
The District is governed by an elected five-member Board and advice from one volunteer associate Board member. Board members serve four-year, staggered terms. The Board of

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

Directors delegate the daily operations of District to the General Manager, who supervises the work of 30 staff members.

Although recent efforts by the District have primarily focused on managing the water utility (EGWD), it has also performed other activities including creek cleanups, tire recycling, technical assistance, and conservation education. To remedy some of the financial pressures of the District, on April 18, 2018, the Board made the decision by Resolution No. 04.18.18.01 to limit all future activities to “water related activities that benefit, or otherwise serve, the EGWD ratepayers.” This decision was made after years of deliberation, multiple public meetings, in-depth engagement with legal counsel, and even consideration of integration with other water agencies. The decision to limit District activities to benefit EGWD ratepayers protects the District from financial uncertainty, maintains stability for EGWD customers, and leaves the FRCD boundaries intact.

Elk Grove Water District Service Area



The EGWD service area covers 13 sq. miles with a population of approximately 46,000 people, providing water to over 12,800 homes and businesses in Elk Grove. Much of the water supplied is produced by wells located throughout Elk Grove, the treatment and storage facility at the Railroad Water Treatment Facility (RRWTF) on Railroad Street and the treatment facility on Hampton Drive. EGWD produces over 1.3 billion gallons of water each year, providing supply to approximately two-thirds of the EGWD service area. The remaining area is supplied with water purchased from the SCWA under a long-term agreement.

Budget Process

The District adopts an annual operating budget and an annual CIP to ensure the adequacy of resources to meet District needs and to accomplish the District's mission.

The District's budget process begins with a Leadership Team Budget Kickoff Workshop to discuss timeline and identify strategic goals and objectives. Each department head is then responsible for developing their departmental operating budget for submission to the Finance Department. The Human Resources Department is responsible for the development of personnel budget and the Finance Department is responsible for the preparation of revenue estimates. Once all departmental operating budgets, personnel budget and the revenue estimates are completed, the Finance Department will compile the information into the budget document.

As required by certain debt covenants, the annual operating budget is evaluated to ensure that net revenues, as defined by the debt covenant, are equal to or exceed a minimum of 115 percent of the anticipated debt service for the budget year.

The preliminary budget is presented to the Finance Committee during a public meeting to solicit feedback and comments from the committee and the public. Once all feedback and comments received have been considered and incorporated as appropriate, the final budget is presented to the Board of Directors for adoption during a public meeting prior to each fiscal year end.

Basis of Accounting

The District operates on a fiscal year that runs from July 1, through June 30. Accounting and budgetary records are maintained using the full accrual basis of accounting. The District is a governmental entity which reports all activities related to the water operation as an enterprise fund where revenues are recognized when they are earned, and the expenses are recognized when they are incurred. The budget does not include amounts for depreciation, pension expense in accordance with Government Accounts Standards Board (GASB) Statement No. 68, or retiree medical expenses in accordance with GASB Statement No. 75 but does include an expenditure for debt principal. Therefore, the budget is not prepared in the same manner as the Comprehensive Annual Finance Report. The budget detailed in this document is used as a management tool for projecting and measuring revenues and expenses.

Budgetary Control

Since the budget is an estimate, from time to time, it may be necessary to make adjustments to fine tune budget line items within expenditure categories. Various levels of budgetary control have been established to maintain the Budget's integrity. The levels of budgetary

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

control are as follows: The General Manager controls the budget at the operating level and budgets are monitored by each respective department head. The General Manager has the authority to transfer balances between budget lines within an expenditure category. Any transfers between expenditure categories or increases in appropriations require approval by the Board of Directors. Budget to actual reports are prepared by the Finance Department and presented to the Board of Directors on a monthly basis.

Reserve Policy

It is the policy of the District that all funds held in reserve be designated to specific uses. The District holds reserves for special projects and operations. Such reserves are not considered 'surplus' and shall not be made available for other uses without the express authorization of the Board of Directors.

The adequacy of the target reserve balance and/or annual contributions will be reviewed annually during the budgeting and planning process and may be revised accordingly as necessary. The following District reserve fund categories are to be established:

- Operating Reserve Fund – Used to ensure resources are available to fund daily administration, operations, and customer services. Target Balance is 120 Days of the Annual Operations and Maintenance Budget.
- Capital Improvement Reserve Fund – Used to fund the new assets needed for the operations of the District that enhance or increase capacity. Target Balance is equal to the annual Capital Improvement Program Budget.
- Capital Replacement Reserve Fund – Used to fund replacement of existing assets. Target Balance is equal to the annual Capital Replacement Budget.
- Elections and Special Studies Reserve Fund – Used to fund various special studies, as needs arise such as election cost, Board expense, etc. The Target funding balance is based on the amount as approved in the annual budget.
- Future Years Capital Improvement Reserve Fund – Used to fund future assets needed for the operations of the District that enhance or increase capacity in future years not yet identified in the annual CIP. Target Balance is 75% of the balance of the Unrestricted Net Position not allocated to the Operating Reserve Fund, Capital Improvement Reserve Fund, Capital Replacement Reserve Fund and the Elections Special Studies Reserve Fund upon conclusion of the annual audit.
- Future Years Capital Replacement Reserve Fund – Used to fund the replacement of existing assets in future years not yet identified in the annual CIP. Target Balance is 25% of the balance of the Unrestricted Net Position not allocated to the Operating

Florin Resource Conservation District/Elk Grove Water District
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Reserve Fund, Capital Improvement Reserve Fund, Capital Replacement Reserve Fund and the Elections Special Studies Reserve Fund upon conclusion of the annual audit.

Investment Policy

It is the policy of the District to invest public funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands of the District and conforming to all state and local statutes governing the investment of public funds. In accordance with section 53600 et. seq. of the Government Code of the State of California, the authority to invest public funds is expressly delegated to the Board of Directors for subsequent re-delegation to the Finance Manager/District Treasurer.

Investments by the Finance Manager are limited to those instruments specifically described in the District's investment policy. The Finance Manager submits monthly reports to the Board of Directors detailing all investment holdings. In order of importance, the following three fundamental criteria are followed in the investment program: 1) safety of principal; 2) liquidity; and 3) return on investment.

Procurement Policy

The District's procurement policies create uniform procedures for acquiring general goods and services, professional services, public construction contracts and the acquisition of real property. The primary purpose of the policies are to provide for the purchase of materials and trade services with the objective that they will be available at the proper time, place, quantity and at the best available price, consistent with the needs of the District.

Accounting Systems and Controls

The District uses Sage 100 as its financial accounting system to record its financial transactions. Management has established a system of internal controls that provide a reasonable basis for protecting the District's assets from fraud, waste and abuse and compile sufficient reliable information for the preparation of the District's financial statements. At the end of the year, the District prepares a Comprehensive Annual Financial Report consisting of management's representations concerning the District's finances. An independent auditing firm audits this report and examines the District's internal controls and provides an opinion on the financial reporting and suggestions on ways to improve the internal control processes of the District.

Capital Improvement Program

The District's annual Capital Improvement Program (CIP) is a projection of the District's capital funding for planned capital projects in upcoming fiscal years. The CIP is reviewed and updated on an annual basis and is a key component of the District's overall Strategic Plan.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

The CIP is an important document for performing water rate studies and for managing the District's operations. The CIP also provides a basis to align District plans with other local agency plans so that an integrated approach may be applied to projects within the community at large.

The District currently funds its capital expenditures on a pay-as-you-go basis. A projection of the anticipated future capital projects and associated funding needs of those projects were included in the 2018 Water Rate Study when analyzing total revenue requirements to maintain operational and capital needs. The study recommended the appropriate user charges and annual water rate increases to ensure revenue requirements were met for both operational and capital needs. Based on the inclusion of capital funding needs into the 2018 Water Rate Study, and all recurring and nonrecurring capital expenditures being funded on a pay-as-you-go basis, the only effect of capital projects on the annual budget will be on going costs for operation and maintenance.

Long-Term Financial Planning

With the approval of the 2018 Water Rate Study and associated rate ordinance, the District has a five-year plan that provides for the stable funding of operations, capital projects and debt service. In conjunction with this plan, the District restructured approximately \$32.3 million of outstanding bonded indebtedness in December 2014 and \$16.4 million in June 2016 to provide an average annual savings of \$194,000 over the remaining term of the debt. It should be noted that the District contributed \$1.5 million of reserve funds in order to reduce the remaining term of the debt by 13 years and maintain annual debt service savings on the refinanced bonds. The District has no legal debt limit and does not intend to issue any additional debt. This, along with continued prudent financial management, has allowed the District to implement no rate adjustments in 2019 and 2020 and to defer the 3.0% rate adjustment scheduled in 2021. The District is further investigating whether rate adjustments in 2022 and 2023 can be deferred to maintain affordability while still providing sufficient revenues to maintain operations. Staff will continue to review revenues and expenditures annually to determine whether the projected revenue adjustments as recommended by the 2018 Water Rate Study will be necessary.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

Budget Assumptions

A budget is an estimate of revenues and expenditures for a set period of time. The creation of estimates involves a set of assumptions. It is important that the reader of this budget understands the assumptions used in preparing the revenue and expenditures estimates contained herein. Listed below are the primary assumptions used in the creation of this budget:

- The 2018 Water Rates Study adopted by the Board on July 18, 2018 approved a 3.0% revenue rate adjustment beginning January 1, 2022. However, this revenue rate adjustment has been deferred into future years, resulting in no anticipated revenue rate adjustment for FY 2021-22.
- A 10% conservation factor was used in projecting water revenues due to the uncertainty of the drought conditions the State is currently facing.
- Estimated 3.10% rate increase in Purchased Water cost from the SCWA.
- Estimated 27.26% decrease in employer retirement costs through California Public Employees Retirement System (CalPERS) as a result of the District paying down the Unfunded Accrual Liability of approximately \$1.6 million in FY 2021.
- Estimated 6.0% increase in health care insurance costs for all employees that have not yet met the District's medical contribution cap.
- Salary increases will be based on a COLA of 3.97%, in accordance with the consumers price index (CPI), and potential merit increases based upon specific employee performance.

EGWD by the Numbers

MAXIMUM DAILY WATER SUPPLY CAPACITY	11.4 MGD
NUMBER OF TREATMENT FACILITIES	2
AGGREGATE TREATMENT FACILITY CAPACITY	13.0 MGD
NUMBER OF WELLS	7
MILES OF WATER MAINS	149.8
NUMBER OF BOOSTER PUMPS	10
NUMBER OF ACTIVE SERVICE CONNECTIONS	13,027
NUMBER OF BOND ISSUES OUTSTANDING	2
NUMBER OF CERTIFIED WATER DISTRIBUTION OPERATORS	17
NUMBER OF CERTIFIED WATER TREATMENT OPERATORS	17
NUMBER OF PUBLIC FIRE HYDRANTS	1,660
EGWD SERVICE AREA POPULATION	46,212



GOVERNMENT FINANCE OFFICERS ASSOCIATION

*Distinguished
Budget Presentation
Award*

PRESENTED TO

**Florin Resource Conservation District
California**

For the Fiscal Year Beginning

July 1, 2020

Christopher P. Morill

Executive Director

FISCAL YEAR 2021-22 BUDGET OVERVIEW

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

Hold for Budget Adoption Resolution

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

Hold for Budget Adoption Resolution

Fiscal Year 2021-22 Budget Preparation Timeline

March 29	Leadership Team Budget Kick-Off.
April 01	All District key objectives and department goals and accomplishments are due to the FM.
April 06	Infrastructure Committee meeting to discuss the 1 st draft of the FY 2022-26 CIP.
April 09	All department initial budget requests are due to the FM.
April 13	FM submits budget development worksheet to the GM for first review.
April 15	Leadership Team meeting to review the 1 st draft of the budget development worksheet.
April 20	Present to the Board the 3 rd quarter financial report.
April 21	GM to provide first round comments and revisions on budget development worksheet to FM.
April 23	FM makes the required revisions and disperses the 1st draft of the budget development worksheet and District key objectives and department goals and objectives to the Finance Committee (Board).
April 27	Infrastructure Committee meeting to go over 2 nd draft of the CIP (if necessary).
April 27	Finance Committee meeting to go over 1 st draft of budget development worksheet and District specific key objectives and department goals and objectives.
May 13	Issue the 1 st draft of the actual budget document and 2 nd draft of budget development worksheet to the Board for review.
May 18	Review and discuss the 2 nd draft budget development worksheet and 1 st draft of actual budget document.
May 26	Finance Committee Meeting (if necessary).
June 01	Issue revised budget to Finance Committee (if necessary).
June 08	Finance Committee Meeting (if necessary).
June 10	Final Budget and staff report due for Board Packet inclusion.
June 15	Board considers all budgets for adoption.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

SUMMARY OF REVENUES AND EXPENDITURES

Elk Grove Water District								
Budgeted Revenues and Expenditures by Category								
For the Fiscal Year ending June 30, 2022								
Expenditure	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Budget	Change in Budget	% Change
Total Revenues	\$15,343,125	\$15,233,674	\$16,418,371	\$15,424,142	\$16,189,741	\$15,716,094	\$291,952	1.89%
Operational Expenditures								
Salaries and Benefits	3,922,785	3,943,543	4,091,441	4,373,018	4,248,758	4,619,614	246,596	5.64%
Seminars, Conventions and Travel	28,872	39,001	30,413	53,307	5,739	48,859	(4,448)	-8.34%
Office and Operational	984,814	974,026	989,374	1,338,578	993,935	1,345,271	6,693	0.50%
Purchased Water	2,873,292	2,777,344	2,965,638	3,198,404	3,391,622	3,511,320	312,916	9.78%
Outside Services	922,576	843,416	939,456	1,283,548	791,004	1,150,358	(133,190)	-10.38%
Equipment Rent, Taxes and Utilities	374,278	333,999	458,451	464,380	526,131	561,740	97,360	20.97%
Subtotal Operational Expenditures	9,106,617	8,911,329	9,474,773	10,711,235	9,957,188	11,237,163	525,927	4.91%
Less: Capitalized Labor	(279,633)	(317,676)	(273,456)	(376,961)	(150,297)	(400,192) *	(23,232)	6.16%
Total Operational Expenses	8,826,984	8,593,653	9,201,317	10,334,275	9,806,891	10,836,970	502,696	4.86%
Non-Operating Expenditures (Income)	3,851,156	3,347,349	3,440,331	5,714,708	5,439,776	3,857,499	(1,857,209)	-32.50%
Capital Equipment and Expenditures	1,352,899	916,290	1,138,639	3,685,750	2,671,378	5,055,000	1,369,250	37.15%
Total Net Expenditures	14,031,039	12,857,292	13,780,287	19,734,732	17,918,045	19,749,469	14,737	0.07%
Revenues In Excess of Expenditures,								
Principal Retirement and Capitalized Labor	\$1,312,086	\$2,376,382	\$2,638,084	\$4,310,590	\$(1,728,304)	\$4,033,375	\$277,215	-6.43%
Transfers (to)/from Reserves	(1,312,086)	(1,978,672)	(2,638,084)	4,310,590	1,728,304	4,033,375	(277,215)	-6.43%
Net Budget Excess/(Deficiency)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	0.00%

* This represents approximately 60% of Salaries and Benefits of the Utility Division which will be charged to the Capital Improvement Program

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

SUMMARY OF NET POSITION ACTIVITY

**Elk Grove Water District
Summary of Net Position Activity
For the Fiscal Year Ending June 30, 2022**

	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Budget
Beginning Net Position	\$ 46,703,765	\$ 46,703,765	\$ 44,975,461
Estimated Revenues	<u>15,424,142</u>	<u>16,189,741</u>	<u>15,716,094</u>
Estimated Operational Expenditures			
Salaries and Benefits	4,373,018	4,248,758	4,619,614
Seminars, Conventions and Travel	53,307	5,739	48,859
Office and Operational	1,338,578	993,935	1,345,271
Purchased Water	3,198,404	3,391,622	3,511,320
Outside Services	1,283,548	791,004	1,150,358
Equipment Rent, Taxes and Utilities	464,380	526,131	561,740
Total Operational Expenditures	<u>10,711,235</u>	<u>9,957,188</u>	<u>11,237,163</u>
Estimated Nonoperational Expenditures			
Capitalized Labor	(376,961)	(150,297)	(400,192)
Non-Operating Expenditures (Income)	5,714,708	5,439,776	3,857,499
Capital Equipment and Expenditures	3,685,750	2,671,378	5,055,000
Total Nonoperational Expenditures	<u>9,023,497</u>	<u>7,960,857</u>	<u>8,512,307</u>
Revenues in Excess of Expenditures	<u>(4,310,590)</u>	<u>(1,728,304)</u>	<u>(4,033,375)</u>
Estimated Ending Net Position	<u>\$ 42,393,175</u>	<u>\$ 44,975,461</u>	<u>\$ 40,942,085</u>

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BUDGET HIGHLIGHTS

FISCAL YEAR 2021-22

The District's budget for FY 2021-22 projects total operating revenues of approximately \$15.716 million and total expenditures of approximately \$19.749 million including Capital Improvement and Capital Repair & Replacement Reserve contributions of approximately \$5.055 million. The projected expenditures in excess of revenues are approximately \$4.033 million which will be funded from operating reserves carried over from prior years.

Despite many non-discretionary cost increases, staff undertook efforts to find cost reductions as well as minimize increases and these are reflected in the FY 2021-22 budget. The budget has an increase in total expenditures of \$14,737 (0.07%) from the adopted budget for FY 2020-21. The major highlights are listed below, and comparisons made are against the budgeted amounts for FY 2020-21:

- Revenues for FY 2021-22 is budgeted at \$15.716 million, an increase of \$291,952 (1.89%) from prior year's budget based on the following assumptions:
 - A deferral of the 3.0% revenue rate adjustment effective January 1, 2022 into future years. This revenue rate adjustment was recommended by the 2018 Water Rate Study adopted by the Board on July 18, 2018.
 - No changes in consumption levels.
 - Increase in the number of accounts based on the most recent billing cycle.
 - A 10% conservation factor in residential revenues due to the unknown nature of current drought conditions.
 - A 5% conservation factor in non-residential revenues due to the unknown nature of drought conditions.

- Total Salaries and Benefits budgeted is \$4.620 million, an increase of \$246,596 (5.64%) from prior year's budget mainly due to:
 - An increase in Exempt Salaries of \$69,954 (12.13%) due to:
 - A COLA of 3.97% COLA based on the April 2021 Consumers Price Index.
 - Longevity and merit pay increases for eligible employees.
 - An increase in Non-Exempt salaries of \$244,003 (15.86%) due to:
 - Longevity and merit pay increases for eligible employees.
 - A COLA of 3.97% based on the April 2021 Consumers Price Index.
 - An increase in on-call pay from \$50 per shift to \$85 per shift.
 - An increase in medical benefits of \$23,462 (2.95%) based on estimated medical premium increases provided by JPIA averaging 6% for any employee who has not yet met the medical subsidy cap.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

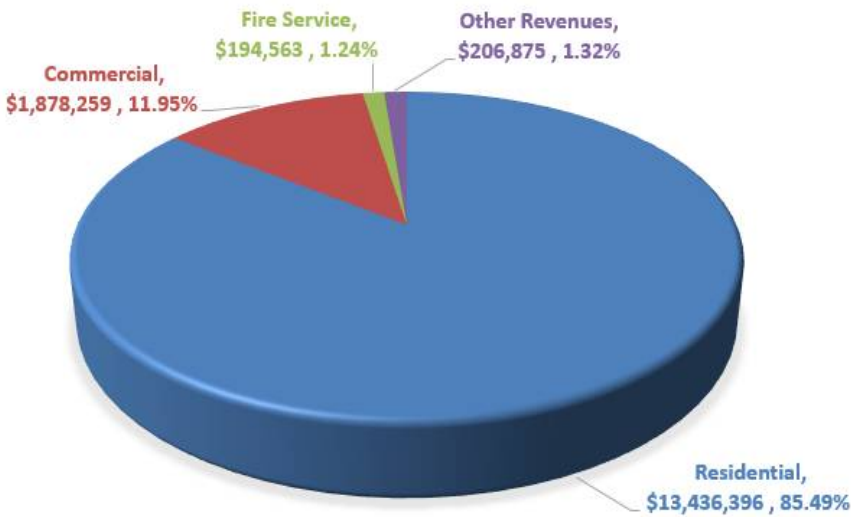
- A decrease in Retirement Benefits of \$91,822 (25.42%) due to the pay down of the District's unfunded accrued liability in December of 2020.
- Seminars, Conventions and Travel budgeted is \$48,859, a decrease of \$4,448 (8.34%) from prior year's budget due the ACWA Spring Conference being held in Sacramento resulting in no travel costs.
- Total Office and Operational Costs budgeted is \$1.345 million, an increase of \$6,693 (0.50%) from prior year's budget mainly due to:
 - An increase in Advertising of \$10,500 for more frequent bill inserts and anticipated recruiting advertising.
 - A decrease in Association Dues of \$28,759 (18.60%) due to a decrease in SCGA dues.
 - An increase in Building Maintenance of \$55,000 (86.61%) for well site and property landscaping and maintenance, which was previously budgeted as contracted services.
 - An increase in Materials of \$25,000 (25.77%) for anticipated materials to complete distribution valve changeouts.
 - A decrease in Meters of \$40,000 (30.77%) due to an anticipated decrease in new meters related to new development.
- Purchased Water budgeted is \$3.511 million, an increase of \$312,916 (9.78%) from prior year's budget due mainly to:
 - An estimated 3.1% rate increase in the wholesale water rate as provided the SCWA.
 - An increase in the number of new accounts in Service Area 2 due to new development.
 - A 10% contingency factor due to the unknown nature of new development in Service Area 2.
- Total Outside Services budgeted is \$1.150 million, a decrease of \$133,190 (10.38%) from prior year's budget due mainly to:
 - An increase in Water Conservation Services of \$30,000 (100.00%) due to anticipated Conservation Monitoring services due to drought conditions.
 - A decrease in Engineering Services of \$55,000 (47.83%) due the anticipated Ground Water Recharge project no longer being viable.
 - A decrease in Special Projects of \$100,000 (100.00%) due to the postponement of Well 3 destruction.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

- Total Equipment Rent, Taxes and Utility budgeted is \$561,740, an increase of \$97,360 (20.97%) from prior year's budget due mainly to:
 - An increase in Occupancy of \$72,000 (100.00%) due to leaseback of 9257 Elk Grove Blvd while the District's new administrative building is being remodeled.
 - An increase of \$10,200 (2.57%) in Electricity based on anticipated electricity rate increases through SMUD.
- Capital Improvement Funding includes contributions to the Repair & Replacement Reserve, as well as the Capital Improvement Reserve for a total of \$5.055 million. This represents an increase of \$1.369 million from prior year's budget and is based on actual funding needs from the FY 2022-26 CIP Program.
- Bond interest expenses will decrease by \$112,970 (7.26%) while bond principal retirements will increase by \$140,000 (6.09%).
- No Elections Costs anticipated for FY 2021-22.
- This budget anticipates capitalizing \$400,192 of Salaries and Benefits for capital improvements constructed by the Distribution and Utility Divisions, which are funded in the Five-Year Capital Improvement Program. Capitalized labor is estimated at 60% of the total salaries and benefits of the Utility Division.
- The budget, as recommended, will meet bond covenant requirements as follows:
 - Covenant – 1.26 (1.15 required)
- The Board adopted a Five-Year Capital Improvement Program (CIP) which only appropriated funding for the CIP projects scheduled in FY 2021-22.
- Staff has determined that Grants or Special Funding are not currently available for the District. Therefore, no revenues from these income sources are included in this budget document.

REVENUE SECTION

BUDGETED REVENUES BY CATEGORY



Other Revenues include:

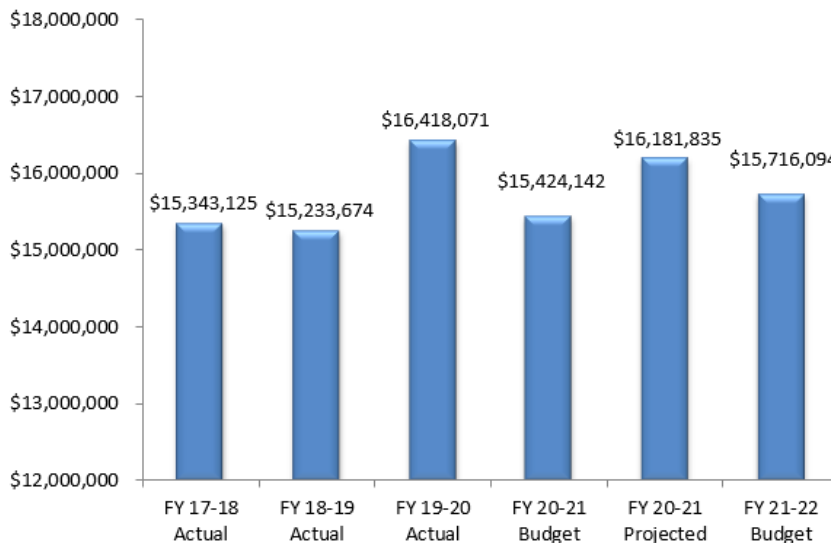
- Meter/Plan Check/Water Capacity Fees
- Door Hanger Fees
- New Account Fees
- NSF Fees
- Credit Card Fees
- Backflow Prevention Installations

Commercial Revenues Include:

- Non-Residential Revenue
- Irrigation Revenue

Note: Residential Revenue in this chart is net of customer refunds.

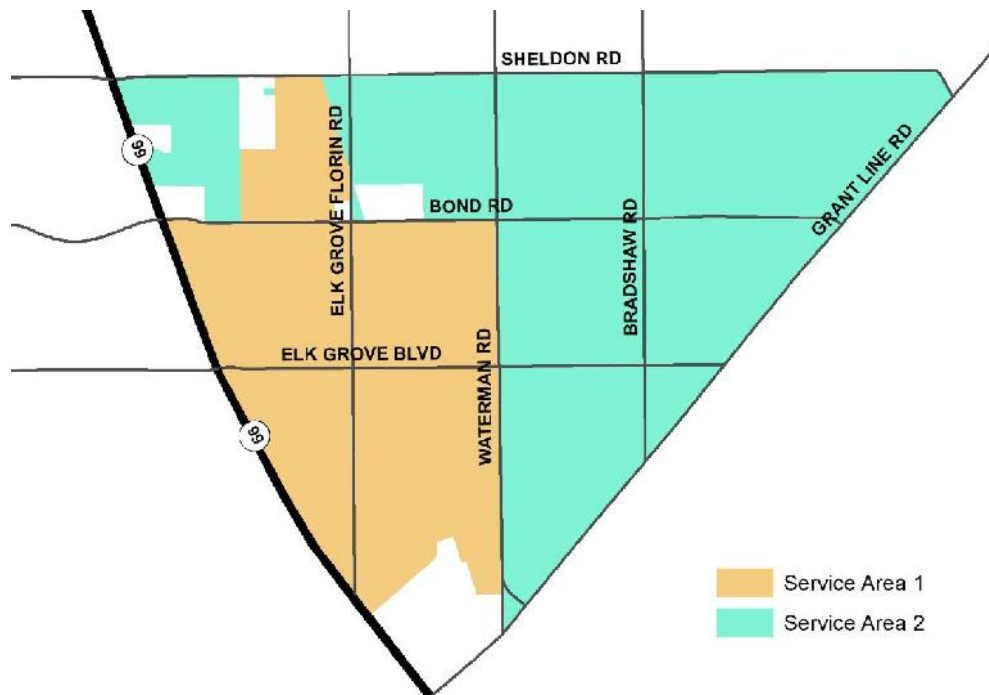
TOTAL REVENUES FISCAL YEARS 2017-18 THROUGH 2021-22



The FY 2021-22 Budget reflects the deferral of a 3.0% revenue rate adjustment into future years and no anticipated increase in overall water consumption. This revenue rate adjustment was recommended in the 2018 Water Rate Study, adopted by the Board of Directors on July 18th, 2018.

MAJOR REVENUE SOURCES

Approximately 98% of the District's revenues are derived from recurring water revenues related to water consumption and availability charges. Although a 3.0% revenue rate adjustment was approved by the Board through the adoption of the 2018 Water Rate Study, the 3.0% revenue rate adjustment effective January 1, 2022, was deemed unnecessary and will be deferred into future years. In addition, the District derives revenues from new connection fees for development within Service Area 1 of its two service areas. Connection fees for development within Service Area 2 of the EGWD's service area are paid to the SCWA.



Revenue projections are developed using a fee/rate-based projection, taking account and consumption information for the most recent twelve-month period, and applying it against the current and proposed fee/rates. Depending on drought conditions, revenue projections are adjusted by what the District deems to be an appropriate conservation factor and/or anticipated increase in water consumption as a result of the lifted drought restrictions.

Revenue Rate Increase Projections

Utility rate setting is subject to the provisions of Proposition 218 wherein customers are provided information on proposed rate changes and are invited to attend a public hearing on the proposed changes. Proposed rate changes can be denied if a majority of ratepayers

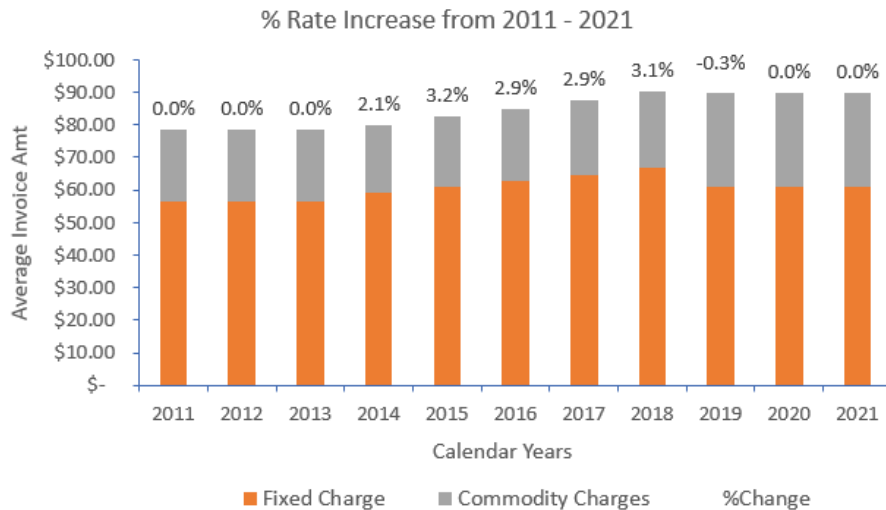
Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

submit written protests opposing them. If a majority of ratepayers do not protest, the Board of Directors vote on the proposed rate changes and set the effective date for any proposed and approved changes. On July 18th, 2018, the 2018 Water Rate Study was adopted by the Board with recommended revenue adjustments over the next five years beginning on January 1, 2019, as follows:

- January 1, 2019 – 0%
- January 1, 2020 – 0%
- January 1, 2021 – 3% - Deferred into future years.
- January 1, 2022 – 3% - Deferred into future years.
- January 1, 2023 – 3%

Revenue rate adjustments are necessary to fund various projects and to pay for increased operating cost, primarily due to inflation. It should be noted that the Board of Directors decided to defer the revenue rate adjustments of 3.0% on January 1, 2022, into future years as it was deemed unnecessary in FY 2021-22.

The table below shows the average revenue rate adjustment each calendar year since 2011 in relation to an average bill, assuming the customer is a single-family residential service customer with a 1” meter consuming 15 CCF’s of water. As can be seen, the increases in rates have been very consistent and relatively minimal. For the years with a rate increase, the increase is approximately equal to the average inflation rate. This is all made possible through prudent financial management and budgeting; however, future revenue adjustments will be necessary to fund various capital projects and to pay for increased operating cost, primarily due to inflation.

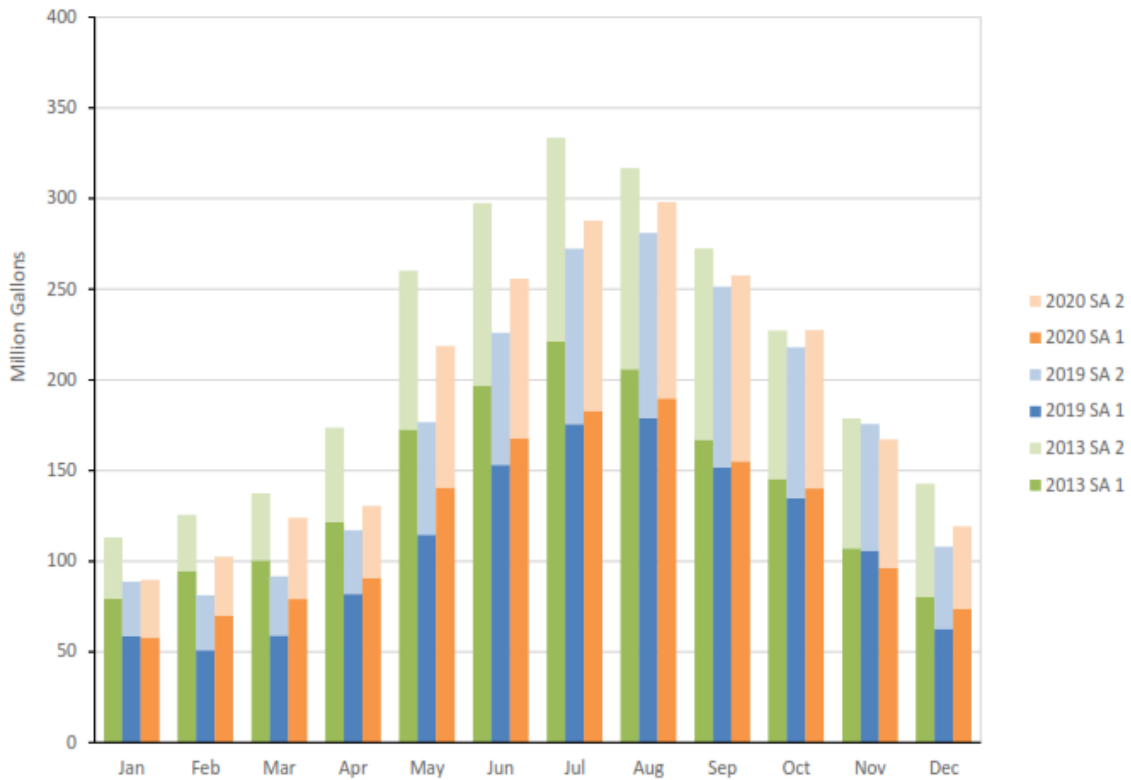


**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

WATER CONSUMPTION TREND

Water revenues are driven by two primary factors, the amount of water sold and the rate per unit, with increases in water consumption generating more revenues to offset the increased costs of operations. The graph below shows the consumption trends for the prior two calendar years as compared to the pre-drought calendar year of 2013. The graph also shows the correlation between the annual seasonal change and overall water consumption, with the highest level of consumption occurring during the summer months.

As can be seen in the graph below, the District has experienced gradual increases in water consumption in 2020 and 2019, however, the total level of water consumption still has not reach the pre-drought levels of 2013. Attributable to the overall decrease in water consumption for the most recent two calendar years, as compared to the pre-drought levels of 2013, is the implementation of certain water conservation efforts, such as installing water efficient appliances and landscaping, which result in long-term water use reductions.



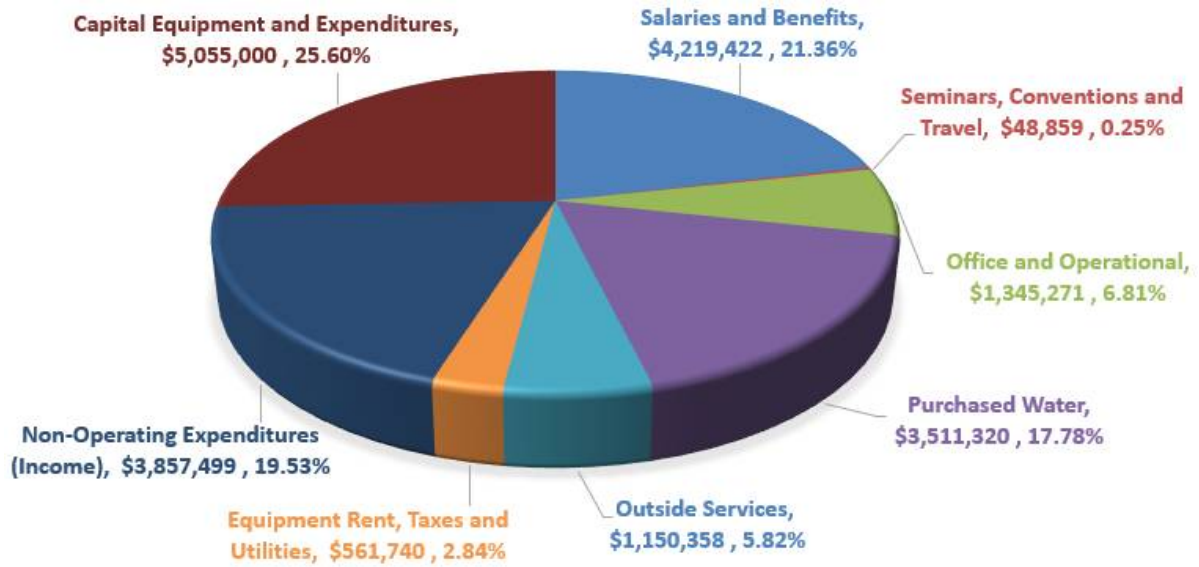
**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

**Elk Grove Water District
Budgeted Revenue Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
4100	Water Payment Revenues - Residential	\$12,848,104	\$12,818,495	\$13,479,404	\$13,114,207	\$13,842,529	\$ 13,437,396
4110	Water Payment Revenues - Commercial	1,831,522	1,926,887	2,040,936	1,875,372	1,846,053	1,878,259
4120	Water Payment Revenues - Fire Service	188,957	177,326	196,357	194,563	201,655	194,563
4200	Meter Fees/Plan Check/Water Capacity	240,190	56,944	511,774	30,000	194,033	30,000
4300	Backflow Install EGWD	15,116	8,555	6,626	10,000	29,327	10,000
4520	Door Hanger Fees	149,725	144,700	106,400	115,000	-	86,250
4540	New Account Fees	22,791	24,000	30,420	25,000	32,714	25,000
4550	NSF Fees	3,640	2,660	2,660	3,000	1,728	3,000
4570	Shut-off Fees	63,166	63,750	38,800	50,000	-	37,625
4580	Credit Card Fees	10,000	10,725	6,050	8,000	-	-
4591	Release of Lien Fee	-	-	1,407	-	-	-
4700	Rental Income	-	-	-	-	33,796	15,000
4900	Customer Refunds	(30,086)	(368)	(2,763)	(1,000)	-	(1,000)
	Total Revenues	\$15,343,125	\$15,233,674	\$16,418,071	\$15,424,142	\$16,181,835	\$ 15,716,094

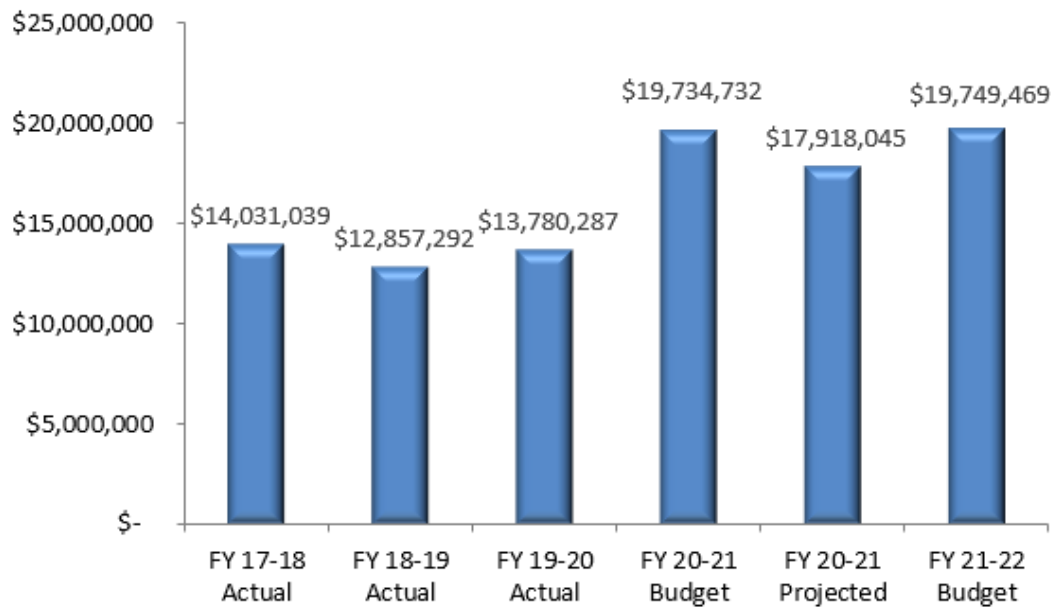
EXPENDITURE SECTION

BUDGETED EXPENDITURES BY CATEGORY



Note: Total Salaries and Benefits Expenditures are net of capitalized labor costs of \$400,192, which is included in total Capital Equipment and Expenditures.

TOTAL NET EXPENDITURES FISCAL YEARS 2017-18 THROUGH 2021-22

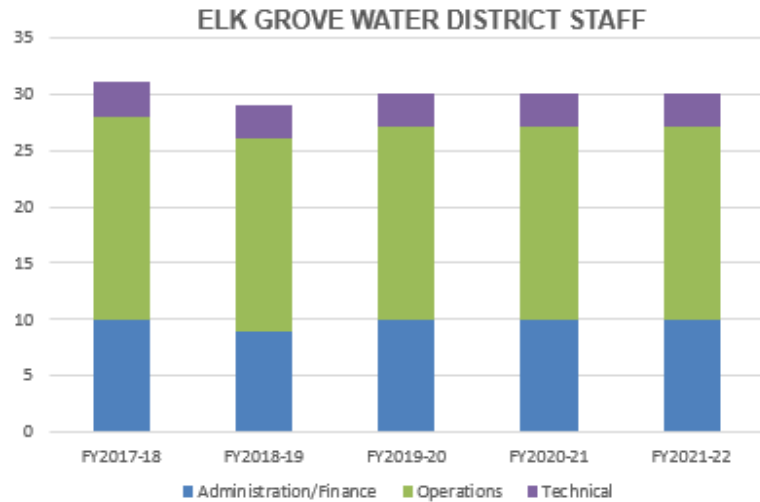


SALARIES AND BENEFITS FISCAL YEARS 2017-18 THROUGH 2021-22

Aside from the cost of water purchased from the SCWA for the EGWD’s Service Area 2 and debt service payments, Salaries and Benefits represent the largest expense of the District.

Staffing levels at the District has remained relatively unchanged. In FY 2021-22, the District added a provision to the Employee Policy Manual to increase the on-call pay from \$50 per day to \$85 per day. The District also provides COLAs

annually based on the average of the U.S. City Average, West Urban Size B/C and San Francisco-Oakland-San Jose, CA indices. The COLA for FY 2021-22 is 3.97%.



Employee Cost Control Program

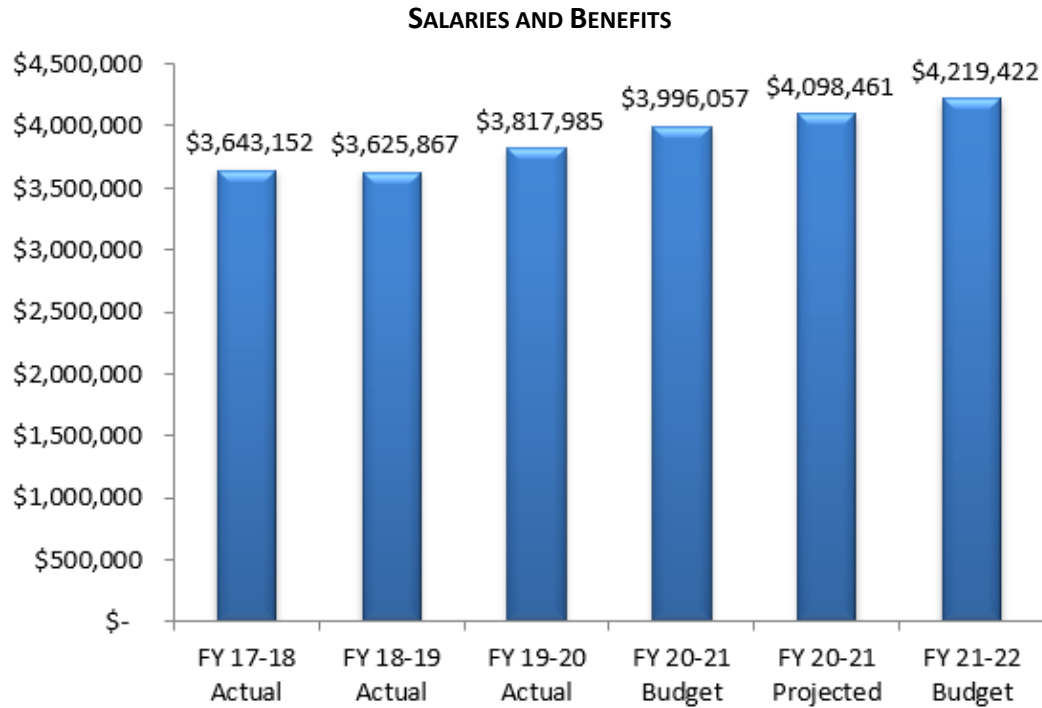
During FY 2011-12, District staff developed an Employee Cost Control Program (ECCP) that helped reduce and control employee costs by obtaining savings through selected employee concessions, including, freezing certain full-time equivalent (FTE) positions, a phase in reduction of the employer portion of employee retirement contributions and placing a cap on the amount of employer paid health premiums. To offset these concessions, the District created an alternative 9/80 work schedule and established a permanent disability retirement benefit program.

Pension and other Post-Employment benefits

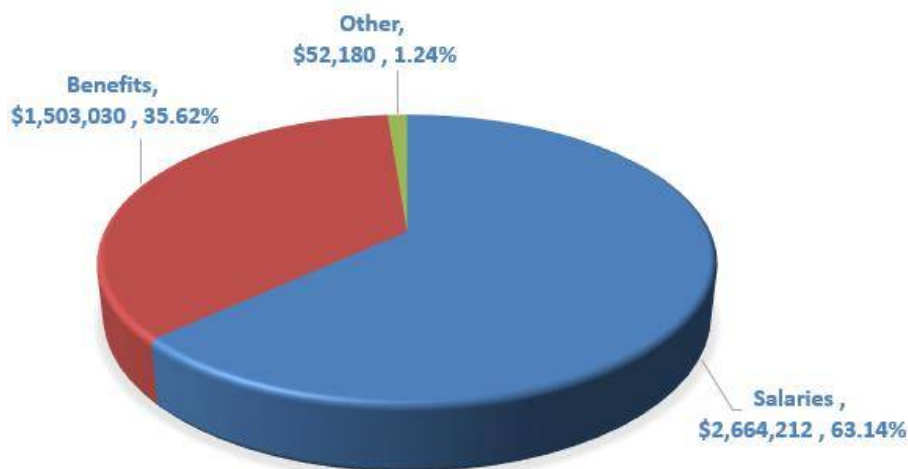
The District’s retirement program remains with the CalPERS. The District currently pays the employer costs and a portion (one percent) of the employees’ tax-deferred member contributions to the system monthly. The District provides post-employment healthcare benefits to retirees and their dependents. Five retired employees receive these benefits, which are financed on a pay-as-go basis. The District pays the medical, dental, and vision insurance premiums for eligible retired employees (and qualified spouse) that are enrolled in the health insurance plan. The current requirements for eligibility are: attaining age 55, having at least fifteen years of continuous service, and retiring from the District.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

The following tables show the trend in salaries and benefits in comparison to prior years, as well as the breakout of the current proposed budgeted salaries and related components.



NET SALARIES AND BENEFITS \$4,219,422*



The Other Expenditure Categories include:

- Employee Training
- Employee Recognition
- Meetings

*The total Salaries and Benefits are net of capitalized labor costs of \$400,192 for capital improvements constructed by the Distribution and Utility Departments.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

**Elk Grove Water District
Budgeted Salaries and Benefits Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
5100	Executive Salary	\$ 151,934	\$ 171,220	\$ 182,615	\$ 211,486	\$ 182,800	\$ 199,678
5110	Exempt Salaries	525,448	581,962	566,577	576,491	562,121	646,445
5120	Non-Exempt Salaries	1,295,333	1,193,993	1,365,198	1,538,721	1,651,707	1,782,724
5130	Overtime Compensation	60,799	43,164	33,784	48,500	26,651	43,500
5140	On Call Pay	18,200	17,650	23,446	18,250	32,739	31,025
5150	Holiday Pay	109,632	111,283	113,792	124,981	123,551	129,660
5160	Vacation Pay	159,232	161,000	184,761	123,294	153,224	127,644
5170	Personal Time Pay	105,387	106,307	91,616	99,985	88,848	103,728
5200	Medical Benefits	593,653	588,241	585,087	796,543	661,532	820,006
5195	EAP	825	813	928	944	885	874
5201	EGWD Contribution H.S.A	13,352	13,251	21,092	23,500	22,400	26,300
5210	Dental/Vision/Life Insurance	52,337	55,117	55,654	63,562	56,072	59,815
5220	Retirement Benefits	524,139	460,006	524,173	361,277	370,399	269,456
5225	Retirement Benefits - Post Employment	131,063	278,088	185,417	165,316	165,316	165,339
5230	Medical Tax, Social Security and SUI	46,990	47,036	49,764	63,503	52,921	64,641
5240	Worker's Compensation Insurance	114,479	91,338	85,222	102,585	91,082	96,600
5250	Education Assistance	2,566	-	-	2,500	-	2,500
5260	Employee Training	13,697	18,378	19,085	45,500	5,965	43,600
5270	Employee Recognition	3,530	4,634	2,383	2,880	545	2,880
5280	Meetings	189	62	847	3,200	-	3,200
	Less Capitalized Labor	(279,633)	(317,676)	(273,456)	(376,961)	(150,297)	(400,192)
		<u>\$3,643,152</u>	<u>\$3,625,867</u>	<u>\$3,817,985</u>	<u>\$3,996,057</u>	<u>\$4,098,461</u>	<u>\$ 4,219,422</u>

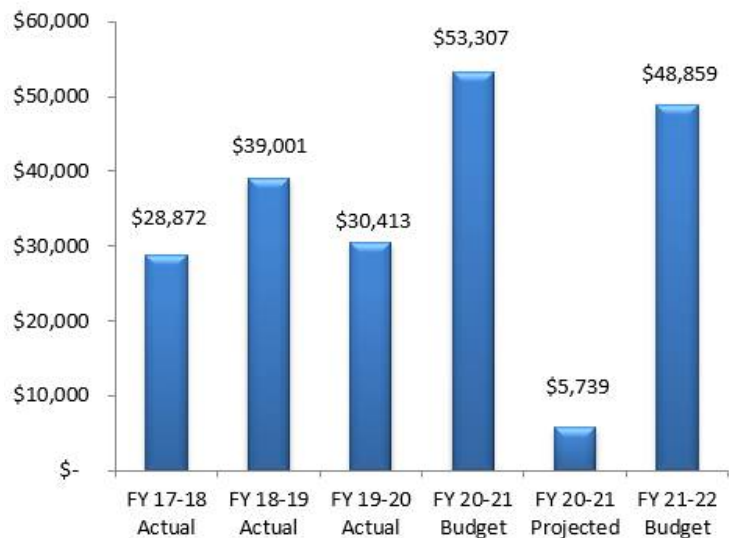
**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

SEMINARS, CONVENTIONS AND TRAVEL FISCAL YEARS 2017-18 THROUGH 2021-22

Seminars, Conventions and Travel expenditures are budgeted based on the anticipated travel to and from various conferences and seminars. It is in the best interest of the District to invest in the employees to allow them to stay current and educated about activities, developments, and professional trends affecting their ability to provide high-quality job performance, which includes external and internal customer service. As such, travel to attend hearings, meetings, conferences, or other gatherings is of value to the District.

The two major conferences that District staff attend are the semi-annual Association of California Water Associations (ACWA) conferences and the annual California Society of Municipal Finance Officers (CSMFO) conference.

SEMINARS, CONVENTIONS AND TRAVEL



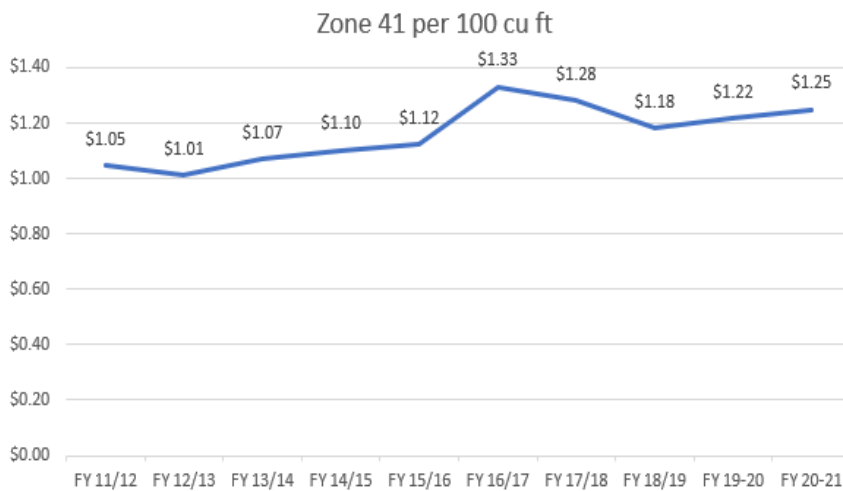
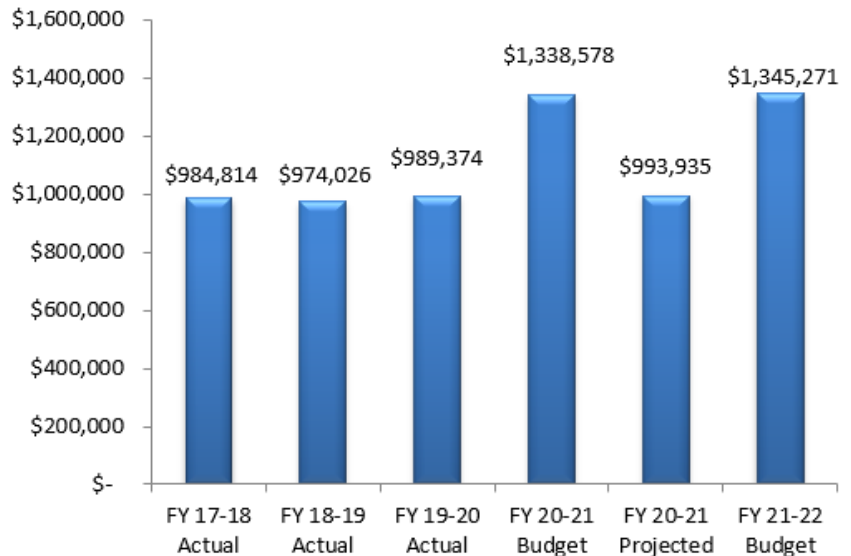
**Elk Grove Water District
Budgeted Seminars, Conventions and Travel Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
5300	Airfare	\$ 1,685	\$ 2,536	\$ 2,928	\$ 5,600	\$ -	\$ 6,050
5310	Hotels	5,022	11,024	7,366	17,441	-	13,216
5320	Meals	3,282	4,585	2,741	7,246	851	7,018
5330	Auto Rental	-	373	63	2,200	-	2,200
5340	Seminars & Conferences	9,109	12,588	10,256	12,900	(1,130)	12,545
5345	Seminars & Conferences - Board	2,197	725	-	-	-	-
5350	Mileage Reimbursement, Parking, Tolls	1,577	1,170	989	1,920	19	1,830
5375	Auto Allowance	6,000	6,000	6,070	6,000	6,000	6,000
		<u>\$ 28,872</u>	<u>\$ 39,001</u>	<u>\$ 30,413</u>	<u>\$ 53,307</u>	<u>\$ 5,739</u>	<u>\$ 48,859</u>

OFFICE AND OPERATIONAL AND PURCHASED WATER FISCAL YEARS 2017-18 THROUGH 2021-22

Office and Operational expenditures are budgeted to cover administrative costs such as repairs and maintenance of equipment, buildings, and computers, purchases of chemicals for water treatment, postage, printing, and association dues. These costs allow the District to continue to operate and maintain the water system and to continue to provide water services to its ratepayers. As can be seen by the table to the right, office and operational expenditures have remained relatively consistent from year to year and only expected to increase by approximately \$7,000 in FY 2021-22 as compared to the FY 2020-21 budgeted amount.

OFFICE AND OPERATIONAL

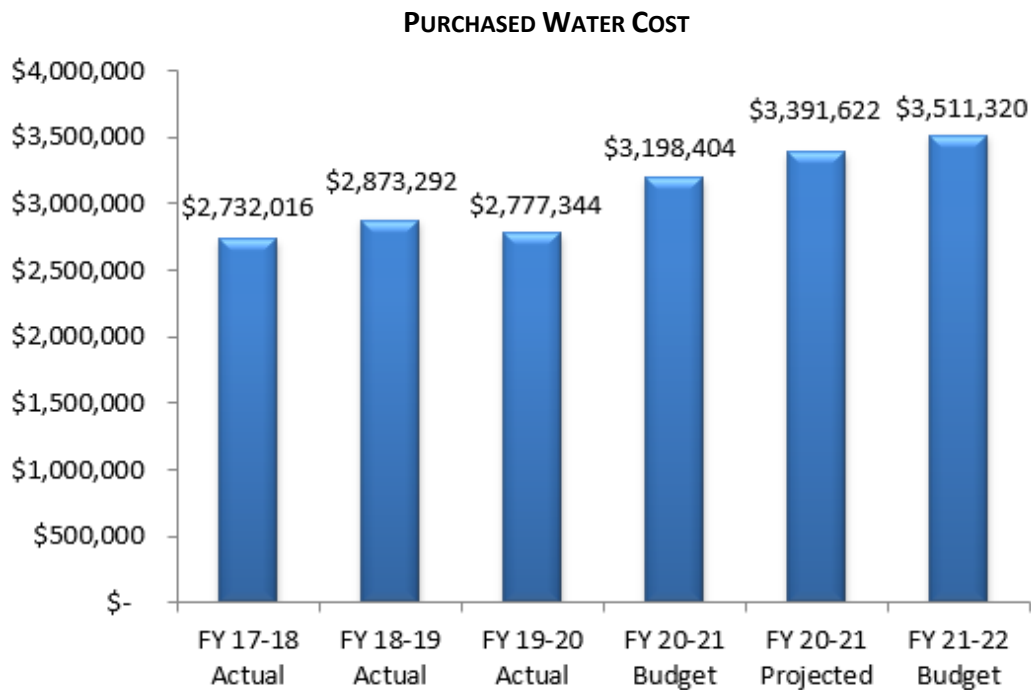


Through the First Amended and Restated Master Water Agreement between Sacramento County Water Agency and Florin Resource Conservation District/Elk Grove Water District, entered into on June 28th, 2002, the District has agreed to purchase, on a wholesale basis, potable water supply from the SCWA. The purchased water from the SCWA is

used to supply the EGWD Service Area 2 ratepayers with their water source. Under the general terms of the agreement, the cost of the wholesale purchased water supply is based on a rate as determined by the actual cost of procurement, extraction, diversion, treatment,

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

and conveyance of potable water actually delivered to the District. The table on the previous page shows the trend in the wholesale purchase water rate for the last 10 years. The change in the wholesale purchase water rate is a direct correlation to the conservation efforts during the drought in FY 2013-14. As drought restrictions from FY 2013-16 resulted in less water delivered to the District and operational and maintenance costs remained stable, there was an overall increase to the wholesale purchase water rate. When drought restrictions were lifted in FY 2016-17, the gradual increase in water consumption resulted in an increase of purchased water delivered to the District. This resulted in a decrease to the wholesale purchased water rate in FY 2017-18. As consumption trends start to normalize and operating costs continue to increase, the District expects the wholesale purchased water rate to gradually increase as well without the major swings experienced during the drought.



The table above shows the total annual purchased water costs since FY 2017-18. Purchased water cost has continued to increase slightly from year to year as drought restrictions have been lifted. For FY 2021-22, the District expects to see water consumption and delivery continue to increase slightly due to the continued residential development in the EGWD's Service Area 2.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

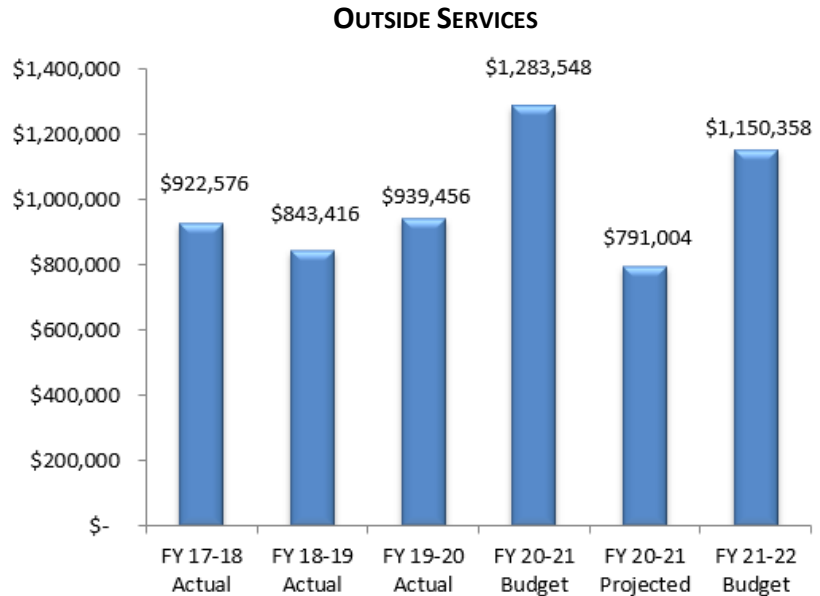
**Elk Grove Water District
Budgeted Office and Operational Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
5410	Advertising	\$ 10,615	\$ 5,033	\$ 5,200	\$ 6,000	\$ 13,888	\$ 16,500
5415	Association Dues	79,874	133,306	118,649	154,606	148,968	125,847
5420	Insurance	86,006	54,500	91,118	102,880	95,640	106,700
5425	Licenses, Certifications, Fees	2,154	2,969	8,304	6,445	6,599	4,370
5430	Repairs & Maintenance - Automotive	38,236	34,719	33,476	42,000	29,892	35,500
5432	Repairs & Maintenance - Building	29,902	28,691	45,258	63,500	44,332	118,500
5434	Repairs & Maintenance - Computers	21,208	35,060	20,927	19,375	5,220	16,225
5435	Repairs & Maintenance - Equipment	97,388	99,860	114,022	102,000	85,821	107,500
5438	Fuel	40,128	38,956	34,343	41,720	25,712	45,470
5440	Materials	122,500	64,740	12,239	97,000	96,457	122,000
5445	Chemicals	42,494	39,418	42,547	45,000	36,588	45,000
5450	Meter Repairs	27,055	64,073	129,363	130,000	71,751	90,000
5453	Permits	83,498	47,486	56,416	65,050	66,236	68,050
5455	Postage	76,355	55,593	60,709	84,950	48,956	82,675
5460	Printing	10,514	13,067	7,022	30,350	8,523	26,800
5465	Safety Equipment	7,633	5,381	19,620	15,500	7,720	15,500
5470	Software Programs & Updates	105,785	156,644	115,622	210,693	135,249	207,114
5475	Supplies	32,351	24,674	26,796	30,720	16,116	30,920
5480	Telephone	39,030	32,310	25,996	39,589	24,115	30,900
5485	Tools	5,370	17,059	7,857	12,500	12,249	11,000
5490	Clothing Allowance	8,206	8,576	2,713	7,700	1,503	7,700
5491	EGWD - Other Clothing	6,223	5,687	11,177	13,000	12,400	13,000
5493	Water Conservation Materials	12,289	6,224	-	18,000	-	18,000
		984,814	974,026	989,374	1,338,578	993,935	1,345,271
5495	Purchased Water	\$2,873,292	\$2,777,344	\$2,965,638	\$3,198,404	\$3,391,622	\$ 3,511,320

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

OUTSIDE SERVICES FISCAL YEARS 2017-18 THROUGH 2021-22

Outside Services expenditures consist mostly of professional services, such as banking services, engineering services, contracted services, pre-employment medical services and legal services. The District utilizes specialized outside service firms and professionals to assist in the development of various technical studies and projects. An example of such a technical study would be the use of a professional consulting firm in FY 2017-18 to complete the 5-year water rate study that was adopted by the Board on July 18, 2018, setting forth the planned revenue rate increases for the next 5 years. The District expects outside services to remain relatively stable and consistent with prior year.

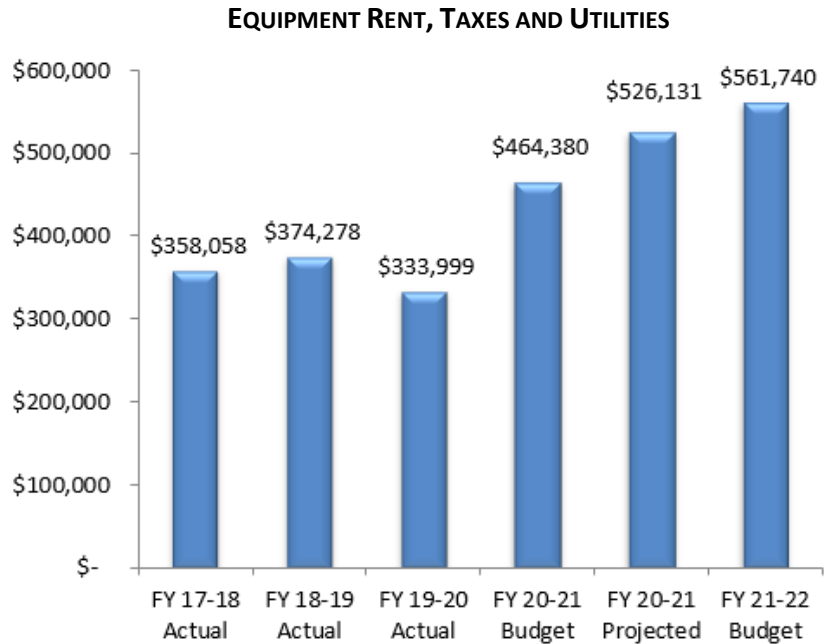


**Elk Grove Water District
Budgeted Outside Services Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
5505	Administration Services	\$ 3,200	\$ 3,820	\$ 6,419	\$ 3,590	\$ 6,377	\$ 3,250
5510	Bank Charges	132,426	159,130	168,810	184,308	170,031	190,208
5515	Billing Services	23,597	19,228	20,869	28,800	24,548	25,500
5520	Contracted Services	297,891	345,052	351,356	521,000	319,267	507,150
5523	Water Conservation Services	-	-	-	-	-	30,000
5525	Accounting Services	25,536	34,860	28,514	35,000	35,000	30,000
5530	Engineering	21,858	68,671	174,660	115,000	37,767	60,000
5532	Special Projects	-	-	-	100,000	-	-
5535	Legal Services	192,023	118,159	94,361	175,000	97,302	175,000
5540	Financial Consultants	112,879	10,421	1,750	10,000	-	10,000
5545	Community Relations	8,679	16,958	7,650	9,200	-	9,200
5552	Misc. Medical	2,548	2,648	1,174	2,500	4,451	2,500
5550	Pre-employment	425	46	1,185	1,000	563	1,000
5555	Janitorial	7,015	7,655	14,753	22,000	26,870	30,400
5560	Bond Administration	4,220	3,800	5,770	7,050	5,720	7,050
5570	Security	51,049	20,874	21,691	29,100	22,527	29,100
5575	Sampling	39,230	32,094	40,494	40,000	40,583	40,000
		<u>\$ 922,576</u>	<u>\$ 843,416</u>	<u>\$ 939,456</u>	<u>\$ 1,283,548</u>	<u>\$ 791,004</u>	<u>\$ 1,150,358</u>

EQUIPMENT RENT, TAXES AND UTILITIES FISCAL YEARS 2017-18 THROUGH 2021-22

Equipment Rent, Taxes and Utilities are budgeted to cover the cost of utilities to extract, treat and pump the water supply to ratepayers. With the rising cost for most utilities and the expected gradual increase in water consumption, the District is expecting to see an increase in this expenditure category. However, to assist in improving or maintaining operational efficiencies and keep operating costs low, the District has installed a series of variable frequency drives (VFD) on the booster pumps that deliver treated drinking water to our customers. The VFD provides energy savings by matching pump motor load to the work needed for water delivery instead of always running the pump at peak load. The District also has an ongoing well rehabilitation program where it monitors the efficiencies of each water well. Over time, well screens plug up, making well pumping operations inefficient. The District rehabilitates its water wells when certain inefficient thresholds are reached, thereby returning the wells to efficient operations.

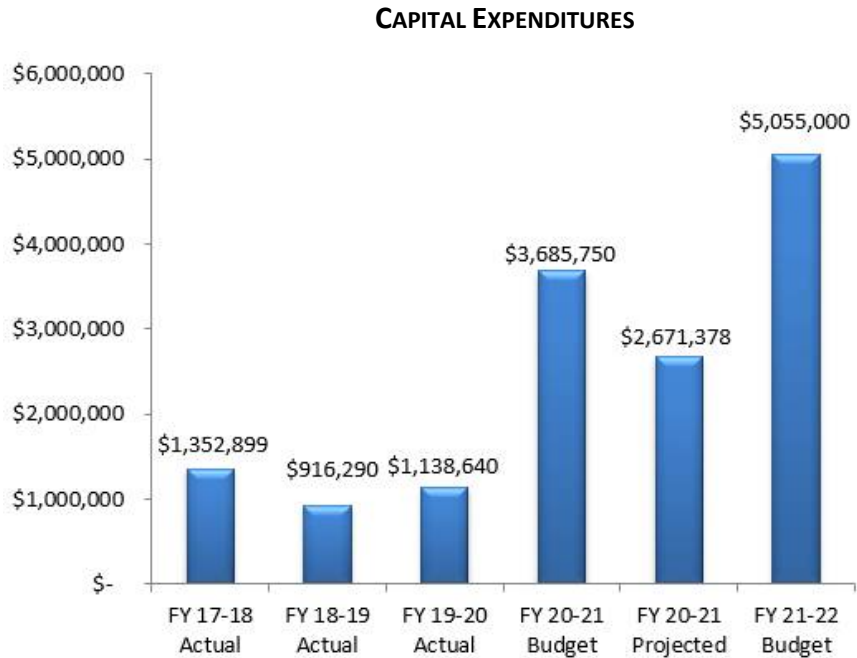


**Elk Grove Water District
Budgeted Rents, Taxes and Utilities Accounts Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 20-21	FY 2021-22
		Actual	Actual	Actual	Budget	Projected	Requested Budget
5610	Occupancy	\$ -	\$ -	\$ -	\$ -	\$ 18,000	\$ 72,000
5620	Equipment Rental	23,266	16,075	21,236	27,800	22,659	35,360
5710	Property Taxes	959	1,116	995	1,500	967	3,500
5740	Electricity	320,004	292,047	402,747	397,000	431,846	407,200
5750	Natural Gas	517	779	725	900	1,151	900
5760	Sewer & Garbage	29,532	23,982	32,748	37,180	51,509	42,780
		<u>\$ 374,278</u>	<u>\$ 333,999</u>	<u>\$ 458,451</u>	<u>\$ 464,380</u>	<u>\$ 526,131</u>	<u>\$ 561,740</u>

CAPITAL EXPENDITURES FISCAL YEARS 2017-18 THROUGH 2021-22

Fiscal year 2021-22 Capital Expenditures consist of funding for Repair & Replacement and Long-term Capital Improvement based on the FY 2022-26 CIP. The CIP is developed by staff in parallel to the budget and is a key component of the District's Strategic Plan. Annually, Staff will identify projects to be included in the CIP. Each project is defined in the CIP and summarized by a brief description and justification. Each project is detailed by location, timing, expenditure schedule, funding source, useful life and impact on operating costs. Before the CIP is completed, it is reviewed to ensure the financial elements are consistent with the District's financial policies. The District's current approach to capital funding is pay-as-you-go. The expenditures for the capital projects, identified by staff to be included in the CIP, are included in the budget. The table on the next page lists the capital projects included in the FY 2022-26 CIP and budgeted for in the current year proposed budget.



**Elk Grove Water District
Budgeted Capital Expenses Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
3560	Repair & Replacement Reserve	\$ 463,368	\$ 492,048	\$ 778,658	\$ 905,000	\$ 282,706	\$ 2,030,000
3565	L-T Capital Improvement Reserve	889,531	424,242	359,981	2,780,750	2,388,672	3,025,000
		<u>\$ 1,352,899</u>	<u>\$ 916,290</u>	<u>\$ 1,138,640</u>	<u>\$ 3,685,750</u>	<u>\$ 2,671,378</u>	<u>\$ 5,055,000</u>

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

FY 2021-22 CAPITAL PROJECTS LISTING

AMOUNT IN 000's

Priority PROJECT NAME	FY21/22
SUPPLY / DISTRIBUTION IMPROVEMENTS	
1 Well Rehabilitation Program	75
2 Truman St./Adams St. Water Main	244
2 Backyard Water Mains/Services Replacement	1,500
2 Service Line Replacements (Pavement Repairs)	100
3 2nd Ave. Water Main	86
4 Transmission Main Brinkman Ct. (Cost Share)	42
TREATMENT IMPROVEMENTS	
1 PLC/MCC Bucket Replacement (Wells 4D & 11D)	50
1 Well 4D Radio Communications	35
2 Chlorine Analyzers Shallow Wells	70
BUILDING & SITE IMPROVEMENTS / VEHICLES	
1 Administration Building	2,300
1 Fiber Optic Cable	300
2 Compact Track Loader with Cold Planer	105
3 Pavement Repair & Seal Coat - RRWTP	25
Digital Data Collector & GPS Rover	23
UNFORESEEN CAPITAL PROJECTS	
Unforeseen Capital Projects	100
TOTAL CAPITAL IMPROVEMENT BUDGET	5,055

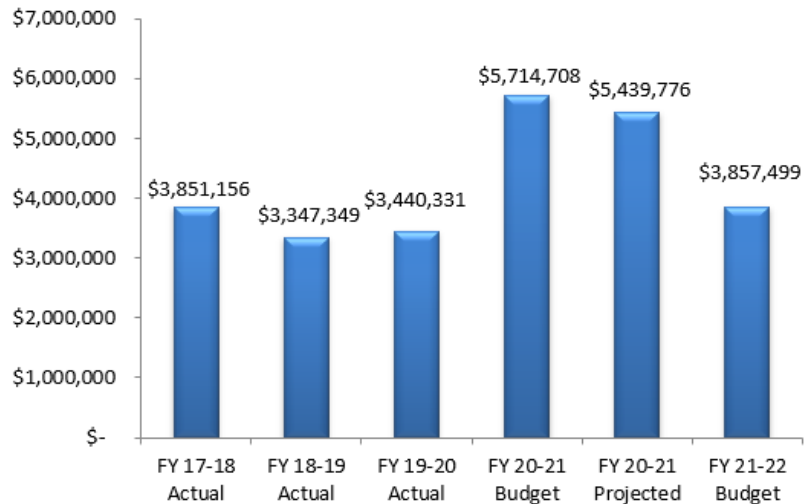


**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

NON-OPERATING EXPENSES (REVENUES) FISCAL YEARS 2017-18 THROUGH 2021-22

Non-Operating Expenditures/ (Revenues) account for debt service interest and principal payments, elections costs and any interest earned on investments. The major decrease in budgeted non-operating expenditures/ (revenues) for FY 2021-22 as compared to projected for FY 2020-21 is due to the pay down of the District's unfunded accrued liability with CalPERS in FY 2020-21.

NON-OPERATING EXPENSES/(INCOME)



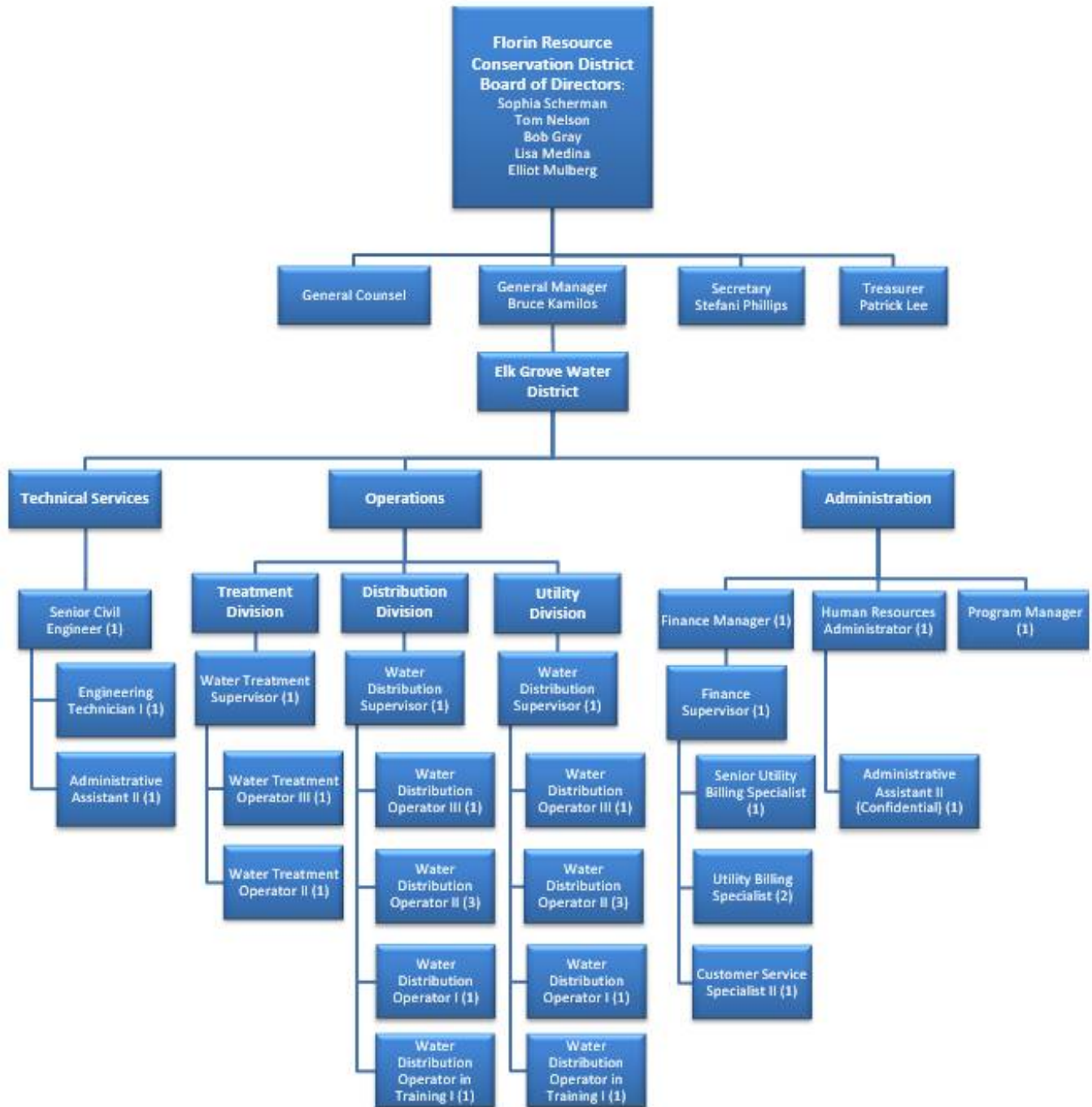
The District expects all future non-operating (income)/expenses to be consistent.

**Elk Grove Water District
Budgeted Non Operating Activity Detail
For the Fiscal Year ending June 30, 2022**

Account#	Description	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Actual	FY 20-21 Budget	FY 20-21 Projected	FY 2021-22 Requested Budget
7300	Debt Service (Bond Interest Expense)	\$1,807,502	\$1,726,795	\$1,627,405	\$1,555,469	\$1,555,469	\$ 1,442,499
9920	Other Expenses (Income)	91,661	(39,929)	(40,580)	1,709,239	1,617,818	-
2500	Bond Retirement	1,990,000	2,070,000	2,165,000	2,300,000	2,300,000	2,440,000
9910	Interest Earned	(105,884)	(213,052)	(221,048)	(100,000)	(74,783)	(25,000)
9911	Unrealized Gains and Losses	67,877	(198,473)	(90,446)	-	39,385	-
9950	Election Costs	-	2,008	-	250,000	1,887	-
		<u>\$3,851,156</u>	<u>\$3,347,349</u>	<u>\$3,440,331</u>	<u>\$5,714,708</u>	<u>\$5,439,776</u>	<u>\$ 3,857,499</u>

ORGANIZATIONAL AND BUDGET SUMMARIES BY DEPARTMENT

ELK GROVE WATER DISTRICT ORGANIZATION CHART



Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT STAFF FTE

	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Administration & Finance					
General Manager	1.00	1.00	1.00	1.00	1.00
Finance Manager	1.00	1.00	1.00	1.00	1.00
Program Manager	1.00	1.00	1.00	1.00	1.00
Human Resources Administrator	1.00	1.00	1.00	1.00	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
Finance Supervisor	1.00	1.00	1.00	1.00	1.00
Senior Utility Billing Specialist	1.00	1.00	1.00	1.00	1.00
Utility Billing Specialist	1.00	2.00	2.00	2.00	2.00
Customer Service Specialist I	1.00	-	-	-	-
Customer Service Specialist II	1.00	-	1.00	1.00	1.00
Department Total	10.00	9.00	10.00	10.00	10.00
Technical Services					
Assistant General Manager	1.00	1.00	1.00	1.00	-
Senior Civil Engineer	-	-	-	-	1.00
Engineering Technician I	-	-	-	-	1.00
Administrative Assistant II	1.00	1.00	1.00	1.00	1.00
GIS Technician II	1.00	1.00	1.00	1.00	-
Department Total	3.00	3.00	3.00	3.00	3.00
Operations					
Foremen	-	-	-	-	-
Supervisors	3.00	3.00	3.00	3.00	3.00
Water Distribution Operator in Training	-	-	1.00	3.00	2.00
Water Distribution Operator I	6.00	6.00	4.00	1.00	2.00
Water Distribution Operator II	4.00	3.00	6.00	6.00	6.00
Water Distribution Operator III	3.00	3.00	1.00	2.00	2.00
Water Treatment Operator II	1.00	1.00	1.00	1.00	1.00
Water Treatment Operator III	1.00	1.00	1.00	1.00	1.00
Departmental Total	18.00	17.00	17.00	17.00	17.00
Organizational Total	31.00	29.00	30.00	30.00	30.00

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

JURISDICTIONAL COMPARISON

District	Elk Grove Water District (EGWD)	Carmichael Water District	San Juan Water District
Year Established	1953	1916	1854
Governed By	Board of Directors	Board of Directors	Board of Directors
Size	13 sq miles	8 sq miles	17 sq miles
Number of Connections	12,800	11,693	10,700
Number of Customers	46,000	38,000	29,830
Budget Comparison - Fiscal Year Basis	July-June	July-June	July-June
Revenues - FY 2020-21 Budget			
Retail Water Sales	\$ 15,184,142	\$ 12,723,622	\$ 12,806,500
Other Revenues	240,000	277,388	624,700
TOTAL REVENUE BUDGET	\$ 15,424,142	\$ 13,001,010	\$ 13,431,200
Expenditures - FY 2020-21 Budget			
Personnel Costs	\$ 3,996,057	\$ 4,219,372	\$ 5,403,300
Operating Costs	6,338,217	4,706,903	3,034,700
Non-Operating Costs	5,714,708	3,389,828	4,188,700
EXPENDITURE BUDGET	\$ 16,048,982	\$ 12,316,103	\$ 12,626,700
CAPITAL BUDGET	\$ 3,685,750	\$ 2,817,006	\$ 5,467,300
TOTAL EXPENDITURE BUDGET	\$ 19,734,732	\$ 15,133,109	\$ 18,094,000
REVENUES IN EXCESS OF EXPENDITURES	\$ (4,310,590)	\$ (2,132,099)	\$ (4,662,800)
OUTSTANDING DEBT	\$ 39,910,000	\$ 32,285,000	\$ 11,865,407
FTE	30	29	47

Note: The information above is based on FY 2020-21 approved budgets for each District. Both the Carmichael and San Juan Water Districts generate revenue from sources other than retail water sales. For comparison purposes, revenues reflected above include only the portion applicable to retail water sales and expenditures reflect total expenditure for all operations, not just retail water sales.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

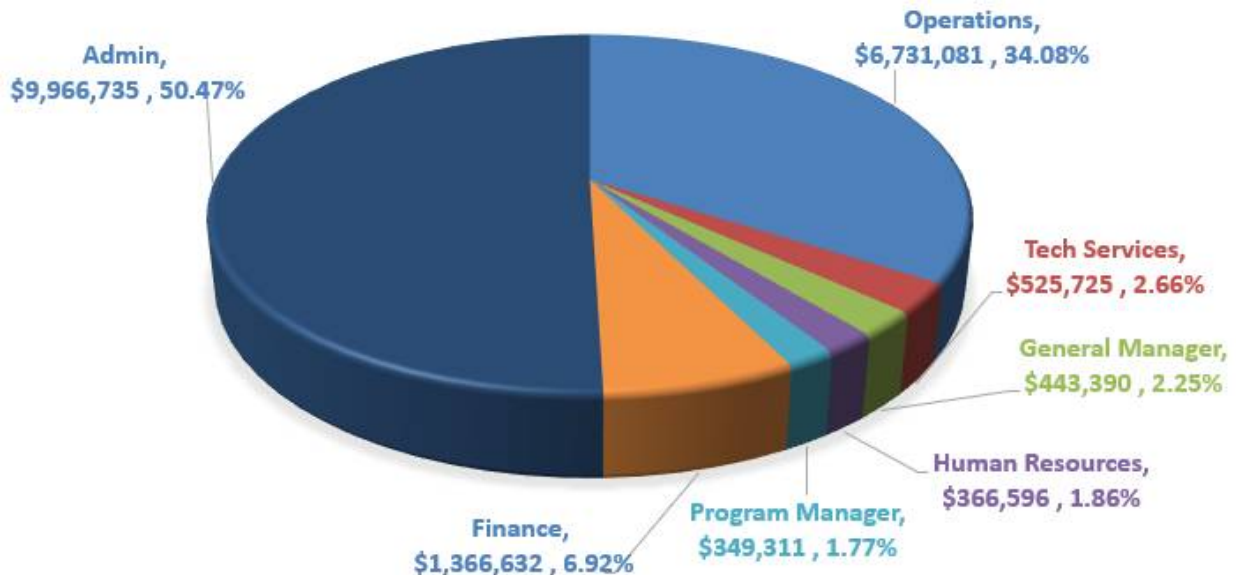
EXPENDITURES BY DEPARTMENTS

**Elk Grove Water District
Summary by Departments
For the Fiscal Year ending June 30, 2022**

Expenditure	Operations	Technical Services	General Manager	Human Resources	Program Manager	Finance	Admin	Total Budget
Revenues								\$15,716,094
Salaries and Benefits	\$2,328,151	\$405,781	\$243,510	\$319,911	\$188,776	\$ 968,147	\$ 165,339	\$ 4,619,614
Seminars, Conventions and Travel	7,760	2,810	18,180	4,900	2,915	12,294	-	48,859
Office and Operational	736,042	54,134	500	3,535	66,120	130,483	354,457	1,345,271
Purchased Water	3,511,320	-	-	-	-	-	-	3,511,320
Outside Services	100,000	63,000	181,200	38,250	91,500	255,708	420,700	1,150,358
Equipment Rent, Taxes and Utilities	448,000	-	-	-	-	-	113,740	561,740
Subtotal Operational Expenditures	7,131,273	525,725	443,390	366,596	349,311	1,366,632	1,054,236	11,237,163
Less: Capitalized Labor	(400,192) *	-	-	-	-	-	-	(400,192)
Total Operational Expenses	6,731,081	525,725	443,390	366,596	349,311	1,366,632	1,054,236	10,836,970
Non-Operating Expenditures (Income)	-	-	-	-	-	-	3,857,499	3,857,499
Capital Equipment and Expenditures	-	-	-	-	-	-	5,055,000	5,055,000
Total Net Expenditures	\$6,731,081	\$525,725	\$443,390	\$366,596	\$349,311	\$1,366,632	\$ 9,966,735	\$19,749,469
Transfers (to)/from reserves								4,033,375
Revenues In Excess of Expenditures, Principal Retirement and Capital Expenditures								\$ -

* This represents approximately 60% of salaries and benefits of the Utility Division which will be charged to Capital Projects.

SUMMARY BY DEPARTMENTS

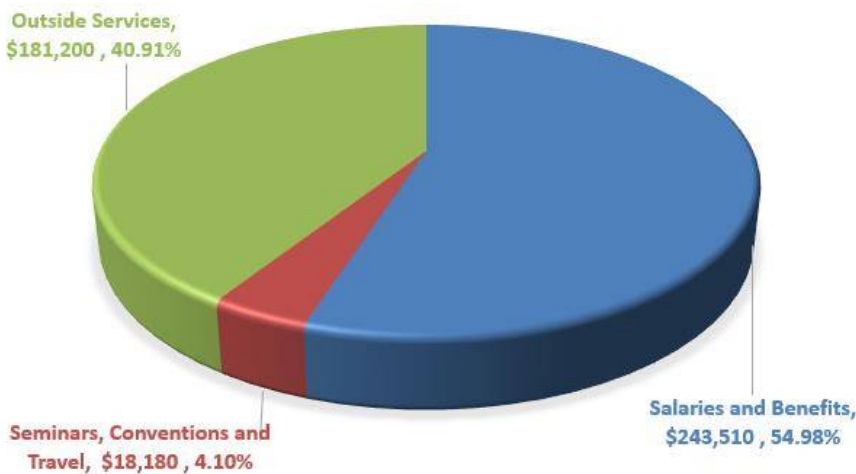


OFFICE OF THE GENERAL MANAGER

The General Manager superintends the District, ensuring that the policies and directives of the Board of Directors are carried out as assigned. The General Manager leads the entire staff with a subset of managers informally called the Leadership Team.



FY 2021-22 GENERAL MANAGER EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

GENERAL OBJECTIVES

- Provide leadership to ensure that the District overall mission and values are accomplished.
- Provide the Board of Directors timely support and information.
- Ensure that all water facilities and programs are operated in compliance with all applicable standards.
- Promote continued innovation and creativity in providing services in a more effective and cost-efficient manner.
- Maintain effective long-term financial and operational plans.
- Implement sound fiscal policies, budgets, and controls.
- Maintain effective coordination, cooperation, and communication with local governments, State and Federal agencies and continue involvement in civic, professional and community affairs.
- Motivate employees and encourage teamwork throughout the organization.
- Complete all approved CIP projects identified in the District's FY 2021-22 CIP.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

Specific Key Objectives

- Implement a new records management and document storage system.
- Complete the tenant improvements of the new administration building.
- Complete the offering and potential disposition of all surplus remnant properties.
- Construct a comprehensive history of the Florin Resource Conservation District.
- Complete a cybersecurity checkup and review.
- Complete an update of the District's source capacity.

FY 2020-21 ACCOMPLISHMENTS

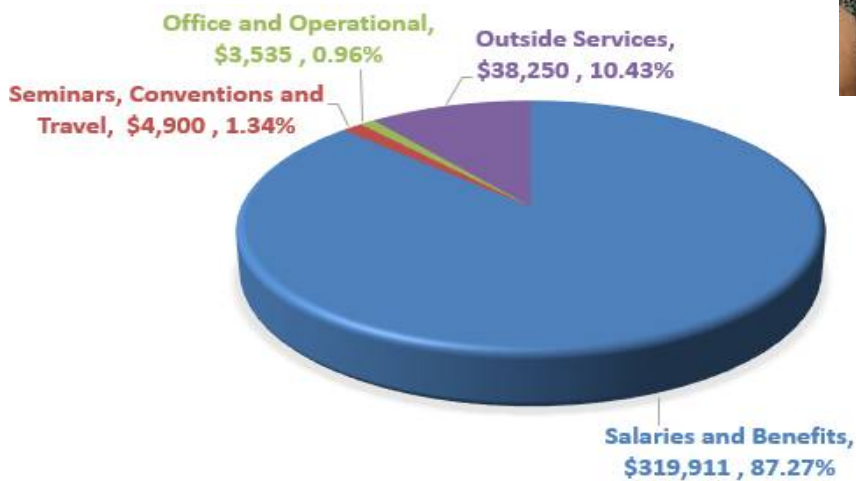
- Successfully navigated the operations of the District throughout the COVID-19 pandemic.
- Completed a new Urban Water Shortage Contingency Plan for the District.
- Completed a new Water System Risk and Resiliency Assessment for the District.
- Completed an update of the District's Emergency Response Plan.
- Acquired a new Administration Building for the District.
- Completed a new Municipal Services Review which was adopted by the Sacramento Local Agency Formation Commission.
- Developed and implemented a comprehensive Public Outreach Plan for the District that incorporates electronic communications and social media.
- Implemented a seamless transition for the General Manager position.
- Advanced Senate Bill 427 (Water Theft Legislation) working with Senator Susan Talamantes Eggman.

HUMAN RESOURCES DEPARTMENT

The Human Resource Department is responsible for handling confidential personnel matters, including recruitment, hiring, training and development, policy development and compliance and employee benefits. The Human Resources Department makes certain that employee matters are handled fairly, equitably and without discrimination according to District policies and State and Federal regulations.



FY 2021-22 HUMAN RESOURCE EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

- Develop standard operating procedures (SOP) for Board Secretary and Human Resources duties.
- Complete the review of staffing requirements and implement the recruitment of qualified candidates for vacant positions.
- Complete the review and update of all District job descriptions.
- Develop and maintain a comprehensive Wellness Program by obtaining grant funding and utilizing results of the pilot program.
- Customer relations training for all District employees.

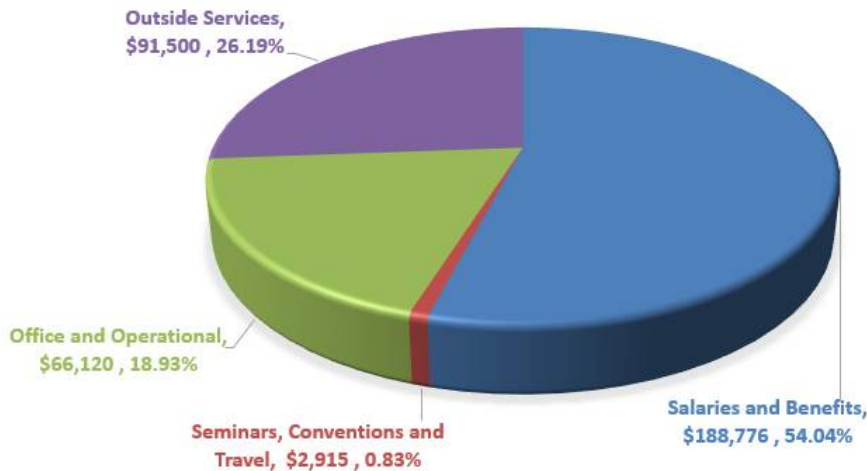
FY 2020-21 ACCOMPLISHMENTS

- Completed a Document management and electronic filing and storage needs assessment.
- Completed an update of the Board Member Guidebook.
- Updated various provisions within the District's Employee Policy Manual.
- Completed the review of staffing requirements, reviewed, and updated related job descriptions and the recruitments to backfill three positions.
- Obtained Grant Funding for comprehensive wellness program.
- Implemented Zoom to hold virtual Board meetings, Leadership meetings, and staff meetings during the COVID-19 pandemic.
- Secured a COVID-19 testing site for the employees and their families.

PROGRAM MANAGER DEPARTMENT

The Program Manager manages special programs and projects as assigned by the General Manager, including water conservation, safety, legislative tracking and lobbying, grant acquisition, and public information and outreach.

FY 2021-22 PROGRAM MANAGER EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

- Work with legislative representative to advance the District’s proposed water theft legislation, as well as legislation to allow Conservation Districts to compensate board members.
- Track and monitor legislation that may impact District operations in coordination with CSDA, RWA and ACWA.
- Work with the Regional Water

Efficiency Program Advisory Committee to develop and implement water efficiency programs that will benefit the District.

- Complete the 2020 Emergency Response Plan.
- Obtain Cal OSHA 30 Certification.

FY 2020-21 ACCOMPLISHMENTS

- Completed the 2020 Urban Water Management Plan.
- Completed the 2020 Risk and Resilience Assessment.
- Worked with legislative representative to draft and introduced Senate Bill 427 “Eggman” Water Theft Legislation to broaden the authority of Water Districts to impose fines and penalties for water theft.
- Developed the Coronavirus (COVID-19) Home to Office Playbook to safely guide staff in return to working in person.
- Enhanced public outreach by creating and maintain a District Facebook page.



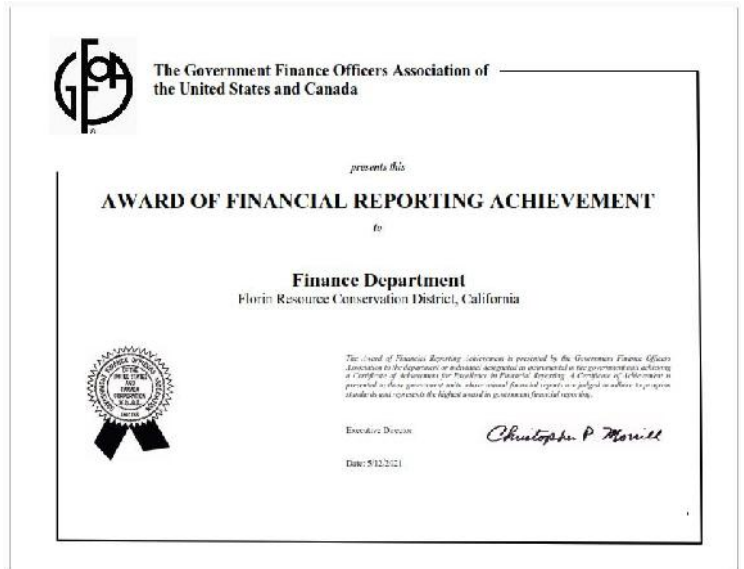
2020 Urban Water Management Plan



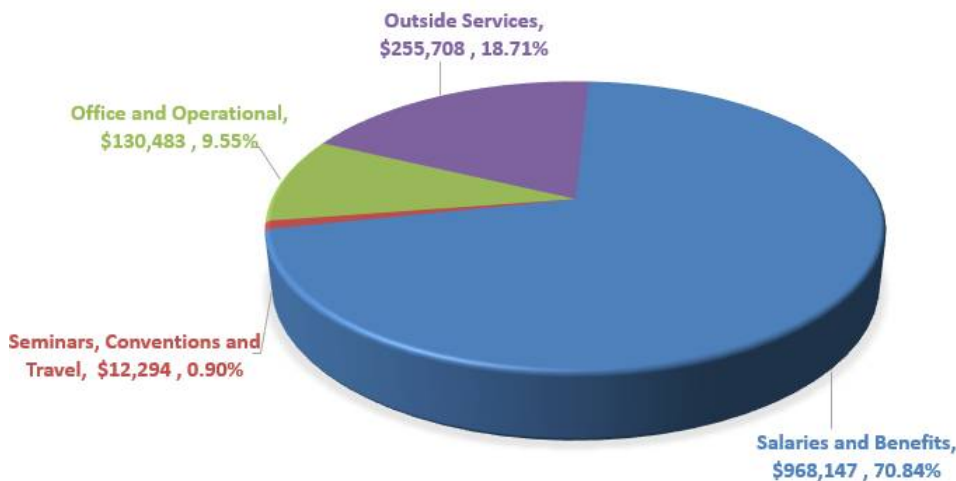
FINANCE AND ADMINISTRATIVE DEPARTMENTS

The Finance Department is responsible for maintaining the fiscal stability in a manner consistent with generally accepted accounting principles and statutory requirements. Included in the Financial Department’s duties are: customer service, accounts payable, billing and accounts receivable, general ledger maintenance, capital assets records, investment activity, accounting, budget development and monitoring, development of cash flow models, debt service, revenue and expenditure forecasting, payroll, financial reporting and coordination

with external financial audits. Finance also oversees the general and administrative functions of the District and its administrative building, including purchasing/procurement management, risk management, equipment rent, supplies and building maintenance.



FY 2021-22 FINANCE EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

- Review and update the District’s Reserve Policy to ensure the adequacy of District’s operating reserve requirements to meet operating needs resulting from unforeseen disruptions.
- Implement electronic payroll timesheets that integrate with payroll system.
- Establish a program to encourage and increase the number of ratepayers subscribed for paperless billing.
- Develop and implement a process to validate customer authenticity during voice calls to increase security over customer information.
- Complete the outsource of lock box payment services to achieve cost savings in payment processing.

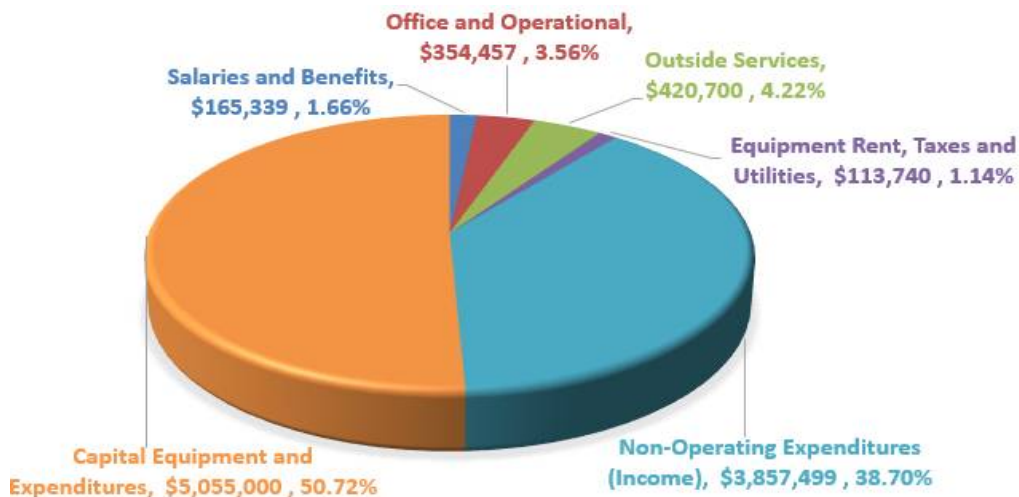
Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

- Implement electronic timecards and time off requests that integrates with the District's payroll system.

FY 2020-21 ACCOMPLISHMENTS

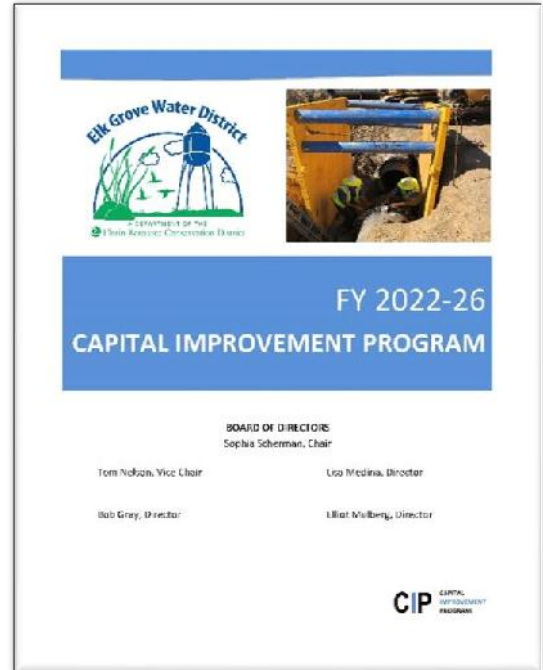
- Completed an analysis of the District's unfunded pension liability and the District's future reserves and funded an additional discretionary payment to CalPERS to pay down the District's unfunded liability and increase the District's funded ratio.
- Developed and implemented a policy to address unclaimed property in the District's possession.
- Implemented electronic check signatures for accounts payable vendor checks and payroll checks and update internal controls accordingly.
- Developed and implemented a system of paperless forms and a customer service portal to increase customer service efficiency and reduce carbon footprint.
- Converted all Customer Service transactional documents from paper to digital.
- Developed and implemented remote working protocols that sustained all customer service and finance operations in response to the COVID-19 pandemic.
- Engaged with the County of Sacramento to develop a partnership to provide District utility customers access to rent and utility assistance payments through the Emergency Rental Assistance program.
- Continued to manage the District's debt service, maintaining strict compliance with bond covenant.
- Achieved the GFOA Certificate of Excellence in Financial Reporting for the 12th consecutive year.
- Achieved the GFOA Distinguished Budget Presentation Award for the second consecutive year.

FY 2021-22 ADMINISTRATIVE EXPENDITURES

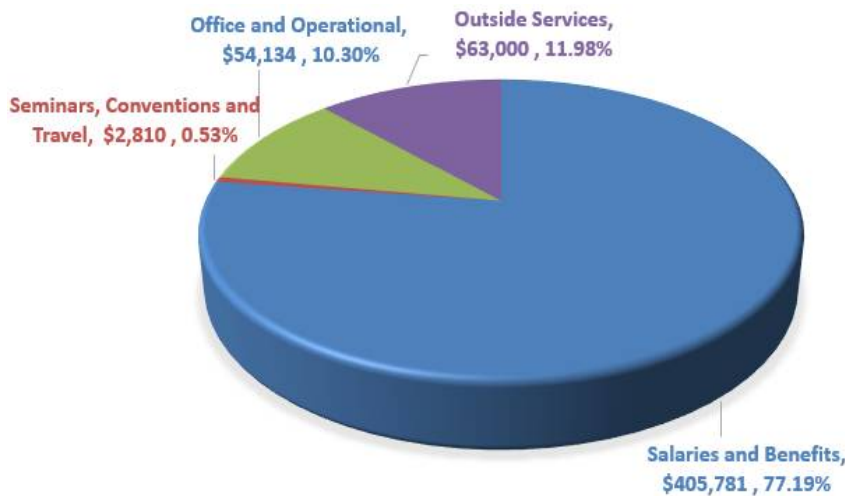


TECHNICAL SERVICES DEPARTMENT

The Technical Services Department provides planning, engineering, construction management, Operations technical support, and district-wide geographic information system (GIS) services. Technical Services Department is also responsible for developing and administering the District’s capital improvement program.



FY 2021-22 TECHNICAL SERVICES EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

- Coordinate and complete all required CIP projects identified in the FY 2021-22 CIP budget.
- Complete the design of water main replacement improvement plans for next year’s planned water main replacement capital improvement projects.
- Complete the unidirectional flushing of the Service Area 1 water distribution system.
- Review and update the District’s Standard Construction Specifications and Detail Drawings.
- Review and update the District’s Asset Management Plan.
- Provide assistance as required related to the Administration Building Tenant Improvements Project.

FY 2020-21 ACCOMPLISHMENTS

- Completed 6 of the 9 CIP projects identified in the FY 2020-21 CIP budget.
- Developed the FY 2022-2026 CIP for the next fiscal year.
- Provided technical support as needed to the Treatment and Distribution Divisions.
- Reviewed and updated the District’s Asset Management Program.
- Filled the Engineering/GIS Technician position that had been vacant.

INFORMATION TECHNOLOGY

The District does not have a formal Information Technology (IT) department or staff but considers the operations of IT to be an essential function. The District contracts its Information Technology (IT) services to an IT Professional that reports to the General Manager, who is responsible for information services, including development and support of computers and software, information network, program development, office telecommunications, office security, and office systems. All hardware and software IT costs are budgeted for and directly charged to each department based on actual costs for equipment and software. Contract costs are budgeted for and paid out of the Administrative Budget, as such, there are no expenditures to report for Information Technology.



FY 2021-22 GOALS AND OBJECTIVES

- Continue to improve the District's cyber-security posture by doing monthly vulnerability scanning and handling all vulnerabilities found.
- Assist in a new cyber security audit for the District.
- Set up automated disaster recovery response and test response systems to test the effectiveness of the server and system backups.
 - Successfully passing the annual Payment Card Industry (PCI) audit.
- Complete all users on a new cyber security awareness training program and keep the click rate to below 1%.
- Migrate Backflow Tester software to new XC2 Software.
- Assist with the implementation of a new document Management Solution.
- Get Two Factor authentication deployed across all devices both cloud and on-premises to secure accounts.
- Implement any findings and recommendations from the Emergency Response Plan Cyber Security Review.
- Upgrade the following systems:
 - SCADA – to be brought to the most current version of Wonderware.
 - ARCGIS To be brought to the most current version of the software.
- Assist in the implementation of a new CMS if that is what is decided upon.
- Get the networking and IT Infrastructure created for the new Admin building. Includes setting up and implementing a new phone system.
- Assist with the new Fiber Optic line between the new Admin building and the IT Center.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

FY 2020-21 ACCOMPLISHMENTS

- Implemented a Work from Home strategy, including setting up all users with Virtual Private Networking (VPN) Software, reconfiguring network devices to allow remote connections, implementing redirected network printing, redirecting phone calls, and configuring desktop workstation with cameras to allow for virtual meetings.
- Reconfigured networking so that the meter reading devices could be used at the Training Center while still being accessed at the Customer Service Desktops who were working remotely.
- Installed 18,531 security patches to servers and systems – an increase of around 87.67% over the previous year.
- Maintained and patched all user software as needed to keep systems operating at peak efficiency. Server system uptime (24x7x365) improved by 0.01% compared to the same time period last year.
- Managed software licenses for all desktop, laptop, and server systems.
- Managed SSL Certificates, for web servers and remote desktop connections. A total of 66 certificates were issued.
- Completed and closed out 7278 help desk tickets - an increase of 10%.
- Completed a security scan of all the District’s network assets for twelve consecutive months and fixed any major flaws found. Vulnerabilities found, patched, or fixed reduced by 61.89%
- Ran a phishing test campaign (weekly) through the KnowBe4 system. User Awareness increased as shown in the number of users reporting phishing scams which increased by 530.3%.
- Continued to hold the District’s phish-proneness to 0.0% compared to the same Industry value (Energy & Utilities less than 250 staff) of 15.5% while the industry benchmark worsened for this same sector by 24%.
- Rolled out a Two Factor Authentication campaign and immediately secured all District Managed Microsoft Cloud accounts for administrators as well as all local server logins for administrators with 2FA.
- Reworked the offsite disaster recovery assets networking to bring these in line with the infrastructure changes done.
- Set up automated disaster recovery response and test response systems to test the effectiveness of the server and system backups.
- Upgraded all server systems, where their operating systems had reached “end of life”, to their newest versions.
- All servers and services were fully integrated into the monitoring solution.
- Upgraded the hardware firewall with new hardware and the latest version of the software.
- Added a second hardware firewall for redundancy.

OPERATIONS DEPARTMENT

The Operations Department, overseen by the General Manager, consists of the Treatment, Distribution, and Utility Divisions. The purpose of the Operations Department is to operate and maintain all facilities in a manner that safeguards public and employee health, complies with all regulatory requirements, and ensures outstanding customer service. The Operations Department is also responsible for the delivery of water to District customers as well as operating and maintaining the District's pipelines and facilities. This department includes the functions of water quality, system maintenance, planning, operations, inspection, and safety.

TREATMENT DIVISION

The Treatment Division oversees the operation and maintenance of District's water supply and treatment facilities to ensure safe and reliable water supplies to ratepayers. Responsibilities of the Treatment Division include: maintaining strict compliance with all State and Federal regulatory agencies with the intent of safeguarding public health and the environment; maintenance and management of all water quality sampling and reporting to Local, State and Federal agencies; maintaining water production and equipment maintenance records and reports; and management of the Backflow/Cross-Connection Control Program.



DISTRIBUTION DIVISION

The Distribution Division oversees the operation and maintenance of the District's water distribution facilities to ensure the reliable and safe distribution of water to ratepayers. Responsibilities of the Distribution Division include: maintenance of 1,610 fire hydrants to ensure reliable fire flows during emergencies and maintenance and exercise of 1,843 valves to ensure that every valve is checked and exercised every three years. The Distribution Division also conducts the necessary monthly meter readings



**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

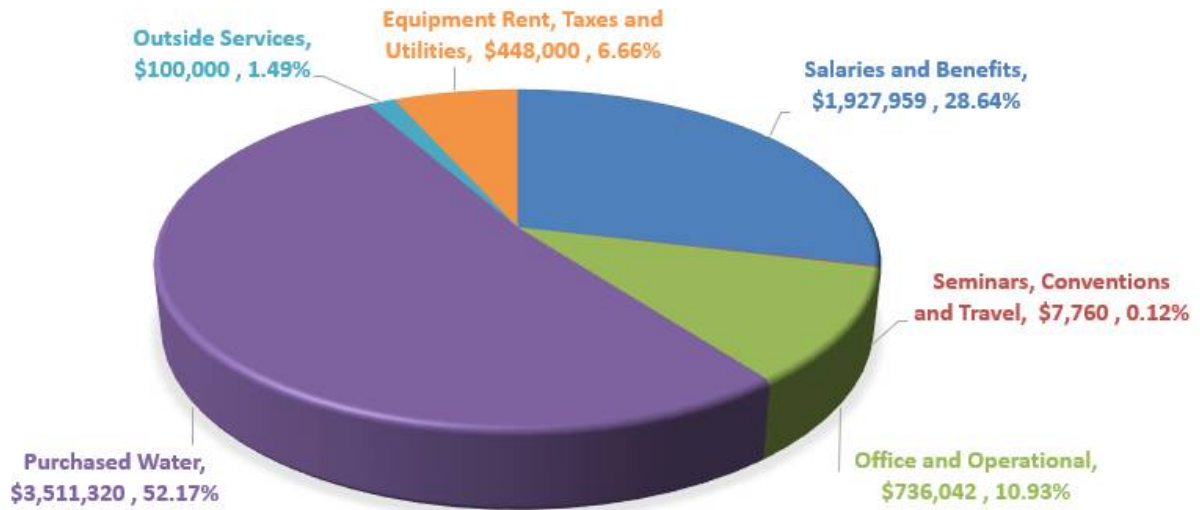
and responds to and handles all customer service requests and corrective maintenance in accordance with State and Federal regulations regarding repairs that impact potable water.

UTILITY DIVISION

The Utility Division oversees the operation and maintenance of capital improvement projects for the District's water system. Responsibilities of the Utility Division include: the necessary repairs and upgrades to the water systems aging infrastructure; staffing and coordination to complete capital improvement projects; the installation of new pipeline due to expanding development; and all construction related activities required by the District that is not contracted to outside contractors.



FY 2021-22 OPERATIONS DEPARTMENT EXPENDITURES



FY 2021-22 GOALS AND OBJECTIVES

- Improve the radio communication between Well 4D and the Railroad Water Treatment Plant.
- Complete the Unidirectional Flushing program.
- Install 3,000 feet of water mains.
- Upgrade the Programmable Logic Controller cabinets at Wells 4D and 11D.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

- Obtain Backhoe/Excavator Operator Training for field employees whose job duties require the operation of such equipment.
- Obtain comprehensive OSHA 10 training for all field employees to increase staff safety awareness related to the construction industry.
- Develop and implement an updated Lockout-Tagout program.
- Provide technical and operational resources to assist field employees in obtaining the necessary certifications and licenses (i.e., Class A commercial driver's licenses, Water Distribution Operator and Water Treatment Operator).
- Review training records and conduct the necessary training to ensure field employees are up to date on the necessary trainings (i.e., Back Flow Prevention Device Tester and Cross Connection Control Specialist).

FY 2020-21 ACCOMPLISHMENTS

- Operated and maintained critical functions of the District's water supply, treatment, and distribution system in a safe and reliable manner with a significantly limited workforce due to the COVID-19 pandemic.
- Completed routine maintenance on all production and treatment equipment.
- Repaired a ruptured 36-inch diameter transmission main without disruption of service to customers.
- Installed 1,240 feet of new water mains on Barth and Emily Streets.
- Completed over 800 water quality samples, on raw and treated water throughout the system, as required by State and Federal regulation.
- Maintained all Cross-Connection Control Program requirements, including the review and approval of 796 backflow assembly test reports.
- Completed the rehabilitation of Well 11D.
- Installed a new variable frequency drive on the Railroad Water Treatment Plant Booster Pump #6.
- Installed a new chlorine storage shed and flow meter at Well 9.
- Relocated all inventory in the Administration Building Warehouse to prepare for the property sale.
- Serviced and maintained 1,374 fire hydrants and 1,202 valves.
- Replaced 183 water meters.
- Handled 2,908 Underground Service Alert requests.
- Read approximately 12,600 meters a month.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**



**LONG-TERM INDEBTEDNESS
REVENUE BONDS
BOND COVENANT RATIO**

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

**Elk Grove Water District
Long-Term Indebtedness to Maturity**

Payment Date	Total Principal	Total Interest	Fiscal Year Total
9/1/2021	2,440,000.00	750,349.38	
3/1/2022	-	692,149.38	3,882,498.76
9/1/2022	2,560,000.00	692,149.38	
3/1/2023	-	631,054.38	3,883,203.76
9/1/2023	2,675,000.00	631,054.38	
3/1/2024	-	580,939.38	3,886,993.76
9/1/2024	2,780,000.00	580,939.38	
3/1/2025	-	527,089.38	3,888,028.76
9/1/2025	2,935,000.00	527,089.38	
3/1/2026	-	479,413.13	3,941,502.51
9/1/2026	3,075,000.00	479,413.13	
3/1/2027	-	426,633.75	3,981,046.88
9/1/2027	3,180,000.00	426,633.75	
3/1/2028	-	370,576.25	3,977,210.00
9/1/2028	3,295,000.00	370,576.25	
3/1/2029	-	310,960.00	3,976,536.25
9/1/2029	3,430,000.00	310,960.00	
3/1/2030	-	234,170.00	3,975,130.00
9/1/2030	3,595,000.00	234,170.00	
3/1/2031	-	158,190.00	3,987,360.00
9/1/2031	3,745,000.00	158,190.00	
3/1/2032	-	80,735.00	3,983,925.00
9/1/2032	3,900,000.00	80,735.00	
3/1/2033	-	-	3,980,735.00
Totals	37,610,000.00	9,734,170.68	47,344,170.68

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

**Elk Grove Water District
Fiscal Year 2021-22
Long-Term Indebtedness
Schedule of Required Payments**

<u>Series</u>	<u>Description</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Payment</u>
2014 A	Water Revenue Refunding Bonds	2,040,000	986,019	3,026,019
2016 A	Water Revenue Refunding Bonds	400,000	456,480	856,480
TOTAL DEBT SERVICE PAYMENTS		<u>\$ 2,440,000</u>	<u>\$ 1,442,499</u>	<u>\$ 3,882,499</u>

	<u>Required</u>	<u>Proposed</u>
Debt Covenant Ratio	1.15	1.26
Net Income	\$ 4,879,123	
Total Debt Service	\$ 3,882,499	

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FISCAL YEAR 2021-22 RATES AND FEES SCHEDULE

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

Use Charges:

Fixed charge based on the number of accounts and the size of the water meter/connections:

Connection Size	Jan. 1, 2021	Jan. 1, 2022
1"	\$ 61.15	\$ 61.15
1.5"	\$ 86.07	\$ 86.07
2"	\$ 115.97	\$ 115.97
3"	\$ 185.76	\$ 185.76
4"	\$ 285.43	\$ 285.43
6"	\$ 534.64	\$ 534.64
8"	\$ 833.69	\$ 833.69
10"	\$ 1,182.57	\$ 1,182.57

Commodity charge for units of water used in a month:

Service Type	Jan. 1, 2021	Jan. 1, 2022
Residential Metered		
Tier 1 (0-30 CCF)	\$ 1.92	\$ 1.92
Tier 2 (30.01+ CCF)	\$ 4.04	\$ 4.04
CCF = Hundred Cubic Feet		
Non-residential	\$ 1.79	\$ 1.79
Irrigation	\$ 2.27	\$ 2.27

Other Fees:

Private Fire Protection Service Rates:

Connection Size	Jan. 1, 2021	Jan. 1, 2022
2"	\$ 3.02	\$ 3.02
3"	\$ 8.78	\$ 8.78
4"	\$ 18.71	\$ 18.71
6"	\$ 54.34	\$ 54.34
8"	\$ 115.80	\$ 115.80
10"	\$ 208.25	\$ 208.25
12"	\$ 336.37	\$ 336.37

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

New Connections: Effective August 15, 2018

Fees for new connection to EGWD contain two components. The base charge for a 1-inch meter is \$926.00 and larger meter installations will be charged any additional time and material (T&M) cost. The second is a capacity charge, which covers the cost of “buying-in” to an existing system. New connections in EGWD’s Service Area 2 do not pay the capacity charge, as those costs are part of Sacramento County’s infrastructure.

Meter Size	Meter Charge	Capacity Fee	Total
1”	\$ 926	\$ 4,479	\$ 5,405
1.5”	T&M	\$ 8,958	\$ 8,958 + T&M
2”	T&M	\$ 14,333	\$ 14,333 + T&M
3”	T&M	\$ 26,874	\$ 26,874 + T&M
4”	T&M	\$ 44,790	\$ 44,790 + T&M
6”	T&M	\$ 89,580	\$ 89,580 + T&M

Other: Effective November 18, 2019

Account set up	\$30.00
Return check charge	\$35.00, plus amount of check
Over the phone payments	\$5.00
Meter re-read	
First request	Free
Subsequent requests	\$25.00
Photocopies	
Black and white	\$0.10/page
Color	\$0.15/page
Delinquency shutoff	
Delinquent amount	Amount of past due bill
Door Tag Fee	\$25.00
Late Payment Penalty	\$100.00
24-hour turn-on fee	\$100.00
Meter testing	\$47/hour
Back flow Tag Fee	\$25/tag
Fire flow testing	\$156.00
Violation of ordinance (within 1 year)	
First occurrence	\$100.00
Second occurrence	\$200.00
Each additional occurrence	\$500.00
Plan check fees	
Irrigation only	\$500.00
1 lot (EDU)	\$500.00
2-9 lots (EDUs)	\$2,000.00
10 lots (EDUs) or more	\$5,000.00
Construction/temporary service	
Installation & removal	\$194.00
Weekly rental	\$50.00
Deposit	\$2,000.00

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FISCAL YEAR 2021-22

SALARY SCHEDULE

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
1	\$ 19,177.60	\$ 20,134.40	\$ 21,112.00	\$ 22,193.60	\$ 23,296.00
	\$ 1,598.13	\$ 1,677.87	\$ 1,759.33	\$ 1,849.47	\$ 1,941.33
	\$ 737.60	\$ 774.40	\$ 812.00	\$ 853.60	\$ 896.00
	\$ 9.22	\$ 9.68	\$ 10.15	\$ 10.67	\$ 11.20
2	\$ 19,635.20	\$ 20,633.60	\$ 21,673.60	\$ 22,734.40	\$ 23,899.20
	\$ 1,636.27	\$ 1,719.47	\$ 1,806.13	\$ 1,894.53	\$ 1,991.60
	\$ 755.20	\$ 793.60	\$ 833.60	\$ 874.40	\$ 919.20
	\$ 9.44	\$ 9.92	\$ 10.42	\$ 10.93	\$ 11.49
3	\$ 20,134.40	\$ 21,112.00	\$ 22,193.60	\$ 23,296.00	\$ 24,481.60
	\$ 1,677.87	\$ 1,759.33	\$ 1,849.47	\$ 1,941.33	\$ 2,040.13
	\$ 774.40	\$ 812.00	\$ 853.60	\$ 896.00	\$ 941.60
	\$ 9.68	\$ 10.15	\$ 10.67	\$ 11.20	\$ 11.77
4	\$ 20,633.60	\$ 21,673.60	\$ 22,734.40	\$ 23,899.20	\$ 25,064.00
	\$ 1,719.47	\$ 1,806.13	\$ 1,894.53	\$ 1,991.60	\$ 2,088.67
	\$ 793.60	\$ 833.60	\$ 874.40	\$ 919.20	\$ 964.00
	\$ 9.92	\$ 10.42	\$ 10.93	\$ 11.49	\$ 12.05
5	\$ 21,112.00	\$ 22,193.60	\$ 23,296.00	\$ 24,481.60	\$ 25,667.20
	\$ 1,759.33	\$ 1,849.47	\$ 1,941.33	\$ 2,040.13	\$ 2,138.93
	\$ 812.00	\$ 853.60	\$ 896.00	\$ 941.60	\$ 987.20
	\$ 10.15	\$ 10.67	\$ 11.20	\$ 11.77	\$ 12.34
6	\$ 21,673.60	\$ 22,734.40	\$ 23,899.20	\$ 25,064.00	\$ 26,332.80
	\$ 1,806.13	\$ 1,894.53	\$ 1,991.60	\$ 2,088.67	\$ 2,194.40
	\$ 833.60	\$ 874.40	\$ 919.20	\$ 964.00	\$ 1,012.80
	\$ 10.42	\$ 10.93	\$ 11.49	\$ 12.05	\$ 12.66
7	\$ 22,193.60	\$ 23,296.00	\$ 24,481.60	\$ 25,667.20	\$ 26,977.60
	\$ 1,849.47	\$ 1,941.33	\$ 2,040.13	\$ 2,138.93	\$ 2,248.13
	\$ 853.60	\$ 896.00	\$ 941.60	\$ 987.20	\$ 1,037.60
	\$ 10.67	\$ 11.20	\$ 11.77	\$ 12.34	\$ 12.97
8	\$ 22,734.40	\$ 23,899.20	\$ 25,064.00	\$ 26,332.80	\$ 27,643.20
	\$ 1,894.53	\$ 1,991.60	\$ 2,088.67	\$ 2,194.40	\$ 2,303.60
	\$ 874.40	\$ 919.20	\$ 964.00	\$ 1,012.80	\$ 1,063.20
	\$ 10.93	\$ 11.49	\$ 12.05	\$ 12.66	\$ 13.29
9	\$ 23,296.00	\$ 24,481.60	\$ 25,667.20	\$ 26,977.60	\$ 28,329.60
	\$ 1,941.33	\$ 2,040.13	\$ 2,138.93	\$ 2,248.13	\$ 2,360.80
	\$ 896.00	\$ 941.60	\$ 987.20	\$ 1,037.60	\$ 1,089.60
	\$ 11.20	\$ 11.77	\$ 12.34	\$ 12.97	\$ 13.62
10	\$ 23,899.20	\$ 25,064.00	\$ 26,332.80	\$ 27,643.20	\$ 29,016.00
	\$ 1,991.60	\$ 2,088.67	\$ 2,194.40	\$ 2,303.60	\$ 2,418.00
	\$ 919.20	\$ 964.00	\$ 1,012.80	\$ 1,063.20	\$ 1,116.00
	\$ 11.49	\$ 12.05	\$ 12.66	\$ 13.29	\$ 13.95

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
11	\$ 24,481.60	\$ 25,667.20	\$ 26,977.60	\$ 28,329.60	\$ 29,723.20
	\$ 2,040.13	\$ 2,138.93	\$ 2,248.13	\$ 2,360.80	\$ 2,476.93
	\$ 941.60	\$ 987.20	\$ 1,037.60	\$ 1,089.60	\$ 1,143.20
	\$ 11.77	\$ 12.34	\$ 12.97	\$ 13.62	\$ 14.29
12	\$ 25,064.00	\$ 26,332.80	\$ 27,643.20	\$ 29,016.00	\$ 30,472.00
	\$ 2,088.67	\$ 2,194.40	\$ 2,303.60	\$ 2,418.00	\$ 2,539.33
	\$ 964.00	\$ 1,012.80	\$ 1,063.20	\$ 1,116.00	\$ 1,172.00
	\$ 12.05	\$ 12.66	\$ 13.29	\$ 13.95	\$ 14.65
13	\$ 25,667.20	\$ 26,977.60	\$ 28,329.60	\$ 29,723.20	\$ 31,200.00
	\$ 2,138.93	\$ 2,248.13	\$ 2,360.80	\$ 2,476.93	\$ 2,600.00
	\$ 987.20	\$ 1,037.60	\$ 1,089.60	\$ 1,143.20	\$ 1,200.00
	\$ 12.34	\$ 12.97	\$ 13.62	\$ 14.29	\$ 15.00
14	\$ 26,332.80	\$ 27,643.20	\$ 29,016.00	\$ 30,472.00	\$ 31,990.40
	\$ 2,194.40	\$ 2,303.60	\$ 2,418.00	\$ 2,539.33	\$ 2,665.87
	\$ 1,012.80	\$ 1,063.20	\$ 1,116.00	\$ 1,172.00	\$ 1,230.40
	\$ 12.66	\$ 13.29	\$ 13.95	\$ 14.65	\$ 15.38
15	\$ 26,977.60	\$ 28,329.60	\$ 29,723.20	\$ 31,200.00	\$ 32,780.80
	\$ 2,248.13	\$ 2,360.80	\$ 2,476.93	\$ 2,600.00	\$ 2,731.73
	\$ 1,037.60	\$ 1,089.60	\$ 1,143.20	\$ 1,200.00	\$ 1,260.80
	\$ 12.97	\$ 13.62	\$ 14.29	\$ 15.00	\$ 15.76
16	\$ 27,643.20	\$ 29,016.00	\$ 30,472.00	\$ 31,990.40	\$ 33,592.00
	\$ 2,303.60	\$ 2,418.00	\$ 2,539.33	\$ 2,665.87	\$ 2,799.33
	\$ 1,063.20	\$ 1,116.00	\$ 1,172.00	\$ 1,230.40	\$ 1,292.00
	\$ 13.29	\$ 13.95	\$ 14.65	\$ 15.38	\$ 16.15
17	\$ 28,329.60	\$ 29,723.20	\$ 31,200.00	\$ 32,780.80	\$ 34,403.20
	\$ 2,360.80	\$ 2,476.93	\$ 2,600.00	\$ 2,731.73	\$ 2,866.93
	\$ 1,089.60	\$ 1,143.20	\$ 1,200.00	\$ 1,260.80	\$ 1,323.20
	\$ 13.62	\$ 14.29	\$ 15.00	\$ 15.76	\$ 16.54
18	\$ 29,016.00	\$ 30,472.00	\$ 31,990.40	\$ 33,592.00	\$ 35,297.60
	\$ 2,418.00	\$ 2,539.33	\$ 2,665.87	\$ 2,799.33	\$ 2,941.47
	\$ 1,116.00	\$ 1,172.00	\$ 1,230.40	\$ 1,292.00	\$ 1,357.60
	\$ 13.95	\$ 14.65	\$ 15.38	\$ 16.15	\$ 16.97
19	\$ 29,723.20	\$ 31,200.00	\$ 32,780.80	\$ 34,403.20	\$ 36,129.60
	\$ 2,476.93	\$ 2,600.00	\$ 2,731.73	\$ 2,866.93	\$ 3,010.80
	\$ 1,143.20	\$ 1,200.00	\$ 1,260.80	\$ 1,323.20	\$ 1,389.60
	\$ 14.29	\$ 15.00	\$ 15.76	\$ 16.54	\$ 17.37
20	\$ 30,472.00	\$ 31,990.40	\$ 33,592.00	\$ 35,297.60	\$ 37,044.80
	\$ 2,539.33	\$ 2,665.87	\$ 2,799.33	\$ 2,941.47	\$ 3,087.07
	\$ 1,172.00	\$ 1,230.40	\$ 1,292.00	\$ 1,357.60	\$ 1,424.80
	\$ 14.65	\$ 15.38	\$ 16.15	\$ 16.97	\$ 17.81

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
21	\$ 31,200.00	\$ 32,780.80	\$ 34,403.20	\$ 36,129.60	\$ 37,960.00
	\$ 2,600.00	\$ 2,731.73	\$ 2,866.93	\$ 3,010.80	\$ 3,163.33
	\$ 1,200.00	\$ 1,260.80	\$ 1,323.20	\$ 1,389.60	\$ 1,460.00
	\$ 15.00	\$ 15.76	\$ 16.54	\$ 17.37	\$ 18.25
22	\$ 31,990.40	\$ 33,592.00	\$ 35,297.60	\$ 37,044.80	\$ 38,875.20
	\$ 2,665.87	\$ 2,799.33	\$ 2,941.47	\$ 3,087.07	\$ 3,239.60
	\$ 1,230.40	\$ 1,292.00	\$ 1,357.60	\$ 1,424.80	\$ 1,495.20
	\$ 15.38	\$ 16.15	\$ 16.97	\$ 17.81	\$ 18.69
23	\$ 32,780.80	\$ 34,403.20	\$ 36,129.60	\$ 37,960.00	\$ 39,832.00
	\$ 2,731.73	\$ 2,866.93	\$ 3,010.80	\$ 3,163.33	\$ 3,319.33
	\$ 1,260.80	\$ 1,323.20	\$ 1,389.60	\$ 1,460.00	\$ 1,532.00
	\$ 15.76	\$ 16.54	\$ 17.37	\$ 18.25	\$ 19.15
24	\$ 33,592.00	\$ 35,297.60	\$ 37,044.80	\$ 38,875.20	\$ 40,851.20
	\$ 2,799.33	\$ 2,941.47	\$ 3,087.07	\$ 3,239.60	\$ 3,404.27
	\$ 1,292.00	\$ 1,357.60	\$ 1,424.80	\$ 1,495.20	\$ 1,571.20
	\$ 16.15	\$ 16.97	\$ 17.81	\$ 18.69	\$ 19.64
25	\$ 34,403.20	\$ 36,129.60	\$ 37,960.00	\$ 39,832.00	\$ 41,849.60
	\$ 2,866.93	\$ 3,010.80	\$ 3,163.33	\$ 3,319.33	\$ 3,487.47
	\$ 1,323.20	\$ 1,389.60	\$ 1,460.00	\$ 1,532.00	\$ 1,609.60
	\$ 16.54	\$ 17.37	\$ 18.25	\$ 19.15	\$ 20.12
26	\$ 35,297.60	\$ 37,044.80	\$ 38,875.20	\$ 40,851.20	\$ 42,889.60
	\$ 2,941.47	\$ 3,087.07	\$ 3,239.60	\$ 3,404.27	\$ 3,574.13
	\$ 1,357.60	\$ 1,424.80	\$ 1,495.20	\$ 1,571.20	\$ 1,649.60
	\$ 16.97	\$ 17.81	\$ 18.69	\$ 19.64	\$ 20.62
27	\$ 36,129.60	\$ 37,960.00	\$ 39,832.00	\$ 41,849.60	\$ 43,950.40
	\$ 3,010.80	\$ 3,163.33	\$ 3,319.33	\$ 3,487.47	\$ 3,662.53
	\$ 1,389.60	\$ 1,460.00	\$ 1,532.00	\$ 1,609.60	\$ 1,690.40
	\$ 17.37	\$ 18.25	\$ 19.15	\$ 20.12	\$ 21.13
28	\$ 37,044.80	\$ 38,875.20	\$ 40,851.20	\$ 42,889.60	\$ 45,032.00
	\$ 3,087.07	\$ 3,239.60	\$ 3,404.27	\$ 3,574.13	\$ 3,752.67
	\$ 1,424.80	\$ 1,495.20	\$ 1,571.20	\$ 1,649.60	\$ 1,732.00
	\$ 17.81	\$ 18.69	\$ 19.64	\$ 20.62	\$ 21.65
29	\$ 37,960.00	\$ 39,832.00	\$ 41,849.60	\$ 43,950.40	\$ 46,134.40
	\$ 3,163.33	\$ 3,319.33	\$ 3,487.47	\$ 3,662.53	\$ 3,844.53
	\$ 1,460.00	\$ 1,532.00	\$ 1,609.60	\$ 1,690.40	\$ 1,774.40
	\$ 18.25	\$ 19.15	\$ 20.12	\$ 21.13	\$ 22.18
30	\$ 38,875.20	\$ 40,851.20	\$ 42,889.60	\$ 45,032.00	\$ 47,278.40
	\$ 3,239.60	\$ 3,404.27	\$ 3,574.13	\$ 3,752.67	\$ 3,939.87
	\$ 1,495.20	\$ 1,571.20	\$ 1,649.60	\$ 1,732.00	\$ 1,818.40
	\$ 18.69	\$ 19.64	\$ 20.62	\$ 21.65	\$ 22.73

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
31	\$ 39,832.00	\$ 41,849.60	\$ 43,950.40	\$ 46,134.40	\$ 48,422.40
	\$ 3,319.33	\$ 3,487.47	\$ 3,662.53	\$ 3,844.53	\$ 4,035.20
	\$ 1,532.00	\$ 1,609.60	\$ 1,690.40	\$ 1,774.40	\$ 1,862.40
	\$ 19.15	\$ 20.12	\$ 21.13	\$ 22.18	\$ 23.28
32	\$ 40,851.20	\$ 42,889.60	\$ 45,032.00	\$ 47,278.40	\$ 49,628.80
	\$ 3,404.27	\$ 3,574.13	\$ 3,752.67	\$ 3,939.87	\$ 4,135.73
	\$ 1,571.20	\$ 1,649.60	\$ 1,732.00	\$ 1,818.40	\$ 1,908.80
	\$ 19.64	\$ 20.62	\$ 21.65	\$ 22.73	\$ 23.86
33	\$ 41,849.60	\$ 43,950.40	\$ 46,134.40	\$ 48,422.40	\$ 50,856.00
	\$ 3,487.47	\$ 3,662.53	\$ 3,844.53	\$ 4,035.20	\$ 4,238.00
	\$ 1,609.60	\$ 1,690.40	\$ 1,774.40	\$ 1,862.40	\$ 1,956.00
	\$ 20.12	\$ 21.13	\$ 22.18	\$ 23.28	\$ 24.45
34	\$ 42,889.60	\$ 45,032.00	\$ 47,278.40	\$ 49,628.80	\$ 52,124.80
	\$ 3,574.13	\$ 3,752.67	\$ 3,939.87	\$ 4,135.73	\$ 4,343.73
	\$ 1,649.60	\$ 1,732.00	\$ 1,818.40	\$ 1,908.80	\$ 2,004.80
	\$ 20.62	\$ 21.65	\$ 22.73	\$ 23.86	\$ 25.06
35	\$ 43,950.40	\$ 46,134.40	\$ 48,422.40	\$ 50,856.00	\$ 53,393.60
	\$ 3,662.53	\$ 3,844.53	\$ 4,035.20	\$ 4,238.00	\$ 4,449.47
	\$ 1,690.40	\$ 1,774.40	\$ 1,862.40	\$ 1,956.00	\$ 2,053.60
	\$ 21.13	\$ 22.18	\$ 23.28	\$ 24.45	\$ 25.67
36	\$ 45,032.00	\$ 47,278.40	\$ 49,628.80	\$ 52,124.80	\$ 54,724.80
	\$ 3,752.67	\$ 3,939.87	\$ 4,135.73	\$ 4,343.73	\$ 4,560.40
	\$ 1,732.00	\$ 1,818.40	\$ 1,908.80	\$ 2,004.80	\$ 2,104.80
	\$ 21.65	\$ 22.73	\$ 23.86	\$ 25.06	\$ 26.31
37	\$ 46,134.40	\$ 48,422.40	\$ 50,856.00	\$ 53,393.60	\$ 56,056.00
	\$ 3,844.53	\$ 4,035.20	\$ 4,238.00	\$ 4,449.47	\$ 4,671.33
	\$ 1,774.40	\$ 1,862.40	\$ 1,956.00	\$ 2,053.60	\$ 2,156.00
	\$ 22.18	\$ 23.28	\$ 24.45	\$ 25.67	\$ 26.95
38	\$ 47,278.40	\$ 49,628.80	\$ 52,124.80	\$ 54,724.80	\$ 57,491.20
	\$ 3,939.87	\$ 4,135.73	\$ 4,343.73	\$ 4,560.40	\$ 4,790.93
	\$ 1,818.40	\$ 1,908.80	\$ 2,004.80	\$ 2,104.80	\$ 2,211.20
	\$ 22.73	\$ 23.86	\$ 25.06	\$ 26.31	\$ 27.64
39	\$ 48,422.40	\$ 50,856.00	\$ 53,393.60	\$ 56,056.00	\$ 58,864.00
	\$ 4,035.20	\$ 4,238.00	\$ 4,449.47	\$ 4,671.33	\$ 4,905.33
	\$ 1,862.40	\$ 1,956.00	\$ 2,053.60	\$ 2,156.00	\$ 2,264.00
	\$ 23.28	\$ 24.45	\$ 25.67	\$ 26.95	\$ 28.30
40	\$ 49,628.80	\$ 52,124.80	\$ 54,724.80	\$ 57,491.20	\$ 60,340.80
	\$ 4,135.73	\$ 4,343.73	\$ 4,560.40	\$ 4,790.93	\$ 5,028.40
	\$ 1,908.80	\$ 2,004.80	\$ 2,104.80	\$ 2,211.20	\$ 2,320.80
	\$ 23.86	\$ 25.06	\$ 26.31	\$ 27.64	\$ 29.01

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
41	\$ 50,856.00	\$ 53,393.60	\$ 56,056.00	\$ 58,864.00	\$ 61,796.80
	\$ 4,238.00	\$ 4,449.47	\$ 4,671.33	\$ 4,905.33	\$ 5,149.73
	\$ 1,956.00	\$ 2,053.60	\$ 2,156.00	\$ 2,264.00	\$ 2,376.80
	\$ 24.45	\$ 25.67	\$ 26.95	\$ 28.30	\$ 29.71
42	\$ 52,124.80	\$ 54,724.80	\$ 57,491.20	\$ 60,340.80	\$ 63,356.80
	\$ 4,343.73	\$ 4,560.40	\$ 4,790.93	\$ 5,028.40	\$ 5,279.73
	\$ 2,004.80	\$ 2,104.80	\$ 2,211.20	\$ 2,320.80	\$ 2,436.80
	\$ 25.06	\$ 26.31	\$ 27.64	\$ 29.01	\$ 30.46
43	\$ 53,393.60	\$ 56,056.00	\$ 58,864.00	\$ 61,796.80	\$ 64,916.80
	\$ 4,449.47	\$ 4,671.33	\$ 4,905.33	\$ 5,149.73	\$ 5,409.73
	\$ 2,053.60	\$ 2,156.00	\$ 2,264.00	\$ 2,376.80	\$ 2,496.80
	\$ 25.67	\$ 26.95	\$ 28.30	\$ 29.71	\$ 31.21
44	\$ 54,724.80	\$ 57,491.20	\$ 60,340.80	\$ 63,356.80	\$ 66,539.20
	\$ 4,560.40	\$ 4,790.93	\$ 5,028.40	\$ 5,279.73	\$ 5,544.93
	\$ 2,104.80	\$ 2,211.20	\$ 2,320.80	\$ 2,436.80	\$ 2,559.20
	\$ 26.31	\$ 27.64	\$ 29.01	\$ 30.46	\$ 31.99
45	\$ 56,056.00	\$ 58,864.00	\$ 61,796.80	\$ 64,916.80	\$ 68,140.80
	\$ 4,671.33	\$ 4,905.33	\$ 5,149.73	\$ 5,409.73	\$ 5,678.40
	\$ 2,156.00	\$ 2,264.00	\$ 2,376.80	\$ 2,496.80	\$ 2,620.80
	\$ 26.95	\$ 28.30	\$ 29.71	\$ 31.21	\$ 32.76
46	\$ 57,491.20	\$ 60,340.80	\$ 63,356.80	\$ 66,539.20	\$ 69,846.40
	\$ 4,790.93	\$ 5,028.40	\$ 5,279.73	\$ 5,544.93	\$ 5,820.53
	\$ 2,211.20	\$ 2,320.80	\$ 2,436.80	\$ 2,559.20	\$ 2,686.40
	\$ 27.64	\$ 29.01	\$ 30.46	\$ 31.99	\$ 33.58
47	\$ 58,864.00	\$ 61,796.80	\$ 64,916.80	\$ 68,140.80	\$ 71,552.00
	\$ 4,905.33	\$ 5,149.73	\$ 5,409.73	\$ 5,678.40	\$ 5,962.67
	\$ 2,264.00	\$ 2,376.80	\$ 2,496.80	\$ 2,620.80	\$ 2,752.00
	\$ 28.30	\$ 29.71	\$ 31.21	\$ 32.76	\$ 34.40
48	\$ 60,340.80	\$ 63,356.80	\$ 66,539.20	\$ 69,846.40	\$ 73,361.60
	\$ 5,028.40	\$ 5,279.73	\$ 5,544.93	\$ 5,820.53	\$ 6,113.47
	\$ 2,320.80	\$ 2,436.80	\$ 2,559.20	\$ 2,686.40	\$ 2,821.60
	\$ 29.01	\$ 30.46	\$ 31.99	\$ 33.58	\$ 35.27
49	\$ 61,796.80	\$ 64,916.80	\$ 68,140.80	\$ 71,552.00	\$ 75,129.60
	\$ 5,149.73	\$ 5,409.73	\$ 5,678.40	\$ 5,962.67	\$ 6,260.80
	\$ 2,376.80	\$ 2,496.80	\$ 2,620.80	\$ 2,752.00	\$ 2,889.60
	\$ 29.71	\$ 31.21	\$ 32.76	\$ 34.40	\$ 36.12
50	\$ 63,356.80	\$ 66,539.20	\$ 69,846.40	\$ 73,361.60	\$ 76,980.80
	\$ 5,279.73	\$ 5,544.93	\$ 5,820.53	\$ 6,113.47	\$ 6,415.07
	\$ 2,436.80	\$ 2,559.20	\$ 2,686.40	\$ 2,821.60	\$ 2,960.80
	\$ 30.46	\$ 31.99	\$ 33.58	\$ 35.27	\$ 37.01

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
51	\$ 64,916.80	\$ 68,140.80	\$ 71,552.00	\$ 75,129.60	\$ 78,894.40
	\$ 5,409.73	\$ 5,678.40	\$ 5,962.67	\$ 6,260.80	\$ 6,574.53
	\$ 2,496.80	\$ 2,620.80	\$ 2,752.00	\$ 2,889.60	\$ 3,034.40
	\$ 31.21	\$ 32.76	\$ 34.40	\$ 36.12	\$ 37.93
52	\$ 66,539.20	\$ 69,846.40	\$ 73,361.60	\$ 76,980.80	\$ 80,849.60
	\$ 5,544.93	\$ 5,820.53	\$ 6,113.47	\$ 6,415.07	\$ 6,737.47
	\$ 2,559.20	\$ 2,686.40	\$ 2,821.60	\$ 2,960.80	\$ 3,109.60
	\$ 31.99	\$ 33.58	\$ 35.27	\$ 37.01	\$ 38.87
53	\$ 68,140.80	\$ 71,552.00	\$ 75,129.60	\$ 78,894.40	\$ 82,846.40
	\$ 5,678.40	\$ 5,962.67	\$ 6,260.80	\$ 6,574.53	\$ 6,903.87
	\$ 2,620.80	\$ 2,752.00	\$ 2,889.60	\$ 3,034.40	\$ 3,186.40
	\$ 32.76	\$ 34.40	\$ 36.12	\$ 37.93	\$ 39.83
54	\$ 69,846.40	\$ 73,361.60	\$ 76,980.80	\$ 80,849.60	\$ 84,926.40
	\$ 5,820.53	\$ 6,113.47	\$ 6,415.07	\$ 6,737.47	\$ 7,077.20
	\$ 2,686.40	\$ 2,821.60	\$ 2,960.80	\$ 3,109.60	\$ 3,266.40
	\$ 33.58	\$ 35.27	\$ 37.01	\$ 38.87	\$ 40.83
55	\$ 71,552.00	\$ 75,129.60	\$ 78,894.40	\$ 82,846.40	\$ 86,985.60
	\$ 5,962.67	\$ 6,260.80	\$ 6,574.53	\$ 6,903.87	\$ 7,248.80
	\$ 2,752.00	\$ 2,889.60	\$ 3,034.40	\$ 3,186.40	\$ 3,345.60
	\$ 34.40	\$ 36.12	\$ 37.93	\$ 39.83	\$ 41.82
56	\$ 73,361.60	\$ 76,980.80	\$ 80,849.60	\$ 84,926.40	\$ 89,169.60
	\$ 6,113.47	\$ 6,415.07	\$ 6,737.47	\$ 7,077.20	\$ 7,430.80
	\$ 2,821.60	\$ 2,960.80	\$ 3,109.60	\$ 3,266.40	\$ 3,429.60
	\$ 35.27	\$ 37.01	\$ 38.87	\$ 40.83	\$ 42.87
57	\$ 75,129.60	\$ 78,894.40	\$ 82,846.40	\$ 86,985.60	\$ 91,332.80
	\$ 6,260.80	\$ 6,574.53	\$ 6,903.87	\$ 7,248.80	\$ 7,611.07
	\$ 2,889.60	\$ 3,034.40	\$ 3,186.40	\$ 3,345.60	\$ 3,512.80
	\$ 36.12	\$ 37.93	\$ 39.83	\$ 41.82	\$ 43.91
58	\$ 76,980.80	\$ 80,849.60	\$ 84,926.40	\$ 89,169.60	\$ 93,620.80
	\$ 6,415.07	\$ 6,737.47	\$ 7,077.20	\$ 7,430.80	\$ 7,801.73
	\$ 2,960.80	\$ 3,109.60	\$ 3,266.40	\$ 3,429.60	\$ 3,600.80
	\$ 37.01	\$ 38.87	\$ 40.83	\$ 42.87	\$ 45.01
59	\$ 78,894.40	\$ 82,846.40	\$ 86,985.60	\$ 91,332.80	\$ 95,908.80
	\$ 6,574.53	\$ 6,903.87	\$ 7,248.80	\$ 7,611.07	\$ 7,992.40
	\$ 3,034.40	\$ 3,186.40	\$ 3,345.60	\$ 3,512.80	\$ 3,688.80
	\$ 37.93	\$ 39.83	\$ 41.82	\$ 43.91	\$ 46.11
60	\$ 80,849.60	\$ 84,926.40	\$ 89,169.60	\$ 93,620.80	\$ 98,280.00
	\$ 6,737.47	\$ 7,077.20	\$ 7,430.80	\$ 7,801.73	\$ 8,190.00
	\$ 3,109.60	\$ 3,266.40	\$ 3,429.60	\$ 3,600.80	\$ 3,780.00
	\$ 38.87	\$ 40.83	\$ 42.87	\$ 45.01	\$ 47.25

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
61	\$ 82,846.40	\$ 86,985.60	\$ 91,332.80	\$ 95,908.80	\$ 100,692.80
	\$ 6,903.87	\$ 7,248.80	\$ 7,611.07	\$ 7,992.40	\$ 8,391.07
	\$ 3,186.40	\$ 3,345.60	\$ 3,512.80	\$ 3,688.80	\$ 3,872.80
	\$ 39.83	\$ 41.82	\$ 43.91	\$ 46.11	\$ 48.41
62	\$ 84,926.40	\$ 89,169.60	\$ 93,620.80	\$ 98,280.00	\$ 103,188.80
	\$ 7,077.20	\$ 7,430.80	\$ 7,801.73	\$ 8,190.00	\$ 8,599.07
	\$ 3,266.40	\$ 3,429.60	\$ 3,600.80	\$ 3,780.00	\$ 3,968.80
	\$ 40.83	\$ 42.87	\$ 45.01	\$ 47.25	\$ 49.61
63	\$ 86,985.60	\$ 91,332.80	\$ 95,908.80	\$ 100,692.80	\$ 105,705.60
	\$ 7,248.80	\$ 7,611.07	\$ 7,992.40	\$ 8,391.07	\$ 8,808.80
	\$ 3,345.60	\$ 3,512.80	\$ 3,688.80	\$ 3,872.80	\$ 4,065.60
	\$ 41.82	\$ 43.91	\$ 46.11	\$ 48.41	\$ 50.82
64	\$ 89,169.60	\$ 93,620.80	\$ 98,280.00	\$ 103,188.80	\$ 108,368.00
	\$ 7,430.80	\$ 7,801.73	\$ 8,190.00	\$ 8,599.07	\$ 9,030.67
	\$ 3,429.60	\$ 3,600.80	\$ 3,780.00	\$ 3,968.80	\$ 4,168.00
	\$ 42.87	\$ 45.01	\$ 47.25	\$ 49.61	\$ 52.10
65	\$ 91,332.80	\$ 95,908.80	\$ 100,692.80	\$ 105,705.60	\$ 110,988.80
	\$ 7,611.07	\$ 7,992.40	\$ 8,391.07	\$ 8,808.80	\$ 9,249.07
	\$ 3,512.80	\$ 3,688.80	\$ 3,872.80	\$ 4,065.60	\$ 4,268.80
	\$ 43.91	\$ 46.11	\$ 48.41	\$ 50.82	\$ 53.36
66	\$ 93,620.80	\$ 98,280.00	\$ 103,188.80	\$ 108,368.00	\$ 113,796.80
	\$ 7,801.73	\$ 8,190.00	\$ 8,599.07	\$ 9,030.67	\$ 9,483.07
	\$ 3,600.80	\$ 3,780.00	\$ 3,968.80	\$ 4,168.00	\$ 4,376.80
	\$ 45.01	\$ 47.25	\$ 49.61	\$ 52.10	\$ 54.71
67	\$ 95,908.80	\$ 100,692.80	\$ 105,705.60	\$ 110,988.80	\$ 116,542.40
	\$ 7,992.40	\$ 8,391.07	\$ 8,808.80	\$ 9,249.07	\$ 9,711.87
	\$ 3,688.80	\$ 3,872.80	\$ 4,065.60	\$ 4,268.80	\$ 4,482.40
	\$ 46.11	\$ 48.41	\$ 50.82	\$ 53.36	\$ 56.03
68	\$ 98,280.00	\$ 103,188.80	\$ 108,368.00	\$ 113,796.80	\$ 119,454.40
	\$ 8,190.00	\$ 8,599.07	\$ 9,030.67	\$ 9,483.07	\$ 9,954.53
	\$ 3,780.00	\$ 3,968.80	\$ 4,168.00	\$ 4,376.80	\$ 4,594.40
	\$ 47.25	\$ 49.61	\$ 52.10	\$ 54.71	\$ 57.43
69	\$ 100,692.80	\$ 105,705.60	\$ 110,988.80	\$ 116,542.40	\$ 122,387.20
	\$ 8,391.07	\$ 8,808.80	\$ 9,249.07	\$ 9,711.87	\$ 10,198.93
	\$ 3,872.80	\$ 4,065.60	\$ 4,268.80	\$ 4,482.40	\$ 4,707.20
	\$ 48.41	\$ 50.82	\$ 53.36	\$ 56.03	\$ 58.84
70	\$ 103,188.80	\$ 108,368.00	\$ 113,796.80	\$ 119,454.40	\$ 125,444.80
	\$ 8,599.07	\$ 9,030.67	\$ 9,483.07	\$ 9,954.53	\$ 10,453.73
	\$ 3,968.80	\$ 4,168.00	\$ 4,376.80	\$ 4,594.40	\$ 4,824.80
	\$ 49.61	\$ 52.10	\$ 54.71	\$ 57.43	\$ 60.31

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
71	\$ 105,705.60	\$ 110,988.80	\$ 116,542.40	\$ 122,387.20	\$ 128,502.40
	\$ 8,808.80	\$ 9,249.07	\$ 9,711.87	\$ 10,198.93	\$ 10,708.53
	\$ 4,065.60	\$ 4,268.80	\$ 4,482.40	\$ 4,707.20	\$ 4,942.40
	\$ 50.82	\$ 53.36	\$ 56.03	\$ 58.84	\$ 61.78
72	\$ 108,368.00	\$ 113,796.80	\$ 119,454.40	\$ 125,444.80	\$ 131,726.40
	\$ 9,030.67	\$ 9,483.07	\$ 9,954.53	\$ 10,453.73	\$ 10,977.20
	\$ 4,168.00	\$ 4,376.80	\$ 4,594.40	\$ 4,824.80	\$ 5,066.40
	\$ 52.10	\$ 54.71	\$ 57.43	\$ 60.31	\$ 63.33
73	\$ 110,988.80	\$ 116,542.40	\$ 122,387.20	\$ 128,502.40	\$ 134,929.60
	\$ 9,249.07	\$ 9,711.87	\$ 10,198.93	\$ 10,708.53	\$ 11,244.13
	\$ 4,268.80	\$ 4,482.40	\$ 4,707.20	\$ 4,942.40	\$ 5,189.60
	\$ 53.36	\$ 56.03	\$ 58.84	\$ 61.78	\$ 64.87
74	\$ 113,796.80	\$ 119,454.40	\$ 125,444.80	\$ 131,726.40	\$ 138,278.40
	\$ 9,483.07	\$ 9,954.53	\$ 10,453.73	\$ 10,977.20	\$ 11,523.20
	\$ 4,376.80	\$ 4,594.40	\$ 4,824.80	\$ 5,066.40	\$ 5,318.40
	\$ 54.71	\$ 57.43	\$ 60.31	\$ 63.33	\$ 66.48
75	\$ 116,542.40	\$ 122,387.20	\$ 128,502.40	\$ 134,929.60	\$ 141,668.80
	\$ 9,711.87	\$ 10,198.93	\$ 10,708.53	\$ 11,244.13	\$ 11,805.73
	\$ 4,482.40	\$ 4,707.20	\$ 4,942.40	\$ 5,189.60	\$ 5,448.80
	\$ 56.03	\$ 58.84	\$ 61.78	\$ 64.87	\$ 68.11
76	\$ 119,454.40	\$ 125,444.80	\$ 131,726.40	\$ 138,278.40	\$ 145,225.60
	\$ 9,954.53	\$ 10,453.73	\$ 10,977.20	\$ 11,523.20	\$ 12,102.13
	\$ 4,594.40	\$ 4,824.80	\$ 5,066.40	\$ 5,318.40	\$ 5,585.60
	\$ 57.43	\$ 60.31	\$ 63.33	\$ 66.48	\$ 69.82
77	\$ 122,387.20	\$ 128,502.40	\$ 134,929.60	\$ 141,668.80	\$ 148,761.60
	\$ 10,198.93	\$ 10,708.53	\$ 11,244.13	\$ 11,805.73	\$ 12,396.80
	\$ 4,707.20	\$ 4,942.40	\$ 5,189.60	\$ 5,448.80	\$ 5,721.60
	\$ 58.84	\$ 61.78	\$ 64.87	\$ 68.11	\$ 71.52
78	\$ 125,444.80	\$ 131,726.40	\$ 138,278.40	\$ 145,225.60	\$ 152,484.80
	\$ 10,453.73	\$ 10,977.20	\$ 11,523.20	\$ 12,102.13	\$ 12,707.07
	\$ 4,824.80	\$ 5,066.40	\$ 5,318.40	\$ 5,585.60	\$ 5,864.80
	\$ 60.31	\$ 63.33	\$ 66.48	\$ 69.82	\$ 73.31
79	\$ 128,502.40	\$ 134,929.60	\$ 141,668.80	\$ 148,761.60	\$ 156,208.00
	\$ 10,708.53	\$ 11,244.13	\$ 11,805.73	\$ 12,396.80	\$ 13,017.33
	\$ 4,942.40	\$ 5,189.60	\$ 5,448.80	\$ 5,721.60	\$ 6,008.00
	\$ 61.78	\$ 64.87	\$ 68.11	\$ 71.52	\$ 75.10
80	\$ 131,726.40	\$ 138,278.40	\$ 145,225.60	\$ 152,484.80	\$ 160,097.60
	\$ 10,977.20	\$ 11,523.20	\$ 12,102.13	\$ 12,707.07	\$ 13,341.47
	\$ 5,066.40	\$ 5,318.40	\$ 5,585.60	\$ 5,864.80	\$ 6,157.60
	\$ 63.33	\$ 66.48	\$ 69.82	\$ 73.31	\$ 76.97

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
81	\$ 134,929.60	\$ 141,668.80	\$ 148,761.60	\$ 156,208.00	\$ 164,008.00
	\$ 11,244.13	\$ 11,805.73	\$ 12,396.80	\$ 13,017.33	\$ 13,667.33
	\$ 5,189.60	\$ 5,448.80	\$ 5,721.60	\$ 6,008.00	\$ 6,308.00
	\$ 64.87	\$ 68.11	\$ 71.52	\$ 75.10	\$ 78.85
82	\$ 138,278.40	\$ 145,225.60	\$ 152,484.80	\$ 160,097.60	\$ 168,126.40
	\$ 11,523.20	\$ 12,102.13	\$ 12,707.07	\$ 13,341.47	\$ 14,010.53
	\$ 5,318.40	\$ 5,585.60	\$ 5,864.80	\$ 6,157.60	\$ 6,466.40
	\$ 66.48	\$ 69.82	\$ 73.31	\$ 76.97	\$ 80.83
83	\$ 141,668.80	\$ 148,761.60	\$ 156,208.00	\$ 164,008.00	\$ 172,182.40
	\$ 11,805.73	\$ 12,396.80	\$ 13,017.33	\$ 13,667.33	\$ 14,348.53
	\$ 5,448.80	\$ 5,721.60	\$ 6,008.00	\$ 6,308.00	\$ 6,622.40
	\$ 68.11	\$ 71.52	\$ 75.10	\$ 78.85	\$ 82.78
84	\$ 145,225.60	\$ 152,484.80	\$ 160,097.60	\$ 168,126.40	\$ 176,508.80
	\$ 12,102.13	\$ 12,707.07	\$ 13,341.47	\$ 14,010.53	\$ 14,709.07
	\$ 5,585.60	\$ 5,864.80	\$ 6,157.60	\$ 6,466.40	\$ 6,788.80
	\$ 69.82	\$ 73.31	\$ 76.97	\$ 80.83	\$ 84.86
85	\$ 148,761.60	\$ 156,208.00	\$ 164,008.00	\$ 172,182.40	\$ 180,793.60
	\$ 12,396.80	\$ 13,017.33	\$ 13,667.33	\$ 14,348.53	\$ 15,066.13
	\$ 5,721.60	\$ 6,008.00	\$ 6,308.00	\$ 6,622.40	\$ 6,953.60
	\$ 71.52	\$ 75.10	\$ 78.85	\$ 82.78	\$ 86.92
86	\$ 152,484.80	\$ 160,097.60	\$ 168,126.40	\$ 176,508.80	\$ 185,328.00
	\$ 12,707.07	\$ 13,341.47	\$ 14,010.53	\$ 14,709.07	\$ 15,444.00
	\$ 5,864.80	\$ 6,157.60	\$ 6,466.40	\$ 6,788.80	\$ 7,128.00
	\$ 73.31	\$ 76.97	\$ 80.83	\$ 84.86	\$ 89.10
87	\$ 156,208.00	\$ 164,008.00	\$ 172,182.40	\$ 180,793.60	\$ 189,862.40
	\$ 13,017.33	\$ 13,667.33	\$ 14,348.53	\$ 15,066.13	\$ 15,821.87
	\$ 6,008.00	\$ 6,308.00	\$ 6,622.40	\$ 6,953.60	\$ 7,302.40
	\$ 75.10	\$ 78.85	\$ 82.78	\$ 86.92	\$ 91.28
88	\$ 160,097.60	\$ 168,126.40	\$ 176,508.80	\$ 185,328.00	\$ 194,584.00
	\$ 13,341.47	\$ 14,010.53	\$ 14,709.07	\$ 15,444.00	\$ 16,215.33
	\$ 6,157.60	\$ 6,466.40	\$ 6,788.80	\$ 7,128.00	\$ 7,484.00
	\$ 76.97	\$ 80.83	\$ 84.86	\$ 89.10	\$ 93.55
89	\$ 164,008.00	\$ 172,182.40	\$ 180,793.60	\$ 189,862.40	\$ 199,347.20
	\$ 13,667.33	\$ 14,348.53	\$ 15,066.13	\$ 15,821.87	\$ 16,612.27
	\$ 6,308.00	\$ 6,622.40	\$ 6,953.60	\$ 7,302.40	\$ 7,667.20
	\$ 78.85	\$ 82.78	\$ 86.92	\$ 91.28	\$ 95.84
90	\$ 168,126.40	\$ 176,508.80	\$ 185,328.00	\$ 194,584.00	\$ 204,339.20
	\$ 14,010.53	\$ 14,709.07	\$ 15,444.00	\$ 16,215.33	\$ 17,028.27
	\$ 6,466.40	\$ 6,788.80	\$ 7,128.00	\$ 7,484.00	\$ 7,859.20
	\$ 80.83	\$ 84.86	\$ 89.10	\$ 93.55	\$ 98.24

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ELK GROVE WATER DISTRICT
Salary Schedule
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

Grade	Step I	Step II	Step III	Step IV	Step V
91	\$ 172,182.40	\$ 180,793.60	\$ 189,862.40	\$ 199,347.20	\$ 209,310.40
	\$ 14,348.53	\$ 15,066.13	\$ 15,821.87	\$ 16,612.27	\$ 17,442.53
	\$ 6,622.40	\$ 6,953.60	\$ 7,302.40	\$ 7,667.20	\$ 8,050.40
	\$ 82.78	\$ 86.92	\$ 91.28	\$ 95.84	\$ 100.63
92	\$ 176,508.80	\$ 185,328.00	\$ 194,584.00	\$ 204,339.20	\$ 214,552.00
	\$ 14,709.07	\$ 15,444.00	\$ 16,215.33	\$ 17,028.27	\$ 17,879.33
	\$ 6,788.80	\$ 7,128.00	\$ 7,484.00	\$ 7,859.20	\$ 8,252.00
	\$ 84.86	\$ 89.10	\$ 93.55	\$ 98.24	\$ 103.15
93	\$ 180,793.60	\$ 189,862.40	\$ 199,347.20	\$ 209,310.40	\$ 219,814.40
	\$ 15,066.13	\$ 15,821.87	\$ 16,612.27	\$ 17,442.53	\$ 18,317.87
	\$ 6,953.60	\$ 7,302.40	\$ 7,667.20	\$ 8,050.40	\$ 8,454.40
	\$ 86.92	\$ 91.28	\$ 95.84	\$ 100.63	\$ 105.68
94	\$ 185,328.00	\$ 194,584.00	\$ 204,339.20	\$ 214,552.00	\$ 225,284.80
	\$ 15,444.00	\$ 16,215.33	\$ 17,028.27	\$ 17,879.33	\$ 18,773.73
	\$ 7,128.00	\$ 7,484.00	\$ 7,859.20	\$ 8,252.00	\$ 8,664.80
	\$ 89.10	\$ 93.55	\$ 98.24	\$ 103.15	\$ 108.31
95	\$ 189,862.40	\$ 199,347.20	\$ 209,310.40	\$ 219,814.40	\$ 230,796.80
	\$ 15,821.87	\$ 16,612.27	\$ 17,442.53	\$ 18,317.87	\$ 19,233.07
	\$ 7,302.40	\$ 7,667.20	\$ 8,050.40	\$ 8,454.40	\$ 8,876.80
	\$ 91.28	\$ 95.84	\$ 100.63	\$ 105.68	\$ 110.96
96	\$ 194,584.00	\$ 204,339.20	\$ 214,552.00	\$ 225,284.80	\$ 236,516.80
	\$ 16,215.33	\$ 17,028.27	\$ 17,879.33	\$ 18,773.73	\$ 19,709.73
	\$ 7,484.00	\$ 7,859.20	\$ 8,252.00	\$ 8,664.80	\$ 9,096.80
	\$ 93.55	\$ 98.24	\$ 103.15	\$ 108.31	\$ 113.71
97	\$ 199,347.20	\$ 209,310.40	\$ 219,814.40	\$ 230,796.80	\$ 242,320.00
	\$ 16,612.27	\$ 17,442.53	\$ 18,317.87	\$ 19,233.07	\$ 20,193.33
	\$ 7,667.20	\$ 8,050.40	\$ 8,454.40	\$ 8,876.80	\$ 9,320.00
	\$ 95.84	\$ 100.63	\$ 105.68	\$ 110.96	\$ 116.50
98	\$ 204,339.20	\$ 214,552.00	\$ 225,284.80	\$ 236,516.80	\$ 248,372.80
	\$ 17,028.27	\$ 17,879.33	\$ 18,773.73	\$ 19,709.73	\$ 20,697.73
	\$ 7,859.20	\$ 8,252.00	\$ 8,664.80	\$ 9,096.80	\$ 9,552.80
	\$ 98.24	\$ 103.15	\$ 108.31	\$ 113.71	\$ 119.41
99	\$ 209,310.40	\$ 219,814.40	\$ 230,796.80	\$ 242,320.00	\$ 254,404.80
	\$ 17,442.53	\$ 18,317.87	\$ 19,233.07	\$ 20,193.33	\$ 21,200.40
	\$ 8,050.40	\$ 8,454.40	\$ 8,876.80	\$ 9,320.00	\$ 9,784.80
	\$ 100.63	\$ 105.68	\$ 110.96	\$ 116.50	\$ 122.31
100	\$ 214,552.00	\$ 225,284.80	\$ 236,516.80	\$ 248,372.80	\$ 260,790.40
	\$ 17,879.33	\$ 18,773.73	\$ 19,709.73	\$ 20,697.73	\$ 21,732.53
	\$ 8,252.00	\$ 8,664.80	\$ 9,096.80	\$ 9,552.80	\$ 10,030.40
	\$ 103.15	\$ 108.31	\$ 113.71	\$ 119.41	\$ 125.38

ELK GROVE WATER DISTRICT
General Manager Salary
Annual, Monthly, Bi-Weekly & Hourly Wage
As of July 1, 2021

General Manager	
GM	\$ 192,345
	\$ 16,029
	\$ 7,398
	\$ 92.47

ACRONYMS & GLOSSARY OF TERMS

A

Account – A category that identifies the justification of the transaction of funds received or paid.

Account Balance – The difference in dollars between the total debits and the total credits in an account.

Accrual Basis of Accounting – A basis of accounting under which increases and decreases in economic resources are recognized as soon as the underlying event or transaction occurs. Revenues are recognized when earned and expenses are recognized when incurred, regardless of the timing of related cash flows.

Accrual – The recognition of a revenue or expense in a current period even though the actual cash may not be received or paid until a following period.

Acre-foot of Water – The volume of water that covers one acre to a depth of one foot; 43,560 cubic feet; 1,233.5 cubic meters; 325,872 gallons.

Actual – The final audited revenue / expenditure results of operations for the fiscal year indicated.

ACWA – Association of California Water Agencies.

AICPA – American Institute of Certified Public Accountants.

Amortization – Gradual reduction, redemption, or liquidation of the balance of an account according to a specified times and amounts.

Assets – Resources owned or held by EGWD/FRCO which have monetary value.

Audit – An examination of the books and records of EGWD/FRCO to determine financial status and results of operations (excess or loss).

AWWA – American Water Works Association.

B

Backflow – The backing up of water through a conduit or channel in the direction opposite to normal flow.

BMPs – Best Management Practices.

Board of Directors – The EGWD/FRCO is governed by a Board, the members of which are elected by the voters within the FRCO boundaries. The Board sets policy and provides overall leadership for EGWD/FRCO including the mission, goals, priorities and resource allocation.

Bond Issuance Costs – The costs incurred by the bond issuer during the planning, marketing and sale of a bond issue.

Bonds – Fixed income instruments that represent loans made by investors to borrowers.

Budget Calendar – The schedule of key dates or milestones which the District follows in the preparation, adoption, and administration of the budget.

Budgetary Control - The control of management in accordance with the approved budget to keep expenditures within the limitations of available appropriations and available revenues.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

C

CAC – Community Advisory Committee.

CalPERS – California Public Employees Retirement System.

Capital Equipment (Assets) – Fixed assets such as vehicles, computers, equipment, technical instruments, etc., which have a life expectancy of more than one year and a value over \$5,000.

Cash Flows – The movement of cash in and out of the District from day-to-day activities.

Cash Management – The management of cash flows in such a way that interest and penalties paid are minimized and interest earned is maximized. Funds received are deposited on the day of receipt and invested as soon as the funds are available. The District maximizes the return on all funds available for investment without sacrifice of safety or necessary liquidity.

CCF – Centum cubic feet.

CCR – Consumer Confidence Report.

CIP – Capital Improvement Program.

COLA – Cost of Living Adjustment.

CMTA – California Municipal Treasurer’s Association.

Consumer Price Index (CPI) – A statistical description of price levels provided by the U.S. Department of Labor. The index is used as a measure of the increase in the cost of living or doing business (i.e. economic inflation).

CSDA – California Special Districts Association.

CSR – Customer Service Representative.

CSMFO – California Society of Municipal Finance Officers.

Current Assets – Cash plus assets that are expected to be converted to cash, sold or consumed during the next 12 months or as a part of the normal operating cycle.

Current Liabilities – Obligations that will become due within the next year or within the normal operating cycle, if longer than a year.

D

Debt – An obligation resulting from the borrowing of money or from the purchase of goods and services. These include bonds and accounts payable.

Debt Service – The payment of principal and interest on any short-term and long-term debt.

Debt Service Requirements – The amount of money required to pay interest and principal on outstanding debt.

Depreciation – The allocation of the acquisition cost of plant, property and equipment to the particular periods or products that benefit from the utilization of the asset in service.

E

Easement – An acquired legal right to the use of land owned by others.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

ECCP – Employee Cost Control Program.

EGWD – Elk Grove Water District.

Enterprise Fund – A fund established to account for the operation of self-supporting enterprises.

Expenditures – A decrease in net financial resources, actual payment for goods and services received.

F

Financial Statement – A set of summary documents which pertain to financial information that consist of the following: Balance Sheet or Combining Schedule of Net Assets, Income Statement or Combining Schedule of Revenues and Expenses, Statement of Cash Flows, Notes of Financial Statements and, in the District’s case, various Supplements, Schedules, etc.

Fiscal Policy – The District’s policies with respect to revenues, spending, and debt management as these relate to services, programs and capital investment.

Fixed Assets – Long-term tangible assets that have a normal use expectancy of more than one year and do not lose their individual identity through use. Fixed assets include primarily buildings, equipment, and land.

FRCDD – Florin Resource Conservation District.

FTE – Full Time Equivalent.

Fund – A fiscal and accounting entity with a self-balancing set of accounts in which cash and other financial resources, all related liabilities and residual equities, or balances and changes therein, are recorded and segregated to carry on specific activities or attain certain objectives in accordance with special regulations, restrictions or limitations.

Fund Balance – The cumulative difference of all revenues and all expenditures of the fund from the time the District was established. Fund balance is also considered to be the difference between fund assets and fund liabilities and is sometimes referred to as “fund equity” at any given point in time.

G

Generally Accepted Accounting Principles (GAAP) – Uniform minimum standards of, and guidelines for, external financial accounting and reporting. They govern the form and content of the basic financial statements of an entity. GAAP encompasses the conventions, rules, and procedures necessary to define accepted accounting practices at a particular time. They include not only broad guidelines of general application, but also detailed practices and procedures. GAAP provides a standard by which to measure financial presentations. The primary authoritative statement on the application of GAAP to state and local governments is Government Accounting Standards Board (GASB) pronouncements.

Geographic Information System (GIS) – An organized collection of computer hardware, software and geographic data designed to efficiently capture, store, update, manipulate, analyze, and display all forms of geographically referenced information.

Goals – General statements of desired state, condition, or situation to be achieved, which may be viewed from a short or long-term perspective.

Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget

Governmental Accounting Standards Board (GASB) – Their mission is to establish and improve standards of state and local governmental accounting and financial reporting that will result in useful information for users of financial reports.

Governmental Finance Officers of America (GFOA) – Their purpose is to enhance and promote the professional management of governments for the public benefit. The GFOA accomplishes this mission by identifying and developing financial policies and practices and promoting them through education, training and leadership.

Groundwater – Water produced by pumping from underground.

H

I

Independent Auditor – External public accounting firm hired to audit the annual financial statements and express an opinion on those statements as to conformity with generally accepted accounting principles.

Infrastructure – District owned capital assets that provide services to the ratepayers.

Internal Control – Methods and procedures that are primarily concerned with the authorization of transactions, safeguarding of assets, and accuracy of the financial records.

Inventories – Items held for future use.

Investment Income – Income derived by investing certain fund balance in interest-yielding securities in compliance with the provisions of the District’s Investment policy.

J

K

L

Liabilities – Obligations incurred in past or current transactions requiring present or future settlement.

Long-Term Debt – Debt with a maturity of more than one year after the date of issuance.

M

Meter – An instrument of measuring the flow of water.

MGD – Million gallons per day.

Mid-Year Review – Midway through the fiscal year the current year budget is evaluated based on spending to date and current projections. The primary areas reviewed and analyzed are year-to-date expenditure and revenue status plus expenditure and revenue projections for the remainder of the year.

Modified Accrual Basis – The accrual basis of accounting adapted to the governmental fund type. Revenues are recognized when they become both “measurable” and “available to finance expenditures of the current period.” Expenditures are recognized when the liability is incurred except on long-term debt which is recognized when due.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

N

Notes Payable – Long or short-term obligations that are payable according to a contract or agreement in which the timeframe is executed.

NSF – Non-sufficient funds.

O

Objective – A statement of purpose defined more specifically than goals, defining the result-oriented activities necessary to achieve a stated goal.

Obligation – Amounts which the District may be legally required to meet out of its resources and includes not only actual liabilities, but also encumbrances not yet paid.

OPEB – Other Post Employment Benefit.

Operating Expense – All costs required for the daily operation of the District necessary to provide services and maintain the systems in good operating condition that are not considered capital improvements or debt repayments.

Overtime – Hours worked in excess of 40 hours per work week or hours worked in excess of those scheduled in a shift.

P

Projected – An estimate of revenues or expenditures based on past trends, the present economic situation and future financial forecasts.

PTO – Personal time off.

Q

R

Ratepayers– Those being provided with water service by Elk Grove Water District.

Refunding Bonds – Bonds issued to retire bonds already outstanding.

Reimbursements – Payment made to someone for out-of-pocket expenses incurred.

Reserves – An account used to indicate that a portion of a fund’s assets are restricted for a specific purpose.

Revenue – An inflow of assets in exchange for services.

Revenue Bonds – Municipal bonds that finance income-producing projects and are secured by a specific revenue source.

Risk Management – A coordinated effort to minimize costs – typically where insurance policies are purchased to manage the District’s exposure to various risks of loss; Workers’ Compensation; theft of, damage to, and destruction of assets, errors and omissions; injuries to employees; and natural disasters.

RRWTF – Railroad Water Treatment Facility.

RWA – Regional Water Authority.

**Florin Resource Conservation District/Elk Grove Water District
Fiscal Year 2021-22 Operating Budget**

S

SCADA System – “*Supervisory Control and Data Acquisition*” System. The computer system that collects data, processes the data and allows operating personnel to take corrective actions.

SCGA – Sacramento Central Groundwater Authority.

SCWA – Sacramento County Water Agency.

SOP – Standard operating procedures.

T

Treated Water – Water which has been processed through the District’s water treatment plant(s) or imported from other utilities to supplement the EGWD’s water supplies.

U

V

Variance – The dollar and/or percentage difference between two sets of figures.

VFD – Variable frequency drive.

VTO – Vacation time off.

W

Water Conservation – Reducing the demand for water through activities that alter water use practices, e.g., improving efficiency in water use, and reducing losses of water from leaks.

Water Quality – The chemical, physical and biological characteristics of water with respect to its suitability for a particular purpose. The same water may be of good quality for one purpose or use, and bad for another, depending on its characteristics and the requirements for the particular use.

Well – A vertical drilled hole into an underground formation, usually to obtain a source of water, to monitor ground water quality or to determine the position of the water table.

WDO – Water Distribution Operator.

X

Y

Z

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District

FROM: Patrick Lee, Finance Manager / Treasurer

SUBJECT: **FISCAL YEAR 2021-22 INVESTMENT POLICY GUIDELINES**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors adopt Resolution 06.15.21.03, approving the Fiscal Year 2021-22 Investment Policy Guidelines and delegating investment authority to the Finance Manager/Board Treasurer.

SUMMARY

By this action, if approved, the Florin Resource Conservation District (District) Board of Directors (Board) will approve the Fiscal Year 2021-22 Investment Policy Guidelines (attached) of District and delegate investment authority to the Finance Manager/Board Treasurer.

DISCUSSION

Background

State of California Government Code section 53607 et. seq., states that the authority to invest District funds is expressly delegated to the Board. The Board may then re-delegate that authority to the District Treasurer for a period of up to one (1) year. Subject to review, the Board may renew the delegation of authority each year.

Present Situation

The District's Investment Policy Guidelines requires the annual readoption and delegation of investment authority annually. California Government Code sections 53600 – 53610 establishes the guidelines for the investment of public funds including the types of allowable investments and maximum amounts of each type of investment. Staff has reviewed the policy for compliance with applicable government codes and is not recommending any changes to the Investment Policy Guidelines at this time.

California Government Code section 53607 et. seq., allows the authority of the Board of Directors to invest or to reinvest funds of the District, or to sell or exchange securities so purchased, to be delegated for a one-year period by the Board of Directors to the

FISCAL YEAR 2021-22 INVESTMENT POLICY GUIDELINES

Page 2

Treasurer of the District, who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires.

If approved, the Board will readopt the District's Investment Policy Guidelines and delegate investment authority to the Finance Manager/Board Treasurer for fiscal year 2021-22.

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/EGWD's 2020-2025 Strategic Plan. Annual adoption of the Investment Policy Guidelines is in line with the Fiscal Responsibility and best business practices of the Strategic Plan.

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,



PATRICK LEE
FINANCE MANAGER / TREASURER

Attachment

RESOLUTION NO. 06.15.21.03

**A RESOLUTION OF THE FLORIN RESOURCE
CONSERVATION DISTRICT BOARD OF DIRECTORS APPROVING
THE FISCAL YEAR 2021-22 INVESTMENT POLICY GUIDELINES
AND DELEGATING INVESTMENT AUTHORITY TO THE
FINANCE MANAGER/BOARD TREASURER**

WHEREAS, the Florin Resource Conservation District (District) is a Resource Conservation District organized pursuant to Division 9 of the California Public Resources Code, Sections 9001, et seq. (Resource Conservation Law); and

WHEREAS, the District is formed for the purposes delineated in the Public Resources Code Section 9001 and all things necessary to carry out the provisions of the Resource Conservation Law and adopted District Bylaws; and

WHEREAS, the Florin Resource Conservation District Board of Directors adopted the Fiscal Year (FY) 2020-21 Investment Policy Guidelines on June 16, 2020, to guide the District, General Manager, Finance Manager/Board Treasurer, and District staff regarding District investments; and

WHEREAS, Section XIV of the Investment Policy Guidelines provides that the District shall adopt the guidelines by resolution annually; and

WHEREAS, California Government Code Section 53607 et. seq., allows the authority of the Board of Directors to invest or to reinvest funds of the District, or to sell or exchange securities so purchased, to be delegated for a one-year period by the Board of Directors to the Finance Manager/Board Treasurer, who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires; and

WHEREAS, the Board of Directors wishes to adopt the FY 2021-22 Investment Policy Guidelines and delegate investment authority to the District's Treasurer for a period of one year.

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS DOES HEREBY RESOLVE:

SECTION 1. The Board of Directors hereby adopts the foregoing recitals as true and correct and incorporates them herein by reference.

SECTION 2. Investments shall be made in accordance with the FY 2021-22 Investment Policy Guidelines attached hereto as Exhibit "A," and made a part hereof.

SECTION 3. Investment authority shall be delegated to the Finance Manager/Board Treasurer for a period of one year.

SECTION 4. The policies adopted by this resolution are in addition to and supplement any other legal requirements.

SECTION 5. The Board Secretary shall certify to the passage and adoption of this resolution and the same shall take effect and be in force upon its adoption.

PASSED, APPROVED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this 15th day of June 2021 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Sophia Scherman
Chair

ATTEST:

Stefani Phillips
Board Secretary

APPROVED AS TO FORM:

Richard E. Nosky
District Legal Counsel

EXHIBIT “A”

“FISCAL YEAR 2021-22 INVESTMENT POLICY GUIDELINES”

[Attached behind this cover page]

Policy Type: Florin Resource Conservation District Board of Directors
Policy Title: Fiscal Year 2021-22 Investment Policy Guidelines
Date Adopted: June 15, 2021
Resolution No: 06.15.21.03
Date Amended:

I. PURPOSE

The purpose of this policy is to provide guidelines for the investment of public funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands of the Florin Resource Conservation District (District) and conforming to all state and local statutes governing the investment of public funds.

II. POLICY

This policy applies to all surplus financial assets of the District. These funds are accounted in the monthly financial reports and the comprehensive annual financial report of District financial activities.

III. INVESTMENT AUTHORITY

In accordance with the section 53600 et. seq. of the Government Code of the State of California, the authority to invest public funds is expressly delegated to the District Board of Directors (Board) for subsequent re-delegation to the Finance Manager/Treasurer.

A. Delegation of Authority

Management responsibility for the investment program is hereby delegated, pursuant to Section 53607 of the Government Code, to the Finance Manager/Treasurer, who shall establish written procedures for the operation of the investment program consistent with this investment policy. This responsibility includes authority to select Brokers, establish safekeeping accounts, enter into wire transfer agreements, banking service contracts, and collateral/depository agreements. The Finance Manager/Treasurer shall be responsible for all transactions undertaken and shall establish a system of controls to regulate the activities of subordinate officials. This delegation shall be for no greater than one (1) year and may be revoked at any time, or, upon review, renewed each year.

IV. PRUDENCE

The standard of prudence to be used by investment officials in the management of District funds shall be the “prudent investor” standard which shall be applied in the context of managing all aspects of the overall portfolio. Investments shall be made with the care, skill, prudence, and diligence, under circumstances then prevailing, including the general economic conditions and the anticipated needs of the District, which persons of prudence, discretion and intelligence acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the District.

It is the District's intent, at the time of purchase, to hold all investments until maturity. However, investments may be sold prior to maturity for cash flow purposes or to take advantage of principal appreciation.

V. OBJECTIVE

The primary objectives, in priority order, of the District's investment activities shall be:

A. Safety

Safety of principal is the foremost objective of the investment program. Investments of the District shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.

B. Liquidity

The District's investment portfolio will remain sufficiently liquid to enable the District to meet all operating requirements which might be reasonably anticipated.

C. Return on Investments

The District's investment portfolio shall be designed with the objective of attaining a rate of return commensurate with the District's investment risk constraints and the cash flow characteristics of the portfolio.

VI. ETHICS AND CONFLICTS OF INTEREST

Officers and employees involved in the investment process shall refrain from personal business activity that conflicts with proper execution of the investment program or impairs their ability to make impartial investment decisions. Additionally, the Finance Manager/Treasurer is required to annually file applicable financial disclosures as required by the Fair Political Practices Commission (FPPC) and/or the District's Conflict of Interest Code.

VII. AUTHORIZED FINANCIAL DEALERS AND INSTITUTIONS

The District shall transact business only with banks, associations, and with broker/dealers licensed by the State of California. The broker/dealers should be primary government dealers regularly reporting to the New York Federal Reserve Bank. The Finance Manager/Treasurer shall annually send a copy of the current investment policy to all broker/dealers approved to do business with the District. Confirmation of receipt of this policy shall be considered evidence that the dealer understands the District's investment policies and intends to sell the District only appropriate investments authorized by this investment policy.

VIII. INVESTMENTS

A. Authorized and Suitable Investments

All investment vehicles allowed by Sections 53601 of the California Government Code may be used by the Florin Resource Conservation District.

1. Government Agency Issues

As authorized in Government Code Sections 53601 (a) through (f), this category includes a wide variety of government securities. There are no

special portfolio limitations on the amount that may be invested in these securities, as follows:

- a. California local government agency bonds, notes, warrants or other indebtedness;
- b. California State warrants, notes, bonds or other indebtedness;
- c. Bonds issued by the Florin Resource Conservation District;
- d. U.S. Treasury notes, bonds, bills or other certificates of indebtedness secured by the full faith and credit of the federal government;
- e. Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.

2. Bankers Acceptances

As provided in Government Code Section 53601 (g), up to 40% of the District's surplus funds may be invested in Bankers Acceptances [that are eligible for purchase by the Federal Reserve System], although no more than 30% of the surplus funds may be invested in Bankers Acceptances of any one commercial bank. Additionally, the maturity period of any Bankers Acceptance shall not exceed 180 days.

3. Commercial Paper

As authorized in Government Code Section 53601 (h), up to 25% of the District's surplus funds may be invested in "prime" commercial paper of quality of the highest ranking or of the highest letter and number rating provided by a nationally recognized statistical-rating organization (NRSRO). Issuing corporation must meet all of the following conditions in either paragraph (1) or paragraph (2):

- a. The entity meets the following criteria:
 - Is organized and operating in the United States as a general corporation.
 - Has total assets in excess of five hundred million dollars (\$500,000,000).
 - Has debt other than commercial paper, if any, that is rated "A" or higher by a NRSRO.
- b. The entity meets the following criteria:
 - Is organized within the United States as a special purpose corporation, trust, or limited liability company.
 - Has program-wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or surety bond.
 - Has commercial paper that is rated "A-1" or higher, or the equivalent, by a NRSRO.

District shall not purchase more than 10% of the outstanding commercial paper of any one issuer. Maturities may not exceed 270 days.

4. Negotiable Certificates of Deposit or Bonds

As authorized in Government Code Section 53601 (i), up to 30% of District's surplus funds may be invested in negotiable certificates of deposit issued by nationally or state-chartered commercial banks, federally insured credit unions, or the state licensed branch of a foreign bank. There is no limitation on the maturity period for this investment vehicle except for the overall investment constraints.

5. Repurchase Agreements, Reverse Repurchase Agreements, Or Securities Lending Agreements

As authorized in Government Code Section 53601 (j), District may invest in repurchase agreements, reverse repurchase agreements, or securities lending agreements of any securities authorized in Government Code Section 53601 (a) to (k) or (n) or (o) provided that a master repurchase agreement that complies with the Bond Market Association (TBMA) Model has been executed with the contra-party. These investment vehicles are agreements between the District and the seller for the purchase of government securities to be resold on or before a specified date and for a specified amount. The market value of the securities that underlay the repurchase agreement shall be valued at 102% or greater of the funds borrowed against those securities, adjusted no less than quarterly. As provided in Government Code Section 53601(j)(5), investing in reverse repurchase agreements or securities lending agreements may only be made upon prior approval of the Board of Directors. The proceeds from a reverse repurchase agreement shall solely supplement the income normally received from the underlying securities. Also:

- a. The maturity of the reverse repurchase agreement must match the maturity of the securities purchased with the proceeds from the sale of the securities on the reverse repurchase agreement, and shall not exceed a term of 92 days, unless the agreement includes a written codicil guaranteeing a minimum earning or spread for the entire period between the sale of a security using a reverse repurchase agreement and the final maturity date of the same security; and
- b. The total amount invested in reverse repurchase agreements shall not exceed 20% of the base value of the portfolio; and
- c. The securities to be sold on the reverse repurchase agreement or securities lending agreement must be owned and fully paid for by the District for a minimum of 30 days prior to the settlement of the reverse repurchase agreement; and
- d. Repurchase agreements, reverse repurchase agreements, or securities lending agreements may only be made with primary dealers of the Federal Reserve Bank of New York.

The Board of Directors specifically authorizes the Finance Manager/Treasurer to enter into reverse repurchase agreements or securities lending agreements pursuant to the limitations described herein.

6. Medium-Term Corporate Notes

As authorized in Government Code Section 53601 (k), up to 30% of District's surplus funds may be invested in medium term corporate notes. Maturities may not exceed five years. The issuing corporation must be organized and operating within the U.S. and must be rated "A" or better by a nationally recognized rating service.

7. Shares of Beneficial Interest

As authorized by Government Code Section 53601 (l), up to 20% of District's surplus funds may be invested in shares of beneficial interest issued by diversified management companies investing in securities authorized by Government Code Section 53601 (a) to (k), inclusive or (n) or (o), and shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission under the investment company act of 1940.

If the investment is in shares by a company that invests in securities and obligations authorized by subdivisions (a) to (k), inclusive or subdivisions (n) or (o), the company must have attained the highest ranking or the highest letter and numerical rating provided by two (2) nationally recognized statistical rating organizations or retain an investment advisor registered or exempt from registration with the Securities and Exchange Commission with at least five (5) years investing the securities authorized by subdivisions (a) to (k), inclusive, or (n) or (o) or experience managing money market mutual funds and with assets under management in excess of \$500,000,000.

The purchase price of shares shall not include any commission and no more than 10% of the surplus funds may be invested in shares of any one mutual fund.

8. Mortgage Pass-Through Securities

As authorized in Government Code Section 53601 (o) up to 20% of the District's surplus funds may be invested in mortgage pass-through securities, collateralized mortgage obligations, mortgage-backed or other pay-through bonds, equipment lease-backed certificates, consumer receivable pass-through certificates, or consumer receivable-backed bonds of a maximum of five (5) years maturity.

Securities eligible for investment under this provision shall be issued by an issuer having an "A" or higher rating for the issuer's debt as provided by a nationally recognized rating service and rated in a rating category of "AA" or its equivalent or better by a nationally recognized rating service.

9. Financial Futures and Financial Option Contracts

As permitted in Government Code Section 53601.1, District may invest in financial futures or financial option contracts in any of the above investment categories, subject to the same overall portfolio limitations.

10. Time Certificates of Deposit

As authorized in Government Code Sections 53601.8 and 53630 and following, up to 30% of the District's surplus funds may be invested in non-negotiable, fixed-term Certificates of Deposit collateralized in accordance with the Government Code requirements. In order to secure such deposits, an institution shall maintain in the collateral pool securities having a market value of at least 10% in excess of the total amount deposited (50% in excess of the total amount of deposits secured by promissory notes secured by first mortgages and first trust deeds). District is permitted to waive the first \$100,000 of collateral security for such deposits if the institution is insured pursuant to federal law. There are no special portfolio limits on the amount or maturity for this investment vehicle. TCDs may be purchased from banks, associations, federally insured credit unions, and federally insured industrial loan companies which meet the requirements set forth in the Government Code.

11. Local Agency Investment Fund (LAIF)

Deposits with the LAIF, which is managed by the California State Treasurer's Office, are also permitted. This investing is authorized by Government Code Section 16429.1. The District is a current participant in this fund.

B. Prohibited Investments

The District shall not invest any funds, pursuant to Government Code 53601.6 or pursuant to Article 2 (commencing with Section 53630), in inverse floaters, range notes, mortgage-derived, or interest-only strips that are derived from a pool of mortgages. Nor shall the District invest in any security that could result in zero interest accrual if held to maturity.

C. Investment Pools

The Finance Manager/Treasurer shall have a thorough understanding of the operational areas listed below for each pool and/or fund prior to investing, and on a continual basis.

1. A description of eligible investment securities, and a written statement of investment policy and objectives; and
2. A description of interest calculations and how interest is distributed, and how gains and losses are treated; and
3. A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced, and the program is audited; and
4. A description of who may invest in the program, how often, and the permissible size of deposit and withdrawal; and
5. A schedule for receiving statements and portfolio listings; and
6. Whether reserves, retained earnings, etc. are utilized by the pool/fund; and
7. A fee schedule, and when and how it is assessed; and
8. Whether the pool/fund is eligible for bond proceeds and/or whether it will accept such proceeds.

IX. SAFEKEEPING, CUSTODY AND DELIVERY

A. Safekeeping and Custody

To protect against fraud or embezzlement or losses caused by collapse of an individual securities dealer, all securities owned by the District shall be held in safekeeping by a third-party custodian, acting as agent for the District under the terms of a custody agreement or TBMA agreement executed by the Finance Manager/Treasurer. All security transactions will settle delivery vs. payment (DVP) through the District's safekeeping agent. Securities purchased from brokers/dealers shall be held in third party safekeeping by the trust department of the District's main bank, or by another third-party trustee designated by the Finance Manager/Treasurer.

B. Delivery

The purchase of an eligible security shall require delivery of the securities to the District, including those purchased for the District by financial advisors, consultants, or managers using the District's funds, by book entry, physical delivery, or by third party custodial agreement. The transfer of securities to the counter party bank's customer book entry account may be used for book entry delivery. A counter party bank's trust department or separate safekeeping department may be used for the physical delivery of the security if it is held in the District's name.

X. MAXIMUM MATURITY

Pursuant to Government Code Section 53601 where the Government Code does not specify a limitation on the maturity term of a security, the Finance Manager/Treasurer is authorized, as part of the District's investment program set forth herein, to invest in individual instruments in the portfolio to a maximum maturity of ten (10) years. The maximum weighted average maturity of the portfolio shall not exceed five (5) years.

XI. INTERNAL CONTROL

A. Separation of Functions

Separation of functions between the Finance Manager/Treasurer and the Finance Supervisor is designed to provide an ongoing internal review to prevent the potential for converting assets or concealing transactions.

B. Proper Documentation

Existing procedures require all wire transfers to be approved by the Finance Manager/Treasurer and Finance Supervisor. Proper documentation obtained from confirmation and cash disbursement wire transfers is required for each investment transaction. Timely bank reconciliation is conducted to ensure proper handling of all transactions.

C. Investment Portfolio

The investment portfolio and all related transactions are reviewed and balanced to appropriate general ledger accounts by the Finance Manager/Treasurer on a monthly basis.

D. Investment Bonding

All employees involved in the investment of District funds are properly bonded.

E. Confirmation Documentation

Confirmation letters are delivered to the financial institution with the details of the investment transaction. The letters are signed by the Finance Manager/Treasurer with copies to the Finance Supervisor. In the absence of the Finance Manager/Treasurer, the Finance Supervisor may sign the confirmation letter for investments previously authorized. The Finance Manager/Treasurer will review the letter signed during his or her absence by the Finance Supervisor. District receives confirmations from the financial institutions. All investment confirmations received from financial institutions are reviewed for accuracy and filed with the District's letter of confirmation in the Finance Manager/Treasurer's office.

F. Legal Reporting

The District investment accounting software package meets all legal reporting requirements. It has the capability of generating a variety of reports for monitoring and controlling investment activity. An independent confirmation by an external auditor is conducted annually to review internal control, account activity and compliance with policies and procedures.

XII. OTHER GUIDELINES

A. Liquidity

Liquidity refers to the ability to convert investment holdings to cash immediately with minimal loss of principal or accrued interest. This quality is important when the need for unexpected funds suddenly occurs. The secondary duty of the Finance Manager/Treasurer is to ensure that the liquidity needs of the District are met.

B. Competitive Bids

Purchase and sale of securities are made on the basis of competitive offers and bids.

C. Selling Securities Prior to Maturity

Generally, losses are acceptable on a sale before maturity if the earnings from the reinvested proceeds will exceed the income that would have been generated by the old investment considering any capital loss or foregone interest on the original investment.

D. Sale of Investments Before Maturity

Investments may be sold prior to maturity for cash flow or appreciation purposes; however, no investment shall be made solely for the purpose of trading.

E. Negotiable Certificates of Deposit (NCD) Evaluation

NCD are evaluated in terms of the credit worthiness of the issuer, as these deposits are unsecured, and uncollateralized promissory notes.

F. Time Deposit Placement

Time deposits (insured and collateralized certificates of deposit) are not placed with banks, credit unions and/or associations unless an office is maintained in the State of California.

G. Time Certificates of Deposit (TCD) Evaluation

TCD are evaluated in terms of FDIC coverage. For deposits in excess of the insured maximum of \$100,000 approved levels of collateral at full market value are required, as prescribed in the California Government Code.

H. Security Marketability

The marketability (salability) of a security is considered at the time of purchase, as the security may have to be sold prior to maturity in order to meet unanticipated cash demands.

I. Cash Flow Requirements Used to Establish Maturity

Projected cash flow requirements and the overall weighted average maturity of the District's investment portfolio are the primary factors to be used in determining investment maturity terms.

XIII. REPORTING

A. Monthly Report

1. Government Code Section 53067 requires the Finance Manager/Treasurer to make a monthly report to the Board of Directors of transactions made pursuant to the Investment Policy.
2. Water Code Section 24273 requires the Finance Manager/Treasurer to file a report with the Secretary showing: Amount of money in District's treasury, audit of receipts and audit of items of expenditure.

B. Quarterly Report

Government Code Section 53646 requires the Finance Manager/Treasurer to issue a quarterly report within 30 days following the end of the quarter, to the General Manager and the Board, showing the type of investment, issuer and/or institution, date of maturity, amount of investment, current market value for all securities, rate of interest, and other relevant data that may be required. The quarterly report shall state compliance of the investment portfolio with the Investment Policy and shall include a statement denoting the ability of the District to meet its pool expenditure requirements for the next six (6) months. The Finance Manager/Treasurer shall also submit the investment policy annually to the Board, disclose the source of market value information, confirm compliance with the guidelines or explain the differences, and affirm the agency's ability to meet its obligations over the next six (6) months.

XIV. INVESTMENT POLICY ADOPTION

The District's investment policy guidelines shall be adopted by resolution annually. However, changing economic conditions may make it advisable to review the

guidelines during the year. Legislative changes affecting public agency investment practices may also need to be incorporated into the policy statement prior to year-end. It is anticipated that most changes will be processed at the end of the fiscal year.

APPENDIX A – Glossary

APPENDIX B – Sources

Appendix A

Accrued Interest	Interest that has accumulated between the most recent payment and the sale of a bond or other fixed income security. At the time of sale, the buyer pays the seller the bond's price plus accrued interest.
Agencies	Securities issued by government-sponsored corporations or agencies of the U.S. Government such as the Federal Home Loan Banks, the Federal Farm Credit Banks Small Business Administration, Department of Housing and Urban Development.
Amortize	Accounting method whereby the cost of acquisition of an asset gradually is reduced to reflect the theoretical resale value of the asset.
Asked Price	The price at which securities are offered for sale. Also called the Ask Price, Asking Price, or Ask.
Bankers' Acceptance	A draft or bill of exchange accepted by a bank or trust company. It is the customary means of effecting payment for merchandise sold in import-export transactions and a source of financing used extensively in international trade.
Basis Point	.01% of yield (1/100 of 1%) on a fixed-income security.
Bear Market	Prolonged period of falling prices. A bear market in stocks is usually brought on by the anticipation of declining economic activity, and a bear market in bonds is caused by rising interest rates.
Bearish	Having the opinion that securities will fall in market value.
Bid	The price offered by a buyer of securities. (When you are selling securities, you ask for a bid.) See Offer.
Bond	Any interest-bearing or discounted government or corporate security that obligates the issuer to pay the bondholder a specified sum of money, usually at specific intervals, and to repay the principal amount of the loan at maturity.
Book Entry	Holdings of the securities are recorded on the books of the Federal Reserve Bank of New York for the issuer. Interest and principal payments are sent to the investor when due. No physical certificates are issued or delivered to the investor. Bonds issued in book entry form are transferred via the Federal Reserve wire or book entry system to member financial institutions. Book entry securities are said to be wireable.
Book Value	Value at which an asset is carried on the balance sheet.
Broker	A person who acts as an intermediary between a buyer and seller.

Bull Market	Prolonged rise in the prices of stocks, bonds, or commodities. Bull markets usually last at least a few months and are characterized by high trading volume.
Bullish	The belief that prices will rise or will continue to rise.
Call	The action whereby a company elects to redeem a security prior to its maturity date.
Callable Bond	Bond that may be called (redeemed) by the issuer on or after a specified date before maturity.
Certificate of Deposit (CD)	A time deposit with a specific maturity evidenced by a certificate.
Collateral	Securities, evidenced of deposit or other property which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.
Commercial Paper	Short-term obligations with maturities ranging from 2 to 270 days issued by banks, corporations, and other borrowers to investors with temporarily idle cash. Such instruments are unsecured and usually discounted, although some are interest bearing.
Confirmation	Formal memorandum from a broker to a client giving details of a securities transaction.
Consumer Price Index (CPI)	Measure of change in consumer prices, as determined by a monthly survey of the U.S. Bureau of Labor Statistics.
Coupon	(a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value. (b) A certificate attached to a bond evidencing interest due on a payment date.
Current Yield	The annual interest received on a bond in relation to the amount paid for the bond expressed as a percentage.
Debenture	A bond secured only by the general credit of the issuer.
Delivery Versus Payment (DVP)	There are two methods of delivering securities: delivery versus payment (DVP) and delivery versus receipt. DVP is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.
Depository Trust Company (DTC)	A central securities certificate depository, and member of the Federal Reserve System, through which members may arrange deliveries of securities between each other through computerized debit and credit entries without physical delivery of the certificates.
Derivatives	(1) Financial instruments whose return profile is linked to, or derived from, the movement of one or more underlying index or security, and may include a leveraging factor, or (2) financial contracts based upon notional amounts whose value is derived from an underlying index or security (interest rates, foreign exchange rates, equities or commodities).

Discount	The difference between the cost price of a security and its maturity amount when quoted at lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount.
Discount Rates	Interest rate that the Federal Reserve charges member banks for loans, using government securities or eligible paper as collateral.
Discount Securities	Non-interest-bearing money market instruments that are issued at a discount and redeemed at maturity for full face value, e.g., U.S. Treasury Bills.
Diversification	Dividing investment funds among a variety of securities offering independent returns.
Face Value	Value of a bond stated on the bond certificate.
Fed Wire	Computerized network linking the Fed with its district banks, member banks, and primary dealers in government securities.
Federal Deposit Insurance Corporation (FDIC)	A federal agency that insures bank deposits, currently up to \$100,000 per deposit.
Federal Funds Rate	Interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements.
Federal Home Loan Banks (FHLB)	Government sponsored wholesale banks (currently 12 regional banks) which lend funds and provide correspondent banking services to member commercial banks, thrift institutions, credit unions and insurance companies. The mission of the FHLBs is to liquefy the housing related assets of its members who must purchase stock in their district Bank.
Federal National Mortgage Association (FNMA)	FNMA, like GNMA, was chartered under the Federal National Mortgage Association Act in 1938. FNMA is a federal corporation working under the auspices of the Department of Housing and Urban Development (HUD). It is the largest single provider of residential mortgage funds in the United States. Fannie Mae, as the corporation is called, is a private stockholder-owned corporation. The corporation's purchases include a variety of adjustable mortgages and second loans, in addition to fixed-rate mortgages. FNMA's securities are also highly liquid and are widely accepted. FNMA assumes and guarantees that all security holders will receive timely payment of principal and interest.

Federal Open Market Committee (FOMC)	Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other Presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.
Federal Reserve System	The central bank of the United States created by Congress to regulate the U.S. monetary and banking system.
Flat	A bond that is sold without accrued interest.
Government National Mortgage Association (GNMA or Ginnie Mae)	A government-owned corporation, nicknamed Ginnie Mae, which is an agency of the U.S. Department of Housing and Urban Development. GNMA guarantees, with the full faith and credit of the U.S. Government, full and timely payment of all monthly principal and interest payments on the mortgage-backed pass-through securities of registered holders.
Illiquid	Used when a security that does not enjoy an active secondary market; thus, the holder may find it difficult to sell the security and thereby go back to cash.
Know Your Customer	Industry obligation that requires a brokerage firm and its registered representatives to know the important facts about the customer with whom they do business.
Liquidity	A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.
Local Government Investment Pool (LGIP)	The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment. In California it is called the Local Agency Investment Fund (LAIF).
Market Value	The price at which a security is trading and could presumably be purchased or sold.
Master Repurchase Agreement	A written contract covering all future transactions between the parties to repurchase -- reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller-borrower.
Maturity Date	The specified day on which the issuer of a debt security is obligated to repay the principal amount, or face value, of a security.
Money Market	The market in which short-term debt instruments (bills, commercial paper, bankers' acceptances, etc.) are issued and traded.

New Issue	Popular term for any new security offered for sale by the issuer.
Odd Lot	Transactions that are for less than the typical unit of trading.
Offer	The price asked by a seller of securities. (When you are buying securities, you ask for an offer.) See Asked and Bid.
Open Market Operations	Purchases and sales of government and certain other securities in the open market by the New York Federal Reserve Bank as directed by the FOMC in order to influence the volume of money and credit in the economy. Purchases inject reserves into the bank system and stimulate growth of money and credit; sales have the opposite effect. Open market operations are the Federal Reserve's most important and most flexible monetary policy tool.
Paper Loss	An unrealized loss on a security position. Paper losses become realized losses only if the security is sold.
Par	Any security whose market or offering price is the same as its face value at the time of redemption.
Portfolio	Collection of securities held by an investor.
Premium	The dollar amount by which the market price of a bond exceeds its par value.
Primary Dealer	A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.
Prime Rate	Interest rate banks charge to their most creditworthy customers.
Prudent Person Rule	An investment standard. In some states the law requires that a fiduciary, such as a trustee, may invest money only in a list of securities selected by the custody state -- the so-called legal list. In other states the trustee may invest in a security if it is one which would be bought by a prudent person of discretion and intelligence who is seeking a reasonable income and preservation of capital.
Quote	A statement of the highest bid and lowest offer for the security.
Rally	Industry term for a sharp rise in the price of the security.
Rate of Return	The yield obtainable on a security based on its purchase price or its current market price.
Rating	Judgment of creditworthiness of an issuer made by an accepted rating service.
Registered Bond	A bond that is recorded in the name of the holder on the books of the issuer or the issuer's Registrar and can be transferred to another owner only when endorsed by the registered owner.

Repurchase Agreement (RP or Repo)	A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security “buyer” in effect lends the “seller” money for the period of the agreement, and the terms of the agreement are structured to compensate him for this.
Reverse Repurchase Agreements	Whereby dealers agree to buy the securities and the investor agrees to repurchase them at a later date.
Safekeeping	A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank’s vaults for protection.
Secondary Market	A market made for the purchase and sale of outstanding issues following the initial distribution.
Securities Lending Agreement	An agreement under which a local agency agrees to transfer securities to a borrower who, in turn, agrees to provide collateral to the local agency. During the term of the agreement, both the securities and the collateral are held by a third party. At the conclusion of the agreement, the securities are transferred back to the local agency in return for the collateral.
Settlement Date	The date on which a securities contract, by prearranged agreement, must be cleared or settled.
Spread	The difference between yields on various fixed-income securities.
Subject	Term used of a quote made by a dealer, whether a bid or an offer or both, that must be reviewed before a final decision to buy or sell is made.
Swap	Industry jargon for the sale of one security and the purchase of another.
The Bond Marketing Association (TBMA)	A trade association representing banks, dealers, and brokers who underwrite and trade municipals, governments, and federal agency securities.
Treasury Bills	A non-interest-bearing discount security issued by the U.S. Treasury. Most bills are issued to mature in three months, six months, or one year, in minimum denominations of \$10,000.
Treasury Bonds	Long-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities 10 years or longer issued in minimum denominations of \$1,000.
Treasury Notes	Intermediate securities with maturities of 1 to 10 years.

Yield	The rate of annual income returns on an investment, expressed as a percentage. (a) INCOME YIELD is obtained by dividing the current dollar income by the current market price for the security. (b) NET YIELD or YIELD TO MATURITY is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.
Yield to Maturity	A measurement of the compound rate of return that an investor in a bond with a maturity of more than one year will receive if: (1) the investor holds the security to maturity and (2) reinvests all cash flows at the same market rate of interest.

Appendix B

1. California Government Code Section 53600
2. Dictionary of Finance and Investment Terms, Second Edition, John Downes and Jordan Elliot Goodman.
3. Debt Securities, A Handbook for State and Local Government Portfolio Managers, Keith Williams.
4. Municipal Treasurers' Association of the United States and Canada, Investment Policy Guidelines.

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District

FROM: Bruce Kamilos, General Manager

SUBJECT: **BACKYARD WATER MAINS REPLACEMENT PROJECT – SARA STREET CONTRACT**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors authorize the General Manager to execute a construction contract in the amount of \$622,075.42 with Flowline Contractors for the Backyard Water Mains Replacement Project – Sara Street.

SUMMARY

The Elk Grove Water District (EGWD) received bids for the Backyard Water Mains Replacement Project – Sara Street on May 25, 2021. Seven (7) contractors submitted bids for the project. Flowline Contractors was the lowest responsive, responsible bidder with a bid amount of \$622,075.42. The Florin Resource Conservation District (FRCD) Board of Directors' (Board) approved budget for the Backyard Water Mains Replacement project for fiscal year 2021-22 is \$1,500,000, of which \$655,000 is earmarked for the Sara Street project. The water main replacement on Sara Street is a project for which staff has planned to use contract work forces as opposed to EGWD work forces.

Staff recommends that the Board authorize the General Manager to execute the contract (attached), in the amount of \$622,075.42, with Flowline Contractors for the Backyard Water Mains Replacement Project – Sara Street.

DISCUSSION

Background

This fiscal year's capital improvement program (CIP) includes the Backyard Water Mains Replacement project. The project replaces existing water mains located in the backyard public utilities easement with new water mains located in the rights-of-ways of the streets. The approved budget for the Backyard Water Mains Replacement project this fiscal year is \$1,500,000 for replacement of mains using both EGWD work forces and contract work forces. The water main replacement on Sara Street is a project for which staff has planned to use contract work forces as opposed to EGWD work forces.

BACKYARD WATER MAINS REPLACEMENT PROJECT – SARA STREET CONTRACT

Page 2

Present Situation

EGWD's utility crews are presently replacing backyard water mains on Amethyst Street. While this work is in progress, contract crews will work concurrently to replace the backyard water mains on Sara Street. EGWD staff bid out the Backyard Water Mains Replacement Project – Sara Street. Staff received and opened seven (7) bids on May 25, 2021 at 2:00 pm. Flowline Contractors was the lowest responsive, responsible bidder for the project. The bids are summarized below.

	<u>Company Name</u>	<u>Bid Amount</u>
1	Flowline Contractors	\$622,075.42
2	Cobabe Brothers	\$643,949.27
3	Lund Construction	\$662,790.45
4	Basset Engineering	\$701,575.00
5	C.E. Cox Engineering	\$885,858.00
6	Dutch Contracting	\$912,073.50
7	Swierstok Enterprise	\$1,188,000.00
	<i>Engineer's Estimate</i>	\$650,000.00

The lowest responsive, responsible bid of \$622,075.42 is by Flowline Contractors.

Staff recommends that the Board authorize the General Manager to execute a contract in the amount of \$622,075.42 with Flowline Contractors for the Backyard Water Mains Replacement Project – Sara Street.

ENVIRONMENTAL CONSIDERATIONS

The proposed project has been determined to be categorically exempt from environmental review under the provisions of California Environmental Quality Act (CEQA) Class 2, Section 15302 (Replacement or Reconstruction), which includes replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity. A Notice of Exemption (NOE) will be filed with the County Clerk for this project.

June 15, 2021

**BACKYARD WATER MAINS REPLACEMENT PROJECT – SARA STREET
CONTRACT**

Page 3

STRATEGIC PLAN CONFORMITY

The recommendation made in this staff report conforms to Strategic Goal 3, Planning and Operational Efficiency. Strategic Goal 3 directs EGWD to practice ongoing infrastructure renewal and organizational improvement through planning and increased operational efficiency. Implementing the projects contained in the capital improvement program meets this directive.

FINANCIAL SUMMARY

The financial impact of the contract for the Backyard Water Main Replacements Project - Sara Street is \$622,075.42. The funds for this project will be paid for from the approved fiscal year 2021-22 CIP reserve fund.

Respectfully submitted,



BRUCE M. KAMILOS
GENERAL MANAGER

Attachment

Attachment

FLORIN RESOURCE CONSERVATION DISTRICT

BACKYARD WATER MAINS REPLACEMENT PROJECT

SARA STREET

BID AND CONTRACT DOCUMENTS

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FLORIN RESOURCE CONSERVATION DISTRICT
NOTICE INVITING BIDS

Backyard Water Mains Replacement Project
Sara Street

The Florin Resource Conservation District (“District”) will receive sealed bids for the Backyard Water Mains Replacement Project Sara Street at the office of the Elk Grove Water District no later than Tuesday, May 25, 2021 at 2:00 PM at which time or thereafter said bids will be opened and read aloud. Bids received after this time will be returned unopened. Bids shall be valid for 60 calendar days after the bid opening date.

Work includes furnishing of all labor, materials, tax, equipment and services for the Backyard Water Mains Replacement Project Sara Street as outlined in the Contract Documents, including all plans, specifications and all addenda for this project.

Bids must be submitted on the District’s Bid Forms. Bidders are responsible for purchasing and obtaining all the contract documents. The District will make the Contract Documents available at the Sacramento Regional Builders Exchange, 5370 Elvas Avenue, Sacramento, CA 95819, (916) 442-8991.

Bids must be accompanied by cash, a certified or cashier’s check, or a Bid Bond in favor of the District in an amount not less than ten percent (10%) of the submitted Total Bid Price.

A non-mandatory Pre-Bid Conference will be held at the job site located at the intersection of Sara Street and 2nd Avenue in Elk Grove, California on Monday, May 11, 2021, at 10:00 am. Bidders are encouraged to attend the Pre-Bid Conference. Bids will be accepted from any bidder who did not attend the Pre-Bid Conference.

Each bid shall be accompanied by the security referred to in the Contract Documents, the non-collusion affidavit, the list of proposed subcontractors, and all additional documentation required by the Instructions to Bidders.

The successful bidder will be required to furnish the District with a Performance Bond equal to 100% of the successful bid, and a Payment (Labor and Materials) Bond equal to 100% of the successful bid, prior to execution of the Contract. All bonds are to be secured from a surety that meets all of the State of California bonding requirements, as defined in Code of Civil Procedure Section 995.120, and is admitted by the State of California. Pursuant to Public Contract Code Section 22300, the successful bidder may substitute certain securities for funds withheld by District to ensure his performance under the Contract.

The Director of Industrial Relations has determined the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract which will be awarded to the successful bidder, copies of which are on file

NOTICE INVITING BIDS

and will be made available to any interested party upon request at Department of Industrial Relations, 2031 Howe Avenue Suite 100, Sacramento, CA 95825 or online at <http://www.dir.ca.gov/dlsr>. A copy of these rates shall be posted by the successful bidder at the job site. The successful bidder and all subcontractor(s) under him, shall comply with all applicable Labor Code provisions, which include, but are not limited to the payment of not less than the required prevailing rates to all workers employed by them in the execution of the Contract, the employment of apprentices, the hours of labor and the debarment of contractors and subcontractors.

All public works projects shall comply with the Department of Industrial Relations (DIR) prevailing wage monitoring requirements. The DIR compliance monitoring program requires all contractors and subcontractors (of any tier) to be registered with DIR prior to bidding on or entering into a contract for a public works project. **Each contractor submitting a bid must list on the Bid Schedule their DIR Public Works Contractor Registration number in the space provided. On the List of Subcontractors, the contractor must list the DIR registration number of all of its subcontractors in the space provided. Failure to provide this information may disqualify the contractor from the bid.** The contractor who is awarded the contract must electronically submit all certified payroll records to DIR during the course of the project. The District shall file a PWC-100 form electronically with DIR within five (5) days of the award of contract. The filing of the PWC-100 form initiates DIR to track the prevailing wage payments from the contractor and subcontractors. Further information can be found under the public works section of DIR's website at www.dir.ca.gov.

Each bidder shall be a licensed contractor pursuant to the Business and Professions Code and shall be licensed in the following appropriate classification(s) of contractor's license(s), for the work bid upon, and must maintain the license(s) throughout the duration of the Contract: California Class A.

The successful bidder must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the Air Quality Management District (AQMD) and/or California Air Resources Board (CARB). Although the AQMD and CARB limits and requirements are more broad, the successful bidder shall specifically be aware of their application to "portable equipment", which definition is considered by AQMD and CARB to include any item of equipment with a fuel-powered engine. The successful bidder will be required to indemnify District against any fines or penalties imposed by AQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by the successful bidder, its subcontractors, or others for whom the successful bidder is responsible under its indemnity obligations.

Pursuant to Public Contract Code Section 3400(b), if the District has made any findings designating certain materials, products, things, or services by specific brand or trade name, such findings and the materials, products, things, or services and their specific brand or trade names will be set forth in the Special Conditions.

NOTICE INVITING BIDS

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Engineer's Estimate: The Engineer's estimate for this work is \$650,000.00.

Award of Contract: The District shall award the Contract for the Project to the lowest responsive, responsible bidder as determined from the base bid alone and is deemed responsible by the District. The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding process.

For further information, contact Bruce Kamilos, General Manager, (916) 685-3556. The last date to submit questions shall be Friday, May 21, 2021. All questions must be submitted in accordance with the procedures set forth in the Information for Bidders.

NOTICE INVITING BIDS

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FLORIN RESOURCE CONSERVATION DISTRICT

INSTRUCTIONS TO BIDDERS

1. AVAILABILITY OF CONTRACT DOCUMENTS

Bids must be submitted to the District on the Bid Forms which are a part of the Bid Package for the Project. Prospective bidders may obtain Contract Documents at the location(s) and at the time(s) indicated in the Notice Inviting Bids. Prospective bidders are encouraged to telephone in advance to determine the availability and cost of Contract Documents. Any applicable charges for the Contract Documents are the prospective bidders responsibility.

The District may also make the Contract Documents available for review at the plan rooms, as indicated in the Notice Inviting Bids.

2. EXAMINATION OF CONTRACT DOCUMENTS

The District has made copies of the Contract Documents available, as indicated above. Bidders shall be solely responsible for examining the Project Site and the Contract Documents, including any Addenda issued during the bidding period, and for informing itself with respect to local labor availability, means of transportation, necessity for security, laws and codes, local permit requirements, wage scales, local tax structure, contractors' licensing requirements, availability of required insurance, and other factors that could affect the Work. Bidders are responsible for consulting the standards referenced in the Contract. Failure of Bidder to so examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.

3. INTERPRETATION OF CONTRACT DOCUMENTS

Discrepancies in, and/or omissions from the Plans, Specifications or other Contract Documents or questions as to their meaning shall be immediately brought to the attention of the District by submission of a written request for an interpretation or correction to the District. Such submission, if any, must be sent to the Project Manager, Bruce Kamilos, email bkamilos@egwd.org.

Any interpretation of the Contract Documents will be made only by written addenda duly posted at Sacramento Regional Builders Exchange, 1331 T Street, Sacramento, CA 95811, (916) 442-8991. An email will be sent to all know Plan Holders notifying Bidders that an addendum has been issued. The District will not be responsible for any explanations or interpretations provided in any other manner. No person is authorized to make any oral interpretation of any provision in the Contract Documents to any bidder, and no bidder should rely on any such oral interpretation.

Bids shall include complete compensation for all items that are noted in the Contract Documents as the responsibility of the Contractor.

INSTRUCTIONS TO BIDDERS

4. **INSPECTION OF SITE; PRE-BID CONFERENCE AND SITE WALK**

Each prospective bidder is responsible for fully acquainting itself with the conditions of the Project Site (which may include more than one site), as well as those relating to the construction and labor of the Project, to fully understand the facilities, difficulties and restrictions which may impact the cost or effort required to complete the Project. To this end, a Pre-Bid Conference and Site Walk will be held at the job site located at the intersection of Sara Street and 2nd Avenue in Elk Grove, California on Monday, April 5, 2021 at 10:00 a.m. as indicated in the Notice Inviting Bids.

5. **ADDENDA**

The District reserves the right to revise the Contract Documents prior to the bid opening date. Revisions, if any, shall be made by written Addenda. All addenda issued by the District shall be included in the bid and made part of the Contract Documents. Pursuant to Public Contract Code Section 4104.5, if the District issues an Addendum which includes material changes to the Project less than 72 hours prior to the deadline for submission of bids, the District will extend the deadline for submission of bids. The District may determine, in its sole discretion, whether an Addendum warrants postponement of the bid submission date. Each prospective bidder shall provide District a name, address, facsimile number and email address to which a notification can be sent that an addendum has been posted to the Sacramento Regional Builders Exchange site as listed in the Notice Inviting Bids. Please Note: Bidders are responsible for ensuring that they have received any and all Addenda and should check the above sites prior to bid opening.

6. **ALTERNATE BIDS**

If alternate bid items are called for in the Contract Documents, the lowest bid will be determined on the basis of the base bid only. The time required for completion of the alternate bid items has been factored into the Contract duration and no additional Contract time will be awarded for any of the alternate bid items. The District may elect to include one or more of the alternate bid items, or to otherwise remove certain work from the Project scope of work, accordingly each Bidder must ensure that each bid item contains a proportionate share of profit, overhead and other costs or expenses which will be incurred by the Bidder.

7. **COMPLETION OF BID FORMS**

Bids shall only be prepared using copies of the Bid Forms which are included in the Contract Documents and are provided herein. The use of substitute bid forms other than clear and correct photocopies of those provided by the District will not be permitted. Bids shall be executed by an authorized signatory as described in these Instructions to Bidders. In addition, Bidders shall fill in all blank spaces (including inserting "N/A" where applicable) and initial all interlineations, alterations, or erasures to the Bid Forms. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms nor make substitutions thereon. **USE OF BLACK OR BLUE INK, INDELIBLE PENCIL OR A TYPEWRITER IS REQUIRED.** Deviations in the bid form may result in the bid being deemed non-responsive.

INSTRUCTIONS TO BIDDERS

8. MODIFICATIONS OF BIDS

Each Bidder shall submit its Bid in strict conformity with the requirements of the Contract Documents. Unauthorized additions, modifications, revisions, conditions, limitations, exclusions or provisions attached to a Bid may render it non-responsive and may cause its rejection. Bidders shall neither delete, modify, nor supplement the printed matter on the Bid Forms, nor make substitutions thereon. Oral, telephonic and electronic modifications will not be considered.

9. DESIGNATION OF SUBCONTRACTORS

Pursuant to State law, the Bidders must designate the name and location of each subcontractor who will perform work or render services for the Bidder in an amount that exceeds one-half of one percent (1/2%) of the Bidder's Total Bid Price, as well as the portion of work each such subcontractor will perform on the form provided herein by the District. No additional time will be provided to bidders to submit any of the requested information in the Designation of Subcontractor form.

10. LICENSING REQUIREMENTS

Pursuant to Section 7028.15 of the Business and Professions Code and Section 3300 of the Public Contract Code, all bidders must possess proper licenses for performance of this Contract. Subcontractors must possess the appropriate licenses for each specialty subcontracted. Pursuant to Section 7028.5 of the Business and Professions Code, the District shall consider any bid submitted by a contractor not currently licensed in accordance with state law and pursuant to the requirements found in the Contract Documents to be non-responsive, and the District shall reject the Bid. The District shall have the right to request, and Bidders shall provide within five (5) calendar days, evidence satisfactory to the District of all valid license(s) currently held by that Bidder and each of the Bidder's subcontractors, before awarding the Contract. Please also note that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

11. SIGNING OF BIDS

All Bids submitted shall be executed by the Bidder or its authorized representative. Bidders may be asked to provide evidence in the form of an authenticated resolution of its Board of Directors or a Power of Attorney evidencing the authority of the person signing the Bid to bind the Bidder to each Bid and to any Contract arising therefrom.

If a Bidder is a joint venture or partnership, it may be asked to submit an authenticated Power of Attorney executed by each joint venturer or partner appointing and designating one of the joint venturers or partners as a management sponsor to execute the Bid on behalf of Bidder. Only that joint venturer or partner shall execute the Bid. The Power of Attorney shall also: (1) authorize that particular joint venturer or partner to act for and bind Bidder in all matters relating to the Bid; and (2) provide that each venturer or partner shall be jointly and severally liable for any and all of the duties and obligations of Bidder assumed under the Bid and under any Contract arising therefrom.

INSTRUCTIONS TO BIDDERS

The Bid shall be executed by the designated joint venturer or partner on behalf of the joint venture or partnership in its legal name.

12. **BID GUARANTEE (BOND)**

Each bid shall be accompanied by: (a) cash; (b) a certified check made payable to the District; (c) a cashier's check made payable to the District; or (d) a bid bond payable to the District executed by the bidder as principal and surety as obligor in an amount not less than 10% of the maximum amount of the bid. Personal sureties and unregistered surety companies are unacceptable. The surety insurer shall be California admitted surety insurer, as defined in Code of Civil Procedure Section 995.120. The cash, check or bid bond shall be given as a guarantee that the bidder shall execute the Contract if it be awarded to the bidder, shall provide the payment and performance bonds and insurance certificates and endorsements as required herein within ten (10) calendar days after notification of the award of the Contract to the bidder. Failure to provide the required documents may result in forfeiture of the bidder's bid deposit or bond to the District and the District may award the Contract to the next lowest responsive, responsible bidder, or may call for new bids.

13. **SUBMISSION OF SEALED BIDS**

Once the Bid and supporting documents have been completed and signed as set forth herein, they shall be placed, along with the Bid Guarantee and other required materials in an envelope, sealed, addressed and delivered or mailed, postage prepaid to the District at the place and to the attention of the person indicated in the Notice Inviting Bids. No oral or telephonic bids will be considered. No forms transmitted via the internet, e-mail, facsimile, or any other electronic means will be considered unless specifically authorized by District as provided herein. The envelope shall also contain the following in the lower left-hand corner thereof:

Bid of _____ (Bidder's Name)
for the Backyard Water Mains Replacement Project – Sara Street

14. **DELIVERY AND OPENING OF BIDS**

Bids will be received by the District at the address shown in the Notice Inviting Bids up to the date and time shown therein. The District will leave unopened any Bid received after the specified date and time, and any such unopened Bid will be returned to the Bidder. It is the Bidder's sole responsibility to ensure that its Bid is received as specified. Bids may be submitted earlier than the dates(s) and time(s) indicated.

Bids will be opened at the date and time stated in the Notice Inviting Bids, and the amount of each Bid will be read aloud and recorded. All Bidders may, if they desire, attend the opening of Bids. The District may in its sole discretion, elect to postpone the opening of the submitted Bids. District reserves the right to reject any or all Bids and to waive any informality or irregularity in any Bid. In the event of a discrepancy between the written amount of the Bid Price and the numerical amount of the Bid Price, the written amount shall govern.

INSTRUCTIONS TO BIDDERS

15. WITHDRAWAL OF BID

Prior to bid opening, a Bid may be withdrawn by the Bidder only by means of a written request signed by the Bidder or its properly authorized representative.

16. BASIS OF AWARD; BALANCED BIDS

The District shall award the Contract to the lowest responsive, responsible Bidder submitting a responsive Bid. The District may reject any Bid which, in its opinion when compared to other bids received or to the District’s internal estimates, does not accurately reflect the cost to perform the Work. The District may reject as non-responsive any bid which unevenly weights or allocates costs, including but not limited to overhead and profit to one or more particular bid items.

17. DISQUALIFICATION OF BIDDERS; INTEREST IN MORE THAN ONE BID

No bidder shall be allowed to make, submit or be interested in more than one bid. However, a person, firm, corporation or other entity that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a subproposal or quoting prices to other bidders submitting a bid to the District. No person, firm, corporation, or other entity may submit subproposal to a bidder, or quote prices of materials to a bidder, when also submitting a prime bid on the same Project.

18. INSURANCE REQUIREMENTS

The successful bidder shall procure the insurance in the form and in the amount specified in the Contract Documents.

19. AWARD PROCESS

Once all Bids are opened and reviewed to determine the lowest responsive and responsible Bidder, the District may award the contract. The apparent successful Bidder should begin to prepare the following documents: (1) the Performance Bond; (2) the Payment (Labor and Materials) Bond; and (3) the required insurance certificates and endorsements. Once the District notifies the Bidder of the award, the Bidder will have ten (10) consecutive calendar days from the date of this notification to execute the Contract and supply the District with all of the required documents and certifications. Regardless whether the Bidder supplies the required documents and certifications in a timely manner, the Contract time will begin to run ten (10) calendar days from the date of the notification. Once the District receives all of the properly drafted and executed documents and certifications from the Bidder, the District shall issue a Notice to Proceed to that Bidder.

20. FILING OF BID PROTESTS

Bidders may file a “protest” of a Bid with the District’s General Manager. In order for a Bidder’s protest to be considered valid, the protest must:

- A. Be filed in writing within five (5) calendar days after the bid opening date;

INSTRUCTIONS TO BIDDERS

- B. Clearly identify the specific irregularity or accusation;
- C. Clearly identify the specific District staff determination or recommendation being protested;
- D. Specify, in detail, the grounds of the protest and the facts supporting the protest; and
- E. Include all relevant, supporting documentation with the protest at time of filing.

If the protest does not comply with each of these requirements, it will be rejected as invalid.

If the protest is valid, the District’s General Manager or other designated District staff member, shall review the basis of the protest and all relevant information. The General Manager will provide a written decision to the protestor. The protestor may then appeal the decision of the General Manager to the District Board.

21. WORKERS COMPENSATION

Each bidder shall submit the Contractor’s Certificate Regarding Workers’ Compensation form.

22. SUBSTITUTION OF SECURITY

The Contract Documents call for monthly progress payments based upon the percentage of the work completed. The District will retain five percent (5%) of each progress payment as provided by the Contract Documents. At the request and expense of the successful Bidder, the District will substitute securities for the amount so retained in accordance with Public Contract Code Section 22300.

23. PREVAILING WAGES

The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages in the locality in which this work is to be performed for each craft or type of worker needed to execute the Contract. These rates are on file and available at 2031 Howe Avenue Suite 100, Sacramento, CA 95825 or may be obtained online at <http://www.dir.ca.gov/dlsr>. Bidders are advised that a copy of these rates must be posted by the successful Bidder at the job site(s). All public works projects shall comply with the Department of Industrial Relations (DIR) prevailing wage monitoring requirements. The DIR compliance monitoring program requires all contractors and subcontractors (of any tier) to be registered with DIR prior to bidding on or entering into a contract for a public works project. **Each contractor submitting a bid must list on the Bid Schedule their DIR Public Works Contractor Registration number in the space provided. On the List of Subcontractors, the contractor must list the DIR registration number of all of its subcontractors in the space provided. Failure to provide this information may disqualify the contractor from the bid.** The contractor who is awarded the contract must electronically submit all certified payroll records to DIR during the course of the project. The District shall file a PWC-100 form electronically with DIR within five (5) days of the award of contract. The filing of the PWC-100 form initiates DIR

INSTRUCTIONS TO BIDDERS

to track the prevailing wage payments from the contractor and subcontractors. Further information can be found under the public works section of DIR's website at www.dir.ca.gov.

24. DEBARMENT OF CONTRACTORS AND SUBCONTRACTORS

In accordance with the provisions of the Labor Code, contractors or subcontractors may not perform work on a public works project with a subcontractor who is ineligible to perform work on a public project pursuant to Section 1777.1 or Section 1777.7 of the Labor Code. Any contract on a public works project entered into between a contractor and a debarred subcontractor is void as a matter of law. A debarred subcontractor may not receive any public money for performing work as a subcontractor on a public works contract. Any public money that is paid to a debarred subcontractor by the Contractor for the Project shall be returned to the District. The Contractor shall be responsible for the payment of wages to workers of a debarred subcontractor who has been allowed to work on the Project.

25. PERFORMANCE BOND AND PAYMENT (LABOR AND MATERIALS) BOND REQUIREMENTS

Within the time specified in the Contract Documents, the Bidder to whom a Contract is awarded shall deliver to the District four identical counterparts of the Performance Bond and Payment (Labor and Materials) Bond in the form supplied by the District and included in the Contract Documents. Failure to do so may, in the sole discretion of District, result in the forfeiture of the Bid Guarantee. The surety supplying the bond must be an admitted surety insurer, as defined in Code of Civil Procedure Section 995.120, authorized to do business as such in the State of California and satisfactory to the District. The Performance Bond and the Payment (Labor and Materials) Bond shall be for one hundred percent (100%) of the Total Bid Price.

26. REQUEST FOR SUBSTITUTIONS

The successful bidder shall comply with the substitution request provisions set forth in the Special Conditions, including any deadlines for substitution requests **which may occur prior to the bid opening date**.

27. SALES AND OTHER APPLICABLE TAXES, PERMITS, LICENSES AND FEES

Contractor and its subcontractors performing work under this Contract will be required to pay California sales tax and other applicable taxes, and to pay for permits, licenses and fees required by the agencies with authority in the jurisdiction in which the work will be located, unless otherwise expressly provided by the Contract Documents.

28. EXECUTION OF CONTRACT

As required herein the Bidder to whom an award is made shall execute the Contract in the amount determined by the Contract Documents. The District may require appropriate evidence that the persons executing the Contract are duly empowered to do so.

END OF INSTRUCTION TO BIDDERS

INSTRUCTIONS TO BIDDERS

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BID FORM

NAME OF BIDDER: Flowline Contractors, Inc.

The undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

Backyard Water Mains Replacement Project – Sara Street

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the base bid portion of the Project for the following TOTAL BID AMOUNT:

BID SCHEDULE – SARA STREET

Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Mobilization, Demobilization, Bonds and Insurance	1	LS	\$17,072.00	\$17,072.00
2	Traffic Control	1	LS	\$3,684.00	\$3,684.00
3	Erosion Control	1	LS	\$1,725.00	\$1,725.00
4	Sheeting, Shoring, and Bracing	1	LS	\$4,841.00	\$4,841.00
5	Install 8" PVC AWWA C900 Class 150 (DR18) Pipe by Open Cut	2,183	LF	\$121.00	\$264,143.00
6	Install Fire Hydrant Assembly (includes Gate Valve and Lateral Run, Regardless of Length)	4	EA	\$14,904.00	\$59,616.00
7	Install 6" Gate Valve and Box	1	EA	\$2,518.00	\$2,518.00
8	Install 8" Gate Valve and Box	10	EA	\$2,496.00	\$24,960.00
9	Install 1" Water Service (short side)	23	EA	\$2,678.00	\$61,594.00
10	Install 1" Water Service (long side)	21	EA	\$2,703.00	\$56,763.00
11	Connection to Existing Water Main	4	EA	\$11,242.00	\$44,968.00
12A	Pavement Restoration (4" A/C Hot Mix, PG64-10) and Thermoplastic Striping	4,366	SF	\$6.77	\$29,557.82
12B	Pavement Restoration (1-1/2" Grind overlaid with 1-1/2" A/C Hot Mix, PG64-10) and Thermoplastic Striping	15,823	SF	\$3.20	\$50,633.60

Engineer's Estimate \$650,000.00

Total Bid Amount (Sum of all contract services including bid items 1-12) \$622,075.42
(numerical form)

Total Bid Amount (written form) six hundred twenty-two thousand seventy-five dollars and forty-two cents

BID FORM

In case of discrepancy between the unit price and the item cost set forth for a unit basis item, the unit price shall prevail and, shall be utilized as the basis for determining the lowest responsive, responsible bidder. However, if the amount set forth as a unit price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or is the same amount as the entry in the "Item Cost" column, then the amount set forth in the "Item Cost" column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price. Final payment shall be determined by the Engineer from measured quantities of work performed based upon the unit price.

In case of discrepancy between the written price and the numerical price, the written price shall prevail.

Bidder certifies that it is registered with the Department of Industrial Relations (DIR) to bid and contract on Public Works projects, and that all of its subcontractors that will be used on the project are registered with DIR to bid and work on Public Works projects. **Contractor's DIR Public Works Contractor Registration No.** is 1000044596.

The undersigned agrees that this Bid Form constitutes a firm offer to the District which cannot be withdrawn for the number of calendar days indicated in the Notice Inviting Bids from and after the bid opening, or until a Contract for the Work is fully executed by the District and a third party, whichever is earlier.

The undersigned acknowledges receipt, understanding and full consideration of the following addenda to the Contract Documents.

Addendum No. 1 Addendum No. _____ Addendum No. _____ Addendum No. _____
Addendum No. _____ Addendum No. _____ Addendum No. _____ Addendum No. _____
Addendum No. _____ Addendum No. _____ Addendum No. _____ Addendum No. _____

1. Attached is the required bid security in the amount of not less than 10% of the Total Bid Price.
2. Attached is the fully executed Non-Collusion Affidavit form.
3. Attached is the completed Designation of Subcontractors form.
4. Attached is the completed Bidder Information Form.
5. Attached is the completed Contractor's Certificate Regarding Workers' Compensation form.
6. Bidder acknowledges and understands that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

I hereby certify under penalty of perjury under the laws of the State of California, that all of the information submitted in connection with this Bid and all of the representations made herein are true and correct

Name of Bidder Flowline Contractors, Inc. Date 05/25/2021

Signature  Name Steve Fann

Title C.E.O.

BID FORM

**CONTRACTOR'S CERTIFICATE REGARDING
WORKERS' COMPENSATION**

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Name of Bidder Flowline Contractors, Inc.

Signature 

Name Steve Fann

Title C.E.O.

Dated 05/25/2021

**CONTRACTOR'S CERTIFICATE REGARDING
WORKERS' COMPENSATION**

BID BOND

The makers of this bond are, Flowline Contractors, Inc., as Principal, and Merchants Bonding Company (Mutual), as Surety and are held and firmly bound unto the Florin Resource Conservation District, hereinafter called the District, in the penal sum of TEN PERCENT (10%) OF THE TOTAL BID PRICE of the Principal submitted to DISTRICT for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted the accompanying bid dated May 25, 2021, for Backyard Water Mains Replacement Project – Sara Street (Base Bid) and Elk Grove Florin Frontage Road (Supplemental Bid).

If the Principal does not withdraw its bid within the time specified in the Contract Documents; and if the Principal is awarded the Contract and provides all documents to the District as required by the Contract Documents; then this obligation shall be null and void. Otherwise, this bond will remain in full force and effect.

Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents shall in affect its obligation under this bond, and Surety does hereby waive notice of any such changes.

In the event a lawsuit is brought upon this bond by the District and judgment is recovered, the Surety shall pay all litigation expenses incurred by the District in such suit, including reasonable attorneys' fees, court costs, expert witness fees and expenses.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals this 28th day of April, 2021, the name and corporate seal of each corporation.



(Corporate Seal)

Flowline Contractors, Inc.

Principal MAC

By MAC

Title C.E.O.

(Corporate Seal)

Merchants Bonding Company (Mutual)

Surety

By Elizabeth Collodi

Attorney-in-Fact

(Attach Attorney-in-Fact Certificate)

Title Elizabeth Collodi, Attorney-in-Fact

BID BOND

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Butte)

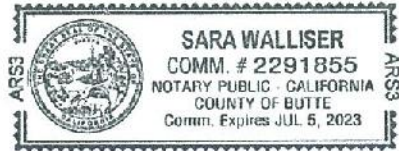
On April 28, 2021 before me, Sara Walliser, Notary Public
(insert name and title of the officer)

personally appeared Elizabeth Collodi,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are
subscribed to the within instrument and acknowledged to me that he/she/~~they~~ executed the same in
~~his/her/their~~ authorized capacity(ies), and that by ~~his/her/their~~ signature(s) on the instrument the
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing
paragraph is true and correct.

WITNESS my hand and official seal.

Signature  (Seal)



MERCHANTS BONDING COMPANY™

POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

Bill Rapp; Claudine Gordon; Deanna Quintero; Elizabeth Collodi; Jason March; Jennifer Lakmann; John Hopkins; K Corey Ward; Kristie Phillips; Marissa Robinson; Mary Collins; Matthew Foster; Michael K Feeney; Mindy Whitehouse; Phillip Watkins; Renee Ramsey; Samantha Watkins; Sara Walliser; Sarah Otto; Stephanie Agapoff; Steven Lee Williams; Tony Clark

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 27th day of January, 2021.



MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.

By *Larry Taylor*
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 27th day of January, 2021, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



Polly Mason
Notary Public

(Expiration of notary's commission does not invalidate this instrument)

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 28th day of April, 2021.



William Warner Jr.
Secretary

DESIGNATION OF SUBCONTRACTORS

In compliance with the Subletting and Subcontracting Fair Practices Act of the Public Contract Code of the State of California, each bidder shall set forth below: (a) the name and the location of the place of business and (b) the portion of the work which will be done by each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price. Notwithstanding the foregoing, if the work involves streets and highways, then the Contractor shall list each subcontractor who will perform work or labor or render service to Contractor in or about the work in an amount in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater. No additional time shall be granted to provide the below requested information.

If no subcontractor is specified, for a portion of the work, or if more than one subcontractor is specified for the same portion of Work, to be performed under the Contract in excess of one-half of one percent (1/2%) of the Contractor's Total Bid Price or \$10,000, whichever is greater if the work involves streets or highways, then the Contractor shall be deemed to have agreed that it is fully qualified to perform that Work, and that it shall perform that portion itself.

Portion of Work	Subcontractor (include Contractor's License No. & DIR Public Works Contractor Registration No.)	Location of Business
Paving	Sierra National Asphalt CSLB: <u>855769</u> DIR: <u>1000016970</u>	Carmichael, CA
Saw Cutting	California Cut & Core CSLB: <u>894220</u> DIR: <u>1000643289</u>	Rancho Cordova, CA
Striping	Sierra Traffic Markings, Inc. CSLB: <u>755317</u> DIR: <u>1000002783</u>	Roseville, CA

Name of Bidder Flowline Contractors, Inc.

Signature 

Name and Title Steve Fann, C.E.O.

Dated 05/25/2021

DESIGNATION OF SUBCONTRACTORS

INFORMATION REQUIRED OF BIDDERS

A. INFORMATION ABOUT BIDDER

NOTE: Where Bidder is a joint venture, pages shall be duplicated and information provided for all parties to the joint venture.

1.0 Bidders Name and address: Flowline Contractors, Inc. - 6560 Asher Lane, Sacramento, CA 95828

2.0 Bidders telephone no.: 916-383-7525

3.0 Bidders fax no. and email address: 916-383-7737 - flowlinecontractorsinc@gmail.com

4.0 Contractor' State License No. and Expiration Date: : 697400 - 10/31/2022

5.0 Contractor's Primary classification: A - General Engineering Contractor

6.0 Contractor's Specialty classification: N/A

Name of Licensee, if different from (1) above. If Joint Venture or Partnership, list full names of all partners:

N/A

7.0 What type of work does the Bidder normally perform with its own forces?

Underground Utilities

8.0 Has Bidder ever failed to complete any work awarded to it? If so, note when, where, and why:

No

INFORMATION REQUIRED OF BIDDERS

9.0 Within the last five years, has any officer or partner of Bidder's organization ever been an officer or partner of another organization when it failed to complete a contract? If so, state why and when:

No

10.0 At any time in the last five years has your firm failed to satisfactorily complete any work whereby the owner was forced to either take legal action or contact the surety company bonding the project to resolve the conflict? If so, state the circumstance.

No

B. LIST OF THREE SIMILAR COMPLETED PROJECTS - LAST THREE YEARS

Please include only those projects which are similar enough to demonstrate Bidder's ability to perform the required Work. The list shall include the following information as a minimum:

1.0 Name of Project, and Owner: Thor Main Replacement Project - Sacramento Suburban Water District

2.0 Name, address and contact information for Owner: Sacramento Suburban Water District

3701 Marconi Ave STE 100, Sacramento, CA - (916) 972-7171

3.0 Brief description of work involved: Approx 16,000 feet of 6-, 8-, and 12-inch diameter pipe installed, 50 fire hydrants upgraded, 200 new metered services installed and 7 meters reconnected.

4.0 Contract amount: \$1,304,795.10

5.0 Date of Completion: 12/03/2020

6.0 Name of Project, and Owner: Fair Oaks Boulevard Waterline Project - Carmichael Water District

7.0 Name, address and contact information for Owner: Carmichael Water District

7837 Fair Oaks Boulevard, Carmichael, CA 95608 - (916) 483-2452

8.0 Brief description of work involved: Installing over 2000 LF of waterline 8-inch to 16-inch diameter ductile iron pipe, isolation valves, abandonment of existing water mains, relocation and reconnection of existing water services and fire hydrants to the new waterline, testing and disinfection, asphalt removal and replacement of pavement, and traffic control.

9.0 Contract amount: \$1,919,503.00

INFORMATION REQUIRED OF BIDDERS

- 10.0 Date of Completion: 04/30/2020
- 11.0 Name of Project, and Owner: 2018/19 Water Mains and Services Replacement - San Juan Water District
- 12.0 Name, address and contact information for Owner: San Juan Water District
9335 Auburn Folsom Rd, Granite Bay, CA 95746 - (916) 791 -6912
- 13.0 Brief description of work involved: Project includes replacing approximately 1,245-LF of existing, old, failing pipeline with new 8-in ductile Iron, 4-in Ductile Iron, and 8-in C-900 pipeline on multiple streets along Auburn Folsom Rd. in Granite Bay, CA
- 14.0 Contract amount: \$1,253,744.00
- 15.0 Date of Completion: 10/09/2019

C. EQUIPMENT SUPPLIER LISTING

The following are the names of the manufacturers and suppliers of major items of equipment and systems to be used by the Bidder in the work.

Section Number	Equipment Description	Manufacturer and/or Supplier
	Not Applicable	

D. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder Steve Fann

Signature 

Company Name: Flowline Contractors, Inc.

INFORMATION REQUIRED OF BIDDERS

The Owner will check project references listed to verify information provided along with skills and capacity represented by Contractor. It is very important that the Bidder verify that all contact information is current for each name listed above.

The undersigned hereby states that all above representations are correct and true.

05/25/2021

Date

Steve Fann

Name

C.E.O.

Signatory Title

Flowline Contractors, Inc.

Company Name

697400

CA Contractor License No.

A - General Engineering Contractor

License Classification

10/31/2022

License Expiration Date

Signature:



INFORMATION REQUIRED OF BIDDERS

NON-COLLUSION AFFIDAVIT

I, Steve Fann, being first duly sworn, deposes and says that he is C.E.O. of Flowline Contractors, Inc. the party making the attached bid; that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I certify (or declare) under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Name of Bidder Flowline Contractors, Inc.

Signature 

Name Steve Fann

Title C.E.O.

Dated 05/25/2021

INFORMATION REQUIRED OF BIDDERS

CONTRACT

THIS CONTRACT is made this ____ day of _____, 2021, in the County of Sacramento, State of California, by and between the Florin Resource Conservation District, hereinafter called District, and Flowline Contractors, Inc., hereinafter called Contractor. The District and the Contractor for the considerations stated herein agree as follows:

ARTICLE 1. SCOPE OF WORK. The Contractor shall perform all Work within the time stipulated the Contract and shall provide all labor, materials, equipment, tools, utility services, and transportation to complete all of the Work required in strict compliance with the Contract Documents as specified in Article 5 below for the following Project:

Backyard Water Mains Replacement Project – Sara St.

The Contractor and its surety shall be liable to the District for any damages arising as a result of the Contractor’s failure to comply with this obligation.

ARTICLE 2. TIME FOR COMPLETION. The Work shall be commenced on the date stated in the District’s Notice to Proceed. The Contractor shall substantially complete all Work required by the Contract Documents within 120 calendar days from the commencement date stated in the Notice to Proceed. By its signature hereunder, Contractor agrees the time for completion set forth above is adequate and reasonable to complete the Work.

ARTICLE 3. CONTRACT PRICE. The District shall pay to the Contractor as full compensation for the performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, and including all applicable taxes and costs, the sum of Six Hundred Twenty-Two Thousand Seventy-Five Dollars and Forty-Two Cents (\$622,075.42). Payment shall be made as set forth in the General Conditions.

ARTICLE 4. LIQUIDATED DAMAGES. In accordance with Government Code section 53069.85, it is agreed that the Contractor will pay the District the sum of \$250 for each and every calendar day of delay beyond the time prescribed in the Contract Documents for finishing the Work, as Liquidated Damages and not as a penalty or forfeiture. In the event this is not paid, the Contractor agrees the District may deduct that amount from any money due or that may become due the Contractor under the Contract. This Article does not exclude recovery of other damages specified in the Contract Documents.

ARTICLE 5. COMPONENT PARTS OF THE CONTRACT. The “Contract Documents” include the following:

Notice Inviting Bids
Instructions to Bidders
Contractor's Bid Forms

CONTRACT

Contractor's Certificate Regarding Workers' Compensation
Bid Bond
Designation of Subcontractors
Information Required of Bidders
Non-Collusion Affidavit form
Contract
Performance Bond
Payment (Labor and Materials) Bond
General Conditions
Special Provisions (or Special Conditions)
Technical Specifications
Elk Grove Water Service Standard Construction Specifications
Addenda
Improvement Plans and Contract Drawings
Approved and fully executed change orders
Any other documents contained in or incorporated into the Contract

The Contractor shall complete the Work in strict accordance with all of the Contract Documents.

All of the Contract Documents are intended to be complementary. Work required by one of the Contract Documents and not by others shall be done as if required by all. This Contract shall supersede any prior agreement of the parties.

ARTICLE 6. PROVISIONS REQUIRED BY LAW. Each and every provision of law required to be included in these Contract Documents shall be deemed to be included in these Contract Documents. The Contractor shall comply with all requirements of applicable federal, state and local laws, rules and regulations, including, but not limited to, the provisions of the California Labor Code and California Public Contract Code which are applicable to this Project.

ARTICLE 7. INDEMNIFICATION. Contractor shall provide indemnification as set forth in the General Conditions.

ARTICLE 8. PREVAILING WAGES. Contractor shall be required to pay the prevailing rate of wages in accordance with the Labor Code which such rates shall be made available at 2031 Howe Avenue Suite 100, Sacramento, CA or may be obtained online at <http://www.dir.ca.gov/dlsr>. and which must be posted at the job site. All public works projects shall comply with the Department of Industrial Relations (DIR) prevailing wage monitoring requirements. The DIR compliance monitoring program requires all contractors and subcontractors (of any tier) to be registered with DIR prior to bidding on or entering into a contract for a public works project. **Each contractor submitting a bid must list on the Bid Schedule their DIR Public Works Contractor Registration number in the space provided. On the List of Subcontractors, the contractor must list the DIR registration number of all of its subcontractors in the space provided. Failure to provide this information may disqualify the contractor from the bid.** The contractor who is awarded the contract must electronically submit all certified payroll records

CONTRACT

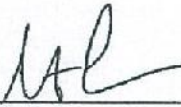
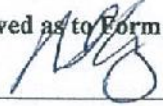
24

to DIR during the course of the project. The District shall file a PWC-100 form electronically with DIR within five (5) days of the award of contract. The filing of the PWC-100 form initiates DIR to track the prevailing wage payments from the contractor and subcontractors. Further information can be found under the public works section of DIR's website at www.dir.ca.gov.

CONTRACT

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IN WITNESS WHEREOF, this Contract has been duly executed by the above-named parties, on the day and year above written.

FLORIN RESOURCE CONSERVATION DISTRICT	FLOWLINE CONTRACTORS, INC.
By:	By: 
_____ Signature	_____ Signature
<u>Bruce Kamilos, P.E.</u> Name	<u>Steve Fann</u> Name
<u>General Manager</u> Title	<u>C.E.O.</u> Title
Attest:	<u>697400</u> License Number
_____ District Clerk	
Approved as to Form:	
	
<u>Richard E. Nosky</u> Name <u>6-10-21</u>	
<u>General Counsel</u> Title	

CONTRACT

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Elk Grove Water District
Backyard Water Mains Replacement Project - Sara St.
May 2021

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, _____ (hereinafter referred to as “District”) has awarded to _____, (hereinafter referred to as the “Contractor”) an agreement for _____ (hereinafter referred to as the “Project”).

WHEREAS, the work to be performed by the Contractor is more particularly set forth in the Contract Documents for the Project dated _____, (hereinafter referred to as “Contract Documents”), the terms and conditions of which are expressly incorporated herein by reference; and

WHEREAS, the Contractor is required by said Contract Documents to perform the terms thereof and to furnish a bond for the faithful performance of said Contract Documents.

NOW, THEREFORE, we, _____, the undersigned Contractor and _____ as Surety, a corporation organized and duly authorized to transact business under the laws of the State of California, are held and firmly bound unto the District in the sum of _____ DOLLARS, (\$_____), said sum being not less than one hundred percent (100%) of the total amount of the Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the Contractor, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any alteration thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill all obligations including the one-year guarantee of all materials and workmanship; and shall indemnify and save harmless the District, its officers and agents, as stipulated in said Contract Documents, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified therefore, there shall be included costs and reasonable expenses and fees including reasonable attorney’s fees, incurred by District in enforcing such obligation.

As a condition precedent to the satisfactory completion of the Contract Documents, unless otherwise provided for in the Contract Documents, the above obligation shall hold good for a period of one (1) year after the acceptance of the work by District, during which time if Contractor shall fail to make full, complete, and satisfactory repair and replacements and totally protect the District from loss or damage resulting from or caused by defective materials or faulty workmanship. The obligations of Surety hereunder shall continue so long as any obligation of Contractor remains. Nothing herein shall limit the District’s rights or the Contractor or Surety’s

PERFORMANCE BOND

obligations under the Contract, law or equity, including, but not limited to, California Code of Civil Procedure section 337.15.

Whenever Contractor shall be, and is declared by the District to be, in default under the Contract Documents, the Surety shall remedy the default pursuant to the Contract Documents, or shall promptly, at the District's option:

- (1) Take over and complete the Project in accordance with all terms and conditions in the Contract Documents; or
- (2) Obtain a bid or bids for completing the Project in accordance with all terms and conditions in the Contract Documents and upon determination by Surety of the lowest responsive and responsible bidder, arrange for a Contract between such bidder, the Surety and the District, and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract Documents.
- (3) Permit the District to complete the Project in any manner consistent with California law and make available as work progresses sufficient funds to pay the cost of completion of the Project, less the balance of the contract price, including other costs and damages for which Surety may be liable. The term "balance of the contract price" as used in this paragraph shall mean the total amount payable to Contractor by the District under the Contract and any modification thereto, less any amount previously paid by the District to the Contractor and any other set offs pursuant to the Contract Documents.

Surety expressly agrees that the District may reject any contractor or subcontractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Contractor.

Surety shall not utilize Contractor in completing the Project nor shall Surety accept a bid from Contractor for completion of the Project if the DISTRICT, when declaring the Contractor in default, notifies Surety of the District's objection to Contractor's further participation in the completion of the Project.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project to be performed thereunder shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract Documents or to the Project.

PERFORMANCE BOND

IN WITNESS WHEREOF, we have hereunto set our hands and seals this _____ day of _____, 20____.

CONTRACTOR/PRINCIPAL

Name

By _____

SURETY:

By: _____
Attorney-In-Fact

The rate of premium on this bond is _____ per thousand. The total amount of premium charges, \$ _____.
(The above must be filled in by corporate attorney.)

THIS IS A REQUIRED FORM

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of Agent or Representative for service of process in California, if different from above)

(Telephone number of Surety and Agent or Representative for service of process in California)

PERFORMANCE BOND

STATE OF CALIFORNIA)
) ss.
DISTRICT OF _____)

On this _____ day of _____, in the year 20____, before me, _____, a Notary Public in and for said state, personally appeared _____, known to me to be the person whose name is subscribed to the within instrument as the Attorney-In-Fact of the (Surety) acknowledged to me that he subscribed the name of the _____ (Surety) thereto and his own name as Attorney-In-Fact.

Notary Public in and for said State

(SEAL)

Commission expires: _____

NOTE: A copy of the Power-of-Attorney to local representatives of the bonding company must be attached hereto.

PAYMENT BOND (LABOR AND MATERIALS)

KNOW ALL MEN BY THESE PRESENTS That

WHEREAS, the Florin Resource Conservation District (hereinafter designated as the “District”), by action taken or a resolution passed _____, 20____ has awarded to _____ hereinafter designated as the “Principal,” a contract for the work described as follows:

(the “Project”); and

WHEREAS, said Principal is required to furnish a bond in connection with said contract; providing that if said Principal or any of its Subcontractors shall fail to pay for any materials, provisions, provender, equipment, or other supplies used in, upon, for or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, or for amounts due under the Unemployment Insurance Code or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of said Principal and its Subcontractors with respect to such work or labor the Surety on this bond will pay for the same to the extent hereinafter set forth.

NOW THEREFORE, we, the Principal and _____ as Surety, are held and firmly bound unto the District in the penal sum of _____ Dollars (\$_____) lawful money of the United States of America, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, his or its subcontractors, heirs, executors, administrators, successors or assigns, shall fail to pay any of the persons named in Section 3181 of the Civil Code, fail to pay for any materials, provisions or other supplies, used in, upon, for or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department or Franchise Tax Board from the wages of employees of the contractor and his subcontractors pursuant to Section 18663 of the Revenue and Taxation Code, with respect to such work and labor the Surety or Sureties will pay for the same, in an amount not exceeding the sum herein above specified, and also, in case suit is brought upon this bond, all litigation expenses incurred by the District in such suit, including reasonable attorneys’ fees, court costs, expert witness fees and investigation expenses.

This bond shall inure to the benefit of any of the persons named in Section 3181 of the Civil Code so as to give a right of action to such persons or their assigns in any suit brought upon this bond.

It is further stipulated and agreed that the Surety on this bond shall not be exonerated or released from the obligation of this bond by any change, extension of time for performance, addition,

PAYMENT BOND (LABOR AND MATERIALS)

alteration or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described, or pertaining or relating to the furnishing of labor, materials, or equipment therefore, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement herein above described, nor by any rescission or attempted rescission or attempted rescission of the contract, agreement or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the owner or District and original contractor or on the part of any obligee named in such bond, but the sole conditions of recovery shall be that claimant is a person described in Section 3110 or 3112 of the Civil Code, and has not been paid the full amount of his claim and that Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed unoriginal thereof, have been duly executed by the Principal and Surety above named, on the ____ day of _____ 20____ the name and corporate seal of each corporate party being hereto affixed and these presents duly signed b its undersigned representative pursuant to authority of its governing body.

(Corporate Seal of Principal,
if corporation)

Principal (Property Name of Contractor)

By _____
(Signature of Contractor)

(Seal of Surety)

Surety

By _____
Attorney in Fact

(Attached Attorney-In-Fact Certificate and Required
Acknowledgements)

*Note: Appropriate Notarial Acknowledgments of Execution by Contractor and +surety and a power of Attorney MUST BE ATTACHED.

PAYMENT BOND (LABOR AND MATERIALS)

GENERAL CONDITIONS

ARTICLE 1. DEFINITIONS

- a. Acceptable, Acceptance or words of similar import shall be understood to be the acceptance of the Engineer and/or the District .
- b. Act of God an Act of God is an earthquake of magnitude 3.5 on the Richter scale and tidal waves.
- c. Approval means written authorization by Engineer and/or District .
- d. Contract Documents includes all documents as stated in the Contract.
- e. District and Contractor are those stated in the Contract. The terms District and Owner may be used interchangeably.
- f. Day shall mean calendar day unless otherwise specifically designated.
- g. Engineer shall mean the Project Engineer and/or Manager designated by the Florin Resource Conservation District, acting either directly or through properly authorized agents, such as agents acting within the scope of the particular duties entrusted to them. Also sometimes referred to as the “District’s Representative,” “Engineer” or “Representative” in the Contract Documents.
- h. Equal, Equivalent, Satisfactory, Directed, Designated, Selected, As Required and similar words shall mean the written approval, selection, satisfaction, direction, or similar action of the Engineer and/or District.
- i. Indicated, Shown, Detailed, Noted, Scheduled or words of similar meaning shall mean that reference is made to the drawings, unless otherwise noted. It shall be understood that the direction, designation, selection, or similar import of the Engineer and/or District is intended, unless stated otherwise.
- j. Install means the complete installation of any item, equipment or material.
- k. Material shall include machinery, equipment, manufactured articles, or construction such as form work, fasteners, etc., and any other classes of material to be furnished in connection with the Contract. All materials shall be new unless specified otherwise.
- l. Perform shall mean that the Contractor, at Contractor’s expense, shall take all actions necessary to complete The Work, including furnishing of necessary labor, tools, and equipment, and providing and installing Materials that are indicated, specified, or required to complete such performance.

GENERAL CONDITIONS

- m. Project is The Work planned by District as provided in the Contract Documents.
- n. Provide shall include provide complete in place, that is furnish, install, test and make ready for use.
- o. Recyclable Waste Materials shall mean materials removed from the Project site which are required to be diverted to a recycling center rather than an area landfill. Recyclable Waste Materials include asphalt, concrete, brick, concrete block, and rock.
- p. Specifications means that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the work and those portions of the Elk Grove Water Service Standard Construction Specification, including all current supplements, addenda, and revisions thereof. In the case of conflict between the Elk Grove Water Service Standard Construction Specifications and the Contract Documents, the Contract Documents shall prevail.
- q. The Work means the entire improvement planned by the District pursuant to the Contract Documents.
- r. Work means labor, equipment and materials incorporated in, or to be incorporated in the construction covered by the Contract Documents.

ARTICLE 2. CONTRACT DOCUMENTS

- a. **Contract Documents.** The Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.
- b. **Interpretations.** The Contract Documents are intended to be fully cooperative and to be complementary. If Contractor observes that any documents are in conflict, the Contractor shall promptly notify the Engineer in writing. In case of conflicts between the Contract Documents, the order of precedence shall be as follows:
 - 1. Change Orders or Work Change Directives
 - 2. Addenda
 - 3. Special Provisions (or Special Conditions)
 - 4. Technical Specifications
 - 5. Plans (Contract Drawings)
 - 6. Contract
 - 7. General Conditions
 - 8. Instructions to Bidders
 - 9. Notice Inviting Bids
 - 10. Contractor’s Bid Forms
 - 11. Elk Grove Water Service Standard Construction Specifications
 - 12. Standard Plans
 - 13. Reference Documents

GENERAL CONDITIONS

With reference to the Drawings, the order of precedence shall be as follows:

1. Figures govern over scaled dimensions
 2. Detail drawings govern over general drawings
 3. Addenda or Change Order drawings govern over Contract Drawings
 4. Contract Drawings govern over Standard Drawings
 5. Contract Drawings govern over Shop Drawings
- c. **Conflicts in Contract Documents.** Notwithstanding the orders of precedence established above, in the event of conflicts, the higher standard shall always apply.
- d. **Organization of Contract Documents.** Organization of the Contract Documents into divisions, sections, and articles, and arrangement of drawings shall not control the Contractor in dividing The Work among subcontractors or in establishing the extent of Work to be performed by any trade.

ARTICLE 3. CONTRACTS DOCUMENTS: COPIES & MAINTENANCE

Contractor will be furnished, free of charge, an electronic copy of the final Contract Documents. Additional copies will be the responsibility of the contractor.

Contractor shall maintain a clean, undamaged set of Contract Documents at the Project site. Bids must be submitted on the District's Bid Forms. Bidders may obtain a copy of the Contract Documents at: Sacramento Regional Builders Exchange, 1331 T Street, Sacramento, CA 95811, (916) 442-8991.

ARTICLE 4. DETAIL DRAWINGS AND INSTRUCTIONS

- a. **Examination of Contract Documents.** Before commencing any portion of The Work, Contractor shall again carefully examine all applicable Contract Documents, the Project site and other information given to Contractor as to materials and methods of construction and other Project requirements. Contractor shall immediately notify the Engineer of any potential error, inconsistency, ambiguity, conflict or lack of detail or explanation. If Contractor performs, permits, or causes the performance of any Work which is in error, inconsistent or ambiguous, or not sufficiently detailed or explained, Contractor shall bear any and all resulting costs, including, without limitation, the cost of correction. In no case shall the Contractor or any subcontractor proceed with Work if uncertain as to the applicable requirements.
- b. **Additional Instructions.** After notification of any error, inconsistency, ambiguity, conflict or lack of detail or explanation, the Engineer will provide any required additional instructions, by means of drawings or other written direction, necessary for proper execution of Work.

GENERAL CONDITIONS

- c. **Quality of Parts, Construction and Finish.** All parts of The Work shall be of the best quality of their respective kinds and the Contractor must use all diligence to inform itself fully as to the required construction and finish. In no case shall Contractor proceed with The Work without obtaining first from the Engineer such Approval may be necessary for the proper performance of Work.
- d. **Contractor's Variation from Contract Document Requirements.** If it is found that the Contractor has varied from the requirements of the Contract Documents including the requirement to comply with all applicable laws, ordinances, rules and regulations, the Engineer may at any time, before or after completion of the Work, order the improper Work removed, remade or replaced by the Contractor at the Contractor's expense.

ARTICLE 5. EXISTENCE OF UTILITIES AT THE WORK SITE

- a. No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities are not shown on the plans. It shall be the responsibility of the Contractor to determine the exact location of all service connections. The Contractor shall make its own investigations, including exploratory excavations, to determine the locations and type of service connections, prior to commencing Work which could result in damage to such utilities. The Contractor shall immediately notify the District in writing of any utility discovered in a different position than shown on the Plans or which is not shown on the Plans.
- b. All water meters, water valves, fire hydrants, electrical utility vaults, telephone vaults, gas utility valves, and other subsurface structures shall be relocated or adjusted to final grade by the Contractor. Locations of existing utilities shown on the Plans are approximate and may not be complete. The Contractor shall be responsible for coordinating its Work with all utility companies during the construction of The Work.
- c. Contractor, except in an emergency, shall contact the appropriate regional notification center, Underground Service Alert at 1-800-227-2600 at least two working days prior to commencing any excavation if the excavation will be performed in an area which is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced or carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the District has been given the identification number by the Contractor.

ARTICLE 6. SCHEDULE

- a. **Estimated Schedule.** Within seven (7) days after the issuance of the Notice to Proceed, Contractor shall prepare a Project schedule and shall submit this to the Engineer for Approval. The receipt or Approval of any schedules by the Engineer or the District shall not

GENERAL CONDITIONS

in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Project. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Project within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Engineer.

- b. **Schedule Contents.** The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Project within the time specified for completion. Schedule duration shall match the Contract time. Schedules indicating early completion will be rejected.
- c. **Schedule Updates.** Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Engineer whenever requested to do so by Engineer and with each progress payment request. The Engineer may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

ARTICLE 7. SUBSTITUTIONS

- a. Pursuant to Public Contract Code Section 3400(b) the District may make a finding that is described in the invitation for bids that designates certain products, things, or services by specific brand or trade name.
- b. Unless specifically designated in the Contract Documents, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents. However, the District may have adopted certain uniform standards for certain materials, processes and articles.
- c. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of "or equal" requests shall not in any way authorize an extension of time for

GENERAL CONDITIONS

performance of this Contract. If a proposed “or equal” substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with the Contractor. The District has the complete and sole discretion to determine if a material, process or article is an “or equal” material, process or article that may be substituted.

- d. Data required to substantiate requests for substitutions of an “or equal” material, process or article data shall include a signed affidavit from the Contractor stating that, and describing how, the substituted “or equal” material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted “or equal” material, process or article, and substantiates that it is an “or equal” to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted “or equal” material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the District in a timely fashion will result in the rejection of the proposed substitution.
- e. The Contractor shall bear all of the District’s costs associated with the review of substitution requests.
- f. The Contractor shall be responsible for all costs related to a substituted “or equal” material, process or article.
- g. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

ARTICLE 8. SHOP DRAWINGS

- a. Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in his own Work or in that of any other contractor, subcontractor, or worker on the Project, one (1) electronic copy and three (3) copies of all shop or setting drawings, calculations, schedules, and materials list, and all other provisions required by the Contract. Contractor shall sign all submittals affirming that submittals have been reviewed and approved by Contractor prior to submission to Engineer. Each signed submittal shall affirm that the submittal meets all the requirements of the Contract Documents except as specifically and clearly noted and listed on the cover sheet of the submittal.
- b. Contractor shall make any corrections required by the Engineer, and file with the Engineer three (3) corrected copies each, and furnish such other copies as may be needed for completion of the Work. Owner’s approval of shop drawings shall not relieve Contractor from responsibility for deviations from the Contract Documents unless Contractor has, in writing, called Engineer’s attention to such deviations at time of submission and has secured

GENERAL CONDITIONS

the Engineer's written Approval. Engineer's Approval of shop drawings shall not relieve Contractor from responsibility for errors in shop drawings.

ARTICLE 9. SUBMITTALS

- a. Contractor shall furnish to the Engineer for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the specifications. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
- b. Contractor will provide samples and submittals, together with catalogs and supporting data required by the Engineer, to the Engineer within a reasonable time period to provide for adequate review and avoid delays in the Work.
- c. These requirements shall not authorize any extension of time for performance of this Contract. Engineer will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

ARTICLE 10. MATERIALS

- a. Except as otherwise specifically stated in the Contract Documents, Contractor shall provide and pay for all materials, labor, tools, equipment, water, lights, power, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.
- b. Unless otherwise specified, all materials shall be new and the best of their respective kinds and grades as noted and/or specified, and workmanship shall be of good quality.
- c. Materials shall be furnished in ample quantities and at such times as to ensure uninterrupted progress of The Work and shall be stored properly and protected as required by the Contract Documents. Contractor shall be entirely responsible for damage or loss by weather or other causes to materials or Work.
- d. No materials, supplies, or equipment for Work under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in the work and agrees upon completion of all work to deliver the Project, to the District free from any claims, liens, or charges.
- e. Materials shall be stored on the Project site in such manner so as not to interfere with any operations of the District or any independent contractor.

GENERAL CONDITIONS

ARTICLE 11. CONTRACTOR'S SUPERVISION

Contractor shall continuously keep at the Project site, a competent and experienced full-time Project superintendent approved by the District. Superintendent must be able to proficiently speak, read and write in English. Contractor shall continuously provide efficient supervision of the Project.

ARTICLE 12. WORKERS

- a. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Project any unfit person or any one not skilled in the Work assigned to him or her.
- b. Any person in the employ of the Contractor whom the District may deem incompetent or unfit shall be dismissed from The Work and shall not be employed on this Project except with the written Approval of the District.

ARTICLE 13. SUBCONTRACTORS

- a. Contractor agrees to bind every subcontractor to the terms of the Contract Documents as far as such terms are applicable to subcontractor's portion of The Work. Contractor shall be as fully responsible to the District for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by its subcontractors, as Contractor is for acts and omissions of persons directly employed by Contractor. Nothing contained in these Contract Documents shall create any contractual relationship between any subcontractor and the District.
- b. The District reserves the right to Approve all subcontractors. The District's Approval of any subcontractor under this Contract shall not in any way relieve Contractor of its obligations in the Contract Documents.
- c. Prior to substituting any subcontractor listed in the Bid Forms, Contractor must comply with the requirements of the Subletting and Subcontracting Fair Practices Act pursuant to California Public Contract Code section 4100 et seq.

ARTICLE 14. PERMITS AND LICENSES

Permits and licenses necessary for prosecution of The Work shall be secured and paid for by Contractor, unless otherwise specified in the Contract Documents.

- a. Contractor shall obtain and pay for all other permits and licenses required for The Work, including excavation permit and for plumbing, mechanical and electrical work and for operations in or over public streets or right of way under jurisdiction of public agencies other than the District.

GENERAL CONDITIONS

- b. The Contractor shall arrange and pay for all off-site inspection of the Work related to permits and licenses, including certification, required by the specifications, drawings, or by governing authorities, except for such off-site inspections delineated as the District's responsibility pursuant to the Contract Documents.
- c. Before Acceptance of the Project, the Contractor shall submit all licenses, permits, certificates of inspection and required approvals to the District.

ARTICLE 15. UTILITY USAGE

- a. All temporary utilities, including but not limited to electricity, water, gas, and telephone, used on the Work shall be furnished and paid for by Contractor. Contractor shall Provide necessary temporary distribution systems, including meters, if necessary, from distribution points to points on The Work where the utility is needed. Upon completion of The Work, Contractor shall remove all temporary distribution systems.
- b. Contractor shall provide necessary and adequate utilities and pay all costs for water, electricity, gas, oil, and sewer charges required for completion of the Project.
- c. All permanent meters Installed shall be listed in the Contractor’s name until Project Acceptance.
- d. If the Contract is for construction in existing facilities, Contractor may, with prior written Approval of the District, use the District’s existing utilities by compensating the District for utilities used by Contractor.

ARTICLE 16. INSPECTION FEES FOR PERMANENT UTILITIES

All inspection fees and other municipal charges for permanent utilities including, but not limited to, sewer, electrical, phone, gas, water, and irrigation shall be paid for by the District. Contractor shall be responsible for arranging the payment of such fees, but inspection fees and other municipal fees relating to permanent utilities shall be paid by the District. Contractor may either request reimbursement from the District for such fees, or shall be responsible for arranging and coordination with District for the payment of such fees.

ARTICLE 17. TRENCHES

- a. Trenches Five Feet or More in Depth. The Contractor shall submit to the District, in advance of excavation, a detailed plan showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five feet or more in depth. If the plan varies from shoring system standards, the plan shall be prepared by a registered civil or structural engineer. The plan shall not be less effective than the shoring, bracing, sloping, or other provisions of the Construction Safety Orders, as defined in the California Code of Regulations.

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b. Excavations Deeper than Four Feet. If work under this Contract involves digging trenches or other excavation that extends deeper than four feet below the surface, Contractor shall promptly, and before the following conditions are disturbed, notify the District, in writing, of any:

- 1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
- 2) Subsurface or latent physical conditions at the site differing from those indicated.
- 3) Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract.

The District shall promptly investigate the conditions, and if it finds that the conditions do so materially differ, or do involve hazardous waste, and cause a decrease or increase in Contractor's cost of, or the time required for, performance of any part of The Work, shall issue a change order under the procedures described in the Contract Documents.

In the event that a dispute arises between the District and the Contractor as to whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of The Work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract, but shall proceed with all Work to be performed under the Contract. Contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the parties.

ARTICLE 18. DIVERSION OF RECYCLABLE WASTE MATERIALS

In compliance with the applicable City of Elk Grove's waste reduction and recycling efforts, Contractor shall divert all Recyclable Waste Materials to appropriate recycling centers. Contractor will be required to submit weight tickets and written proof of diversion with its monthly progress payment requests if required by the City. Contractor shall complete and execute any certification forms required by the City or other applicable agencies to document Contractor's compliance with these diversion requirements. All costs incurred for these waste diversion efforts shall be the responsibility of the Contractor.

ARTICLE 19. REMOVAL OF HAZARDOUS MATERIALS

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Project site, the Contractor shall immediately stop work at the affected Project site and shall report the condition to the District in writing. The District shall contract for any services required to directly

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remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Project site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the District and Contractor.

ARTICLE 20. SANITARY FACILITIES

Contractor shall provide sanitary temporary toilet buildings for the use of all workers. All toilets shall comply with local codes and ordinances. Toilets shall be kept supplied with toilet paper and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in The Work under construction shall not be permitted. Any other Sanitary Facilities required by CAL-OSHA shall be the responsibility of the Contractor.

ARTICLE 21. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the Air Quality Management District (AQMD) and/or California Air Resources Board (CARB). Although the AQMD and CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by AQMD and CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify District against any fines or penalties imposed by AQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in Article 48, Indemnification.

ARTICLE 22. COMPLIANCE WITH STATE STORM WATER PERMIT

Permit Compliance. The Contractor shall comply with the District's National Pollutant Discharge Elimination System (NPDES) Permit No. CAG995001 issued by the Regional Water Quality Control Board in association with Low Threat General Waste Discharge Order No. R5-2013-0074-059.

- a. **Consideration of Costs.** As stated in the Instruction to Bidders, it was the responsibility of the Contractor in preparing its bid to evaluate and include in the bid any costs for complying with the Permits.

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- b. **Other Applicable Laws.** Contractor shall also comply with the lawful requirements of any applicable municipality, the District, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system(s) or other water courses under their jurisdiction, including applicable requirements in municipal storm water management programs. This requirement applies to all projects, including those projects that impact less than one acre or disturb less than one acre.
- c. **Run-on Drainage.** Storm, surface, nuisance or other waters may be encountered at various times during the course of construction. By submitting its bid, Contractor acknowledged that it investigated the risk arising from such waters, prepared its bid accordingly, and assumed any and all liabilities arising therefrom.
- d. **Liability for Non-Compliance.** Failure to comply with the Permit or any applicable municipal permit is a violation of law and may be subject to penalties, fines, or additional regulatory requirements. In addition to the other indemnities included herein, Contractor hereby agrees to indemnify and hold harmless District, its officers, directors, agents and employees from and against any and all fines, penalties, claims or other regulatory requirements imposed as a result of noncompliance with the Permit or the applicable municipal permit, unless such noncompliance is the result of District's sole established negligence, willful misconduct or active negligence..

ARTICLE 23. CLEANING UP

- a. Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment. Contractor shall not store debris under, in, or about the premises. Upon completion of Work, Contractor shall clean the interior and exterior of the building or improvement including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration. Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and contractor shall also remove temporary fencing, barricades, planking and construction toilet and similar temporary facilities from site. Contractor shall also clean all buildings, asphalt and concrete areas to the degree necessary to remove oil, grease, fuel, or other stains caused by Contractor operations or equipment.
- b. Contractor shall fully clean up the site at the completion of The Work. If the Contractor fails to immediately clean up at the completion of The Work, the District may do so and the cost of such clean up shall be charged back to the Contractor.

ARTICLE 24. LAYOUT AND FIELD ENGINEERING

All field engineering required for laying out The Work and establishing grades for earthwork operations shall be furnished by the Contractor at its expense. Layout shall be done by a registered

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civil engineer Approved by the Engineer. Any required “as-built” drawings of the Work shall be prepared by the registered civil engineer.

ARTICLE 25. EXCESSIVE NOISE

- a. The Contractor shall use only such equipment on the work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
- b. The Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements. No internal combustion engine shall be operated on the Project without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

ARTICLE 26. TESTS AND INSPECTIONS

- a. If the Contract Documents, the Engineer, or any instructions, laws, ordinances, or public authority require any part of The Work to be tested or Approved, Contractor shall provide the Engineer at least two (2) working days notice of its readiness for observation or inspection. If inspection is by a public authority other than the District, Contractor shall promptly inform the District of the date fixed for such inspection. Required certificates of inspection (or similar) shall be secured by Contractor. Costs for District testing and District inspection shall be paid by the District. Costs of tests for Work found not to be in compliance shall be paid by the Contractor.
- b. If any Work is done or covered up without the required testing or approval, the Contractor shall uncover or deconstruct the Work, and the Work shall be redone after completion of the testing at the Contractor’s cost in compliance with the Contract Documents.
- c. Where inspection and testing are to be conducted by an independent laboratory or agency, materials or samples of materials to be inspected or tested shall be selected by such laboratory or agency, or by the District, and not by Contractor. All tests or inspections of materials shall be made in accordance with the commonly recognized standards of national organizations.
- d. In advance of manufacture of materials to be supplied by Contractor which must be tested or inspected, Contractor shall notify the District so that the District may arrange for testing

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at the source of supply. Any materials which have not satisfactorily passed such testing and inspection shall not be incorporated into The Work.

- e. If the manufacture of materials to be inspected or tested will occur in a plant or location outside the geographic limits of District, the Contractor shall pay for any excessive or unusual costs associated with such testing or inspection, including but not limited to excessive travel time, standby time and required lodging.
- f. Reexamination of Work may be ordered by the District. If so ordered, Work must be uncovered or deconstructed by Contractor. If Work is found to be in accordance with the Contract Documents, the District shall pay the costs of reexamination and reconstruction. If such work is found not to be in accordance with the Contract Documents, Contractor shall pay all costs.

ARTICLE 27. PROTECTION OF WORK AND PROPERTY

- a. The Contractor shall be responsible for all damages to persons or property that occur as a result of The Work. Contractor shall be responsible for the proper care and protection of all materials delivered and Work performed until completion and final Acceptance by the District. All Work shall be solely at the Contractor's risk. Contractor shall adequately protect adjacent property from settlement or loss of lateral support as necessary. Contractor shall comply with all applicable safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the Project site where Work is being performed. Contractor shall erect and properly maintain at all times, as required by field conditions and progress of work, all necessary safeguards, signs, barriers, lights, and watchmen for protection of workers and the public, and shall post danger signs warning against hazards created in the course of construction.
- b. In an emergency affecting safety of life or of work or of adjoining property, Contractor, without special instruction or authorization from the Engineer, is hereby permitted to act to prevent such threatened loss or injury; and Contractor shall so act, without appeal, if so authorized or instructed by the Engineer or the District. Any compensation claimed by Contractor on account of emergency work shall be determined by and agreed upon by the District and the Contractor.
- c. Contractor shall provide such heat, covering, and enclosures as are necessary to protect all Work, materials, equipment, appliances, and tools against damage by weather conditions.
- d. Contractor shall take adequate precautions to protect existing sidewalks, curbs, pavements, utilities, and other adjoining property and structures, and to avoid damage thereto, and Contractor shall repair any damage thereto caused by The Work operations. Contractor shall:
 - 1) Enclose the working area with a substantial barricade, and arrange work to cause minimum amount of inconvenience and danger to the public.

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- 2) Provide substantial barricades around any shrubs or trees indicated to be preserved.
- 3) Deliver materials to the Project site over a route designated by the Engineer.
- 4) Provide any and all dust control required and follow the Applicable air quality regulations as appropriate. If the Contractor does not comply, the District shall have the immediate authority to provide dust control and deduct the cost from payments to the Contractor.
- 5) Confine Contractor's apparatus, the storage of materials, and the operations of its workers to limits required by law, ordinances, permits, or directions of the Engineer. Contractor shall not unreasonably encumber the Project site with its materials.
- 6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved civil engineer or land surveyor, at no cost to the District.
- 7) Ensure that existing facilities, fences and other structures are all adequately protected and that, upon completion of all Work, all facilities that may have been damaged are restored to a condition acceptable to the District.
- 8) Preserve and protect from injury all buildings, pole lines and all direction, warning and mileage signs that have been placed within the right-of-way.
- 9) At the completion of work each day, leave the Project site in a clean, safe condition.
- 10) Comply with any stage construction and traffic handling plans. Access to residences and businesses shall be maintained at all times.

These precautionary measures will apply continuously and not be limited to normal working hours. Full compensation for the Work involved in the preservation of life, safety and property as above specified shall be considered as included in the prices paid for the various contract items of Work, and no additional allowance will be made therefor.

- e. Should damage to persons or property occur as a result of The Work, Contractor shall be responsible for proper investigation, documentation, including video or photography, to adequately memorialize and make a record of what transpired. The District shall be entitled to inspect and copy any such documentation, video, or photographs.

ARTICLE 28. CONTRACTORS MEANS AND METHODS

Contractor is solely responsible for the means and methods utilized to Perform The Work. In no case shall the Contractor's means and methods deviate from commonly used industry standards.

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ARTICLE 29. AUTHORIZED REPRESENTATIVES

The District shall designate representatives, who shall have the right to be present at the Project site at all times. The District may designate an inspector who shall have the right to observe all of the Contractor's Work. The inspector is not authorized to make changes in the Contract Documents. The inspector shall not be responsible for the Contractor's failure to carry out The Work in accordance with the Contract Documents. Contractor shall provide safe and proper facilities for such access.

ARTICLE 30. HOURS OF WORK

- a. Eight (8) hours of work shall constitute a legal day's work. The Contractor and each subcontractor shall forfeit, as penalty to the District, twenty-five dollars (\$25) for each worker employed in the execution of Work by the Contractor or any subcontractor for each day during which such worker is required or permitted to work more than eight (8) hours in any one day and forty (40) hours in any week in violation of the provisions of the Labor Code, and in particular, Section 1810 to Section 1815, except as provided in Labor Code Section 1815.
- b. Work shall be accomplished on a regularly scheduled eight (8) hour per day work shift basis, Monday through Friday, between the hours of 7:00 a.m. and 5:00 p.m.
- c. It shall be unlawful for any person to operate, permit, use, or cause to operate any of the following at the Project site, other than between the hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, with no Work allowed on District-observed holidays, unless otherwise Approved by the Engineer:
 - 1) Powered Vehicles
 - 2) Construction Equipment
 - 3) Loading and Unloading Vehicles
 - 4) Domestic Power Tool.

ARTICLE 31. PAYROLL RECORDS

- a. Pursuant to Labor Code Section 1776, the Contractor and each subcontractor shall maintain weekly certified payroll records showing the name, address, social security number, work classification, straight time and overtime hours paid each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed in connection with the work. Contractor shall certify under penalty of perjury that records maintained and submitted by Contractor are true and accurate. Contractor shall also require subcontractor(s) to certify weekly payroll records under penalty of perjury.

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- b. The payroll records described herein shall be certified and submitted by the Contractor at a time designated by the District. The Contractor shall also provide the following:
 - 1) A certified copy of the employee’s payroll records shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
 - 2) A certified copy of all payroll records described herein shall be made available for inspection or furnished upon request of the Department of Industrial Relations (“DIR”).
- c. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement (“DLSE”) of the DIR or shall contain the same information as the forms provided by the DLSE.
- d. Any copy of records made available for inspection and furnished upon request to the public shall be marked or obliterated in such a manner as to prevent disclosure of an individual’s name, address, and social security number. The name and address of the Contractor or any subcontractor shall not be marked or obliterated.
- e. In the event of noncompliance with the requirements of this Section, the Contractor shall have ten (10) days in which to comply subsequent to receipt of written notice specifying any item or actions necessary to ensure compliance with this section. Should noncompliance still be evident after such ten (10) day period, the Contractor shall, as a penalty to the District, forfeit Twenty-five Dollars (\$25.00) for each day, or portion thereof, for each worker until strict compliance is effectuated. Upon the request of the DIR, such penalties shall be withheld from contract payments.

ARTICLE 32. PREVAILING RATES OF WAGES

- a. The Contractor is aware of the requirements of Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. (“Prevailing Wage Laws”), which require the payment of prevailing wage rates and the performance of other requirements on certain “public works” and “maintenance” projects. Since this Project involves an applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, and since the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. The Contractor shall obtain a copy of the prevailing rates of per diem wages at the commencement of this Agreement from the website of the Division of Labor Statistics and Research of the Department of Industrial Relations located at www.dir.ca.gov/dlsr/. In the alternative, the Contractor may view a copy of the prevailing rates of per diem wages at the District. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to perform work on the Project available to interested parties upon request, and shall post copies at the Contractor’s principal place of business and at the Project site. Contractor shall

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defend, indemnify and hold the District, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

- b. The Contractor and each subcontractor shall forfeit as a penalty to the District not more than fifty dollars (\$50) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.
- c. Contractor shall post, at appropriate conspicuous points on the Project site, a schedule showing all determined general prevailing wage rates and all authorized deductions, if any, from unpaid wages actually earned.

ARTICLE 33. EMPLOYMENT OF APPRENTICES

The Contractor’s attention is directed to the provisions of Sections 1777.5, 1777.6, and 1777.7 of the Labor Code concerning employment of apprentices by the Contractor or any subcontractor. The Contractor shall obtain a certificate of apprenticeship before employing any apprentice pursuant to Section 1777.5, 1777.6, and 1777.7 of the Labor Code. Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, the Administrator of Apprenticeships, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

ARTICLE 34. NONDISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY/EMPLOYMENT ELIGIBILITY

Pursuant to Labor Code Section 1735 and other applicable provisions of law, the Contractor and its subcontractors shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap on this Project. The Contractor will take affirmative action to insure that employees are treated during employment or training without regard to their race, color, religion, sex, national origin, age, political affiliation, marital status, or handicap.

Employment Eligibility; Contractor. By executing this Contract, Contractor verifies that it fully complies with all requirements and restrictions of state and federal law respecting the employment of undocumented aliens, including, but not limited to, the Immigration Reform and Control Act of 1986, as may be amended from time to time. Such requirements and restrictions include, but are not limited to, examination and retention of documentation confirming the identity and immigration status of each employee of the Contractor. Contractor also verifies that it has not committed a violation of any such law within the five (5) years immediately preceding the date of execution of this Contract, and shall not violate any such law at any time during the term of the Contract.

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Contractor shall avoid any violation of any such law during the term of this Contract by participating in an electronic verification of work authorization program operated by the United States Department of Homeland Security, by participating in an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, or by some other legally acceptable method. Contractor shall maintain records of each such verification, and shall make them available to the District or its representatives for inspection and copy at any time during normal business hours. The District shall not be responsible for any costs or expenses related to Contractor's compliance with the requirements provided for in Section 3.16 or any of its sub-sections.

Employment Eligibility; Subcontractors, Sub-subcontractors and Consultants. To the same extent and under the same conditions as Contractor, Contractor shall require all of its subcontractors, sub-subcontractors and consultants performing any work relating to the Project or this Contract to make the same verifications and comply with all requirements and restrictions provided for in Section 3.16.1.

Employment Eligibility; Failure to Comply. Each person executing this Contract on behalf of Contractor verifies that they are a duly authorized officer of Contractor, and understands that any of the following shall be grounds for the District to terminate the Contract for cause: (1) failure of Contractor or its subcontractors, sub-subcontractors or consultants to meet any of the requirements provided for in Sections 3.16.1 or 3.16.2; (2) any misrepresentation or material omission concerning compliance with such requirements (including in those verifications provided to the Contractor under Section 3.16.2); or (3) failure to immediately remove from the Project any person found not to be in compliance with such requirements.

ARTICLE 35. LABOR/EMPLOYMENT SAFETY

The Contractor shall maintain emergency first aid treatment for his employees which complies with the Federal Occupational Safety and Health Act of 1970 (29 U.S.C. § 651 et seq.), and California Code of Regulations, Title 8, Industrial Relations Division 1, Department of Industrial Relations, Chapter 4.

ARTICLE 36. WORKERS' COMPENSATION INSURANCE

The Contractor shall Provide, during the life of this Contract, workers' compensation insurance for all of the employees engaged in Work under this Contract, on or at the Project site, and, in case any of sublet Work, the Contractor shall require the subcontractor similarly to provide workers' compensation insurance for all the latter's employees as prescribed by State law. Any class of employee or employees not covered by a subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in work under this Contract, on or at the Project site, is not protected under the Workers' Compensation Statutes, the Contractor shall provide or shall cause a subcontractor to provide, adequate insurance coverage for the protection of such employees not otherwise protected. The Contractor is required to secure payment of compensation to his employees in accordance with the provisions of Section 3700 of the Labor

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Code. The Contractor shall file with the District certificates of his insurance protecting workers. Company or companies providing insurance coverage shall be acceptable to the District, if in the form and coverage as set forth in the Contract Documents.

ARTICLE 37. EMPLOYER’S LIABILITY INSURANCE

Contractor shall provide during the life of this Contract, Employer’s Liability Insurance, including Occupational Disease, in the amount of, at least, one million dollars (\$1,000,000.00) per person per accident. Contractor shall provide District with a certificate of Employer’s Liability Insurance. Such insurance shall comply with the provisions of the Contract Documents. The policy shall be endorsed, if applicable, to provide a Borrowed Servant/Alternate Employer Endorsement and contain a Waiver of Subrogation in favor of the District.

ARTICLE 38. COMMERCIAL GENERAL LIABILITY INSURANCE

- a. Contractor shall procure and maintain during the life of this Contract and for such other period as may be required herein, at its sole expense, occurrence version Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products/completed operations if applicable, personal and advertising injury – which may arise from or out of Contractor’s operations, use, and management of the Project site, or the performance of its obligations hereunder. Policy limits shall not be less than \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- b. Such policy shall comply with all the requirements of this Article. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are brought, except with respect to the limits of liability. Further the limits set forth herein shall not be construed to relieve the Contractor from liability in excess of such coverage, nor shall it limit Contractor’s indemnification obligations to the District, and shall not preclude the District from taking such other actions available to the District under other provisions of the Contract Documents or law.
- c. Contractor shall make certain that any and all subcontractors hired by Contractor are insured in accordance with this Contract. If any subcontractor’s coverage does not comply with the foregoing provisions, Contractor shall indemnify and hold the District harmless from any damage, loss, cost, or expense, including attorneys’ fees, incurred by the District as a result thereof.
- d. All general liability policies provided pursuant to the provisions of this Article shall comply with the provisions of the Contract Documents.

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- e. All general liability policies shall be written to apply to all bodily injury, including death, property damage, personal injury, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, under-ground excavation, removal of lateral support, and other covered loss, however occasioned, occurring during the policy term, and shall specifically insure the performance by Contractor of that part of the indemnification contained in these General Conditions, relating to liability for injury to or death of persons and damage to property. If the coverage contains one or more aggregate limits, a minimum of 50% of any such aggregate limit must remain available at all times; if over 50% of any aggregate limit has been paid or reserved, the District may require additional coverage to be purchased by Contractor to restore the required limits. Contractor may combine primary, umbrella, and as broad as possible excess liability coverage to achieve the total limits indicated above. Any umbrella or excess liability policy shall include the additional insured endorsement described in the Contract Documents.
- f. Such insurance shall comply with the provisions of Article 42 below.

ARTICLE 39. AUTOMOBILE LIABILITY INSURANCE

Contractor shall take out and maintain at all times during the term of this occurrence version Contract Automobile Liability Insurance in the amount of, at least, one million dollars (\$1,000,000). Such insurance shall provide coverage for bodily injury and property damage including coverage for non-owned and hired vehicles, in a form and with insurance companies acceptable to the District. Such insurance shall comply with the provisions of Article 42 below.

ARTICLE 40. FORM AND PROOF OF CARRIAGE OF INSURANCE

- a. Any insurance carrier providing insurance coverage required by the Contract Documents shall be admitted to and authorized to do business in the State of California unless waived, in writing, by the District Risk Manager. Carrier(s) shall have an A.M. Best rating of not less than an A:VIII. Insurance deductibles or self-insured retentions must be declared by the Contractor, and such deductibles and retentions shall have the prior written consent from the District. At the election of the District the Contractor shall either 1) reduce or eliminate such deductibles or self-insured retentions, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.
- b. Contractor shall cause its insurance carrier(s) to furnish the District with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, or 2) if requested to do so in writing by the District Risk Manager, provide original Certified copies of policies including all Endorsements and all attachments thereto, showing such insurance is in full force and effect. The District, its Director’s and officers, employees, agents or representatives are named as Additional Insureds and Provide a Waiver of Subrogation in favor of those parties. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that shall provide no less than thirty (30) days written notice be given to the District prior

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to any material modification or cancellation of such insurance. In the event of a material modification or cancellation of coverage, the District may terminate or Stop Work pursuant to the Contract Documents, unless the District receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverages set forth herein and the insurance required herein is in full force and effect. Contractor shall not take possession, or use the Project site, or commence operations under this Agreement until the District has been furnished original Certificate(s) of Insurance and certified original copies of Endorsements or policies of insurance including all Endorsements and any and all other attachments as required in this Section. The original Endorsements for each policy and the Certificate of Insurance shall be signed by an individual authorized by the insurance carrier to do so on its behalf.

- c. It is understood and agreed to by the parties hereto and the insurance company(s), that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary, and the District's insurance and/or deductibles and/or self-insured retentions or self-insured programs shall not be construed as contributory.
- d. The District reserves the right to adjust the monetary limits of insurance coverage's during the term of this Contract including any extension thereof-if in the District's reasonable judgment, the amount or type of insurance carried by the Contractor becomes inadequate.
- e. Contractor shall pass down the insurance obligations contained herein to all tiers of sub-contractors working under this Contract.

ARTICLE 41. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- a. **Time for Completion/Liquidated Damages.** Work shall be commenced within ten (10) days of the date stated in the District's Notice to Proceed and shall be completed by Contractor in the time specified in the Contract Documents. The District is under no obligation to consider early completion of the Project; and the Contract completion date shall not be amended by the District's receipt or acceptance of the Contractor's proposed earlier completion date. Furthermore, Contractor shall not, under any circumstances, receive additional compensation from the District (including but not limited to indirect, general, administrative or other forms of overhead costs) for the period between the time of earlier completion proposed by the Contractor and the Contract completion date. If The Work is not completed as stated in the Contract Documents, it is understood that the District will suffer damage. In accordance with Government Code section 53069.85, being impractical and infeasible to determine the amount of actual damage, it is agreed that Contractor shall pay to the District as fixed and liquidated damages, and not as a penalty, the sum stipulated in the Contract for each day of delay until The Work is fully completed. Contractor and its surety shall be liable for any liquidated damages. Any money due or to become due the Contractor may be retained to cover liquidated damages.

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- b. **Inclement Weather.** Contractor shall abide the Engineer’s determination of what constitutes inclement weather. Time extensions for inclement weather shall only be granted when the Work stopped during inclement weather is on the critical path of the Project schedule.
- c. **Extension of Time.** Contractor shall not be charged liquidated damages because of any delays in completion of The Work due to unforeseeable causes beyond the control and without the fault or negligence of Contractor (or its subcontractors or suppliers). Contractor shall within five (5) Days of identifying any such delay notify the District in writing of causes of delay. The District shall ascertain the facts and extent of delay and grant extension of time for completing The Work when, in its judgment, the facts justify such an extension. Time extensions to the Project shall be requested by the Contractor as they occur and without delay. No delay claims shall be permitted unless the event or occurrence delays the completion of the Project beyond the Contract completion date.
- d. **No Damages for Reasonable Delay.** The District’s liability to Contractor for delays for which the District is responsible shall be limited to only an extension of time unless such delays were unreasonable under the circumstances. In no case shall the District be liable for any costs which are borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and other ongoing costs. Damages caused by unreasonable District delay, including delays caused by items that are the responsibility of the District pursuant to Government Code section 4215, shall be based on actual costs only, no proportions or formulas shall be used to calculate any delay damages.

ARTICLE 42. COST BREAKDOWN AND PERIODIC ESTIMATES

Contractor shall furnish on forms Approved by the District:

- a. Within ten (10) Days of award of the Contract a detailed estimate giving a complete breakdown of the Contract price;
- b. A monthly itemized estimate of Work done for the purpose of making progress payments. In order for the District to consider and evaluate each progress payment application, the Contractor shall submit a detailed measurement of Work performed and a progress estimate of the value thereof before the tenth (10th) Day of the following month.
- c. Contractor shall submit, with each of its payment requests, an adjusted list of actual quantities, verified by the Engineer, for unit price items listed, if any, in the Bid Form.
- d. Following the District’s Acceptance of the Work, the Contractor shall submit to the District a written statement of the final quantities of unit price items for inclusion in the final payment request.
- e. The District shall have the right to adjust any estimate of quantity and to subsequently correct any error made in any estimate for payment.

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Contractor shall certify under penalty of perjury, that all cost breakdowns and periodic estimates accurately reflect the Work on the Project.

ARTICLE 43. MOBILIZATION

- a. When a bid item is included in the Bid Form for mobilization, the costs of Work in advance of construction operations and not directly attributable to any specific bid item will be included in the progress estimate (“Initial Mobilization”). When no bid item is provided for “Initial Mobilization,” payment for such costs will be deemed to be included in the other items of The Work.
- b. Payment for Initial Mobilization based on the lump sum provided in the Bid Form, which shall constitute full compensation for all such Work. No payment for Initial Mobilization will be made until all of the listed items have been completed to the satisfaction of the Engineer. The scope of the Work included under Initial Mobilization shall include, but shall not be limited to, the following principal items:
 1. Obtaining and paying for all bonds, insurance, and permits.
 2. Moving on to the Project site of all Contractor’s plant and equipment required for first month’s operations.
 3. Installing temporary construction power, wiring, and lighting facilities.
 4. Establishing fire protection system.
 5. Developing and installing a construction water supply.
 6. Providing and maintaining the field office trailers for the Contractor, complete with all specified furnishings and utility services including telephones, telephone appurtenances, computer and printer, and copying machine.
 7. Providing on-site communication facilities including telephones, radio pagers, and fax machines.
 8. Providing on-site sanitary facilities and potable water facilities as specified per Cal-OSHA and these Contract Documents.
 9. Furnishing, installing, and maintaining all storage buildings or sheds required for temporary storage of products, equipment, or materials that have not yet been installed in the Work. All such storage shall meet manufacturer’s specified storage requirements, and the specific provisions of the specifications, including temperature and humidity control, if recommended by the manufacturer, and for all security.
 10. Arranging for and erection of Contractor’s work and storage yard.

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11. Posting all OSHA required notices and establishment of safety programs per Cal-OSHA.
12. Full-time presence of Contractor's superintendent at the job site as required herein.
13. Submittal of Construction Schedule as required by the Contract Documents.

ARTICLE 44. PAYMENTS

- a. The District shall make monthly progress payments following receipt of undisputed and properly submitted payment requests. Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of Work performed up to the last day of the previous month, less the aggregate of previous payments.
- b. The Contractor shall, after the full completion of The Work, submit a final payment application. All prior progress estimates shall be subject to correction in the final estimate and payment.
- c. Unless otherwise required by law, the final payment of five percent (5%) of the value of the Work, if unencumbered, shall be paid no later than sixty (60) Days after the date of recordation of the Notice of Completion.
- d. Acceptance by Contractor of the final payment shall constitute a waiver of all claims against the District arising from this Contract.
- e. Payments to the Contractor shall not be construed to be an acceptance of any defective work or improper materials, or to relieve the Contractor of its obligations under the Contract Documents.
- f. The Contractor shall submit with each payment request the Contractor's conditional waiver of lien for the entire amount covered by such payment request, as well as a valid unconditional waiver of lien from the Contractor and all subcontractors and materialmen for all work and materials included in any prior invoices. Waivers of lien shall be in the forms prescribed by California Civil Code Section 3262. Prior to final payment by the District, the Contractor shall submit a final waiver of lien for the Contractor's work, together with releases of lien from any subcontractor or materialmen.

ARTICLE 45. PAYMENTS WITHHELD AND BACKCHARGES

In addition to amounts which the District may retain under other provisions of the Contract Documents the District may withhold payments due to Contractor as may be necessary to cover:

- a. Stop Notice Claims.
- b. Defective work not remedied.

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- c. Failure of Contractor to make proper payments to its subcontractors or suppliers.
- d. Completion of the Contract if there exists a reasonable doubt that the work can be completed for balance then unpaid.
- e. Damage to another contractor or third party.
- f. Amounts which may be due the District for claims against Contractor.
- g. Failure of Contractor to keep the record (“as-built”) drawings up to date.
- h. Failure to provide updates on the construction schedule.
- i. Site clean up.
- j. Failure of the Contractor to comply with requirements of the Contract Documents.
- k. Liquated damages.
- l. Legally permitted penalties.

Upon completion of the Contract, the District will reduce the final Contract amount to reflect costs charged to the Contractor, back charges or payments withheld pursuant to the Contract Documents.

ARTICLE 46. CHANGES AND EXTRA WORK

a. Change Order Work.

- 1) The District, without invalidating the Contract, may order changes in the Work consisting of additions, deletions or other revisions, the Contract amount and Contract time being adjusted accordingly. All such changes in the Work shall be authorized by Change Order, and shall be performed under the applicable conditions of the Contract Documents. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including any adjustment in the Contract amount or the Contract time, and the full and final settlement of all costs (direct, indirect and overhead) related to the Work authorized by the Change Order.
- 2) All claims for additional compensation to the Contractor shall be presented in writing before the expense is incurred and will be adjusted as provided herein. No work shall be allowed to lag pending such adjustment, but shall be promptly executed as directed, even if a dispute arises. No claim will be considered after the work in question has been done unless a written contract change order has been issued or a timely written notice of claim has been made by Contractor. Contractor shall not be entitled to claim or bring suit for damages, whether for loss of profits or otherwise, on account of any decrease or omission of any item or portion of Work to be done.

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Whenever any change is made as provided for herein, such change shall be considered and treated as though originally included in the Contract, and shall be subject to all terms, conditions and provisions of the original Contract.

- 3) Owner Initiated Change. The Contractor must submit a complete cost proposal, including any change in the Contract time, within seven (7) Days after receipt of a scope of a proposed change order, unless the District requests that proposals be submitted in less than seven (7) Days.
- 4) Contractor Initiated Change. The Contractor must give written notice of a proposed change order required for compliance with the Contract Documents within seven (7) Days of discovery of the facts giving rise to the proposed change order.
- 5) Whenever possible, any changes to the Contract amount shall be in a lump sum mutually agreed to by the Contractor and the District.
- 6) Price quotations from the Contractor shall be accompanied by sufficiently detailed supporting documentation to permit verification by the District.
- 7) If the Contractor fails to submit the cost proposal within the seven (7) Day period (or as requested), the District has the right to order the Contractor in writing to commence the work immediately on a force account basis and/or issue a lump sum change to the contract price in accordance with the District's estimate of cost. If the change is issued based on the District estimate, the Contractor will waive its right to dispute the action unless within fifteen (15) Days following completion of the added/deleted work, the Contractor presents written proof that the District's estimate was in error.
- 8) Estimates for lump sum quotations and accounting for cost-plus-percentage work shall be limited to direct expenditures necessitated specifically by the subject extra work, and shall be segregated as follows:
 - (a) Labor. The costs of labor will be the actual cost for wages prevailing locally for each craft or type of worker at the time the extra work is done, plus employer payments of payroll taxes and insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessment or benefits required by lawful collective bargaining agreements. The use of a labor classification which would increase the extra work cost will not be permitted unless the contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

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- (b) Materials. The cost of materials reported shall be at invoice or lowest current price at which such materials are locally available in the quantities involved, plus sales tax, freight and delivery. Materials cost shall be based upon supplier or manufacturer's invoice. If invoices or other satisfactory evidence of cost are not furnished within fifteen (15) Days of delivery, then the Engineer shall determine the materials cost, at its sole discretion.
 - (c) Tool and Equipment Use. No payment will be made for the use of small tools, tools which have a replacement value of \$1,000 or less. Regardless of ownership, the rates to be used in determining equipment use costs shall not exceed listed rates prevailing locally at equipment rental agencies, or distributors, at the time the work is performed.
 - (d) Overhead, Profit and Other Charges. The mark-up for overhead (including supervision) and profit on work added to the Contract shall be according to the following:
 - i. "Net Cost" is defined as consisting of costs of labor, materials and tools and equipment only excluding overhead and profit. The costs of applicable insurance and bond premium will be reimbursed to the Contractor and subcontractors at cost only, without mark-up.
 - ii. For Work performed by the Contractor's forces the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work.
 - iii. For Work performed by a subcontractor, the added cost for overhead and profit shall not exceed fifteen (15%) percent of the Net Cost of the Work to which the Contractor may add five (5%) percent of the subcontractor's Net Cost.
 - iv. For Work performed by a sub-subcontractor the added cost for overhead and profit shall not exceed fifteen (15 %) percent of the Net Cost for Work to which the subcontractor and general contractor may each add an additional five (5 %) percent of the Net Cost of the lower tier subcontractor.
 - iv. No additional mark up will be allowed for lower tier subcontractors, and in no case shall the added cost for overhead and profit payable by District exceed twenty-five (25%) percent of the Net Cost as defined herein.
- 9) For added or deducted Work by subcontractors, the Contractor shall furnish to the District the subcontractor's signed detailed estimate of the cost of labor, material and

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equipment, including the subcontractor markup for overhead and profit. The same requirement shall apply to sub-subcontractors.

- 10) For added or deducted work furnished by a vendor or supplier, the Contractor shall furnish to the District a detailed estimate or quotation of the cost to the Contractor, signed by such vendor or supplier.
- 11) Any change in The Work involving both additions and deletions shall indicate a net total cost, including subcontracts and materials. Allowance for overhead and profit, as specified herein, shall be applied if the net total cost is an extra; overhead and profit allowances shall not be applied if the net total cost is a credit. The estimated cost of deductions shall be based on labor and material prices on the date the Contract was executed.
- 12) Contractor shall not reserve a right to assert impact costs, extended job site costs, extended overhead, constructive acceleration and/or actual acceleration beyond what is stated in the change order for work. No claims shall be allowed for impact, extended overhead costs, constructive acceleration and/or actual acceleration due to a multiplicity of changes and/or clarifications. The Contractor may not change or modify the District's change order form in an attempt to reserve additional rights.
- 13) If the District disagrees with the proposal submitted by Contractor, it will notify the Contractor and the District will provide its opinion of the appropriate price and/or time extension. If the Contractor agrees with the District, a change order will be issued by the District. If no agreement can be reached, the District shall have the right to issue a unilateral change order setting forth its determination of the reasonable additions or savings in costs and time attributable to the extra or deleted work. Such determination shall become final and binding if the Contractor fails to submit a claim in writing to the District within fifteen (15) Days of the issuance of the unilateral change order, disputing the terms of the unilateral change order.
- 14) No dispute, disagreement or failure of the parties to reach agreement on the terms of the change order shall relieve the Contractor from the obligation to proceed with performance of the work, including extra work, promptly and expeditiously.
- 15) Any alterations, extensions of time, extra work or any other changes may be made without securing consent of the Contractor's surety or sureties.

ARTICLE 47. OCCUPANCY

The District reserves the right to occupy or utilize any portion of The Work at any time before completion, and such occupancy or use shall not constitute Acceptance of any part of Work covered by this Contract. This use shall not relieve the Contractor of its responsibilities under the Contract.

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ARTICLE 48. INDEMNIFICATION

Contractor shall defend (with counsel of District's choosing), indemnify and hold the District, its officials, officers, agents, employees, and representatives free and harmless from any and all claims, demands, causes of action, costs, expenses, liabilities, losses, damages or injuries, in law or equity, regardless of whether the allegations are false, fraudulent, or groundless, to property or persons, including wrongful death, to the extent arising out of or incident to any acts, omissions or willful misconduct of Contractor, its officials, officers, employees, agents, consultants and contractors arising out of or in connection with the performance of the Work or this Contract, including claims made by subcontractors for nonpayment, including without limitation the payment of all consequential damages and attorneys fees and other related costs and expenses. Contractor shall defend, at Contractor's own cost, expense and risk, with counsel of District's choosing, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District, its officials, officers, agents, employees and representatives. To the extent of its liability, Contractor shall pay and satisfy any judgment, award or decree that may be rendered against District, its officials, officers, employees, agents, employees and representatives, in any such suit, action or other legal proceeding. Contractor shall reimburse District, its officials, officers, agents, employees and representatives for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. The only limitations on this provision shall be those imposed by Civil Code Section 2782.

ARTICLE 49. RECORD ("AS BUILT") DRAWINGS

- a. Contractor shall prepare and maintain a complete set of record drawings (herein referred to as "as-builts") and shall require each trade to prepare its own as-builts. The as-builts must show the entire site for each major trade, including but not limited to water, sewer, electrical, data, telephone, cable, fire alarm, gas and plumbing. Contractor shall mark the as-builts to show the actual installation where the installation varies from the Work as originally shown. Contractor shall mark whichever drawings are most capable of showing conditions fully and where shop drawings are used, Contractor must record a cross-reference at the corresponding location on the contract drawings. Contractor shall give particular attention to concealed elements that would be difficult to measure and record at a later date. Contractor shall use colors to distinguish variations in separate categories of The Work.
- b. Contractor shall note related change order numbers where applicable. Contractor shall organize as-builts into manageable sets, bound with durable paper cover sheets and shall print suitable title, dates and other identification on the cover of each set. Contractor to also provide an electronic version of the as-builts. The suitability of the as-builts will be determined by the Engineer.

ARTICLE 50. RESOLUTION OF CLAIMS

This section shall govern any claim by the Contractor for: (1) an extension of time, including relief from damages or penalties for delay; (2) payment by District of money or damages

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arising from work done by, or on behalf of, the Contractor, where the underlying contract does not expressly provide for payment or payment to which the Contractor is not otherwise entitled; or (3) the payment of an amount disputed by District.

Contractor may submit to District a claim for any of the three above-referenced matters. Contractor shall provide District with reasonable documentation necessary to support its claim. Contractor shall submit its claim by registered mail or certified mail, return receipt requested.

District, within forty-five (45) days of its receipt of the claim, unless such time is extended as referenced in this section, shall conduct a reasonable review of the claim and provide Contractor with a written statement identifying what portion of the claim District disputes and what portion District does not dispute.

The forty-five (45) day period referenced herein may be extended by mutual agreement of District and Contractor or, if the District's Board of Directors approval is necessary to provide the Contractor with such a written statement, and the Board does not meet within the 45-day period, District shall have three (3) days following the Board's next duly noticed public meeting to provide the Contractor with the written statement.

Payment on any undisputed portion of the claim shall occur within sixty (60) days of District issuing the written statement.

If District does not respond within the required time period, the claim shall be deemed rejected in its entirety.

If Contractor disputes District's written statement as to of any portion of the claim, or if District fails to respond within the specified time period, Contractor may demand in writing an informal conference to meet and confer for settlement of the dispute. Upon receipt of such demand by registered mail or certified mail, return receipt requested, District shall schedule a meet and confer conference within thirty (30) days, to settle the dispute. Within ten (10) business days of the conclusion of the meet and confer conference, District shall provide Contractor with a written statement identifying the portion and amount of the claim that remains in dispute, if any. If District does not respond within the required time period, the entire claim shall be deemed to remain in dispute. District shall pay any portion of the claim that is undisputed after the conference within sixty (60) days of District issuing the written statement.

Any portion of the claim that remains disputed, as identified by the Contractor in writing, shall be submitted to nonbinding mediation. The Parties shall mutually agree on a mediator within ten (10) business days of the Contractor identifying the disputed portion of the claim in writing. If the Parties cannot agree upon a mediator, each Party shall select a mediator, and those mediators shall then select a qualified neutral third party to mediate. Each Party shall bear the fees and costs charged by its respective mediator, and the parties shall share all other fees and costs associated with the mediation equally. The parties may mutually agree, in writing, to waive mediation. If

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mediation is unsuccessful, civil litigation may be commenced, subject to all applicable laws and provisions of this Contract, including any obligation to arbitrate disputes. Unless otherwise agreed to by the Parties in writing, this mediation shall excuse any further obligation to mediate under Public Contract Code Section 20104.4. As used herein, “mediation” means any nonbinding process in which an independent third party assists the Parties in dispute resolution through negotiation or issuance of an evaluation.

If a subcontractor lacks legal standing to assert a claim against District, the subcontractor may request that the Contractor present District with a claim on behalf of the subcontractor or a lower tier subcontractor. The subcontractor shall furnish reasonable documentation to support the claim. Within forty-five (45) days of receipt of the request, Contractor shall provide subcontractor with a written statement confirming that the Contractor presented the claim to District, or providing the reasons that the Contractor did not.

Upon receipt of a claim, the Parties may also mutually agree, in writing, to waive the provisions of this section and, instead, proceed directly to commencement of a civil action or binding arbitration.

- a. Any payment not paid within the time period required by this Section shall bear interest at seven percent (7%) per annum.

ARTICLE 51. DISTRICT’S RIGHT TO TERMINATE CONTRACT

- a. **Termination for Cause:** The District may, without prejudice to any other right or remedy, serve written notice upon Contractor of its intention to terminate this Contract if the Contractor: (i) refuses or fails to prosecute The Work or any part thereof with such diligence as will ensure its completion within the time required; (ii) fails to complete The Work within the required time; (iii) should file a bankruptcy petition or be adjudged a bankrupt; (iv) should make a general assignment for the benefit of its creditors; (v) should have a receiver appointed; (vi) should persistently or repeatedly refuse or fail to supply enough properly skilled workers or proper materials to complete the work; (vii) should fail to make prompt payment to subcontractors or for material or labor; (viii) persistently disregard laws, ordinances, other requirements or instructions of the District; or (ix) should violate any of the provisions of the Contract Documents.

The notice of intent to terminate shall contain the reasons for such intention to terminate. Unless within ten (10) Days after the service of such notice, such condition shall cease or satisfactory arrangements (acceptable to the District) for the required correction are made, this Contract shall be terminated. In such case, Contractor shall not be entitled to receive any further payment until the Project has been finished. The District may take over and complete The Work by any method it may deem appropriate. Contractor and its surety shall be liable to the District for any excess costs or other damages incurred by the District to complete the Project. If the District takes over The Work, the District may, without liability for so doing, take possession of and utilize in completing The Work such materials,

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appliances, plant, and other property belonging to the Contractor as may be on the Project site.

- b. **Termination For Convenience:** The District may terminate performance of The Work in whole or, in part, if the District determines that a termination is in the District's interest.

The Contractor shall terminate all or any part of The Work upon delivery to the Contractor of a Notice of Termination specifying that the termination is for the convenience of the District, the extent of termination, and the effective date of such termination.

After receipt of Notice of Termination, and except as directed by the District, the Contractor shall, regardless of any delay in determining or adjusting any amounts due under this Termination for Convenience clause, immediately proceed with the following obligations:

- 1) Stop Work as specified in the Notice.
- 2) Complete any Work specified in the Notice of Termination in a least cost/shortest time manner while still maintaining the quality called for under the Contract Documents.
- 3) Leave the property upon which the Contractor was working and upon which the facility (or facilities) forming the basis of the Contract Documents is situated in a safe and sanitary manner such that it does not pose any threat to the public health or safety.
- 4) Terminate all subcontracts to the extent that they relate to the portions of The Work terminated.
- 5) Place no further subcontracts or orders, except as necessary to complete the remaining portion of The Work.
- 6) Submit to the District, within ten (10) Days from the effective date of the Notice of Termination, all of the documentation called for by the Contract Documents to substantiate all costs incurred by the Contractor for labor, materials and equipment through the Effective Date of the Notice of Termination. Any documentation substantiating costs incurred by the Contractor solely as a result of the District's exercise of its right to terminate this Contract pursuant to this clause, which costs the Contractor is authorized under the Contract Documents to incur, shall: (i) be submitted to and received by the District no later than thirty (30) Days after the Effective Date of the Notice of Termination; (ii) describe the costs incurred with particularity; and (iii) be conspicuously identified as "Termination Costs Occasioned by the District's Termination for Convenience."

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- 7) These provisions are in addition to and not in limitation of any other rights or remedies available to the District.
- c. Notwithstanding any other provision of this Article, when immediate action is necessary to protect life and safety or to reduce significant exposure or liability, the District may immediately order Contractor to cease Work on the Project until such safety or liability issues are addressed to the satisfaction of the District or the Contract is terminated.

ARTICLE 52. WARRANTY AND GUARANTEE

- a. Contractor warrants that all materials and equipment furnished under this Contract shall be new unless otherwise specified in the Contract Documents; and that all Work conforms to the Contract Document requirements and is free of any defect whether performed by the Contractor or any subcontractor or supplier.
- b. Unless otherwise stated, all warranty periods shall begin upon the filing of the Notice of Completion. Unless otherwise stated, the warranty period shall be for one year.
- c. The Contractor shall remedy at its expense any damage to District-owned or controlled real or personal property.
- d. Contractor shall furnish the District with all warranty and guarantee documents prior to final Acceptance of the Project by the District.
- e. The District shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage. The Contractor shall within ten (10) Days after being notified commence and perform with due diligence all necessary Work. If the Contractor fails to promptly remedy any defect, or damage; the county shall have the right to replace, repair, or otherwise remedy the defect, or damage at the Contractor’s expense.
- f. In the event of any emergency constituting an immediate hazard to health, safety, property, or licensees, when caused by Work of the Contractor not in accordance with the Contract requirements, the District may undertake at Contractor’s expense, and without prior notice, all Work necessary to correct such condition.
- g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and Materials furnished under this Contract, the Contractor shall:
 - 1) Obtain for District all warranties that would be given in normal commercial practice;
 - 2) Require all warranties to be executed, in writing, for the benefit of the District; and
 - 3) Enforce all warranties for the benefit of the District, unless otherwise directed in writing by the District.

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This Article shall not limit the District's rights under this Contract or with respect to latent defects, gross mistakes, or fraud. The District specifically reserves all rights related to defective work, including but not limited to the defect claims pursuant to California Code of Civil Procedure Section 337.15.

ARTICLE 53. DOCUMENT RETENTION & EXAMINATION

- a. In accordance with Government Code Section 8546.7, records of both the District and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
- b. Contractor shall make available to the District any of the Contractor's other documents related to the Project immediately upon request of the District.
- c. In addition to the State Auditor rights above, the District shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the District, for a period of four (4) years after final payment.

ARTICLE 54. SOILS INVESTIGATIONS

When a soils investigation report for the Project site is available, any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

ARTICLE 55. SEPARATE CONTRACTS

- a. The District reserves the right to let other contracts in connection with this Work or on the Project site. Contractor shall permit other contractors reasonable access and storage of their materials and execution of their work and shall properly connect and coordinate its Work with theirs.
- b. To ensure proper execution of its subsequent Work, Contractor shall immediately inspect work already in place and shall at once report to the Engineer any problems with the work in place or discrepancies with the Contract Documents.
- c. Contractor shall ascertain to its own satisfaction the scope of the Project and nature of any other contracts that have been or may be awarded by the District in prosecution of the Project to the end that Contractor may perform this Contract in the light of such other contracts, if any. Nothing herein contained shall be interpreted as granting to Contractor exclusive

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occupancy at site of the Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project. If simultaneous execution of any contract for the Project is likely to cause interference with performance of some other contract or contracts, the Engineer shall decide which Contractor shall cease Work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously. The District shall not be responsible for any damages suffered or for extra costs incurred by Contractor resulting directly or indirectly from award, performance, or attempted performance of any other contract or contracts on the Project site.

ARTICLE 56. NOTICE AND SERVICE THEREOF

All notices shall be in writing and either served by personal delivery or mailed to the other party as designated in the Bid Forms. Written notice to the Contractor shall be addressed to Contractor's principal place of business unless Contractor designates another address in writing for service of notice. Notice to District shall be addressed to the District as designated in the Notice Inviting Bids unless District designates another address in writing for service of notice. Notice shall be effective upon receipt or five (5) Days after being sent by first class mail, whichever is earlier. Notice given by facsimile shall not be effective unless acknowledged in writing by the receiving party.

ARTICLE 57. NOTICE OF THIRD PARTY CLAIMS

Pursuant to Public Contract Code Section 9201, the District shall provide Contractor with timely notification of the receipt of any third-party claim relating to the Contract.

ARTICLE 58. STATE LICENSE BOARD NOTICE.

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

ARTICLE 59. INTEGRATION

- a. Oral Modifications Ineffective. No oral order, objection, direction, claim or notice by any party or person shall affect or modify any of the terms or obligations contained in the Contract Documents.
- b. Contract Documents Represent Entire Contract. The Contract Documents represent the entire agreement of the District and Contractor.
- c. The failure of either Party to insist upon strict performance of any of the terms, conditions or covenants in this Agreement shall not be deemed a waiver of any right or remedy for a

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subsequent breach or default of the terms, conditions or covenants herein contained, unless such waiver is in writing.

ARTICLE 60. CHANGE IN NAME AND NATURE OF CONTRACTOR’S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor’s legal entity, the Contractor shall first notify the District in order that proper steps may be taken to have the change reflected on the Contract.

ARTICLE 61. ASSIGNMENT OF ANTITRUST ACTIONS

Pursuant to Section 7103.5 of the Public Contract Code, in entering into a public works contract or subcontract to supply goods, services, or materials pursuant to a public works contract, Contractor or subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Section 15) or under the Cartwright Act (chapter 2 (commencing with Section 16700) of part 2 of division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to this Contract or any subcontract. This assignment shall be made and become effective at the time the District makes final payment to the Contractor, without further acknowledgment by the parties.

ARTICLE 62. PROHIBITED INTERESTS

No District official or representative who is authorized in such capacity and on behalf of the District to negotiate, supervise, make, accept, or approve, or to take part in negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

ARTICLE 63. LAWS AND REGULATIONS

- a. Contractor shall give all notices and comply with all federal, state and local laws, ordinances, rules and regulations bearing on conduct of work as indicated and specified by their terms. References to specific laws, rules or regulations in this Contract are for reference purposes only, and shall not limit or affect the applicability of provisions not specifically mentioned. If Contractor observes that drawings and specifications are at variance therewith, he shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided for in this Contract for changes in work. If Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Engineer, he shall bear all costs arising therefrom.
- b. Contractor shall be responsible for familiarity with the Americans with Disabilities Act (“ADA”) (42 U.S.C. § 12101 et seq.). The Work will be performed in compliance with ADA laws, rules and regulations. Contractor shall comply with the Historic Building Code, including, but not limited to, as it relates to the ADA, whenever applicable.

GENERAL CONDITIONS

- c. Contractor acknowledges and understands that, pursuant to Public Contract Code Section 20676, sellers of "mined material" must be on an approved list of sellers published pursuant to Public Resources Code Section 2717(b) in order to supply mined material for this Contract.

ARTICLE 64. PATENT FEES OR ROYALTIES.

The Contractor shall include in its bid amount the patent fees or royalties on any patented article or process furnished or used in the Work. Contractor shall assume all liability and responsibility arising from the use of any patented, or allegedly patented, materials, equipment, devices or processes used in or incorporated with The Work, and shall defend, indemnify and hold harmless the District, its officials, officers, agents, employees and representatives from and against any and all liabilities, demands, claims, damages, losses, costs and expenses, of whatsoever kind or nature, arising from such use.

ARTICLE 65. OWNERSHIP OF DRAWING

All Contract Documents furnished by the District are District property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the District on request at completion of The Work.

ARTICLE 66. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

GENERAL CONDITIONS

SPECIAL CONDITIONS

"ARTICLE 67 SHALL BE ADDED TO THE GENERAL CONDITIONS TO READ AS FOLLOWS:

ARTICLE 67. VALUE ENGINEERING CHANGE PROPOSALS (VECP)

Value Engineering - Modifications to the project which are proposed by the Contractor and which provide the product or services equal to that called for in the project specifications, but at lower cost than the cost of those products or services designated in the specifications.

- a. Applicability - The provisions of this section shall apply only to Value Engineering Change Proposals (VECPs) resulting in net cost savings of Twenty Thousand dollars (\$20,000) or greater.

- b. Future Changes - The Contractor is entitled to share in the net cost savings of the VECP to the full extent provided for in this section and in the change order implementing the VECP. However, the net cost savings shall not continue to subsequent contract change orders nor other modifications of the contract which may change the service provided or increase the quantity of any item related to the VECP.

- c. VECP Submittal - The Contractor must submit all VECPs to the Engineer after receipt of the Notice To Proceed and prior to surpassing forty percent (40%) of the contract time allowed in Section 01010-3.0, Time Allowed For Completion. The number of copies of the VECP submitted shall be in accordance with that designated for submittals in Section 01300, SUBMITTALS.

The Contractor shall include the following information for each VECP, in a form acceptable to the Engineer:

- 1) Description of the differences between the existing design and the proposed design.

- 2) Description of the advantages and disadvantages of the existing design and the proposed design.

- 3) If the function of an item is altered, the justification for altering that function.

- 4) The effect of the proposed modifications on the performance of the system or facility.

SPECIAL CONDITIONS

- 5) Any test data regarding the proposed modification.
 - 6) A listing and analysis of all design criteria and specifications that must be changed if the VECP is accepted.
 - 7) A separate detailed estimate of the impact on the project costs, together with a copy of the Contractor's approved schedule of values or costs.
 - 8) A description and estimate of costs the District may incur to implement the VECP, including, but not limited to, design changes, inspection, testing, and evaluation costs.
 - 9) A prediction of any effects the VECP may have on life-cycle costs.
 - 10) The effect of the VECP on design and construction schedules.
 - 11) All preliminary engineering data necessary to support approval of the VECP.
- d. Acceptance of VECP by District - The District shall have sole discretion to determine whether or not to accept a VECP. The District's decision shall be final.

A VECP will be rejected if it causes an increase to the contract amount.

Within thirty (30) days after receipt of a VECP by the Engineer, the Contractor shall be notified in writing that the VECP is acceptable, rejected, or additional time is required for the Engineer's response.

If determined acceptable, the Engineer will initiate a contract change order to implement the VECP. A VECP which is acceptable shall be incorporated into the project only through a contract change order.

- e. Contractor's Right to Withdraw VECP - The Contractor has the right to withdraw part or all of any VECP at any time prior to written acceptance by the District. Such withdrawal shall be made in writing. Each VECP submitted by the Contractor shall remain valid for a period of thirty (30) days from the date received, unless extended by the Engineer. If the Contractor desires to withdraw the VECP prior to its acceptance or rejection, the Contractor shall be liable for the costs incurred by the District in reviewing the VECP.
- f. Change Order Content For Accepted VECP - The contract change order for an accepted VECP shall offer to the Contractor fifty percent (50%) of the net cost savings, as determined by the Engineer. The change order shall detail the cost savings of each contract item that is part of the final accepted VECP. The net cost savings shall be

SPECIAL CONDITIONS

accomplished through progress payments for the various items of work listed in the contract change order.

- g. Identical VECP - A VECP identical to a VECP submitted under any other contract, by the Contractor, or any other contractor, may also be submitted under this contract, provided that the VECP originated with such contractor and not with the District, Design Consultant, or Engineer.
- h. Restrictions - The Contractor may restrict the District's right to use any VECP data by marking it with the following statement:

“This data, furnished pursuant to the Value Engineering Change Proposal section of this contract, shall not be duplicated, used or disclosed, in whole or in part, for any purpose except to evaluate the VECP, unless the VECP is accepted by the District. This restriction does not limit the City's right to use information contained in this data if it is or has been obtained, or is otherwise available from the Contractor or from other sources, without limitations. When this VECP is accepted by the District, the District shall have the right to duplicate, use and disclose any data in any manner and for any purpose whatsoever, and have others do so whether under this or any other contract.”

SPECIAL CONDITIONS

TECHNICAL SPECIFICATIONS

THE FOLLOWING IMPROVEMENT PLANS AND SPECIFICATIONS ARE
INCORPORATED HEREIN BY REFERENCE AS IF SET FORTH IN THEIR ENTIRETY:

IMPROVEMENT PLANS

FOR 2021 EGWD SARA TREET WATER MAIN PROJECT
(9 SHEETS TOTAL)

TECHNICAL SPECIFICATIONS

BACKYARD WATER MAINS REPLACEMENT PROJECT

TECHNICAL SPECIFICATIONS

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SECTION 01071 STANDARD REFERENCES

PART 1 - GENERAL

1.01 ABBREVIATIONS

- A. Wherever used in these specifications, the following abbreviations will have the meanings listed:

<u>Abbreviation</u>	<u>Definition</u>
AAMA	Architectural Aluminum Manufacturer's Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ADA	Americans with Disabilities Act
AFBMA	Anti-Friction Bearing Manufacturers Association
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute, Inc.
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWS	American Welding Society
AWWA	American Water Works Association
CAL/OSHA	State of California Construction Safety Orders – California State Labor Code
CALSPEC	Standard Specifications, State of California, Department of Transportation, State of California, Business & Transportation Agency
CDPH	California Department of Public Health
FDCS	Field Data Collection System
FEDSPEC	Federal Specifications, General Services Administration, Specification and Consumer Information Distribution Branch
IEEE	Institute of Electrical and Electronics Engineers
ISA	Instrument Society of America
MSS	Manufacturers Standardization Society
NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Association
NFPA	National Fire Protection Association
NSF	National Safety Foundation

<u>Abbreviation</u>	<u>Definition</u>
OSHA	Occupation Safety and Health Act, U.S. Department of Health, Occupational and Health Administration
SSPWC	Standard Specifications for Public Works Construction
UBC	Uniform Building Code
UL	Underwriter's Laboratories, Inc.
UMC	Uniform Mechanical Code
UPC	Uniform Plumbing Code

1.02 APPLICABLE PUBLICATIONS

- A. Wherever references are made to published specifications, codes, standards, or other requirements, and where no date is specified, it shall be understood that the latest specifications, standards, or requirements of the respective issuing agencies published as of the date that the work is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 01526 TEMPORARY TRAFFIC CONTROL SYSTEMS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall provide all materials, equipment, and labor necessary to furnish, place, and maintain all temporary traffic control systems, including construction and maintenance area traffic control devices and flaggers as required to perform work in accordance with this Section, and all other appurtenant work, complete in place, as shown on the Drawings and as specified herein.
- B. Work Specified in this Section:
1. Review of proposed work areas to determine temporary traffic control requirements.
 2. Verification of temporary traffic controls with the District or appropriate agency prior to implementation.
 3. Submission of Traffic Control Plans to the District.
 4. Maintenance of traffic control during the work.
 5. Monitoring traffic control during the work to determine necessary changes required to maintain adequacy and safety.
 6. Maintenance of traffic control during non-work hours to maintain adequacy and safety.
 7. Removal of temporary traffic control systems after completion of the work.
 8. Replacement of traffic detector loops/detouring vehicles through signalized intersections.
 9. Comply with Section 7058 of the Business and Professions Code as it applies to establishment of traffic control.
- C. The Contractor shall provide all materials, equipment, and labor necessary to furnish, place, and maintain all temporary traffic control systems, including construction and maintenance area traffic control devices and flaggers as required to perform the work in accordance with this Section, and all other appurtenant work, complete in place, as shown on the Drawings and as specified herein.
- D. The contractor shall comply with Section 7058 of the Business and Professions Code as it applies to establishment of traffic control.

1.02 REFERENCES

- A. This Section references the following documents. They are a part of this Section insofar as specified and modified herein. In case of conflict between the requirements of this Section and the listed documents, the requirements of this Section shall prevail.

Reference

Title

State of California, Department of Transportation (CalTrans) Specifications and Standards, Section 7 – Legal Relations and Responsibility

Reference

Title

State of California, Department of Transportation (CalTrans) Specifications and Standards, Section 12 – Construction Area Traffic Control Devices

State of California, Department of Transportation (CalTrans) Standard Plans

State of California, Division of Industrial Safety, Department of Industrial Relations

Safety Orders of the Division of Industrial Safety, Department of Industrial Relations of the State of California, current edition.

State of California, Business and Professions Code

1.03 SUBMITTALS

- A. In addition to the submittal requirements laid out in Supplemental General Provisions, Special Provisions, and the Elk Grove Water District Standard Construction Specifications, the Contractor shall provide the following at the pre-construction conference:
1. A “Letter of Responsibility,” on company letterhead, indicating the names and telephone numbers of at least three different persons who shall be available to be contacted in case of emergency at any time during the life of the contract. Said persons must have decision-making authority within the company.
 2. “Traffic Control/Construction Staging Plans” indicating proposed traffic control measures during all stages of the work. These plans shall be submitted for review and approval by the District in order to determine the Contractor’s compliance with the requirements of this Section.
- B. The Contractor shall be responsible for submitting separate applications for encroachment permits to the appropriate agencies for work or traffic control within areas outside of the jurisdiction of the District. The Contractor shall be responsible for compliance with all traffic control requirements determined necessary by other permitting agencies or other public authorities acting within their jurisdictions.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All construction area stationary and portable sign panels, lights, barricades, and traffic control devices shall be the product of a commercial sign or safety device manufacturer conforming to the requirements of Section 12. “Construction Area Traffic Control Devices,” of the Caltrans Standard Specifications, unless otherwise specified in this Section, shown on the Drawings, and/or as directed by the District.

2.02 GENERAL

- A. The Contractor shall provide all appropriate traffic control measures in accordance with this Section prior to start of construction in the public right-of-way or in any area adjacent to the street right-of-way where public safety is affected.
- B. The Contractor shall take all necessary precautions for the protection of the work and the safety of its employees and the public. Traffic shall be maintained through the construction or maintenance zone in accordance with Sections 7-1.03, 7-1.04 and Section 12 of the CalTrans Standard Specifications.
- C. Proposed traffic control plans shall be approved by the District and any other public agency with jurisdiction over the roadway prior to installation.
- D. All construction area signs, lights, barricades, and traffic control devices shall be furnished, installed, maintained, and removed in conformance with the specifications of the CalTrans Traffic Manual, current edition, as published by the State of California Department of Transportation and Business and Professions Code Section 7058. Additional or alternate signs may only be used when specifically authorized by the District.
- E. The Contractor shall station guards or flaggers and shall conform to such special safety regulations relating to traffic control as may be required by these Technical Specifications, the District, or other public authorities acting within their jurisdictions. Section 12-1.03 of the CalTrans Standard Specifications is revised to provide that all flaggers and guards shall be furnished by the Contractor at its expense.
- F. The Contractor shall monitor traffic and safety conditions and maintain adequate traffic control measures during both work and non-work hours in order to maintain compliance with the requirements of this Section.
- G. The Contractor shall conform to all requirements of the current "Safety Orders of the Division of Industrial Safety, Department of Industrial Relations of the State of California."
- H. If a hazardous condition is observed and the District notifies the Contractor either directly or by telephone, the Contractor shall correct the condition immediately. If the Contractor fails to correct the hazardous condition immediately, the District reserves the right to call in a local contractor to perform the necessary work needed to improve public safety. The cost incurred shall be billed to the Contractor.
- I. All construction area signs, lights, barricades, and temporary traffic control devices shall be completely removed from the roadway when not in use. Locations and methods of storing traffic control equipment adjacent to the roadway between interrupted use shall require prior approval of the District.
- J. The Contractor shall completely remove all temporary signs, striping and/or delineators and restore the pavement, as necessary, upon removal or relocation of any temporary traffic controls or detours constructed as part of the work.
- K. When the construction activity will make any detector loop at a traffic signal inoperative for a period of 72 hours or more, the Contractor shall provide video detection, or any other similar device which is not installed in the pavement prior to the start of work at his/her own expense. The Contractor shall provide a temporary video detection device attached to the traffic signal pole luminaire arm which is wired to the traffic signal controller. The proposed detection device must be approved by the District.

PART 3 - EXECUTION

3.01 TRAFFIC CONTROL

- A. Lane closure shall conform to the provisions in this Section entitled "Traffic Control System for Lane Closure." Arrow boards shall be used for all lane closures. The Contractor shall check with District Traffic Engineering to confirm any lane closures restrictions that may be in effect before closing any lanes.
- B. All signs and other warning devices shall be provided by the Contractor and shall become his property after the completion of the contract.
- C. The Contractor shall furnish, erect, maintain, and remove all necessary signs and devices during the length of this contract.
- D. The Contractor shall provide a traffic control plan for each street included in the contract.
- E. The traffic control plans shall be specific for each street and for each phase of the project on each street. The traffic control plans must be reviewed and approved by the District prior to starting work.
- F. The traffic control plans shall be submitted for all streets in the project as one package for review by the District. Partial submittals will be rejected by the District.
- G. The traffic control as designed by the Contractor and identified on the traffic control plan shall be in place prior to the start of each day's work. At the pre-construction meeting, the traffic control requirements for the project shall be reviewed with the Contractor, and at the meeting, all of the Contractor's foremen or supervisors shall be present.
- H. The Contractor shall post "No Parking" signs, as necessary, not less than 72 hours in advance of scheduled work that will restrict parking. If the work is not performed during the timeframe indicated on the "No Parking" signs, the work will be rescheduled with at least five (5) working days advance notice. The Contractor shall leave the streets open to traffic until just prior to starting the work, and will provide all barricades, signs and traffic control necessary to protect the work. The Contractor will perform all re-posting of "No Parking" signs and re-notification occasioned by his failure to meet the posted schedule. Any delays caused by failure of the Contractor to adhere to the approved schedule will be at the Contractor's sole expense. No additional compensation will be allowed for costs resulting from said delays.
- I. Except for temporary interruptions approved by the District, property owners shall be provided access to their property over both walkways and driveways at all times. The Contractor shall construct work to allow such access.
- J. The Contractor shall maintain a safe workplace throughout the job including, but not limited to, providing flaggers, safety equipment, barricades, safe pedestrian passage along sidewalks, and maintenance of handicap access throughout the project site where applicable.
- K. The Contractor shall fulfill the requirements of this section 24 hours per day, seven days per week, including holidays, from the time the Notice to Proceed is issued until the project is accepted as complete.
- L. Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A C23 (Road Work

Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed where directed by the District.

- M. Bicycle lanes shall be maintained by the Contractor at all times during construction. Appropriate warning signs designed for bicyclists shall be used by the Contractor, as necessary, so bicyclists can safely traverse the construction zone.
- N. When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic.
- O. The provisions in this section may be modified or altered if, in the opinion of the District, public safety and convenience will be better served and work expedited. Said modifications or alterations shall not be adopted until approved in writing by the District.
- P. The Contractor shall not direct any traffic while a traffic signal is in operation. The Contractor shall make arrangements 5 days in advance with the District Public Safety Department (408-730-7109) to have District police direct traffic for traffic control at the Contractor's expense.

3.02 TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE

- A. A traffic control system shall consist of closing traffic lanes and ramps in accordance with the details shown on State Standard Plans T-11, T-12, and T-14, the provisions of Section 12, "Construction Area Traffic Control Devices," of the State Standard Specifications, and these Technical Specifications.
- B. The provisions in this section will not relieve the Contractor from the responsibility to provide additional devices or take measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the State Standard Specifications.
- C. Each vehicle used to place, maintain and remove components of a traffic control system on multilane roads shall be equipped with a Type II flashing arrow sign which shall be in operation when the vehicle is being used for placing, maintaining, or removing the components. Vehicles equipped with a Type II flashing arrow sign not involved in placing, maintaining, or removing the components when operated within a stationary type lane closure shall only display the caution display mode. The sign shall be controllable by the operator of the vehicle while the vehicle is in motion.
- D. If any component in the traffic control system is displaced, or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the component to its original condition or replace the component, and shall restore the component to its original location.
- E. When lane closures are made for work periods only, at the end of each work period, all components of the traffic control system, except portable delineators placed along open trenches or excavations adjacent to the traveled way, shall be removed from the traveled way and should. If the Contractor so elects, the components may be stored at selected central locations, as approved by the District.

3.03 TRAFFIC CONTROL REQUIREMENTS

- 1. No lane closures before 9 am and after 3 pm.
- 2. Restore all parking after 5 pm each day.
- 3. Backfill trenches by 5 pm each day for two-way traffic and parking.
- 4. Open driveways by 5 pm each day.

5. For one-way traffic during the day, provide detouring signs per the approved Detour Plan.
6. For sidewalk closures, provide alternate path with advance signage.
7. Allow 4' wide minimum ADA clearance for sidewalks to remain open during construction.
8. Restore hydrants on the same day they are removed.
9. Do not impact two adjacent intersections simultaneously.
10. Provide flaggers for lane closures.
11. Maximum spacing for cones and delineators will be 8' o.c.

3.04 TRAFFIC CONTROL PLANS

- A. Preparing and submit detailed traffic handling plan. Traffic handling plan will be prepared in CAD using base mapping provided by District. Traffic Control plans will conform the following requirements:
1. Plan #1: Traffic Handling Plans at 1" = 20' scale within 2 weeks of NTP.
 - a) Show typical lane closure.
 - b) Conform to approved staging plan.
 - c) Show intersection traffic handling.
 - d) Include detailed striping, signing and other devices.
 - e) Submit draft plans to District, and revise per District comments within 4 days of receiving comments.
 - 2) Plan #2: Pedestrian Access Plan at 1" = 20' scale within 2 weeks of NTP.
 - a) Show detouring of pedestrians between 9 am and 3 pm, including advance signing and striping.
 - b) Provide 24-hour ADA compliant access through the neighborhood.
 - c) Included detailed striping, signing and other devices.
 - d) Submit draft plans to District, and revise per District comments within 4 days of receiving comments.
 - 3) Plan #3: Detour Plans at 1" = 100' scale within 2 weeks of NTP
 - a) Provide for each stage of construction.
 - b) Show advance signage for one-way traffic during 9 am to 3 pm.
 - c) Included detailed striping, signing and other devices.
 - d) Submit draft plans to District, and revise per District comments within 4 days of receiving comments.

**** END OF SECTION ****

**SECTION 01620
PROTECTION OF MATERIALS AND EQUIPMENT**

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Materials and equipment shall be shipped, handled, stored, and installed by methods that will prevent damage to the items. Damaged items will not be permitted as part of the work except in cases of minor damage that have been satisfactorily repaired and are acceptable to the Engineer.

1.02 PIPE AND APPURTENANCES

- A. Pipe and appurtenances shall be handled, stored, and installed as recommended by the manufacturer. Pipes with soft coatings, such as coal tar enamel or the like, or pipes of materials which are subject to deterioration by sunlight or heat, such as PVC pipe, shall be stored to protect the coating or pipe from physical damage or other deterioration and shall only be handled with padded, wide slings. Pipes shipped with interior bracing shall have the bracing removed only when recommended by the pipe manufacturer.

1.03 DELIVERY OF MATERIAL OR EQUIPMENT

- A. The Engineer will not accept materials or equipment deliveries for the Contractor.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

**** END OF SECTION ****

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SECTION 01700 RESTORATION OF IMPROVEMENTS

PART 1 - GENERAL

1.01 STRUCTURES

- A. The Contractor shall remove existing structures, including paving, sidewalks, curbs, gutters, pipelines, and rip rap, as may be necessary for the performance of the work and shall rebuild the structures thus removed in as good a condition as found with the requirements specified. Concrete structures such as curbs and gutters shall be replaced from joint to joint or as directed by the Engineer. The Contractor shall also repair existing structures that may be damaged as a result of the work under this contract.

1.02 ROADS

- A. Unless otherwise specified, roads or other paved surfaces in which the surface is removed, broken, or damaged, or in which the ground has caved or settled during the work under this contract, shall be resurfaced and brought to the original grade and section. Requirements for paving restoration are covered in Section 02500.

1.03 CULTIVATED AREAS AND OTHER IMPROVEMENTS

- A. Cultivated or planted areas and other surface or subsurface improvements which are damaged by actions of the Contractor shall be restored as nearly as possible to their original condition at the Contractor's expense. Existing guard posts, barricades, and fences shall be protected and replaced if damaged. Contractor shall protect street lighting, traffic signals, telephone or other existing facilities from damage. Not all existing facilities are shown on the Drawings. Contractor shall restore all existing facilities damaged due to construction.

1.04 RESTORATION OF EXISTING INSTALLATIONS

- A. The Contractor shall, at no cost to the Owner, immediately correct or replace existing equipment, controls or systems that are damaged as a result of construction or Contractor operations.
- B. All curb, gutter and sidewalks saw cut and removed during construction including handicap ramps shall be replaced within fourteen (14) days of completion of the utility work within that portion of the project.

1.05 WARRANTY OF RESTORATION WORK

- A. The Contractor shall include all restoration work under the one (1) year guarantee included in the Supplemental General Provisions and Special Provisions.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

**** END OF SECTION ****

SECTION 02055 DEMOLITION AND SITE PREPARATION

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Demolition and site preparation includes all clearing, grubbing, and demolition work as well as abandonment of pipelines, valves, and other existing structures as shown on plans.

1.02 JOB CONDITIONS

- A. The Contractor shall determine the actual condition of the site as it affects the work.

1.03 SUBMITTALS

- A. The Contractor shall provide schedules and method of abandonment for submittal to the Owner for approval in accordance with the Supplemental General Provisions and Special Provisions.

1.04 QUALITY ASSURANCE

- A. General: All work shall be performed in accordance with the local building codes, State Industrial Safety Orders and requirements of the Occupational Safety and Health Act.
- B. Schedule: Demolition must be scheduled to allow all existing services and utilities to remain in continuous operation. No interruption in operation will be permitted without previous authorization from the Engineer.
- C. Protection:
1. Demolition shall be performed in such a manner as to not harm adjacent structures, equipment, existing landscaping, or natural vegetation. The Contractor shall assume full responsibility for such disturbance. All costs of any such repair, rehabilitation, or modifications shall be borne by the Contractor.
 2. The Contractor shall provide such protection as may be required to transfer material to the ground. Throwing, dropping or permitting the free fall of material and debris from heights which would cause damage to other work, existing structures, or equipment; undue noise or nuisance; or excessive dust will be expressly prohibited.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Fittings, backfill material and other material used for abandonment shall comply with Project Specifications.
- B. Concrete:
1. Concrete plugs shall be used to seal both ends of abandoned pipe. The plugs are intended to be watertight and to enclose pumped concrete slurry within abandoned pipe.
 2. Pumped concrete slurry shall be used to fill abandoned pipe. The slurry shall consist of Low Density Cellular Concrete from California Lite Weight Concrete or approved

equal. The Low Density Cellular Concrete contains a foam component and shall have the following characteristics:

- 1) Strength Specification 28 Day (ASTM C495/C796): Minimum 80 PSI
- 2) Density (ASTM C495/C796): 28-30 PCF
- 3) Flow Range (ASTM D6103): 6 or Greater

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall notify the Engineer when demolition is complete.

3.02 PERFORMANCE

- A. Clearing and Grubbing:

1. The site of all open-cut excavations and areas to be cleared as indicated on the Drawings shall be cleared and grubbed prior to excavation. Unless otherwise specified, the Contractor shall remove obstructions such as brush, trees, logs, roots, root balls, heavy sod, vegetation, rock, stones larger than 6 inches by any dimension, broken or old concrete and pavement, debris, and structures.
2. Clearing and grubbing in areas of structural improvement such as storage tank foundations and concrete structures shall be cleared and grubbed as above except that obstructions larger than two (2) inches in any dimension shall be removed.

- B. Equipment and Piping Removal:

1. All equipment and piping to be removed shall be properly disconnected from structures, piping, electrical, and instrumentation systems. The Contractor shall do all resurfacing and other work as necessary to comply with the above requirements.

- C. Pipeline/Structure Abandonment:

1. Pipelines are to be abandoned by plugging the ends and filling the entire pipeline with pumped concrete. Cut and plug each section of existing pipe on all sides of existing valves and at a minimum of every 500 feet along the existing pipeline and fill with cement slurry.
2. Pipelines to be abandoned, shall be removed a minimum of three feet from the live portion of the pipeline and securely closed at all pipe ends by a watertight plug of concrete not less than 2-feet thick. When laterals are abandoned, they shall be capped with an approved fitting at the property line.
3. Pipelines to be completely filled shall be pumped full with a concrete slurry mix sufficiently workable for the purposes intended.
4. Structures to be abandoned shall be removed to a point 24-in below the proposed grade or existing ground surface, shall have all openings, inlets and outlets sealed off/capped, and filled with backfill (compacted as directed) or filled with concrete.
5. Buried valves shall be abandoned in place or removed as called for in the Drawings. Valves to be abandoned in place shall be abandoned by removing bonnet and wedge, then filling with concrete. Contractor shall remove valve box and re-pave surface to match existing.

6. Existing fire hydrant stub ups shall be removed to a minimum of 12 inches below grade and provided with a cap or concrete plug. Finish the surface with sidewalk pavement or fill with planting soil as applicable.
- D. Pavement Removal:
1. All pavements and concrete pads shall be saw-cut on a neat line at right angles to the curb face.
- E. Utility Interference:
1. Where existing utilities interfere with the performance of the work, the Contractor shall relocate them.

3.03 SALVAGE

- A. The Owner has the right to salvage any items scheduled for removal. The Contractor shall notify the Engineer five (5) calendar days prior to any salvage or demolition work to determine the disposition of items to be removed. The Engineer will mark items to be salvaged. Such items shall be properly disconnected, removed from their foundations, cleaned, and stored at a location on the site as specified or as directed by the Engineer.

3.04 REMOVED MATERIAL AND DEBRIS

- A. All removed material not designated for salvage and all debris shall become the property of the Contractor and shall be removed from the site.
- B. Materials and debris generated by demolition activities shall not be allowed to accumulate. Debris shall be removed daily and disposed of in a manner allowed by law.
- C. If asbestos cement pipe (ACP) must be cut and handled in the field to accomplish the work, the Contractor shall be solely responsible for and shall take all appropriate precautions for protecting against threats to health and safety of the work force and general public arising out of construction involving asbestos. The Contractor shall comply with all applicable regulations for the handling, cutting, shaping, installation and disposal of asbestos.
- D. Asbestos cement pipe to be disposed shall be properly manifested, prepared for transport following criteria of appropriate County, State and Federal regulations, and delivered to a landfill permitted for disposal of non-friable asbestos containing materials. Proper disposal shall be the sole responsibility of the Contractor. Contractor shall return the completed Generator copy (yellow) manifest to the Owner.

3.05 BACKFILL

- A. Holes or depressions in the ground remaining after demolition of pipelines or equipment shall be filled with compacted backfill materials as specified in Section 02200. Surface shall be restored to match adjacent conditions and features and in accordance with Elk Grove Water District Standard Construction Specifications.

**** END OF SECTION ****

SECTION 02140 DEWATERING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The work of this Section includes dewatering if necessary to lower and control groundwater levels and hydrostatic pressures to permit excavation and construction to be performed properly under dry conditions.
- B. Dewatering operations shall be adequate to assure the integrity of the finished project. The responsibility for conducting the dewatering operation in a manner that will protect adjacent structures and facilities rests solely with the Contractor. The cost of repairing any damage to adjacent structures and restoration of facilities shall be the responsibility of the Contractor.

1.02 SUBMITTALS

- A. The following shall be submitted in accordance with the Supplemental General Provisions and Special Provisions:
 - 1. Should dewatering be required by the Engineer during the course of construction, the Contractor shall provide a detailed plan and schedule with description for dewatering of excavations.
 - 2. Prior to commencement of excavation, the Contractor shall demonstrate that adequate personnel, materials, and equipment are readily available.

1.03 CONTROL AND OBSERVATION

- A. Adequate control shall be maintained to ensure that the stability of excavated and constructed slopes are not adversely affected by water, that erosion is controlled and that flooding of excavation or damage to structures do not occur.
- B. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, reference points shall be established and observed at frequent intervals to detect any settlement that may develop.
- C. A daily report shall be maintained. The following shall be recorded:
 - 1. Elevation of ground water and piezometric water levels in observation wells (if any).
 - 2. Change in elevation of reference points established in accordance with Subsection 1.03B.

PART 2 - PRODUCTS

2.01 EQUIPMENT

- A. Dewatering shall include well points, sump pumps, temporary pipelines for water disposal, rock or gravel placement, and other means including standby pumping equipment maintained on the job site continuously.

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A. An adequate system shall be maintained to lower and control the groundwater to permit excavation, construction of structures, placement of piping, and placement of fill materials to be performed under dry conditions.
- B. Sufficient dewatering equipment shall be installed to predrain the water-bearing strata below the bottom of foundations, drains, sewers, pipelines, and other excavations.
- C. The hydrostatic head in water-bearing strata below foundations, drains, sewers, pipelines and other excavations shall be reduced to ensure that the water level and piezometric water levels are below the excavation surface at all times.
 - 1. The piezometric water level shall be maintained a minimum of three (3) feet below the excavation surface.
- D. The system shall be placed into operation prior to excavation below ground water level to lower the ground water level and shall be operated continuously 24 hours a day, seven (7) days a week until drains, sewers, pipelines and structures have been constructed and leak tested and fill materials have been placed and dewatering is no longer required.
- E. The site shall be graded to facilitate drainage. Surface runoff shall be diverted from excavations. Water entering the excavation from surface runoff shall be collected in shallow ditches around the perimeter of the excavation, drained to sumps, and be pumped or drained by gravity away from the excavation.
- F. Dewatering shall at all times be conducted in such a manner as to preserve the undisturbed bearing capacity of the subgrade soils at proposed bottom of excavation.
- G. If foundation soils are disturbed or loosened by the upward seepage of water or an uncontrolled flow of water, the affected areas shall be excavated and replaced with drain rock at no additional cost to the Owner.
- H. Flotation of structures and facilities shall be prevented by maintaining a positive and continuous removal of water.
- I. If well points or wells are used, they shall be adequately spaced to provide the necessary dewatering and shall be sandpacked and/or other means shall be used to prevent pumping of fine sands or silts from the subsurface. A continual check shall be maintained to ensure that the subsurface soil is not being removed by the dewatering operation.
- J. Water and debris shall be disposed of in a suitable manner in compliance with local and State regulations and without damage to adjacent property. No water shall be drained into work built or under construction. Water shall be filtered to remove sand and fine-sized soil particles and further treated if required by regulatory agencies before disposal into any drainage system. Necessary permits for disposal of water, if applicable, shall be obtained by the Contractor from the appropriate regulatory agencies.
- K. The release of groundwater to its original level shall be performed in such manner to prevent disturbance of natural foundation soils, prevent disturbance of compacted backfill and prevent flotation or movement of structures, pipelines, and sewers.

**** END OF SECTION ****

SECTION 02200 EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This Section specifies earthwork consisting of excavation, filling, grading, excess material control, and third party inspection by an independent inspector/firm.
- B. This work shall consist of: performing all operations necessary to excavate earth and rock or other material, of whatever nature, including removing water, regardless of character and subsurface conditions necessary for the construction of the project facilities.

1.02 DEFINITIONS

- A. Compaction: The degree of compaction is specified as percent compaction. Maximum of relative densities refers to dry soil densities obtainable at optimum moisture content.
- B. Excavation Slope: Excavation slope shall be defined as an inclined surface formed by removing material from below existing grade.
- C. Embankment Slope: Embankment slope shall be defined as an inclined surface formed by placement of material above existing grade.
- D. Street Zone: The street zone includes the asphalt concrete and aggregate base pavement section placed over the trench backfill and/or above street subgrade.
- E. Trench Zone: The trench zone includes the portion of the trench from the top of the pipe zone to the bottom of the street zone in paved areas or to the existing surface in unpaved areas.
- F. Pipe Zone: The pipe zone shall include the full width of trench from the bottom of the pipe to a horizontal level 12" minimum above the top of the pipe, as shown on the contract drawings. Where multiple pipes are placed in the same trench, the pipe zone shall extend from the bottom of the lowest pipes to a horizontal level above the top of the highest or topmost pipe.
- G. Pipe Base or Bedding: The pipe base or bedding shall be defined as a minimum 4-inches or ¼ pipe diameter, whichever is greater, thick layer of material immediately below the bottom of the pipe and extending over the full trench width in which the pipe is bedded.

1.03 QUALITY ASSURANCE

- A. References: This Section references the following documents. They are a part of this Section insofar as specified and modified herein. In case of conflict between the requirements of this Section and the listed documents, the requirements of this Section shall prevail.

<u>Reference</u>	<u>Title</u>
AASHTO T176	Plastic Fines in Graded Aggregates and Soils by use of the Sand Equivalent Test
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D420	Standard Guide to Site Characterization for Engineering, Design, and Construction Purposes

<u>Reference</u>	<u>Title</u>
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557/ CA Test 216 or 231	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2,700 kN-m/m ³))
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D2419/ CA Test 217	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D3017	Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)
CA Test 301	Resistance (R-Value)
CA Test 302	Sieve Analysis

B. Tests: The contractor shall be responsible for procuring an independent inspector/firm with a minimum five (5) years of experience to conduct all sampling and perform moisture content, gradation, compaction, and density tests during placement of backfill materials to check compliance with these specifications.

1. The Contractor shall remove surface material at locations designated by the Engineer and/or independent inspector/firm and provide such assistance as necessary for sampling and testing. The Engineer and/or inspector may direct the Contractor to construct inspection trenches in compacted or consolidated backfill to determine that the Contractor has complied with these specifications. The Owner will bear the costs for sampling and testing specified in this Paragraph. The Contractor shall pay costs associated with retesting due to the Contractor's failure to comply with the specifications.

1.04 SUBMITTALS

A. The contractor shall provide certification from suppliers for materials used as well as certified results from the independent inspector/firm. All reports prepared and submitted by the independent inspector/firm shall be under the supervision of a California Registered Geotechnical or Civil Engineer. Submittal shall contain the name and address of the firm and shall be stamped and signed by the Engineer of record.

PART 2 - PRODUCTS

2.01 FILL MATERIALS

A. Imported sand-pipe zone and pipe base: Imported sand used in the pipe zone or for the pipe base shall have the following gradation:

<u>U.S. Standard Sieve Size</u>	<u>Percent by Weight Passing</u>
3/8 inch	100
No. 4	95-100

<u>U.S. Standard Sieve Size</u>	<u>Percent by Weight Passing</u>
No. 8	90-100
No. 16	80-100
No. 30	65-100
No. 50	40-70
No.100	0-30
No. 200	0-12

- B. Imported sand shall have a coefficient of permeability greater than 0.014 measured in accordance with ASTM D2434 or a minimum sand equivalent of 20 per ASTM D 2419.
- C. Minimum Resistivity for "Imported Sand" backfill shall be 2, ---ohm-cm in accordance with Method of Field Resistively Survey and Sampling Laboratory Tests and Laboratory Method of Determining Minimum Resistivity per Caltrans' California Test Method 643. Imported sand shall have a maximum chloride concentration of 200 mg/l in accordance with Caltrans Method 422 and maximum sulfate concentration of 500 mg/l in accordance with Caltrans Method 417.
- D. Coefficient of Uniformity, $C_u \geq 2.5$
 - 1. $C_u = D_{60}/D_{10}$
 - 2. D_N = Diameter of grain size which n% of the total is passing
- E. Class 2 Aggregate Base (Type 2): Backfill material consisting of Class 2 Aggregate shall comply with Caltrans Standard Specification Section 26-1.02A.
- F. Backfill material schedule (for placement): Unless otherwise called out on the plans, backfill materials shall be provided according to the following schedule:

<u>Location</u>	<u>Material</u>
Street Zone	Class 2 AB
Trench Zone	Class 2 AB
Pipe Zone	Imported Sand
Bedding	Class 2 AB

PART 3 - EXECUTION

3.01 GENERAL

- A. Overexcavation:
 - 1. At the direction of the Engineer:
 - 1) Where the undisturbed condition of natural soils is inadequate for support of planned construction, the Engineer will direct the Contractor to overexcavate to adequately support the natural soils. The excavated space shall be backfilled and compacted to the specified elevation with soil materials in accordance with Section 3.02.

- 2) When overexcavation and backfill is directed by the Engineer because of inadequate soil support, the overexcavation and the placement of backfill or concrete material will be paid for as Extra Work.
 2. Due to Contractor's Operations: Should the excavation be carried below the lines and grades specified on the drawings or should the bottom of the excavation be disturbed because of the Contractor's operations and require overexcavation and backfill, the Contractor shall refill such excavated space with compacted backfill in accordance with Section 3.02. Backfill and compaction shall be at Contractor's expense. Areas where overexcavation has taken place will be subject to inspection by the independent inspector.
- B. Removal of Obstructions:
1. The Contractor shall remove all rocks, stones, broken concrete and pavement, debris and all obstructions of whatsoever kind or character, whether natural or artificial, encountered in the work.
 2. Material that is removed as hereinbefore specified, and is not to be incorporated in the work, shall be properly disposed of off the site.
- C. Surplus Material:
1. Unless otherwise specified, surplus excavated material shall be disposed of in accordance with applicable ordinances and environmental requirements.
 2. The Contractor shall satisfy himself that there is sufficient material available for the completion of the required earthwork before disposing of any material inside or outside the site. The Contractor shall replace, at their own expense, the shortage of material caused by premature disposal of any material by the Contractor.
 3. Material shall not be stockpiled to a depth greater than five (5) feet above finished grade within twenty-five (25) feet of any excavation or structure except for those areas designated to be preconsolidated. For these areas, the depth of stockpiled material shall be as specified. The Contractor shall maintain stability of the soil adjacent to any excavation.
- D. Borrow Material: If the quantity of acceptable material from excavation is not sufficient to complete the backfill required by the work, the quantity of material needed to complete the work shall consist of imported borrow conforming to specified requirements.
- E. Hauling: When hauling is done over highways or District streets, the loads shall be trimmed and the vehicle shelf areas shall be cleaned after each loading. The loads shall be watered after trimming to eliminate dust.
- F. Finish Grading:
1. Finish surfaces shall be smooth, compacted and free from irregularities. The degree of finish shall be that normally obtainable with a blade-grader.
 2. Finished grade shall be as specified by the contours, plus or minus 0.10 foot, except where a local change in elevation is required to match sidewalks, curbs, manholes and catch basins, or to ensure proper drainage. Allowance for subbase and pavement thickness shall be made so that the specified thickness can be applied to attain the finished grade.
 3. When the work is at an intermediate stage of completion, the lines and grades shall be as specified \pm 0.5 foot to provide adequate drainage.

- G. Control of Erosion: The Contractor shall maintain earthwork surface true and smooth and protected from erosion. Where erosion occurs, the Contractor shall provide fill or shall excavate as necessary to return earthwork surfaces to the grade and finish specified.
- H. Dewatering: The Contractor is notified that high groundwater levels may be encountered at the site, and shall be prepared to dewater excavations as necessary. Dewatering activities shall be conducted in accordance with Section 02140.

3.02 EXCAVATION AND BACKFILL FOR PIPELINES

A. Excavation:

1. Unless otherwise specified or indicated, excavation for pipelines shall be open cut. Trenching machines may be used except where their use will result in damage to existing facilities.
2. Where, in the opinion of the Engineer, the undisturbed condition of the natural soils below the excavation grades indicated or specified is inadequate for the support of the planned pipeline, the Engineer will direct the Contractor to overexcavate to adequate supporting soils and refill the excavated space to the proper elevation in accordance with Subsection 3.01, Paragraph A. Should the natural foundation soils be disturbed or loosened because of the Contractor's operations, they shall be recompacted or removed and the space refilled in accordance with Subsection 3.01, Paragraph A. All overexcavated areas shall be subject to independent inspection in accordance with Subsection 3.01 A.
3. Unless otherwise shown, trenches shall be excavated at least six (6) inches below the barrel of the pipe.

B. Trench Width:

1. The minimum width shall be a minimum of one pipe diameter plus eight (8) inches. The maximum allowable width of trench shall be as shown on the design drawings. The maximum width shall be inclusive of all sheeting, lagging, and bracing.
2. Wherever the maximum allowable trench width is exceeded for any reason, the Contractor shall provide improved bedding and/or extra strength pipe, as directed by the Engineer.
3. All pipelines shall have minimum of six (6) inches bedding material below the barrel of the pipe. Bedding material shall as specified in Table A. Bedding shall be placed and compacted as specified for initial trench backfill and shall be placed to provide uniform support for the pipe.
4. Where, in the opinion of the Owner and/or independent inspector, stabilization of the undisturbed foundation below the 6-inch bedding of the overexcavated depth as shown is required because of the soft, spongy or unstable condition, backfill selected by the Owner shall be placed in the trench bottom in accordance with Subsection 3.01, Paragraph A. The quantity and placement of such material shall be as ordered by the Owner and will be paid for as Extra Work.

C. Trench Length:

1. Trench length shall be limited as much as possible without hindering or delaying the work to be completed.

2. When trenches are left open overnight, the Contractor shall plate the trench using trench plates in conjunction with appropriate sheeting, shoring, and bracing to support H-20 traffic loads.

D. Bedding and Backfill Placement

1. Bedding and backfill in pipe trenches shall be of the type, placement, compaction and inspected as shown on the plans and in this Section.
2. All backfill shall be carefully placed and spread in uniform horizontal layers (lifts) not exceeding 8 inches. Backfill shall be placed to about the same elevation on both sides of the pipe to prevent unequal loading and displacement of pipe. Backfill shall be placed to minimum depth of 30 inches above the top of the pipe unless shown otherwise on plans.

3.03 SUBGRADE FOR PAVEMENT

- A. The prepared subgrade shall be scarified to a depth of at least 12 inches and recompact to at least 95 percent of the maximum density.

3.04 SITE FILL

- A. Unless otherwise specified, site fill shall be processed miscellaneous base fill. If the existing slope in an area to be filled is greater than 5:1, the Contractor shall bench the area prior to filling.

**** END OF SECTION ****

SECTION 02350 SHEETING, SHORING, AND BRACING

PART 1 - GENERAL

1.01 SCOPE

- A. This Section provides specifications for sheeting, shoring, bracing, or other excavation supports.

1.02 PAYMENT

- A. All sheeting, shoring, and bracing necessary shall be included in a separate bid item of the Bid Schedule.

1.03 STANDARDS

- A. Work shall be in conformance with the requirements of OSHA, CAL/OSHA, the Elk Grove Water District Standard Construction Specifications and Standard Details, and the requirements set forth herein.

1.04 QUALITY ASSURANCE

- A. Design Requirements:
1. Protection and Trench Safety: Pursuant to Section 6705 of the State Labor Code, all open excavations greater than five (5) feet in depth shall be constructed with bracing, sheeting, shoring, or other equivalent method designed for the protection of life and limb. The trench excavation and support system shall comply in all respects with the requirements of Article 6, of the Construction Safety Orders of the Division of Industrial Safety. The Contractor's attention is directed to the provisions of Subarticle 1540 (4), Article 6 of the California Construction Safety Orders for alternative shoring and sloping system. It shall be the Contractor's responsibility to provide the additional strength required to support the sides of the excavation against loads that may exceed those employed to derive the criteria set forth in the Industrial Safety Orders. The Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil engineer. Plans must be accepted by the Engineer.
 2. It shall be understood that the above stipulated requirements are to be considered to be the minimum to be provided. The Contractor shall be solely responsible for any and all liabilities which may arise from the Contractor's failure to provide adequate shoring, bracing, or sheeting as necessary to support the excavation under any or all of the conditions of loading which may exist, or which may arise during the construction of the project.
 3. Excavation for Structures: All excavations shall be properly shored, sheeted and braced or cut back to the proper slope to furnish safe working conditions, to prevent shifting of material, to prevent damage to structures or other work, and to avoid delay to the work, all in accordance with applicable safety and health regulations. Before starting excavation for structures, the Contractor shall submit for record purposes complete design calculations and working drawings of proposed sheeting and bracing

arrangements which have been prepared, signed, and sealed by a registered civil engineer. Bracing shall be arranged so as not to place any strain on portions of completed work until the general construction has proceeded far enough to provide ample strength. If the Engineer is of the opinion that, at any point, the sheeting or supports are inadequate or unsuited for the purpose, the Engineer may order the Contractor to resubmit design calculations and working drawings for that point, taking into consideration the observed field conditions. If the new calculations show the need for additional sheeting and bracing, the Contractor shall immediately install it. The sole responsibility for the design, methods of installation, and adequacy of the sheeting and supports shall be and shall remain that of the Contractor. The working drawings for shoring, sheeting and bracing will not be checked by the Engineer.

4. Sequencing: The Contractor shall not start excavation until the trench support drawing has been returned to the Contractor. When the construction sequence of structures requires the transfer of bracing to the completed portions of any structure, the Contractor shall secure the written acceptance of the Engineer prior to the installation of such bracing.

B. Submittals:

1. Trench Support Drawings: In accordance with the requirements of Section 6705 of the Labor Code of the State of California, the Contractor shall submit detailed drawings to the Engineer before excavation, showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of any trench or trenches five (5) feet or more in depth. The design shall be signed by a registered civil engineer. The drawings will not be checked by the Engineer.
2. Certification: The minimum required protection will be that described in the Construction Safety Orders of the Division of Industrial Safety. If the Contractor presents excavation plans that vary from the shoring system standards established by the Construction Safety Orders, the Plans shall be prepared and signed by a registered civil engineer.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 INSTALLATION

- A. The design, planning, installation and removal of all lagging, sheeting, shoring, sheet piling, and bracing shall be accomplished in such a manner as to maintain the undisturbed state of the soils adjacent to the trench and at and below the excavation bottom.
- B. The use of horizontal strutting below the barrel of a pipe or the use of a pipe as a support will not be permitted.
- C. Sheet piling and timbers in trench excavations shall be withdrawn in a manner so as to prevent subsequent settlement of the pipe or additional backfill loadings that might overload the pipe. Trench sheeting below the top of the pipe shall be left in place.

**** END OF SECTION ****

SECTION 02500 PAVING

PART 1 - GENERAL

1.01 DESCRIPTION

- A. This section provides specifications for removal of pavements, curbs, gutters and sidewalk, and the construction of re-paving and new pavements.

1.02 STANDARDS

- A. Paving shall be in conformance with the requirements of the Elk Grove Water District Construction Specifications and Standard Details, the City of Elk Grove Public Works Standards, current Caltrans Standard Specifications Section 39 – Asphalt Concrete, and the requirements set forth herein.

PART 2 - PRODUCTS

- A. All materials shall be in conformance with the following requirements:

<u>Material</u>	<u>Requirements</u>
Crushed aggregate base	Caltrans, Class 2, Section 26
Asphalt Concrete	Caltrans, Type A, Section 39
Prime Coat	Caltrans, SC-70, Section 39-4
Tack coat	Caltrans, SS-1h, Section 39-4

- B. Asphalt concrete (AC) shall be standard Type A asphalt concrete mixed, spread and compacted as noted in the Caltrans standards. Base material shall be at least 6 inches Class 2 crushed aggregate base. The traffic index (TI) for the project alignment is 7.0.

PART 3 - EXECUTION

3.01 ASPHALT CONCRETE PAVEMENT

- A. All asphalt concrete pavement removed, broken or damaged shall be re-paved. Removal of existing pavements shall be by saw cutting and in accordance with the District of Elk Grove Construction Specifications and Standard Details and Standard Details and current Caltrans Standard Specifications. Removed asphalt shall be disposed off the site. No removed asphalt shall be used in any backfill material on-site.
- B. All asphalt paving shall be cut to a neat, straight line parallel with the street centerline and the exposed edge shall be tacked with emulsion prior to paving. The exposed base material shall be graded, recompact, and resealed prior to paving.
- C. When sawcutting within the street for trenching or other purposes, contractor shall grind a minimum 1-1/2 inch depth of pavement between the lane lines (from lane stripe to lane stripe or 1/2 the width of the road as noted) upon completion of the sawcutting and or trenching work. Where sawcutting occurs between the curb and gutter and nearest lane stripe (including bike lanes), the same 1-1/2 inch grind shall be required.

- D. Subgrade shall be prepared in accordance with Section 02200 herein. Crushed aggregate base shall be provided as specified in Section 02715. The asphalt concrete pavement shall be placed against a saw cut edge and shall be constructed per current Caltrans Standard Specifications.
- E. All painted traffic stripes, arrows, and pavement markings shall be replaced with thermoplastic material per District of Elk Grove Standard Construction Specifications.
- F. All temporary and permanent paving shall be maintained by the Contractor for the duration of the project.

3.02 CONCRETE CURBS, GUTTERS, DRIVEWAYS AND SIDEWALKS

- A. Repairs and replacement of concrete curbs, gutters, driveways and sidewalks shall be made by removing and replacing the entire portions between joints or saw cuts and not merely refinishing any damaged parts. Removal and replacement shall be in accordance with District of Elk Grove Standard Construction Specifications. Reconstruction shall be of the same kind of material with the same finish and same dimensions as the original work. All work shall match the appearance of existing improvements as nearly as possible. Where the construction work tunnels under curbs, gutters or sidewalks, the tunnel shall be backfilled with concrete above the initial layer of compacted fill.

**** END OF SECTION ****

SECTION 02715 AGGREGATE BASES

PART 1 – GENERAL

1.01 REFERENCES

- A. Current Caltrans Standard Specifications Section 26 - Aggregate Bases

1.02 SUBMITTALS

- A The Contractor shall furnish material certificates signed by the material producer and the Contractor, showing compliance with the respective specifications.

PART 2 - PRODUCTS

2.01 AGGREGATE BASE

- A. Aggregate base shall be Class 2 conforming to Section 26 of the Caltrans Standard Specifications.

2.02 WATER

- A. Water used for compaction shall be clear and free from injurious amounts of oil, acid, alkali, organic matter, or other deleterious substances.

PART 3 - EXECUTION

3.01 SPREADING AND COMPACTING

- B. Aggregate base shall be spread and compacted in accordance with Section 26 of the Caltrans Standard Specifications. The maximum compacted thickness of any one layer of base material shall not exceed six (6) inches. The relative compaction of each layer of compacted base material shall be not less than 95 percent.
- C. The surface of the finished aggregate base at any point shall not vary more than 0.05 foot above or below the grade shown on the plans or established by the Engineer.

**** END OF SECTION ****

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SECTION 02892 TRAFFIC STRIPES, PAVEMENT MARKINGS & DETECTOR LOOPS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Contractor shall provide all materials, equipment, and labor necessary to furnish and place all traffic stripes and pavements markings, which may include but is not necessarily limited to, removal of any existing striping, legends, and pavement markers, detector loops; repair of damaged pavement; placement of pavement markers; placement of both thermoplastic and painted striping and marking, replacement of detector loops and all other appurtenant work, complete in place, as shown on the Drawings and as specified herein.
- B. The Contractor shall protect in place all existing traffic signal conduits, wiring and pull boxes. Any damage shall be repaired or replaced at no additional cost to the District.

1.02 SUBMITTALS

- A. The Contractor shall furnish material certificates signed by the material producer and the Contractor, showing compliance with the respective specifications.

1.03 REFERENCES

- A. California Manual of Uniform Traffic Control Devices (MUTCD) 2012
- B. 2010 Caltrans Standard Specifications:
 - 1. Section 15 – Existing Facilities
 - 2. Section 84 – Traffic Stripes and Pavement Markings
 - 3. Section 85 – Pavement Markers
 - 4. Section 86 – Electrical Systems
 - 5. Section 94 – Asphalt Emulsions

PART 2 - PRODUCTS

2.01 TRAFFIC STRIPES AND PAVEMENT MARKINGS

- A. General: Unless otherwise noted on the Drawings, all permanent traffic stripes and pavement markings shall be thermoplastic and/or pavement markers.
- B. Thermoplastic: Thermoplastic for traffic stripes and pavement markings shall conform to Section 84-2, "Thermo plastic Traffic Stripes and Pavement Markings," of the Caltrans Standard Specifications.
- C. Paint: Paint for traffic stripes and pavement markings shall conform to Section 84-3, "Painted Traffic Stripes and Pavement Markings," of the Caltrans Standard Specifications.
- D. Pavement Markers: Pavement markers shall conform to Section 85, "Pavement Markers," of the Caltrans Standard Specifications and as specified herein. Fire hydrant markers shall be two-way reflective blue markers.

- E. Pavement Arrows: All pavement arrows shall be thermoplastic and shall be installed in conformance with 2010 Caltrans Standard Plans.

2.02 ADHESIVE

- A. Adhesive shall be the hot melt bituminous type conforming to Section 85, "Pavement Markers," of the Caltrans Standard Specifications.

PART 3 - EXECUTION

3.01 GENERAL

- A. Centerline and lane lines shall be re-established the same day as they are removed by the use of temporary reflective markers placed at 24-foot maximum spacing.
- B. Stop bars, crosswalks, advanced school crossing legends and arrows, shall be re-established the same day as they are removed using paint or traffic tape and shall match the width, size, and color as the removed markings unless otherwise shown on the Drawings.
- C. Temporary traffic stripes and pavement markings placed on the finish lift of asphalt concrete shall be made with temporary traffic tape. Temporary traffic stripes and pavement markings placed on sub-lifts of asphalt concrete may be made with paint or traffic tape. Traffic tape will not be placed on slurry seal surfaces.

3.02 REMOVE EXISTING TRAFFIC STRIPES AND PAVEMENT MARKINGS

- A. All removed traffic stripes and pavement markings and excess material shall become the property of the Contractor and shall be disposed of in a legal and proper manner. Removal and disposal of existing traffic markings and excess material shall conform to Section 15, "Existing Facilities," of the Caltrans Standard Specifications and as specified herein.
- B. The Contractor shall conduct his work so as not to damage existing pavement and public improvements. Any resultant damage determined to be excessive by the District shall be repaired in kind by the Contractor at its sole expense.
- C. Damage to the pavement resulting from removal of pavement markers shall be considered as any depression more than 1/4-inch deep and shall be repaired by the Contractor by filling the depression with hot melt bituminous adhesive to the satisfaction of the District.
- D. Where blast cleaning is used for the removal of traffic stripes and pavement markings or objectionable material, and such removal operations are being performed within 10 feet of a lane occupied by public traffic, the residue, including dust, shall be removed immediately after contact between the sand and the surface being treated. Such removal shall be by a vacuum attachment operating concurrently with the blast cleaning operation.
- E. Where removal of traffic stripes and pavement markings is done by grinding or sandblasting methods, the effected pavement surface shall be completely covered by applying asphaltic emulsion conforming to Section 94 of the Caltrans Standard Specifications.
- F. All reference markings made by the Contractor shall be done with spray chalk.
- G. All temporary traffic stripes and pavement markings shall be removed by the Contractor on the same as placement of the permanent stripings and markings.

3.03 TRAFFIC STRIPES AND PAVEMENT MARKING INSTALLATION

- A. Placement of all traffic stripes and pavement markings, legends shall be in conformance with Section 84, "Traffic Stripes and Pavement Markings," and Section 85, "Pavement Markers," of the Caltrans Standard Specifications, referenced Plans of the Caltrans Standard Plans, and as specified herein.
- B. The Contractor shall repaint any pavement striping or markings, legends that are damaged by trenching or other operations during the course of the project. The entire stripe element (individual stripe) or marking (crosswalk lines, turn arrows, etc.) shall be repainted. Unless approved otherwise by the Traffic Engineer, all repainted pavement markings shall be thermoplastic.
- C. All layouts must be inspected and approved by the District prior to permanent placement of the traffic stripes and pavement markings. The Contractor shall notify the District no later than 48 hours prior to the start of the scheduled placement.
- D. Any overlap, dripping or tracking of fresh thermoplastic or paint onto unmarking surfacing shall be removed to the satisfaction of the District.
- E. Thermoplastic and paint shall be placed as close as possible to existing utility structures and monument frames and covers without covering them.
- F. The Contractor shall protect all fresh thermoplastic and paint and shall repair or replace all damage to traffic stripes and pavement markings caused by the failure to do so at the Contractor's expense.
- G. All traffic stripes and pavement markings, new or existing, within or adjacent to the work limits which become deface or damaged during the Contractor's operations shall be replaced by the Contractor at its expense concurrently with other traffic marking operations in the immediate area. The District shall be the sole judge as to which stripes or legends are defaced or damaged.
- H. Fire hydrant markers shall be installed at all fire hydrant locations as shown on the drawings.

3.04 RESTORATION OF CURB MARKINGS

- A. Contractor shall reference out and restore any curb markings (S-indicating sanitary sewer lateral; W-indicating water service lateral; arrows and Roman Numbers-indicating ties to water main valves; high pressure gas main) that may be destroyed by its work. In the case of construction of curb ramps where the vertical curb is eliminated new ties to water valves shall be made on the closest available vertical curb with the proper direction of arrows and proper distances from water valve to tie indicated in three-inch (3") high Roman numerals.

3.05 TRAFFIC SIGNAL DETECTOR LOOPS (INCLUDING BICYCLE DETECTION)

- A. Existing traffic signals and street lighting shall be kept in operation for the benefit of the traveling public during progress of the work. The Contractor shall contact the District or Caltrans 72 hours prior to removal of any existing detector loop or lead-in wire. The District or Caltrans will install appropriate timing in the traffic signal controller prior to the Contractor cutting the existing loops.
- B. Contractor shall replace all damaged detector loops as part of surface restoration. All damaged detector loops including any advanced detector loops and detector handholes shall be replaced.

- C. Detectors shall conform to the provisions in Section 86-5, "Detectors," of the Caltrans Standard Specifications and contained herein. Detector handholes shall be Type A.
- D. The ends of all unused cables shall be sealed watertight. The ends of all cables shall be sealed prior to being installed into the conduits.
- E. At least six feet of slack shall be provided in the pull box nearest each signal standard, for those conductors terminating in that standard; and three feet of slack shall be provided in each conductor in all other pull boxes.
- F. Identification shall be by T&B Ty-Rap shall be marked with a Ty-Rap marking pen No. WT 163 M-1 (Black), or approved equal. All phase conductors and director cables shall be labeled by phase designators in the pull boxes nearest their termination, and in the controller cabinet. Phase conductors shall be labeled with phase designation. Detector cables (street and sign) shall be labeled as appropriate. Spare conductors need not be labeled.
- G. Splice insulations shall use insulation method 'B' per detail shown in ES-13 of the most current version of the State Standard Drawings. No splices are permitted in detector lead-in cables.
- H. Splicing of interconnect cable shall be done only within controller cabinets on terminal blocks furnished and installed by the controller cabinet supplier. All of the splices shall be done in accordance with the recommendations of the controller supplier and to the satisfaction of the District or Caltrans.
- I. All loop wires shall run through detector handholes installed near lip of gutter.
- J. Conductors for each inductive detector loops shall be continuous and unspliced. Conductors for inductive loops shall be Type 2. All loops shall be brought to pull box individually through a 2-inch chase, and conductors shall have two turns of twist per foot and spliced to the lead-in conductor in the pull box.
- K. The Contractor shall install all loops per the State Standard Drawings or as otherwise specified in the Drawings. Loops shall be centered within traffic lanes unless otherwise specified. If any iron (manhole, valve, monument, etc.) is located within two (2) feet of the planned location for home runs, the Contractor shall contact the District for an alternate location for the detector loop or home run prior to cutting any of the loops or home runs in the affected lane(s).
- L. The Contractor shall furnish and install one loop detector amplifier for each detector designation (i.e., 111U and 111L). Where one detector consists of a sequence of 4 loops in a single lane, the front loop closest to the limit line or crosswalk shall be Type D and located one foot from the line. All loops shall be connected in series unless otherwise indicated on the plans.
- M. Hot-melt rubberized asphalt sealant shall be used to seal all traffic detector loop slots. Asphaltic emulsion sealant and elastomeric sealant shall not be used.

3.06 REPAIRS

- A. If any part of the loop conductor, including the portion leading to the adjacent pull box, is damaged by the Contractor's operations, the entire detector loop shall be replaced. If any adjacent loop is damaged during such replacement, that loop shall also be replaced within three days.
- B. The Contractor shall replace damaged loop detectors within three days after completion of work at an intersection.

- C. The Contractor shall protect existing interconnect cables from damage. Any interconnect cable or facility damaged by Contractor operations shall be replaced by the Contractor at his/her expense.

3.07 DETECTOR AND DETECTOR LEAD-IN CABLE (DLC) TESTING AND ACCEPTANCE

- A. The Contractor shall test all individual loops and all DLCs prior to splicing. Inductive loops, and all DLCs shall be tested for continuity, inductance and for insulation resistance using a standard multimeter for continuity and an approved loop test meter for inductance and insulation resistance. For continuity test a value of lower than 5 ohms is desirable and acceptable. For insulation resistance test a value of greater than 100 megohms is desirable and acceptable. Inductance shall be more than 50 but less than 700 micro-henries. Test shall be performed and logged on District provided form included in this section. Test shall be performed in the presence of the District Transportation Engineer before any splices are made.

**** END OF SECTION ****

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SECTION 15050 BASIC MATERIALS AND METHODS

PART 1 - GENERAL

1.01 SUMMARY

- A. Work Included:
 - 1. Materials, installation, and testing of pipe, fittings, and valves.
- B. Reference Elk Grove Water District Standard Construction Specifications for additional requirements.
- C. Location of Existing and New Utilities: Location of all utilities shown on plans is approximate. At least two (2) working days prior to starting work on the project, Underground Service alert (USA) shall be contacted at (800) 227-2600 for location by the Contractor. The locations of various utilities shown on the plans are solely an accommodation to the Contractor without any representation or guarantee concerning completeness and/or accuracy. The Contractor is responsible for ascertaining the locations of, and providing protection for, all utilities to be encountered in the performance of the required work.

1.02 QUALITY ASSURANCE

- A. The Contractor shall use appropriate quality control procedures to ensure that all pipe and fittings shall be of the first grade and quality conforming to these Specifications. Pipe shall be stored and transported in a proper manner and kept clean after delivery to the job site. All work on pipe shall be performed in a skillful and professional manner.
- B. Welding Qualification: Qualify welding procedures, welders, and operators in accordance with ANSI B31.1, Paragraph 127.5, for shop and project site welding of piping work.
- C. Regulatory Requirements:
 - 1. UMC.
 - 2. UPC.
 - 3. CDPH Waterworks Standards
 - 4. Applicable federal, state and local codes; and enforcing authorities.
- D. Manufacturer's Qualifications: Firms regularly engaged in manufacture of products and valves of types and sizes required.
- E. Valve Manufacturers: Per Appendix A – Elk Grove Water District Standard Construction Specifications.
- F. Valve Types: Unless otherwise noted, valve types will be per Elk Grove Water District Standard Construction Specifications.
- G. SUBMITTALS
- H. Product Data: Contractor shall submit, in accordance with the Supplemental General Provisions and Special Provisions, manufacturer's technical product data, installation instructions, and dimensioned drawings for:
 - 1. Each type of valve.

- a) Each type of pipe.
 2. All other appurtenances including fittings, couplings and sleeves, flanges and adapters, gaskets, etc.
 3. Forward a letter listing products and materials proposed for use on this project for products covered in this Section under Part 2 – Products.
- I. Piping Materials List: Contractor shall provide a typewritten list which schedules the piping materials to be used for each system as a function of applicable nominal pipe size ranges. Arrange schedule in outline form for each specific piping system e.g., “Water,” “Drain,” etc. Include ASTM, ANSI or other numbers and other data as necessary to demonstrate compliance with requirements.
 - J. Test Procedure: Contractor shall submit a typewritten checklist type of testing procedure indicating testing medium (i.e., water, air, nitrogen, etc.), pipe service, pipe and fitting type and classification, test pressure, pass/fail criteria and any other pertinent data.
 - K. Compliance Testing: Manufacturer’s inspection and testing of materials – In case of conflict with Manufacturer’s certifications, the Contractor, Project Engineer, or Owner may request retesting by the Manufacturer or have retests performed by an outside testing service. All retesting shall be at the requestor’s expense and shall be performed in accordance with these Specifications.
 - L. Maintenance Data: Contractor shall submit maintenance data and parts list for each type of valve. Include this data, product data, and certifications in maintenance manual.

PART 2 - PRODUCTS

2.01 PRODUCT STANDARDS

- A. References to product Specifications for materials are listed according to accepted base standards. All materials shall meet latest approved versions of these standards.
- B. See Section 15060 and Appendix A – Elk Grove Water District Standard Construction Specifications for piping materials that are approved for use.
- C. Manufacturers: Per Appendix A – Elk Grove Water District Standard Construction Specifications and these Technical Specifications.

PART 3 - EXECUTION

3.01 PIPING AND EQUIPMENT REMOVAL

- A. Piping and equipment removed as salvage by the Owner to remain property of the Owner.
- B. Piping and equipment abandonment and/or removal shall comply with Section 02055.
- C. Remove and reuse piping as shown on the drawings. Contractor to dispose of excess piping, and equipment removed (and not identified by the Owner as salvage) and remove from the premises.

3.02 LAYING OF PIPE

- A. Pipe shall be laid and joined in accordance with manufacturer's and/or Engineer's directions. Necessary facilities including slings shall be provided for lowering and properly placing pipe sections into trench without damage.
- B. Each section of pipe shall be thoroughly cleaned before it is lowered into the trench.
- C. If clean pipe sections and fittings cannot be placed in the trench without getting dirt into open pipe, the Engineer may require a piece of material to be tied over the ends of the pipe or fitting until it has been lowered into position in the trench. After the pipe has been lowered into the trench, all foreign matter shall be completely brushed from the pipe ends before assembly.
- D. The pipe shall be cut to provide closure pieces of correct lengths to permit the proper location of the pipe sections, or to locate valves, fittings, and appurtenant structures where specified on plans.
- E. The pipe and fittings shall be laid to the lines and grades specified on plans, and centered in the trench. All pipelines shall be constructed to resist thrust forces developed during pressure testing and operation. Thrust forces are developed at changes in directions, changes in pipeline diameters, and at closed valves or dead ends. Resistance to thrust forces will be accomplished by thrust blocks and mechanical restraint of all piping per Elk Grove Water District Standard Construction Specifications.
- F. The alignment and elevation of the pipeline as shown on the drawings are designed to avoid conflict with new and existing underground utilities. The Engineer shall be notified immediately of conflicts with existing utilities.
- G. Trenches must be kept dry until pipe has been laid, joints closed and backfill completed to a depth of 1 foot above top of pipe. Crushed rock for drainage and/or bedding shall be provided as necessary.
- H. Temporary water tight plugs shall be provided for closure of the open ends of the pipelines each time pipe laying activity stops and at the end of each working day to prevent the entry of dirt and/or other contaminants.

3.03 CONNECTIONS TO EXISTING PIPELINES

- A. All connections to existing pipelines shall be made as shown on the plans and in accordance with these Specifications.
- B. Where the existing main is provided with fittings for connecting to the new main, the face of the connection shall be clean and free of all foreign materials. The Contractor shall remove the plug, cap or blind flange, clean the ends, and make the new joint.
- C. Where the existing main is not provided with fittings for connecting to the new main, connections shall be made in accordance with Elk Grove Water District Standard Construction Specifications.
- D. Shutdowns and notifications shall be made in accordance with Elk Grove Water District Standard Construction Specifications. A shutdown shall be for as short a period as possible and shall be scheduled seventy two (72) hours in advance with the Elk Grove Water District at (916) 685-3556. Absolutely no connection operations shall occur prior to passing pressure tests. While an existing pipeline is shut down, the connection work shall be performed without interruption, continuing after regular working hours if necessary, until completed, unless otherwise directed by the Engineer. In some cases, shutdowns must occur at times other than normal working hours and/or days.

- 1) Only District personnel shall operate valves on the existing water system. The district shall close all valves in making a shutdown and shall open all valves to restore pressure to the existing main, as well as initiate pressure to the new installation.

3.04 CONTINUITY TESTING

- A. The Contractor shall test for the continuity of the locating wire at time of final walk-thru. The Contractor shall provide all labor, equipment, and materials required for testing the continuity of the locating wire at each valve, fire hydrant, blow off, and AVR. Should continuity not be present and/or observed, the Contractor shall repair, replace, and retest as necessary, entirely at Contractor's expense.

3.05 SPECIAL PROTECTION OF EXISTING PIPE

- A. Where construction loads occur within six (6) feet of the centerline of an existing operating pipe alignment, the contractor shall use protection plates. Plates shall be a minimum eight (8) feet wide, and placed above the existing pipeline alignment on a smooth leveled surface. Contractor shall provide temporary surface drainage to avoid ponding. Plates shall be a minimum 1-inch thick steel or approved equal. Once construction in that area is completed, the plates shall be removed and the surface shall be returned to the original condition.
- B. Special care will be taken of trees adjacent to the existing pipe and new alignments.
- C. The Contractor shall replace any break of existing pipe caused by construction at no additional charge.

3.06 ACCESSIBILITY

- A. Installation of valves, risers and boxes shall be accessibly located with reference to finished grade.

**** END OF SECTION ****

SECTION 15060 PIPING SYSTEMS

PART 1 - DESCRIPTION

1.01 GENERAL

A. This Section specifies requirements for piping systems consisting of pipe, fittings, and valves.

1.02 REFERENCES

A. This Section references the following documents. They are a part of this Section as specified and modified. In case of conflict between the requirements of this Section and those of the listed documents, the requirements of this Section shall prevail.

<u>Reference</u>	<u>Title</u>
FDCA 15060	Hangers and Supports
FDCA 15105	Pipes and Tubes
ANSI B16.3	Malleable-Iron Threaded Fittings
ANSI B16.9	Factory-Made Wrought Steel Butt-Welding Fittings
ASTM A47	Standard Specification for Ferritic Malleable Iron Castings
ASTM A53	Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc Coated, Welded and Seamless
ASTM A120	Pipe, Steel, Black and Hot Dipped Zinc Coated (Galvanized) Welded and Seamless for Ordinary Uses
ASTM A234	Standard Specification for Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and High Temperature Service
ASTM A312	Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless Steel Pipes
ASTM A403	Standard Specification for Wrought Austenitic Stainless Steel Piping Fittings
ASTM D1248	Polyethylene Plastics Molding and Extrusion Materials
ASTM D1784	Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds
ASTM D2152	Standard Test Method for Adequacy of Fusion of Extruded Poly(Vinyl Chloride) (PVC) Pipe and Molded Fittings by Acetone Immersion
ASTM D2241	Standard Specification for Poly(Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR Series)
ASTM D2657	Heat Joining of Thermoplastic Pipe and Fittings
ASTM D3035	Polyethylene Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter
ASTM D3261	Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing
ASTM D3350	Polyethylene Plastic Pipe and Fittings Materials

<u>Reference</u>	<u>Title</u>
ASTM F477	Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe
ASTM F1057	Standard Practice for Estimating the Quality of Extruded Poly (Vinyl Chloride) (PVC) Pipe by the Heat Reversion Technique
ASTM F2620	Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings
AWWA C106	Standard for Gray-Iron Pipe Centrifugally Cast in Metal Molds for Water or Other Liquids
AWWA C108	Standard for Cast-Iron Pipe Centrifugally Cast in Sand-Lined Molds for Water or Other Liquids
AWWA C110	Gray-Iron and Ductile Iron Fittings 3 Inch Through 48 Inch for Water and Other Liquids
AWWA C111	Standard for Rubber Gasket Joints for Ductile-Iron and Gray-Iron Pressure Pipe and Fittings
AWWA C151	Standard for Ductile Iron Pipe Centrifugally Cast in Metal Molds or Sand-Lined Molds for Water or Other Liquids
AWWA C153	AWWA Standard for Ductile-Iron Compact Fittings for Water Service
AWWA C200	Steel Water Pipe 6 Inches and Larger
AWWA C205	Standard for Cement-Mortar Protective Lining and Coating for Steel Water Pipe 4 Inches and Larger - Shop Applied.
AWWA C208	Standard Dimensions for Steel Water Pipe
AWWA C210	Standard for Coal-Tar Epoxy Coating System for the Interior and Exterior of Steel Water Pipe
AWWA C900	Standard for PVC Pressure Pipe
AWWA C905	Standard for Large Diameter PVC Pressure Pipe
AWWA C906	Standard for Polyethylene (PE) Pressure Pipe and Fittings
AWWA M23	AWWA Manual of Supply Practices PVC Pipe—Design and Installation, Second Edition
AWWA M28	AWWA Manual for Rehabilitation of Water Mains

1.03 DESIGN CONDITIONS

- A. Depth of cover to be a minimum of 36 inches, unless otherwise specified on the plans or as approved in writing by the Engineer.
- B. Trench width shall be per drawing W-14 of the Elk Grove Water District Standard Construction Specifications.
- C. Bedding tamped to 12 inches above pipe, load factor 1.5.
- D. Soil density 120 pounds per cubic foot.
- E. Bedding angle 90 degrees.

- F. Live load AASHTO H-20, 16,000 pound wheel load.
- G. Rigid pipe 1.5 factor of safety versus crushing.
- H. Flexible pipe allowable deflection - as specified by pipe manufacturer.
- I. Above design conditions apply to an empty pipe with no internal pressure.
- J. Materials installed with permanent contact with potable water must be NSF 61 approved.
- K. Rubber material to be installed with permanent contact with potable water must be synthetic rubber such as EPDM.
- L. Ductile iron pipe shall be used per Section 3-11.8 of the Elk Grove Water District Standard Construction Specifications.

1.04 PIPING SYSTEM SPECIFICATION SHEETS (PIPESPEC)

- A. Each process piping system is specified in the following PIPESPEC sheets.
- B. Piping materials for blow offs and air/vacuum release valves shall be per AWWA Standards Elk Grove Water District Standard Construction Specifications.
- C. Potable waterline valves twelve inches or less shall be gate type unless otherwise specified on the plans. Valves and appurtenances shall conform to the Elk Grove Water District Standard Construction Specifications.
- D. Tie-in to existing water mains are to be made with a mechanical joint AWWA class 350 C153 solid sleeve fitting, restrained per Potable Water specifications and as specified on the design drawings.

PIPING SYSTEM SPECIFICATION SHEET--PIPESPEC

System: **POTABLE WATER (PW)**

<u>Test Medium:</u>	<u>Water</u>
Test Pressure:	150 psi
Test Duration:	120 minutes with no detectable pressure drop
Flange Gaskets:	1/8-inch thick, cloth-inserted rubber
Mechanical Joint/Coupling Gaskets:	EPDM Synthetic Rubber in accordance with AWWA C111

Buried Piping

3-inch and less

Pipe:	PVC Class 200, iron pipe size outside diameter, conforming to ASTM D241
Fittings:	PVC Class 200, iron pipe size outside diameter, conforming to ASTM D241.
Valves:	Gate Valve.

Buried Piping

4-inch through 12-inch diameter

Pipe:	PVC AWWA C900, cast iron outside diameter, Class 150. Or Ductile iron, cement mortar lining, AWWA C151, Class 52; bituminous coating of either coal tar or asphalt base approximately one mil thick.
Fittings:	AWWA C153 Ductile Iron Fittings, Class 350, with Mechanical Joint or C110 Class 350 Ductile Iron Flanged Fittings with thrust blocks, as shown on plan set.
Valves:	Gate valves – Mueller A-2361 series with EPDM disc and 316 stainless steel bolts.
Restraint:	At mechanical joints - Megalug Series 2000PV with Megabond restraint coating system & Tripac fluoropolymer coated tee bolts, be cast from gray or ductile iron, meeting requirements of ANSI/AWWA C110/A.21.10. For bell to bell: Uni-flange series 1350 PVC pipe bell joint restraint. Restraints shall be for use with C900 PVC Pipe, with minimum pressure rating of 200 psi.

Notes:

1. All runs of PVC pipe shall have a No. 10 gauge solid, insulated, soft drawn copper wire laid along the top of initial backfill to facilitate locating the pipe. Installation of the locating wire shall conform to Standard Drawing W-6 of the Elk Grove Water District Standard Construction Specifications.
2. Pipe shall be disinfected by Contractor in accordance with the Elk Grove Water District Standard Construction Specifications and AWWA Standards B300 and C651.
3. Piping materials for fittings and valves, including blowoffs and AVRVs shall be per the Elk Grove Water District Standard Construction Specifications.
4. Refer to the Elk Grove Water District Standard Construction Specifications. for additional pipeline requirements.

PIPING SYSTEM SPECIFICATION SHEET--PIPESPEC

System: **SERVICE LATERAL (PW)**

<u>Test Medium:</u>	<u>Water</u>
Test Pressure:	150 psi
Test Duration:	120 minutes with no detectable pressure drop
Flange Gaskets:	1/8-inch thick, cloth-inserted rubber
Mechanical Joint/Coupling Gaskets:	EPDM Synthetic Rubber in accordance with AWWA C111

Buried Piping

2-inch and less

Pipe: Polyethylene Pressure Pipe, CTS, PE 4710, 200 psi
Fittings: Mueller 110 Compression Connection Series fittings, or approved equal. No solder or flared joints are permitted.
Valves: Corporation Stop

Buried Piping

3-inch through 10-inch diameter

Pipe: PVC AWWA C900, cast iron outside diameter, Class 200, restrained joints.
Fittings: AWWA C110/153 Ductile Iron Fittings, Class 350, with Mechanical joint restraint (Megalug Series 2000PV with Megabond restraint coating system & Tripac fluoropolymer coated tee bolts, gray or ductile iron, meeting requirements of ANSI/AWWA C110/A.21.10, for use with C900 PVC Pipe, with minimum pressure rating of 200 psi.
Valves: Gate valves – Mueller A-2361 series with EPDM disc and 316 stainless steel bolts.

Notes:

- 1. Pipe shall be disinfected by Contractor in accordance with the Elk Grove Water District Standard Construction Specifications and AWWA Standards B300 and C651.*
- 2. Piping materials for fittings and valves, including blowoffs and AVRVs shall be per the Elk Grove Water District Standard Construction Specifications.*
- 3. Refer to the Elk Grove Water District Standard Construction Specifications for additional pipeline requirements.*

**** END OF SECTION ****

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SECTION 15062 DUCTILE IRON PIPE

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Scope: This section specifies ductile iron pipe, ductile or gray iron fittings and gaskets.
- B. Definition: Where cast iron pipe is specified, the term and symbol shall mean ductile iron pipe.

1.02 REFERENCES

- A. This section references the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

<u>Reference</u>	<u>Title</u>
ANSI B2.1	Pipe Threads (Except Dryseal)
ANSI B16.1	Cast Iron Pipe Flanges and Flanged Fittings
ANSI B18.2.1	Square and Hex Bolts and Screws
ANSI B31.1	Power Piping; Includes Summer 77, Winter 77, Summer 78, and Winger 78 Addenda
ASTM A716	Pipe Spec. for Ductile Iron Culvert
AWWA C101 (ANSI C21-10)	Standard for Gray Iron and Ductile Iron Fittings, 2 Inch Through 48 Inch, for Water and Other Liquids.
AWWA C111 (ANSI C21-10)	Standard for Rubber Gasket Joints for Ductile Iron and Gray iron Pressure Pipe and Fittings.
AWWA C105 (ANSI A21.5)	Standard for Polyethylene Encasement for Gray Ductile Cast Iron Piping for Water and Other Liquid.
AWWA C115 (ANSI A21.15)	Standard for Flanged Cast Iron and Ductile Iron Standard for Flanged Cast Iron and Ductile Iron Pipe with Threaded Flanges.
AWWA C151 (ANSI 21.51)	Standard for Ductile Iron Pipe, Centrifugally Cast, in Metal Molds or Sand Lined Molds for Water or Other Liquids.
AWWA C153 (ANSI C21.53)	Standard for Ductile Iron Compact Fittings for Water Service.

1.03 SUBMITTALS

- A. The Contractor shall submit the following in accordance with Section 01300-SUBMITTAL PROCEDURE:

1. Shop drawings
2. Alignment drawings
3. Certification that such length of pipe has been tested physically for ductility and has satisfactorily passed such tests.
4. Certifications specified in the following documents:
 - 1) AWWA C151, paragraph 51-4.2
 - 2) ANSI 21.52, paragraph 52-4.2
 - 3) ASTM A716, paragraph 4.2
 - 4) AWWA C110, paragraph 10-4.3
 - 5) AWWA C111, paragraph 11-5.1
 - 6) AWWA C115, paragraph 15-3.2

PART 2 - PRODUCTS

2.01 GENERAL

A. Pipe design, materials and manufacture shall comply with the following documents:

<u>Item</u>	<u>Document</u>
Thickness design	AWWA C150, working pressure 250 psig, minimum
Manufacturing requirements	
Water or other liquid	AWWA C151
Gas	ANSI 21.52
Gravity service pipe	ASTM A716
Joints	
Rubber gasket	AWWA C111
Threaded flange	AWWA C115
Fittings	AWWA C110 or C153
Polyethylene encasement	AWWA C105

2.02 GASKETS

A. Gasket stock shall be a synthetic rubber compound in which the elastomer is neoprene. The compound shall contain not less than 50 percent by volume neoprene and shall be free from defects, reclaimed rubber and other deleterious substances.

2.03 FLANGE ASSEMBLIES

- A. Flange assemblies shall be provided as specified in Section 15055-2.01 and herein.
- B. Corrosion-resistant bolts and nuts for use with ductile iron joints are an acceptable substitute for alloyed bolts and nuts. Galvanized or cadmium steel bolts are not acceptable substitutes for stainless steel.

2.04 JOINTS

- A. Push-on and Mechanical Joints: The plain ends of push-on pipe and mechanical joint pipe shall be marked with paint to show the required depth of penetration for making the joint.
- B. Mechanically Restrained Joints: Mechanically restrained joints shall be designed to prevent separation of the joint by the pipe's internal thrust after installation. The design shall permit disassembling of the joint for repair and maintenance. Restraints shall be Field Lock 350 Gaskets (4 – 24 inch diameter), TR Flex, Fast-Grip Gaskets (4-24 inch), Mega Lug 1100 Series, Mega Lug Series 1700, or approved equal.
- C. Grooved End Couplings: Where shown on the Drawings, grooved end couplings shall be Victaulic Style 31 for ductile iron pipe, or equal. Unless otherwise specified, bolts and nuts for submergence shall be 316 stainless steel regardless of any other protective coatings.
- D. Sleeve-Type Couplings:
 - 1. Sleeve-Type Couplings, 30 inches and Smaller: Unless otherwise specified, couplings shall be ductile iron construction. Standard couplings shall be Powerseal 3501, or equal. Flanged coupling adapters shall be restrained type Romac Industries RFCA, or equal. Insulated couplings shall be fabricated steel, Powerseal 3539, Smith-Blair 416, or equal.
 - 2. Sleeve-Type Couplings, Greater Than 30 inches: Unless otherwise specified, couplings shall be fabricated steel construction. Standard couplings shall be Powerseal 3538, Smith-Blair 411, or equal. Reducing couplings shall be Powerseal 3562, Smith-Blair 415, or equal. Flanged coupling adapters shall be Powerseal 3528, or equal.

2.05 FITTINGS

- A. Ends shall be flanged, mechanical joint, as specified in the Pipespec or as shown in the Drawings. Elbows shall be the long radius style.
- B. Service Saddles:
 - 1. Ductile iron, epoxy coated service saddle with double strap stainless steel strap.
 - 2. Smith-Blair 317; Romac Industries Style 202S; or equal.

2.06 POLYETHYLENE ENCASEMENT

- A. Polyethylene encasement shall be used on all buried ductile iron pipe and fittings. Installation of polyethylene shall be as specified in ANSI A21.5, Section 5-4.2.1 and these specifications. Pipe, fittings, valves and couplings shall be wrapped. Fittings that require concrete backing shall be wrapped prior to placing the concrete.

- B. The polyethylene encasement seams and overlaps shall be wrapped and held in place by means of a 2-inch wide plastic backed adhesive tape. The tape shall be Polyken No. 900 (polyethylene), Scotchwrap No. 50 (polyvinyl), or equal. The tape shall be such that the adhesive shall bond securely to both metal surfaces and polyethylene film.
- C. The polyethylene encasement for recycled water pipe shall be color-coded purple.

2.07 CORROSION CONTROL

- A. Where indicated, all lines exceeding 100 feet in length shall be electrically continuous by means of an exothermic weld.
- B. Corrosion test stations shall be provided at intervals specified.

2.08 LINING

- A. Unless otherwise shown or specified, lining shall be cement mortar lining conforming to AWWA C104.
- B. For all raw or screened wastewater service and grit service the pipe shall be lined with Protecto 401; 100% polyurethane - Madison Chemical Industries, Inc. CorroPipe II WasteLiner (use CorroPipe II WasteLiner (CM) for grit service) or approved equal. Apply lining thickness as recommended by the coatings manufacturer.

2.09 COATING

- A. Buried Service: Coating and mortar lining seal shall be asphaltic coating per AWWA C151 for pipe and AWWA C110 for fittings.
- B. Exposed Service except as noted: Supply bare pipe – no asphaltic coating. Field coat exterior per Section 09900-COATING SYSTEMS. Mortar lining seal shall be asphaltic coating per AWWA C151 for pipe and AWWA C110 for fittings.
- C. Submerged Service: Coating and lining shall be 100% polyurethane - Madison Chemical Industries, Inc. CorroPipe II WasteLiner or approved equal. Apply coating thickness as recommended by the coatings manufacturer.

PART 3 - EXECUTION

3.01 GENERAL

- A. Piping runs shown on the drawings shall be followed as closely as possible. Proposed deviations shall be submitted in accordance with Section 01300-SUBMITTALS.
- B. Pipe shall be installed in accordance with AWWA C600. Cuts on DIP pipe shall be coated with an acceptable bituminous material. Cut ends on Protecto 401 lined pipes shall be coated with Protecto 401 Joint Compound in accordance with the manufacturer's recommendations.
- C. Connections to existing structures and manholes shall be made so that the finished work will conform as nearly as practicable to the requirements specified for the new manholes, including

necessary concrete work, cutting and shaping. Concrete mortar shaping within any structure and manhole shall be as specified.

D. The Contractor shall conduct the tests in the presence of the Engineer.

3.02 INSULATING SECTIONS

A. Where a metallic nonferrous pipe or appurtenance is connected to ferrous pipe or appurtenance, an insulating section of rubber or plastic pipe shall be provided. Each insulating section shall have a length of 2 to 4 inches.

3.03 ANCHORAGE

A. Anchorage shall be provided as specified. Calculations and drawings for proposed alternative anchorage shall be submitted.

3.04 RESTRAINED JOINTS

A. Provide restrained joints as indicated or as required to develop full joint restraint to withstand all working and test pressures. Joints encased in concrete below structures need not be restrained type providing Contractor can show that the concrete encasement will provide the necessary restraint for the piping system.

3.05 ACCEPTANCE TESTING

A. Hydrostatic pressure tests shall be conducted and acceptability determined in accordance with AWWA C600 as modified by the Piping System Specification Sheets.

**** END OF SECTION ****

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**SECTION 15064
PLASTIC PIPE, TUBING AND VALVES**

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope: This section specifies polyvinylchloride, chlorinated polyvinylchloride, polyethylene, and polypropylene pipe, fittings and valves.

B. Pipe Designations:

<u>Designation</u>	<u>Definition</u>
PVC	Polyvinylchloride
CPVC	Chlorinated Polyvinylchloride
PE	Polyethylene
PP	Polypropylene
PVDF	Polyvinylidene Fluoride

1.02 QUALITY ASSURANCE – REFERENCES

A. This section contains references to some or all of the following documents, most recent edition. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Reference	Title
ASTM D1248	Polyethylene Plastics Molding and Extrusion materials.
ASTM D1784	Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
ASTM D1785	Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80 and 120.
ASTM D2241	Poly (Vinyl Chloride) (PVC) Pressure-Rated Pipe (SDR series)
ASTM D2464	Threaded Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80.
ASTM D2466	Poly (Vinyl Chloride) (PVC) Plastic Pipe fitting, Schedule 40
ASTM D2467	Socket-type Poly (vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80
ASTM D2564	Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings
ASTM D3034	Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM 4101	Propylene Plastic Injection and Extrusion Materials

ASTM F402	Practice for Safe Handling of Solvent Cements and Primers Used for Joining Thermoplastic Pipe and Fittings
ASTM F437	Threaded Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
ASTM F438	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40
ASTM F439	Socket-Type Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80
ASTM F441	Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80
ASTM F477	Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F493	Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings

1.03 SUBMITTALS

- A. Submit manufacturer's certificates of compliance with the specified standards and Contractor's layout drawings.

PART 2 - PRODUCTS

2.01 PVC PRESSURE PIPE

- A. General: PVC materials for pipe and fittings shall conform to ASTM D1784, Class 12454.
1. All pipe used for recycled water shall be color coded purple.
 2. Blue pipe shall only be used for potable water applications. Pipe for non-potable water or other uses shall be another color.
- B. Schedule 40, 80, and 120: Pipe in accordance with ASTM D1785. Schedule 80 PVC socket type fittings shall conform to ASTM D2467. Schedule 40 PVC fittings shall conform to ASTM D2466. PVC solvent weld cement for socket connections shall meet the requirements of ASTM D2564. Schedule 80 PVC threaded fittings shall conform to ASTM D2464. Flange bolts for submerged or wet conditions shall be 316 stainless steel.
- C. C900 (Class 150): Pipe shall meet the requirements of AWWA C900, "Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4in. Through 12in., for Water Distribution." All pipe shall be suitable for use as pressure conduit. Provisions must be made for expansion and contraction at each joint with an elastomeric ring. The bell shall consist of an integral wall section with a locked-in, solid cross section elastomeric ring that meets the requirements of ASTM F477. The bell

section shall be designed to be at least as hydrostatically strong as the pipe wall and meet the requirements of AWWA C900.

- D. C905 (PR 165 and PR 235): Pipe shall meet the requirements of AWWA C905, "Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14in. Through 48in., for Water Transmission and Distribution." All pipe shall be suitable for use as pressure conduit. Provisions must be made for expansion and contraction at each joint with an elastomeric ring. The bell shall consist of an integral wall section with a locked-in, solid cross section elastomeric ring that meets the requirements of ASTM F477. The wall thickness in the bell section shall conform to the requirements of ASTM D3139.
- E. Fittings for C900 and C905 pipe shall be ductile iron, Class 350, mechanical joint, as specified in Section 15062.
- F. Restrained Joints:
1. C900: Certainteed Certa Lock (for straight runs only), EBAA 1600, Romac 611 Romac Grip Rings (for mechanical joint fittings), or approved equal.
 2. C905: Uni-Flange Series 1300, Uni-Flange Series 1500, EBAA 2000PV, EBAA 2800, Romac 470, or equal.

2.02 VALVES

- A. Isolation Valves: 2-inch and smaller shall be PVC ball valves. Valves shall have PVC bodies with Teflon seats. Seat cushions and O-rings shall be Viton. The ball shall have a 1/8 inch vent at the upstream side of the ball when the valve is in the closed position. Valves shall be Asahi/American Duo Block TU series, Hayward Safe Block True Union, or equal.
- B. Isolation Valves: 3-inch and larger shall be as shown on the Drawings.
- C. Check Valves: 2-inch and smaller shall be PVC ball check valves with Viton seals. The valves shall be Ashahi/American True Union Ball Check Valve, Hayward Safe Block True Union, or equal. Larger than 2-inch shall be PVC swing check valves with external levers and weights. The valve body and disc shall be PVC and the valve seat shall be Viton. The external lever and weight shall be PVC with Viton O-rings. Swing check valves shall be Asahi/American swing check valves, or equal.

2.03 COUPLINGS AND SADDLES

- A. Sleeve-Type Couplings:
1. Sleeve-Type Couplings, 24 inches and Smaller: Unless otherwise specified, couplings shall be ductile iron construction. Standard couplings shall be Powerseal 3501, or equal. Flanged coupling adapters shall be restrained type, Romac Industries RFCA-PVC, or equal.
- B. Service Saddles:
1. Ductile iron, epoxy coated service saddle with double strap stainless steel strap.
 2. Mc Donald, Ford, Jones, Mueller; or equal.

2.04 TUBING

A. Water or Other Liquid Service:

1. Copper Type K or equal.
2. Fittings: Insert type hose fitting with 316 stainless steel clamp.

B. Pneumatic Service:

1. For air actuated valve flexible connection use high pressure flexible nylon tubing, 250 psi working pressure. Use black tubing only. RyanHerco Flex nylon tubing 0550, or equal.
2. Fittings: Plastic push-in pneumatic tube fittings. RyanHerco 1200 Series, or equal.

PART 3 - EXECUTION

3.01 INSTALLATION OF PIPE AND FITTINGS

- A. In accordance with manufacturer's recommendations and supplementary requirements. Pipe and fittings shall be of the sizes indicated. Clean pipe interior of all foreign matter before installing. Pipe shall be square cut with fine tooth saw or other cutter or knife designed for use with plastic pipe. Remove burrs by smoothing edges with a knife, file, or sandpaper.
- B. Cut off and remove bevel end of pipe before installing in mechanical joint.
- C. Replace any section of pipe found to be defective or damaged with new acceptable pipe. Handle pipe carefully to prevent gouging or scratching. Any length of pipe having a gouge, scratch, or other permanent indentation more than 10 percent of the wall thickness in depth shall be rejected. Bedding for PVC pipe shall be sand to 6" below the pipe.
- D. Select backfill shall be sand to 12" above the pipe. Backfill shall be native material or type "C" backfill.

3.02 INSTALLATION OF SOLVENT WELD JOINT TYPE PIPE

- A. In accordance with the recommendations of the pipe manufacturer.

SECTION 15066 COPPER PIPE

PART 1 - GENERAL

1.01 DESCRIPTION

A. This section specifies copper piping, tubing, couplings and fittings.

1.02 REFERENCES

A. This section contains references to the following documents. They are a part of this section as specified and modified. In case of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

<u>Reference</u>	<u>Title</u>
ANSI B16.22	Wrought Copper and Copper Alloy Solder Joint Pressure Fittings
ANSI B16.26	Cast Copper Alloy Fittings for Flared Copper Tubes
ASTM B 32	Solder Metal
ASTM B 88	Seamless Copper Water Tube

PART 2 - PRODUCTS

2.01 COPPER TUBING

A. Copper tubing shall be seamless copper, conforming to ASTM B88. Unless otherwise specified, copper tubing shall be Type L, drawn, where used in exposed service and Type K, annealed or drawn for buried service.

2.02 COUPLINGS AND FITTINGS FOR COPPER TUBING

A. Unless otherwise specified, couplings and fittings for copper tubing 1/2-inch and smaller nominal diameter shall be compression type, brass or bronze, capable of holding the full bursting strength of the tubing; shall meet the requirements of ANSI B16.26; and shall be Swagelok, Gyrolok, or equal. Couplings and fittings for copper tubing larger than 1/2-inch nominal diameter shall be wrought copper or bronze, solder joint pressure fittings and shall conform to ANSI B16.22.

2.03 SOLDER

A. Solder to be used in copper piping shall be ASTM B32, Alloy Grade 50B.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All buried copper piping shall be encased within a 8-mil polyethylene sleeve. Sleeves shall be color coded to match service application of pipe.

3.02 SOLDER JOINTS

- A. All pipe and fittings to be jointed with solder shall be free from all burrs and wire brushed or steel wool cleaned. After cleaning, a paste flux shall be evenly and sparingly applied to the surfaces to be joined. Solder shall then be applied and flame passed toward the center of the fitting until the solder disappears. All excess solder shall be removed while it is still plastic. Absolutely no acid flux or acid wipe shall be used in making solder joints.

3.03 DIELECTRIC PROTECTION

- A. Copper tubing or fittings shall not be permitted to come in contact with steel piping, reinforcing steel, or other steel at any location. Electrical checks shall be made to assure no contact is made between copper tubing and steel elements. Wherever electrical contact is demonstrated by such tests, the Contractor shall provide dielectric protection.

****END OF SECTION****

SECTION 15100 VALVES AND MISCELLANEOUS COMPONENTS

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section includes valves and miscellaneous items to be installed in pipelines as follows:
1. Gate Valves (GV)
 2. Air/Vacuum Release Valves (AVRV)
 3. Corporation Stop
 4. Service Saddles
 5. Strainers
 6. Mechanical Pipe Couplings
 7. Fire Hydrants (FH)

1.02 RELATED SECTIONS

- A. Elk Grove Water District Standard Construction Specifications apply to the work of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this work.

<u>Section</u>	<u>Title</u>
Section 15060	Piping Systems

1.03 SUBMITTALS

- A. Product Data, Shop Drawings, Samples: The following information shall be submitted in accordance with the requirements of the Supplemental General Provisions and Special Provisions:
1. Gate Valves: Annotated Product Bulletins
 2. Air/Vacuum Release Valves: Annotated Product Bulletins
 3. Corporation Stop: Annotated Product Bulletins
 4. Service Saddles: Annotated Product Bulletins
 5. Strainers: Annotated Product Bulletins
 6. Mechanical Pipe Couplings: Annotated Product Bulletins
 7. Fire Hydrants: Annotated Product Bulletins
- B. Operation and Maintenance Data: Installation, operating, and maintenance data shall be in accordance with the Supplemental General Provisions.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. All valves and miscellaneous items shall be packed, shipped, stored and handled in accordance with Section 01620.

- B. Accept valves on site in shipping containers with labeling in place. Inspect for damage.
- C. Provide temporary protective coating on cast iron and steel valves.

1.05 PROJECT/SITE CONDITIONS

- A. All items will be located in an exterior area. Temperature is expected to vary from 20 to 115 degrees F. Relative humidity is expected to vary from 20 to 100 percent.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Gate Valves: Mueller A-2361 series with EPDM disc and 316 stainless steel bolts; American Darling; Kennedy; Waterous; Stockham per Appendix A - Elk Grove Water District Standard Construction Specifications.
- B. Air/Vacuum Release Valves (AVRV): Crispin Universal Air and Vacuum Relief Valve or approved equal per Appendix A - Elk Grove Water District Standard Construction Specifications.
- C. Corporation Stop: Mueller B-25008; Jones; Ford; Mc Donald per Appendix A - Elk Grove Water District Standard Construction Specifications.
- D. Service Saddles: Mueller H-13000 series; Jones; Ford; Mc Donald per Appendix A - Elk Grove Water District Standard Construction Specifications.
- E. Strainers: Bailey, Hayward, or equal.
- F. Fire Hydrants: Clow model 960 painted white per Appendix A - Elk Grove Water District Standard Construction Specifications.
- G. Isolation valves shall be installed in compliance with AWWA Section 64577 and 64578 and requirements of AWWA C-509, manually operated.

2.02 AIR/VACUUM RELEASE VALVES (AVRV)

- A. Combination air/vacuum release valve shall be float operated, simple lever type designed to allow large volumes of air to automatically exhaust from the large orifice when filling a pipeline and closes when liquid enters the valve. The valve shall also release accumulated air from the piping system while the system is under pressure. The valve will open to allow large volumes of air to enter the pipeline during pipeline drainage or if a negative pressure occurs to break the vacuum. The seat shall be Buna-N or reinforced nylon/EPDM rolling seat. The float and trim shall be stainless steel Type 316. Body and cover shall be cast iron ASTM A 126 Class B or 316L stainless steel and shall be designed to withstand a working pressure of 300 psig. The Contractor shall provide NPT connections with valves for backwashing accessories including rubber supply hose with quick disconnect.
 - 1. Size shall be at minimum 1 inch or as shown on the plans. Pipe taps for AVRVS shall always be at actual high points of waterline. Where the pipeline raises suddenly to avoid another utility or other obstruction, an AVRVS shall be placed at the high point if the centerline elevation rise of the high point is one pipe diameter above the centerline pipeline at the grade on either side of the high point.
- B. AVRVS shall be installed in compliance with AWWA Section 64576.

2.03 CORPORATION STOP

- A. Refer to Appendix A - Elk Grove Water District Standard Construction Specifications.

2.04 SERVICE SADDLE

- A. Refer to Appendix A - Elk Grove Water District Standard Construction Specifications.

2.05 STRAINERS

- A. Strainers shall be Y-pattern inline type. The body shall be ASTM A126 Class B cast iron. Screen shall be Type 304 stainless steel. Strainers shall have self-cleaning blowoff plug, NPT threads, and flanged end connections. Screen perforations shall be 0.045-inch.

2.06 VALVE OPERATORS

- A. All valves, except check valves, shall be provided with manual operators unless otherwise specified. The direction of rotation of the handwheel or lever to open the valve shall be counterclockwise. Each valve body shall have cast thereon the word OPEN and an arrow indicating the direction to open.

2.07 VALVE BOXES

- A. Refer to Appendix A - Elk Grove Water District Standard Construction Specifications.
B. Install per Drawing W-7 Elk Grove Water District Standard Construction Specifications.

2.08 MECHANICAL PIPE COUPLINGS

- A. For other pipe materials:
1. Sleeve-Type Couplings: Unless otherwise indicated, flexible type mechanical pipe couplings not intended to take tension shall be Rockwell Type 411, Dresser Style 38, or equal, with the stop removed from the middle ring. Couplings for connecting steel pipe to ductile iron pipe shall be Rockwell Type 413, Dresser Style 62, or equal. Flanged coupling adapters shall be Rockwell Type 913, Dresser Style 128, or equal. Gaskets shall be EPDM synthetic rubber suitable for exposure to potable water.
 2. Plain or Grooved End Couplings: Plain end pipe couplings shall be Victaulic Style 90, or equal. Grooved end pipe couplings employed for jointing purposes shall be Victaulic HP70, Victaulic Style 741, or equal.
 - 1) Grooved end couplings for pipe jointing where flexibility is desired shall be Victaulic 77, or equal. A No. 60 Cap (plate), or equal, can be used to temporarily seal off piping. Grooved end pipe couplings for grit, scum, or primary sludge service shall be Victaulic style 78, or equal.
 - 2) Coupling gaskets shall be suitable for the service conditions specified in the piping system specification sheets, section 15050.

2.09 FIRE HYDRANTS

- A. Refer to Drawing W-2B of Elk Grove Water District Standard Construction Specifications.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. General: Valves shall be installed in accordance with the manufacturer's instructions and with Section 15050. Valves shall be independently supported to prevent stressed on pipe.
- B. Access: Valves shall be installed to provide easy access for operation, removal, and maintenance and to prevent interferences between the valve operators and structural members or other obstructions.

3.02 COATING

- A. Coatings shall be as specified in these specifications. Finish color shall be specified by the Engineer.

**** END OF SECTION ****



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

6/4/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER InterWest Insurance Services (FLOWL-1) License #0B01094 3636 American River Dr. Sacramento CA 95864 License#: 0B01094	CONTACT NAME: Kim Olafsen PHONE (A/C No. Ext): 916-6098329 E-MAIL ADDRESS: kolafsen@iwins.com	FAX (A/C, No): 916-979-7559													
	<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A : Financial Pacific Ins Company</td> <td>31453</td> </tr> <tr> <td>INSURER B : Travelers Prop Cas Co of Amer</td> <td>25674</td> </tr> <tr> <td>INSURER C : Insurance Co. of the West</td> <td>27847</td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </tbody> </table>		INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Financial Pacific Ins Company	31453	INSURER B : Travelers Prop Cas Co of Amer	25674	INSURER C : Insurance Co. of the West	27847	INSURER D :		INSURER E :		INSURER F :
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COVERAGES

CERTIFICATE NUMBER: 371723576

REVISION NUMBER:

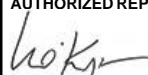
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab <input checked="" type="checkbox"/> \$3,000 BI/PD Ded GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:	Y	Y	60417948	10/1/2020	10/1/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	Y	Y	60417948	10/1/2020	10/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			ZUP15T9712420	10/1/2020	10/1/2021	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000 \$
C	<input checked="" type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	WSA505736400	10/1/2020	10/1/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Elk Grove Water District Contract - Backyard Water Main Replacements Project - Sara Street.
 Florin Resource Conservation District, its Director's and officers, employees, agents or representatives and Elk Grove Water District Additional Insured status applies to requested entities if required by written contract per the attached policy form/endorsement(s). Primary non-contributory applies to requested entities if required by written contract per the attached policy form/endorsement(s). Waiver of subrogation applies to requested entities if required by written contract per the attached policy form/endorsement(s).

CERTIFICATE HOLDER**CANCELLATION**

Florin Resource Conservation District 5370 Elvas Avenue Sacramento CA 95819	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – VOLUNTEER WORKERS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

Section II – Who Is An Insured is amended to include as an insured any person(s) who are volunteer worker(s) for you, but only while acting at the direction of, and within the scope of their duties for you. However, none of these volunteer worker(s) are insureds for:

1. "Bodily injury" or "personal and advertising injury":
 - a. To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to your other volunteer worker(s) or to your "employees" arising out of and in the course of their duties for you;
 - b. To the spouse, child, parent, brother or sister of your volunteer worker(s) or your "employees" as a consequence of Paragraph **1.a.** above;
 - c. For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs **1.a.** or **b.** above; or
 - d. Arising out of his or her providing or failing to provide professional health care services.
2. "Property damage" to property:
 - a. Owned, occupied, or used by,
 - b. Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by you, any of your other volunteer workers, your "employees", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED CONSTRUCTION PROJECT(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Project(s):

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
 - 1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 - 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under Coverage **A**, except damages because of "bodily injury " or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage **C** regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 - 3. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
 - 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.
- D.** If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.
- E.** The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT - BLANKET

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us).

The additional premium for this endorsement shall be **2 %** of the total California Workers' Compensation premium otherwise due.

Schedule

Person or Organization	Job Description
ANY PERSON / ORG WHEN REQUIRED BY WRITTEN CONTRACT	ALL CA OPERATIONS

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective **10/1/2020** Policy No. **WSA505736400** Endorsement No. _____
 Insured **FLOWLINE CONTRACTORS, INC.** Premium \$ **INCL.**
 Insurance Company **INSURANCE COMPANY OF THE WEST**

Countersigned By 

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED OWNERS, LESSEES OR CONTRACTORS (FORM B)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

RE: Elk Grove Water District Contract - Backyard Water Main Replacements Project – Sara Street. Florin Resource Conservation District, its Director's and officers, employees, agents or representatives and Elk Grove Water District Additional Insured status applies to requested entities if required by written contract per the attached policy form/endorsement(s). Primary non-contributory applies to requested entities if required by written contract per the attached policy

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement)

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule, but only to the extent that the person or organization is held liable for "your work" for that person or organization by or for you.

This endorsement applies to the following work:

Description of Job: See Above

Location of Job: See Above

Al only Effective from:

Effective Date: 10/1/2020

Expiration Date: 10/1/2021

When this endorsement applies, such insurance as is afforded by the general liability policy is primary and any other insurance shall be excess and shall not contribute to the insurance afforded by this endorsement.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

RE: Elk Grove Water District Contract - Backyard Water Main Replacements Project – Sara Street.
Florin Resource Conservation District, its Director's and officers, employees, agents or representatives and Elk
Grove Water District Additional Insured status applies to requested entities if required by written contract per the

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations
as applicable to this endorsement.)

The TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US Condition (Section **IV** – COMMERCIAL GENERAL LIABILITY CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

NAMED INSURED: Flowline Contractors, Inc.
6560 Asher Lane
Sacramento CA 95828

ADDITIONAL INSURED: RE: Elk Grove Water District Contract - Backyard Water Main Replacements Project – Sara Street. Florin Resource Conservation District, its Director’s and officers, employees, agents or representatives and Elk Grove Water District Additional Insured status applies to requested entities if required by written contract per the attached policy form/endorsement(s). Primary non-contributory applies to requested entities if required by written contract per the attached policy form/endorsement(s). Waiver of subrogation applies to requested

WHO IS AN INSURED (SECTION II) is amended to include as an insured the organization shown in the Schedule above, but only with respect to the operation of vehicles owned by the named insured and operated on behalf of the named insured. This endorsement does not apply to any operations for other than the named insured.

Each person or organization named above is an insured for liability coverage, but only to the extent that person or organization qualifies as an insured under the Who Is An Insured provision of Section II Liability Coverage.

The additional insured is not required to pay for any premiums stated in the policy or earned from the policy. Any return premium, if applicable, declared by us shall be paid to you.

You are authorized to act for the additional insured in all mailers pertaining to this insurance.

We will mail the additional insured notice of any cancellation of this policy. If the cancellation is by us, we will give thirty days notice to the additional insured.

The additional insured will retain any right of recovery as a claimant under this policy.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**WAIVER OF TRANSFER OF RIGHTS OF RECOVERY
AGAINST OTHERS TO US**

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

Name of Person or Organization: RE: Elk Grove Water District Contract - Backyard Water Main Replacements Project – Sara Street.
Florin Resource Conservation District, its Director's and officers, employees,

The **TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US** Condition (Section IV BUSINESS AUTO CONDITIONS) is amended by the addition of the following:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for bodily injury or property damage arising out of losses or accidents which occur during the policy period. This waiver applies only to liability you assume pursuant to a contract with the person or organization shown in the schedule.

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District

FROM: Bruce Kamilos, General Manager

SUBJECT: **FUTURE FLORIN RESOURCE CONSERVATION DISTRICT BOARD MEETINGS**

RECOMMENDATION

This item is being presented to the Florin Resource Conservation District Board of Directors for discussion, and for direction on how and when future board meetings shall be held in person.

SUMMARY

As a result of the COVID-19 pandemic, the Florin Resource Conservation District (FRCD) Board of Directors' (Board) meetings have been conducted by teleconference since April 21, 2020. On June 15, 2021, Governor Newsom plans to fully reopen the California economy. At the time of writing this report, it is unknown what restrictions will be lifted and remain in place as California's economy is reopened. Current information about restrictions will be presented orally by staff at the board meeting. Because the FRCD uses the Cosumnes Community Services District's (CCSD) board room for its board meetings, resuming in person board meetings will be dependent upon the CCSD making their board room available to FRCD. Staff is working with CCSD on this matter.

Staff requests direction from the Board on how and when future board meetings shall be held in person.

DISCUSSION

Background

In response to the COVID-19 pandemic, the Elk Grove Water District (District) launched its Coronavirus (COVID-19) Risk Minimization and Outbreak Plan (Plan) on March 10, 2020. The Plan identified precautionary measures to assist in protecting employees, board members and the public while maintaining critical District operations. As a result of the pandemic, in-person board meetings were discontinued. Beginning on April 21, 2020, the Board began conducting board meetings by teleconference.

FUTURE FLORIN RESOURCE CONSERVATION DISTRICT BOARD MEETINGS

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Present Situation

Governor Newsom has announced that on June 15, 2021, California's economy will be fully reopened. The Blueprint for a Safer Economy which was the tiered colored system that dictated how businesses should operate will no longer govern. At the time of writing this report, it is unknown what restrictions will be lifted and remain in place as California's economy is reopened. Current information about restrictions will be presented orally by staff at the board meeting. Because the FRCD uses the Cosumnes Community Services District's (CCSD) board room for its board meetings, resuming in person board meetings will be dependent upon the CCSD making their board room available to FRCD. Staff is working with CCSD on this matter.

Staff requests direction from the Board on how and when future board meetings shall be held in person.

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

STRATEGIC PLAN CONFORMITY

This item conforms with Strategic Goal No. 1, Governance and Customer Engagement, of the Strategic Plan 2020-2025

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,



BRUCE KAMILOS
GENERAL MANAGER

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District

FROM: Bruce Kamilos, General Manager

SUBJECT: **OUTSIDE AGENCY MEETINGS REPORT**

RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors consider replacing the standing Outside Agency Meetings Report with a standing General Manager's Report and provide direction to staff.

SUMMARY

The Outside Agency Meetings Report is a standing item on the regular Board meeting agenda. The report is intended to inform the Florin Resource Conservation District (FRCD) Board of Directors (Board) of any substantive content included in meetings that staff or Board members attended since the last regular Board meeting.

Going forward, staff recommends replacing the standing Outside Agency Meetings Report with a standing General Manager's Report. Staff feels that this change may better serve the Board and the District. The General Manager's Report would allow staff to agendize in a single report miscellaneous items requiring Board direction or action, or for information only. Examples of items may include miscellaneous District issues, correspondence, pressing matters and reports to the Board of change orders in accordance with District policy. Reports on content from important outside agency meetings, such as the semi-annual Association of California Water Agency (ACWA) conferences, would still occur. These items, however, would be agendized on the General Manager's Report. There may be some months where the General Manager's Report simply reads, "nothing to report this month."

DISCUSSION

Background

Each month, staff reports on the outside agency meetings that occurred since the previous Board meeting. This report has been designed to list the notable meetings attended, by either staff or Board members. The report will be given orally by staff or Board members in attendance.

OUTSIDE AGENCY MEETINGS REPORT

Page 2

Present Situation

Since May 18, 2021, staff attended the following outside agency meetings and will orally present the major content items addressed in these meetings:

- 6/7 Joint Board Workshop Meeting with Regional Water Authority (RWA)/ Sacramento Central Groundwater Authority / Sacramento Groundwater Authority
(Scherman, Kamilos, Nelson)
- 6/9 ACWA Groundwater Committee Meeting
(Nelson)
- 6/9 State Assembly Local Government Committee Hearing
(Kamilos, Franklin)
- 6/11 RWA Special Board Meeting – Briefing on Drought Impacts
(Scherman, Kamilos)

Going forward, staff recommends replacing the standing Outside Agency Meetings Report with a standing General Manager’s Report. Staff feels that this change may better serve the Board and the District. The General Manager’s Report would allow staff to agendize in a single report miscellaneous items requiring Board direction or action, or for information only. Examples of items may include miscellaneous District issues and correspondence, such as signing on to coalition letters or position letters of pending legislation; informing the Board of District press releases; discussion of pressing District matters; and reports to the Board on change orders in accordance with District policy. Reports on content from important outside agency meetings, such as the semi-annual ACWA conferences, would still occur. These items, however, would be agendized on the General Manager’s Report. There may be some months where the General Manager’s Report simply reads, “nothing to report this month.”

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

June 15, 2021

OUTSIDE AGENCY MEETINGS REPORT

Page 3

STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/EGWD 2020-2025 Strategic Plan. Participating and actively engaging in outside agency meetings conforms with Strategic Goal No. 7, Water Industry Leadership.

FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully submitted,

A handwritten signature in blue ink that reads "B. M. Kamilos".

BRUCE KAMILOS
GENERAL MANAGER

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District
FROM: Travis Franklin, Program Manager
SUBJECT: **LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF**

RECOMMENDATION

This item is presented as information although the Florin Resource Conservation District Board of Directors may provide an action to authorize staff to respond to a legislative item.

SUMMARY

There are several bills that have been introduced in the 2021 legislative session that could potentially impact the Florin Resource Conservation District/Elk Grove Water District (District) if passed. Senate Bill (SB) 427 was heard in the Assembly Local Government Committee and passed with a 7-0 vote. Staff has joined the Association of California Water Agencies (ACWA) lead coalition letter, expressing concerns with draft recommendations for an indoor residential water use standard.

DISCUSSION

Background

The Florin Resource Conservation District (FRCD) Board of Directors (Board) is periodically updated on legislative and regulatory issues.

Present Situation

On June 9th, SB 427 was heard in the Assembly Local Government Committee. Senator Eggman introduced the bill and Ryan Ojakian of Regional Water Authority (RWA) and General Manager Bruce Kamilos testified in support. There were no calls or testimony in support or opposition of the bill. Assemblymember Lackey commented that due to illegal water theft from illegal cannabis operations he wished the bill went further. The bill passed the committee receiving a 7-0 vote of support.

The Department of Water Resources (DWR) released its Draft Report pursuant to Water Code Section §10609.4(b)(1), which requires DWR, in coordination with the State Water Resources Control Board to conduct necessary studies and investigations on indoor water use. DWR and the State Water Board are authorized to jointly recommend to the Legislature a standard for indoor residential water use that more appropriately reflects

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

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best practices for indoor residential water use. This Draft Report proposes the following recommended standard for indoor residential water use that is significantly lower than the existing residential indoor gallons per capita daily (GPCD) water use efficiency standards. Until January 1, 2025 there would be no change from 55 GPCD. January 1, 2025 to January 1, 2030 it would be lowered from 52.5 to 47 GPCD. After January 1, 2030 the target would lower from 50 to 42 GPCD. The District joined an ACWA lead coalition letter opposing this recommendation and instead is recommending DWR work collaboratively with stakeholders to analyze and quantify the impacts of a changed standard to avoid unnecessary adverse impacts to water and wastewater management.

The following bills have been introduced in the 2021 legislative session that could potentially impact the District if passed in their current form.

AB 59 (Gabriel) Mitigation Fee Act: fees: notice and timelines

This bill would increase the time for mailing the notice of the time and place of the meeting to at least 45 days before the meeting for fee and service changes like water connection or capacity charges. The bill would also remove the statute of limitation for challenges to these fee and service changes. This bill was moved to a two-year bill. The California Special Districts Association (CSDA) has taken an oppose position stating, "This bill would leave public water and sewer agencies vulnerable to litigation in perpetuity would undermine the ability of these agencies to properly plan for and finance essential services needed to accommodate new development." ACWA has taken an oppose position. This is now a two-year bill and may be acted upon January 2022.

AB 95 (Low) Employees: bereavement leave.

Would enact the Bereavement Leave Act of 2021. The bill would require an employer with 25 or more employees to grant an employee up to 10 business days of unpaid bereavement leave upon the death of a spouse, child, parent, sibling, grandparent, grandchild, or domestic partner, in accordance with certain procedures, and subject to certain exclusions. The bill would require an employer with fewer than 25 employees to grant up to three (3) business days of leave, in accordance with these provisions. The bill would prohibit an employer from interfering with or restraining the exercise or attempt to exercise the employee's right to take this leave. CSDA has taken an Oppose position. This is now a two-year bill and may be acted upon January 2022.

AB 100 (Holden) Drinking water: pipes and fittings: lead content.

The California Safe Drinking Water Act prohibits, with certain exceptions, the use of any pipe, pipe or plumbing fitting or fixture, solder, or flux that is not lead free in the installation

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

Page 3

or repair of any public water system or any plumbing in a facility providing water for human consumption. The act defines “lead free” for purposes of conveying or dispensing water for human consumption to mean not more than 0.2% lead when used with respect to solder and flux and not more than a weighted average of 0.25% lead when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures. This bill would additionally define “lead free,” with respect to endpoint devices, as defined, to mean that the devices do not leach more than one microgram of lead under certain tests and meeting a specified certification.

AB 252 (Rivas) Department of Conservation: Multibenefit Land Repurposing Incentive Program: administration.

Would require the Department of Conservation to establish and administer a program named the Multibenefit Land Repurposing Incentive Program for purposes of providing grants to groundwater sustainability agencies or counties, or other specified entities designated by groundwater sustainability agencies or counties, for the development or implementation of local programs supporting or facilitating multibenefit land repurposing at the basin scale. The bill would establish procedures for the department’s administration of the program and would require the department to develop guidelines to implement the program and to exercise its expertise and discretion in awarding program funds to eligible applicants. CSDA has taken a Watch position. ACWA has taken a Support if Amended position.

AB 361 (Rivas) Open meetings: local agencies: teleconferences.

Would authorize a local agency to use teleconferencing without complying with the teleconferencing requirements imposed by the Ralph M. Brown Act when a legislative body of a local agency holds a meeting for the purpose of declaring or ratifying a local emergency, during a declared state or local emergency, as those terms are defined, when state or local health officials have imposed or recommended measures to promote social distancing, and during a declared local emergency provided the legislative body makes certain determinations by majority vote. CSDA is a sponsor of this bill. ACWA has taken a Favor position.

AB 377 (Rivas) Water quality: impaired waters.

Would require all California surface waters to be fishable, swimmable, and drinkable by January 1, 2050, as prescribed. The bill would prohibit the state board and regional boards from authorizing a National Pollutant Discharge Elimination System discharge, waste discharge requirement, or waiver of a waste discharge requirement that causes or contributes to an exceedance of a water quality standard, or from authorizing a best

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

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management practice permit term to authorize a discharge that causes or contributes to an exceedance of a water quality standard in receiving waters. The bill would prohibit, on or after January 1, 2030, a regional water quality control plan from including a schedule for implementation for achieving a water quality standard that was adopted as of January 1, 2021, and would prohibit a regional water quality control plan from including a schedule for implementation of a water quality standard that is adopted after January 1, 2021, unless specified conditions are met. ACWA and CSDA have taken an Oppose position. This is now a two-year bill and may be acted upon January 2022.

AB 1434 (Friedman) Urban water use objectives: indoor residential water use

This bill would establish, beginning January 1, 2023, until January 1, 2025, the standard for indoor residential water use as 48 gallons per capita daily. The bill would establish, beginning January 1, 2025, the standard as 44 gallons per capita daily and, beginning January 1, 2030, 40 gallons per capita daily. The bill would eliminate the requirement that the department, in coordination with the state board, conduct necessary studies and investigations and jointly recommend to the Legislature a standard for indoor residential water use. ACWA and CSDA have taken an Oppose position and Elk Grove Water District has sent a letter of opposition to the Assembly Water, Parks, & Wildlife Committee. This is now a 2 Year bill and may be acted upon January 2022.

AB 1500 (Multiple) Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022.

This bill would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$6,700,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs. ACWA and CSDA have taken a Support if amended position.

SB 45 (Portantino) Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2022.

Would enact the Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$5,510,000,000 pursuant to the State General Obligation Bond Law to finance projects for a wildfire prevention, safe drinking water,

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

Page 5

drought preparation, and flood protection program. ACWA and CSDA have taken a Support if amended position. Now in the inactive file.

SB 222 (Dodd) Water Affordability Assistance Program.

Would establish the Water Affordability Assistance Fund in the State Treasury to help provide water affordability assistance, for both drinking water and wastewater services, to low-income ratepayers and ratepayers experiencing economic hardship in California. The bill would make moneys in the fund available upon appropriation by the Legislature to the state board to provide, as part of the Water Affordability Assistance Program established by the bill, direct water bill assistance, water bill credits, water crisis assistance, affordability assistance, and short-term assistance to public water systems to administer program components. ACWA and CSDA have taken an Oppose unless amended position.

SB 223 (Dodd) Discontinuation of residential water service.

Current law prohibits an urban and community water system, defined as a public water system that supplies water to more than 200 service connections, from discontinuing residential water service for nonpayment until a payment by a customer has been delinquent for at least 60 days. Current law requires an urban and community water system to have a written policy on discontinuation of residential service for nonpayment, including, among other things, specified options for addressing the nonpayment. Current law requires an urban and community water system to provide notice of that policy to customers, as provided. This bill would apply those provisions, on and after July 1, 2022, to a very small community water system, defined as a public water system that supplies water to 200 or fewer service connections used by year-long residents. CSDA has taken an Oppose unless amended position. ACWA has taken an oppose position. Staff has joined a coalition in opposition of SB 223. This is now a two-year bill and may be acted upon January 2022.

SB 230 (Portantino D) State Water Resources Control Board: Constituents of Emerging Concern Program.

Would require the State Water Resources Control Board to establish, maintain, and direct an ongoing, dedicated program called the Constituents of Emerging Concern Program to assess the state of information and recommend areas for further study on, among other things, the occurrence of constituents of emerging concern (CEC) in drinking water sources and treated drinking water. The bill would require the state board to convene, by an unspecified date, the Science Advisory Panel to review and provide recommendations to the state board on CEC for further action, among other duties. The bill would require

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

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the state board to provide an annual report to the Legislature on the ongoing work conducted by the panel. CSDA has taken a Support position. ACWA has taken a Favor position. This is now a two-year bill and may be acted upon January 2022.

SB 274 (Wieckowski) Local government meetings: agenda and documents.

This bill will require public agencies to email meeting agendas and the supporting agenda packets, or a link to where they can be found on an agency's website, to members of the public that have requested them. Just like when the public requests meeting materials be mailed to them, this standing request is valid for one year. In the event that it is not technically feasible to email the meeting materials or a link to where it can be found on a website, an agency can physically mail the materials and charge the requested for the costs of the mailing. CSDA has taken a Watch position.

SB 323 (Caballero D) Local government: water or sewer service: legal actions.

This proposal would authorize a local agency or interested person to bring a validation action in a superior court to determine the validity of a fee or charge for water and sewer service. The proposal would require an interested party bring an action within 120 days after the local agency adopts the fee or charge. This bill is sponsored by ACWA and the are urging member agencies to sign on to their coalition letter. CSDA has taken a Support position.

SB 351 (Caballero) Water Innovation Act of 2021

This bill, the Water Innovation Act of 2021, would create the Office of Water Innovation at the California Water Commission for the furtherance of new technologies and other innovative approaches in the water sector. The bill would require the office, by December 31, 2023, to take specified measures to advance innovation in the water sector. The bill would make findings and declarations regarding the need for water innovation. CSDA has taken a Support position. ACWA has taken a Favor position. This is now a two-year bill and may be acted upon January 2022.

SB 427 (Eggman) Water theft: enhanced penalties

This bill would authorize the legislative body of a local agency, as defined, that provides water service to adopt an ordinance that prohibits water theft, as defined, subject to an administrative fine or penalty in excess of the limitations above, as specified. The bill would require the local agency to adopt an ordinance that sets forth the administrative procedures governing the imposition, enforcement, collection, and administrative review of the administrative fines or penalties for water theft and to establish a process for

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

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granting a hardship waiver to reduce the amount of the fine, as specified. Bill was passed by the Senate and is now on to the Assembly. ACWA, RWA and CSDA have taken a Support position.

SB 559 (Hurtado) Canal Conveyance Capacity Restoration Fund

This bill would establish the Canal Conveyance Capacity Restoration Fund in the State Treasury and would require all moneys deposited in the fund to be expended, upon appropriation by the Legislature, in support of subsidence repair costs, including environmental planning, permitting, design, and construction and necessary road and bridge upgrades required to accommodate capacity improvements. Funding would be directed for water conveyance infrastructure to address subsidence issues across the San Joaquin Valley. This would support of restoration of the Friant-Kern Canal, Delta-Mendota Canal, and two portions of the California Aqueduct – the San Luis Fields and San Joaquin Divisions. ACWA and CSDA have taken a Support position. Staff joined ACWA lead coalition in Support of this bill.

H.R.535 (Garamendi) and S.91 (Kyrsten)

H.R. 535 and S. 91, the Special Districts Provide Essential Services Act, were introduced on January 28 to provide special districts with direct access to future local government pandemic relief. The Special Districts Provide Essential Services Act would establish a federal definition for "special district." It would require states to direct at least 5 percent of future Coronavirus Relief Fund (CRF) allocations to their special districts. States would have the discretion to establish their own programs to disburse the funds to special districts demonstrating pandemic-related need for relief. States would have flexibility to use excess funds, should the U.S. Treasury permit, after 60 days should special districts' declared needs be met. The bills would also codify districts' access to the Federal Reserve's Municipal Liquidity Facility. CSDA is in support of this bill and is asking members to send a letter of support to their members of Congress as well as U.S. Senators Dianne Feinstein and Alex Padilla to share why the legislation is important for special districts and their constituents.

Staff will continue to monitor these bills along with any other bills which may affect District operations.

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

June 15, 2021

LEGISLATIVE MATTERS AND POTENTIAL DIRECTION TO STAFF

Page 8

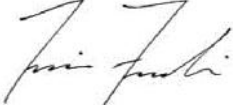
STRATEGIC PLAN CONFORMITY

Tracking active legislation complies with the District's Water Industry Leadership goals of the 2020-2025 Strategic Plan.

FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,



TRAVIS FRANKLIN
PROGRAM MANAGER

June 15, 2021

TO: Chair and Directors of the Florin Resource Conservation District
FROM: Bruce Kamilos, General Manager
SUBJECT: **ELK GROVE WATER DISTRICT OPERATIONS REPORT – MAY 2021**

RECOMMENDATION

This item is presented for information only. No action by the Florin Resource Conservation District Board of Directors 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 May. Other notable events are described below.

DISCUSSION

Background

Every month, staff presents an update of the activities related to the operations of the EGWD. Included for the Florin Resource Conservation District Board of Director's review is the EGWD's May 2021 Operations Report.

Present Situation

The EGWD May 2021 Operations Report highlights are as follows:

- **Operations Activities Summary** – No door hangers were placed for past due balances. The district is currently suspending all shut offs due to emergency Executive Order N-42-20 which prohibits the discontinuation of water service to residences and businesses. We received two (2) water pressure complaints and one (1) water quality complaint. Upon inspection, all water complaints were unsubstantiated.
- **Production** – The Combined Total Service Area 1 production graph on page 13 shows that production during the month of May increased 15.17 percent compared to May 2020 and is 6.21 percent less than what was produced in 2013. Year 2013

ELK GROVE WATER DISTRICT OPERATIONS REPORT – MAY 2021

Page 2

is the baseline year the State Water Resources Control Board adopted for water usage. The Total Demand/Production for both service areas on page 14 shows that customer use during the month of May, compared to May 2013, was down by 5.18 percent.

- **Static and Pumping Level Graphs** – The second quarter soundings are shown and generally indicate that the static water levels in deeper zones have decreased on average by about 6 feet compared to the second quarter of 2019. The shallow zone depths have not shown a change in static water levels.
- **Treatment (Compliance Reporting)** – All samples taken during the month comply with all regulatory permit requirements. No exceedances of any maximum contaminant levels were found, and all water supplied to EGWD’s customers met or exceeded safe drinking water standards.
- **Corrective 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 May:
 - Repaired two (2) separate process valve electric actuators that were not opening or closing all the way on the Railroad Water Treatment Plant filtration system.
 - Investigated failure of the HVAC system on variable frequency (VFD) #6 at the Railroad Water Treatment Plant. Called for repairs.
 - Investigated a malfunction with the Programmable Logic Controller component at well 4D Webb St. Called Tesco Controls to repair.
 - Investigated a malfunction with the main flowmeter at the Railroad Water Treatment Plant. Developing a work plan to replace in winter when demand is low.
- **Cross Connection Control Program 2021** – EGWD issued 61 testing notices for the month. Pursuant to the notices, 26 devices passed. Of the 35 remaining, five (5) of the devices passed the second test and one (1) notice was retracted, leaving 29 not tested by the due date. The total number of delinquents is 30, which includes those that received secondary notices and one (1) device that remains delinquent from April and received a third notice.
- **Safety Meetings/Training** – Two (2) safety training sessions were conducted for the month which is compliant with OSHA standards.

June 15, 2021

ELK GROVE WATER DISTRICT OPERATIONS REPORT – MAY 2021

Page 3

- **Service and Main Leaks Map** – There were six (6) service line leaks and zero main line leaks during May.
- **System Pressures** – Pressures in Service Area 1 generally remained stable during the month of May. Pressures in Service Area 2, which are controlled by Sacramento County Water Agency, were also stable as compared to the previous month.

ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/EGWD 2020-2025 Strategic Plan. The EGWD Operations Report provides an ongoing review of EGWD’s operations, and therefore, conforms with Strategic Goal No. 1, Governance and Customer Engagement.

FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully submitted,



BRUCE KAMILOS
GENERAL MANAGER

BMK/ac

Attachment

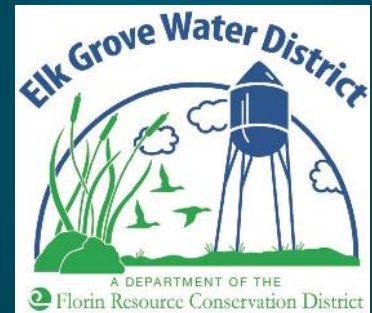
EGWD

OPERATIONS REPORT

May 2021



Elk
Grove
Water
District



Elk Grove Water District
Operations Report
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Operations Activities Summary

Service Requests:

	May -21		YTD (Since Jan. 1, 2021)	
<u>Department</u>	<u>Service Request</u>	<u>Hours</u>	<u>Service Request</u>	<u>Hours</u>
Distribution				
Door Hangers	0	0	0	0
Shut offs	0	0	0	0
Turn ons	0	0	4	1
Investigations	43	10.75	144	36
USA Locates	283	70.75	1,549	387.25
Customer Complaints				
-Pressure	2	1	8	4
-Water Quality	1	0.5	12	6
-Other	0	0	0	0

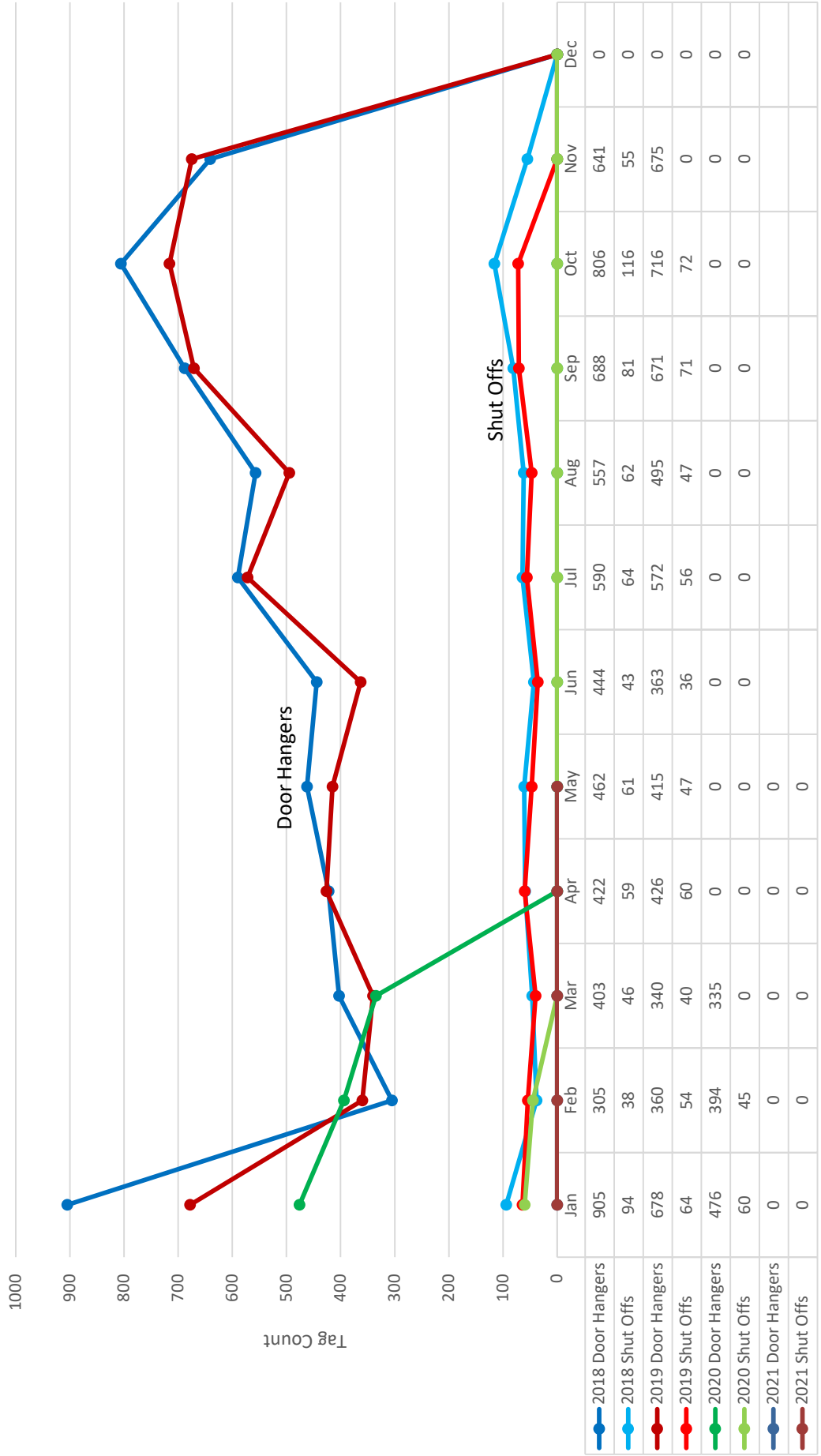
Work Orders:

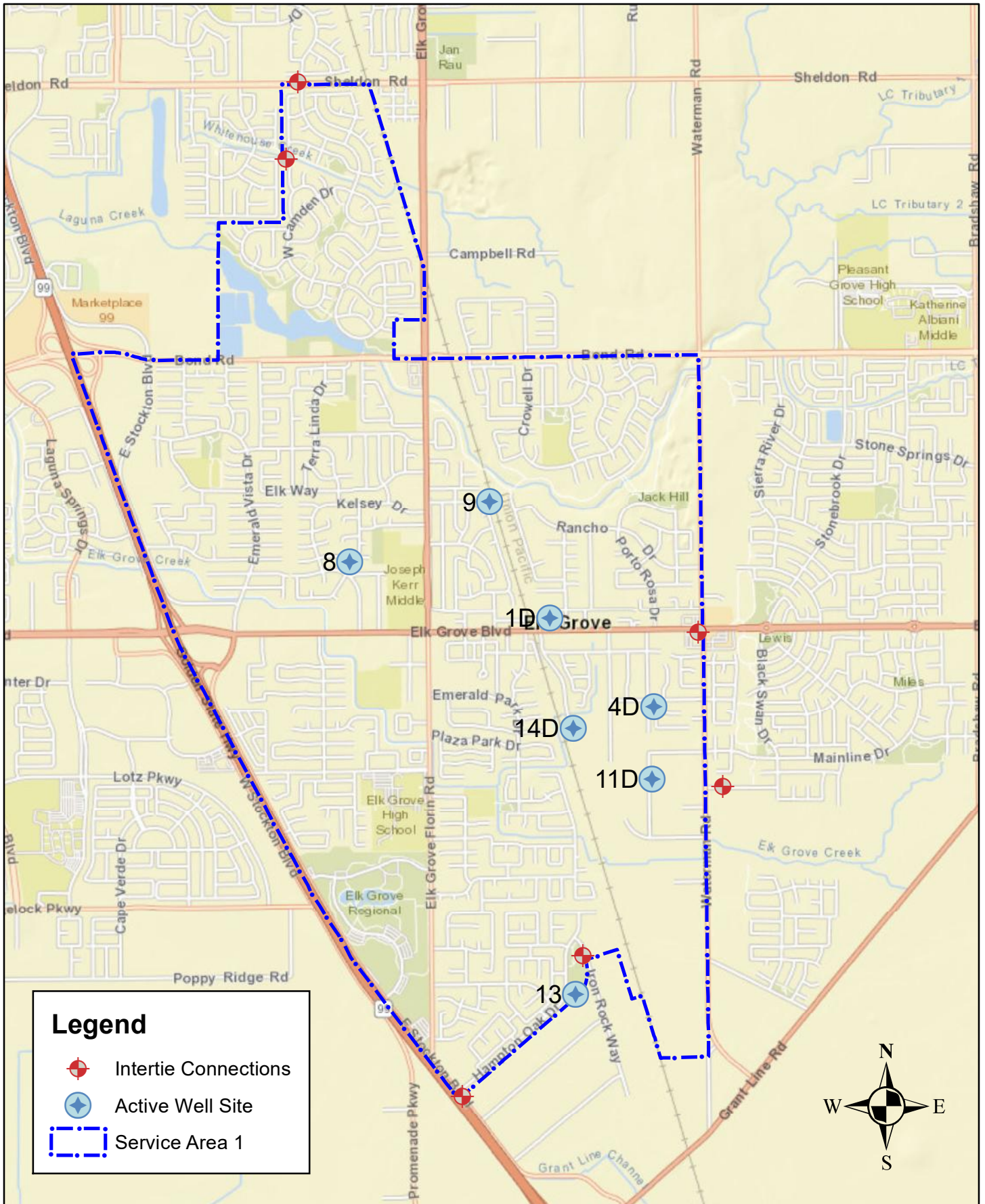
	May -21		YTD (Since Jan. 1, 2021)	
<u>Department</u>	<u>Work Orders</u>	<u>Hours</u>	<u>Work Orders</u>	<u>Hours</u>
Treatment:				
Preventative Maint.	18	29.5	114	295.5
Corrective Maint.	11	42	28	164.5
Water Samples	12	34	81	195.5
Distribution:				
Meters Installed	1	6	4	7.5
Meter Change Out	16	10.25	107	69
Preventative Maint.				
-Hydrant Maintenance (140)	138	25	984	161.75
-Valve Exercising (127)	155	27.5	786	155.5
-Other	0	0	0	0
Corrective Maint.				
-Leaks	6	50.5	14	168
-Other	3	18.5	21	22.5
Valve Locates	0	0	0	0
Utility:				
Corrective Maint.	0	0	0	0






Elk Grove Water District

Door Hangers and Shut Off Tags



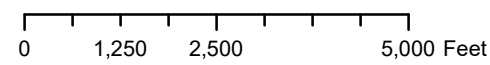


Legend

-  Intertie Connections
-  Active Well Site
-  Service Area 1



Active Well Sites & Intertie Connections



Elk Grove Water District



Elk Grove Water District

Monthly Production

Well ID School -- May 2021

Selected Month Production
28,219,991 Gallons

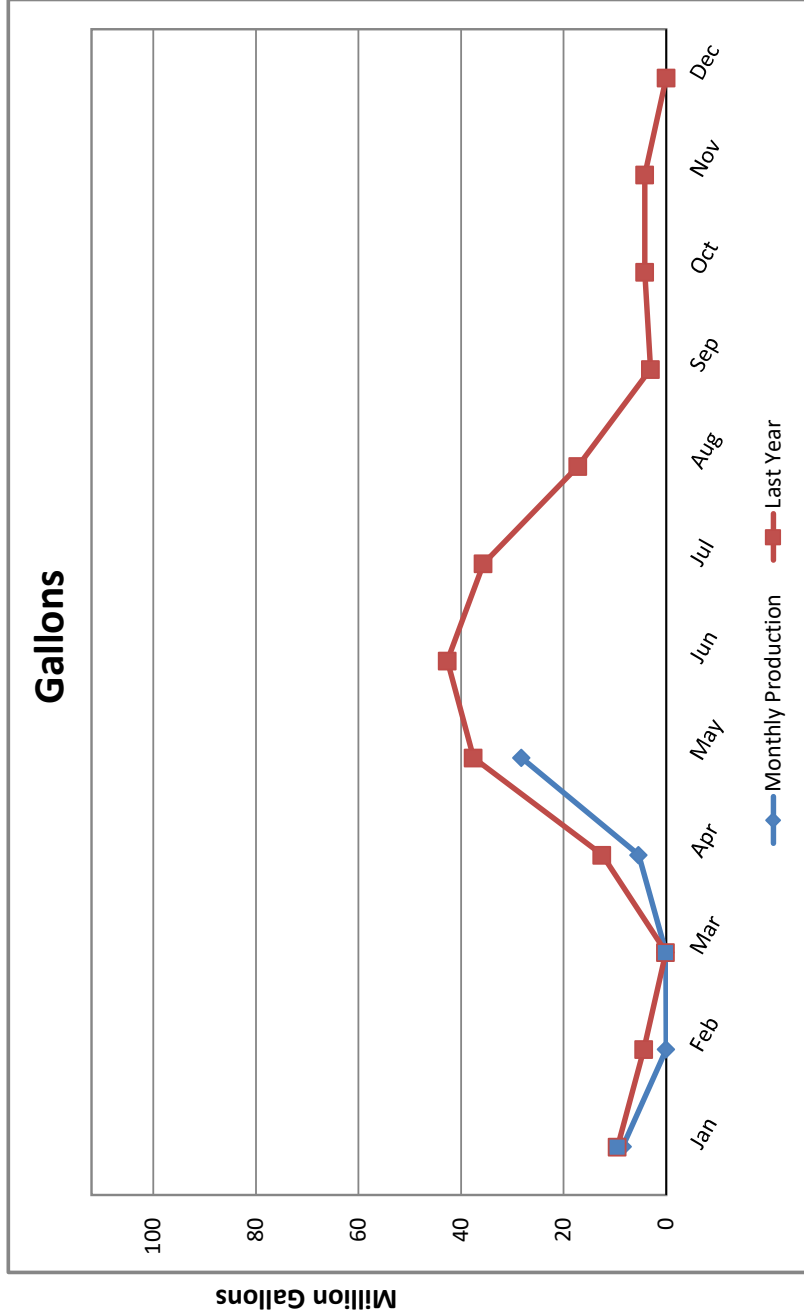
Average GPM: 1,682
Pump depth: 275 ft
Well depth: 1025 ft

Motor:
Volts: 480
Volts (Rated): 460
RPM: 1690
RPM (Rated): 2115
Amps A: 204
Amps A (Rated): 222
Amps B: 204
Amps B (Rated): 222
Amps C: 196
Amps C (Rated): 222

Motor Temp: 142 F
Hour Meter: 279.60
KW Hour Total: 34,640

Chlorine:
Dosing: 1.79 mg/L
Demand: 0.92 mg/L
Residual: 0.87 mg/L

Vibration Reading:
Base Line: 0.05 in/sec
Current: 0.03 in/sec





Elk Grove Water District

Monthly Production

Well 4D Webb -- May 2021

Selected Month Production
15,920,519 Gallons

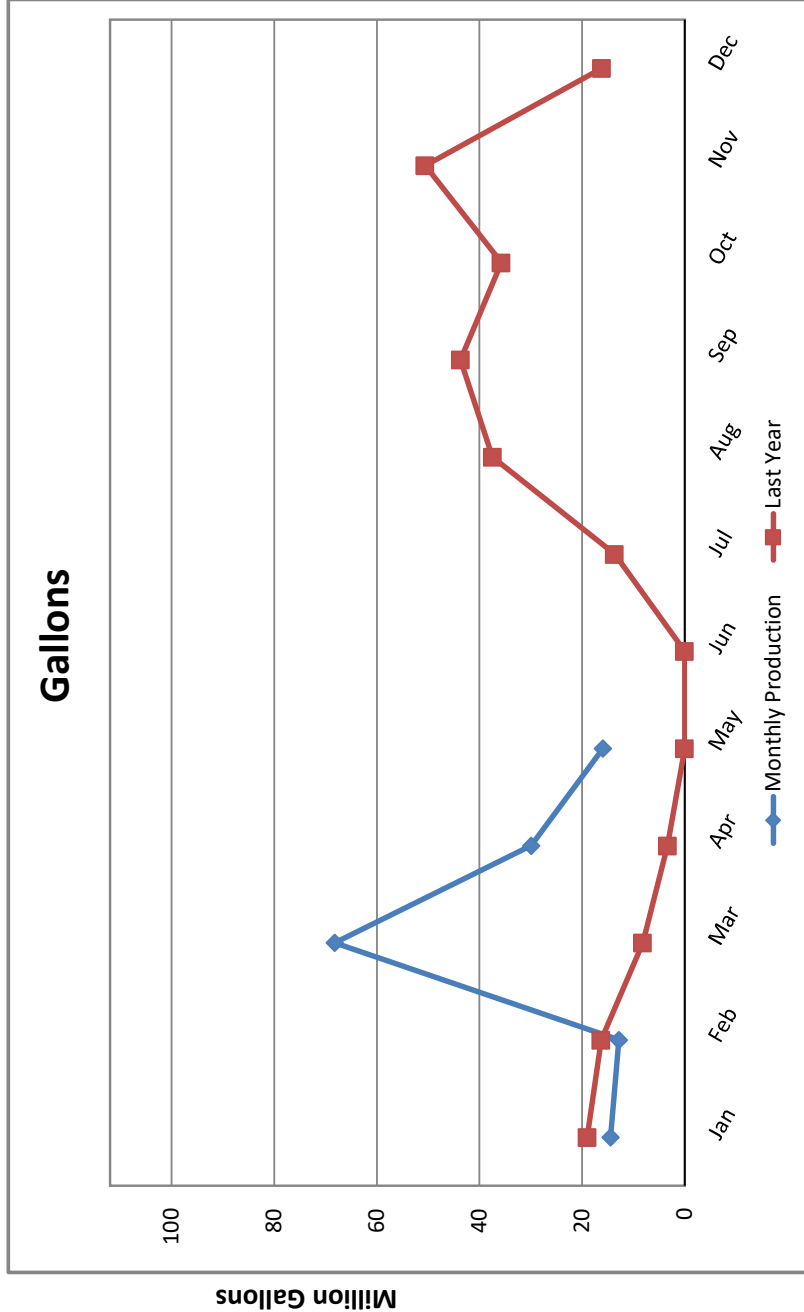
Average GPM: 1680
Pump depth: 340 ft
Well depth: 1075 ft

Motor:
Volts: 480
Volts (Rated): 460
RPM: 1672
RPM (Rated): 1775
Amps A: 202
Amps A (Rated): 225
Amps B: 201
Amps B (Rated): 225
Amps C: 201
Amps C (Rated): 225

Motor Temp: 160.7 F
Hour Meter: 157,90
KW Hour Total: 23,460

Chlorine:
Dosing: 1.76 mg/L
Demand: 0.67 mg/L
Residual: 1.09 mg/L

Vibration Reading:
Base Line: 0.05 in/sec
Current: 0.01 in/sec





Elk Grove Water District

Monthly Production

Well 11D Dino -- May 2021

Selected Month Production
52,482,095 Gallons

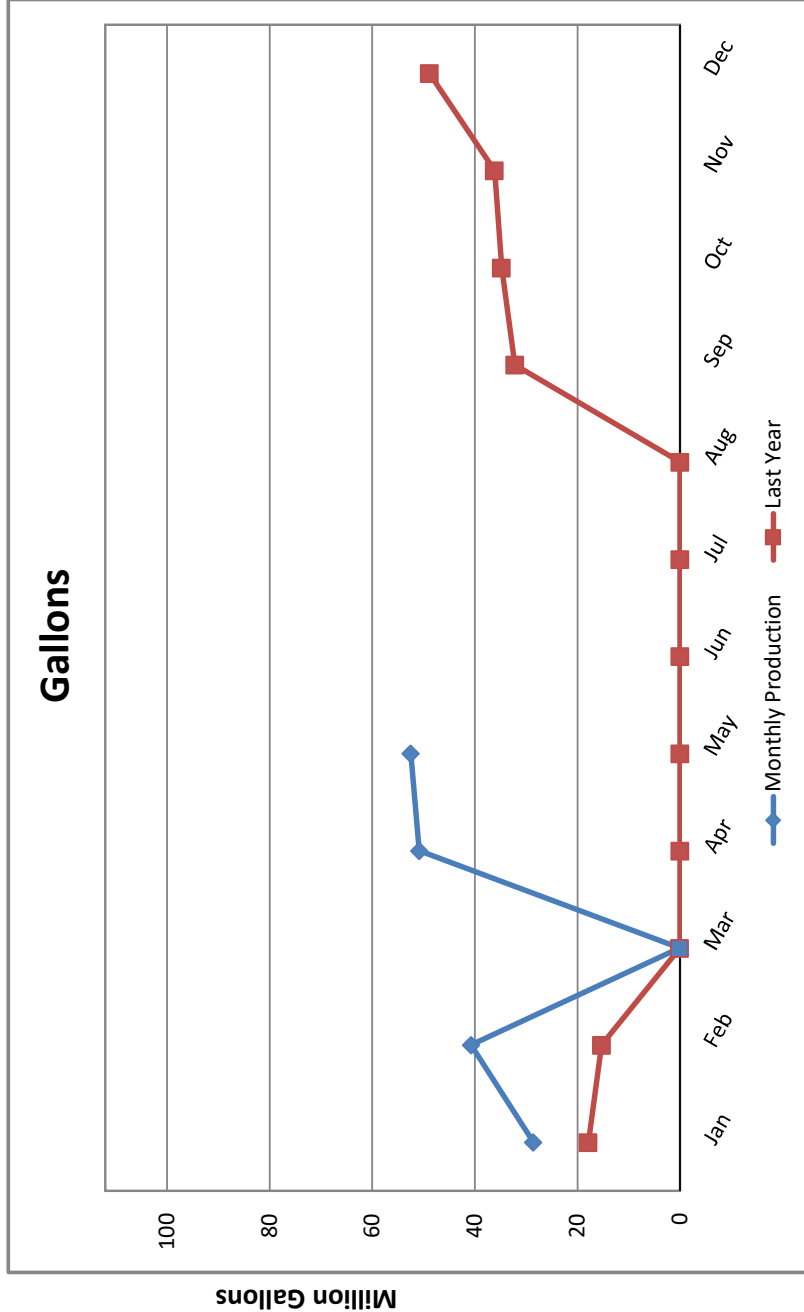
Average GPM: 1701
Pump depth: 340 ft
Well depth: 1038 ft

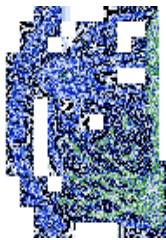
Motor:
Volts: 480
Volts (Rated): 460
RPM: 1690
RPM (Rated): 1775
Amps A: 204
Amps A (Rated): 225
Amps B: 204
Amps B (Rated): 225
Amps C: 196
Amps C (Rated): 225

Motor Temp: 142 F
Hour Meter: 514.00
KW Hour Total: 71,340

Chlorine:
Dosing: 1.75 mg/L
Demand: 0.72 mg/L
Residual: 1.03 mg/L

Vibration Reading:
Base Line: 0.05 in/sec
Current: 0.01 in/sec





Elk Grove Water District

Monthly Production

Well 14D Railroad -- May 2021

Selected Month Production
5,009,847 Gallons

Average GPM: 1167
Pump depth: 340 ft
Well depth: 1051 ft

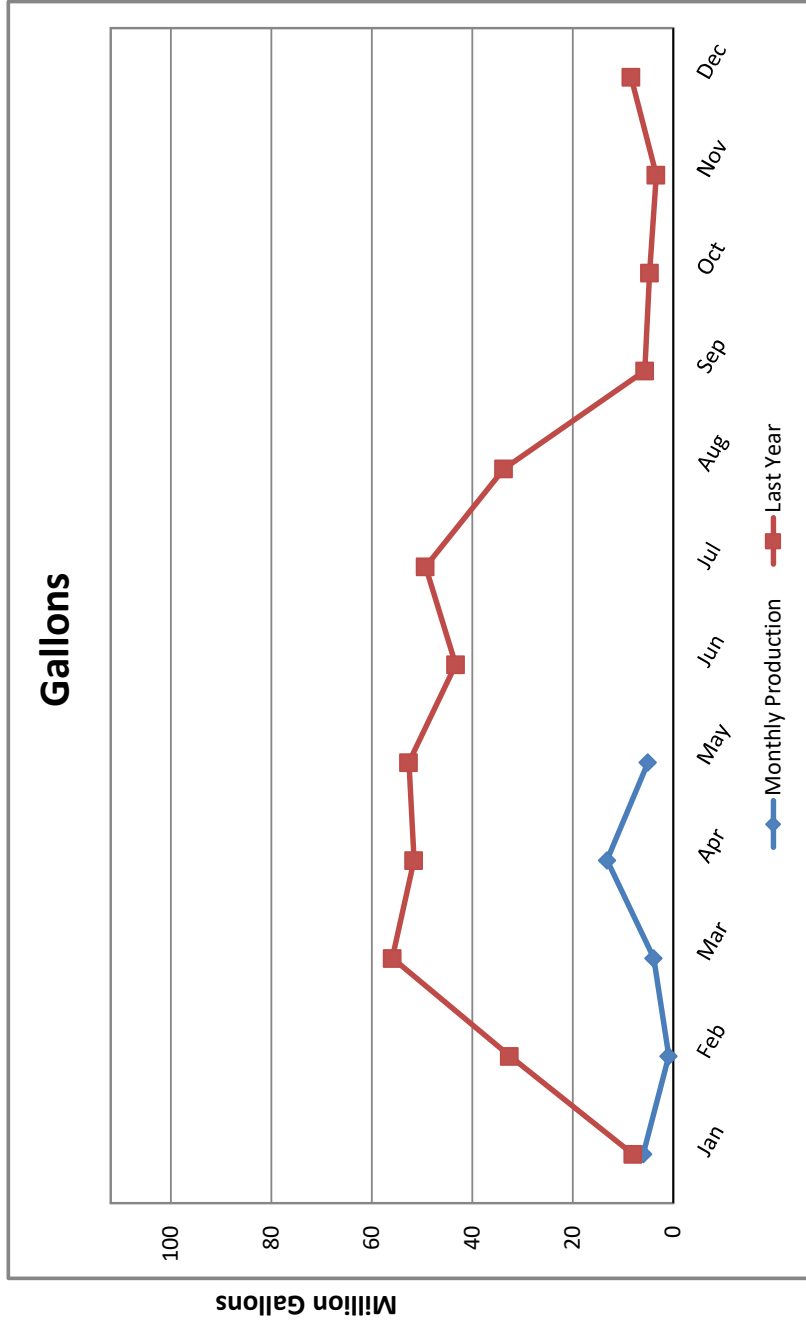
Motor:
Volts: 477
Volts (Rated): 460
RPM: --
RPM (Rated): 1785
Amps A: 156
Amps A (Rated): 171
Amps B: 155
Amps B (Rated): 171
Amps C: 155
Amps C (Rated): 171

Motor Temp.: -- F
Hour Meter: 71.50
KW Hour Total: 82,560
(KWH total is for the entire facility)

Chlorine:
Dosing: 2.04 mg/L
Demand: 0.91 mg/L
Residual: 1.13 mg/L

Vibration Reading:

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





Elk Grove Water District

Monthly Production

Well 8 Williamson -- May 2021
(Submersible)

Selected Month Production
4,126,696 Gallons

Average GPM: 540
Pump depth: 150 ft
Well depth: 564 ft

Motor:

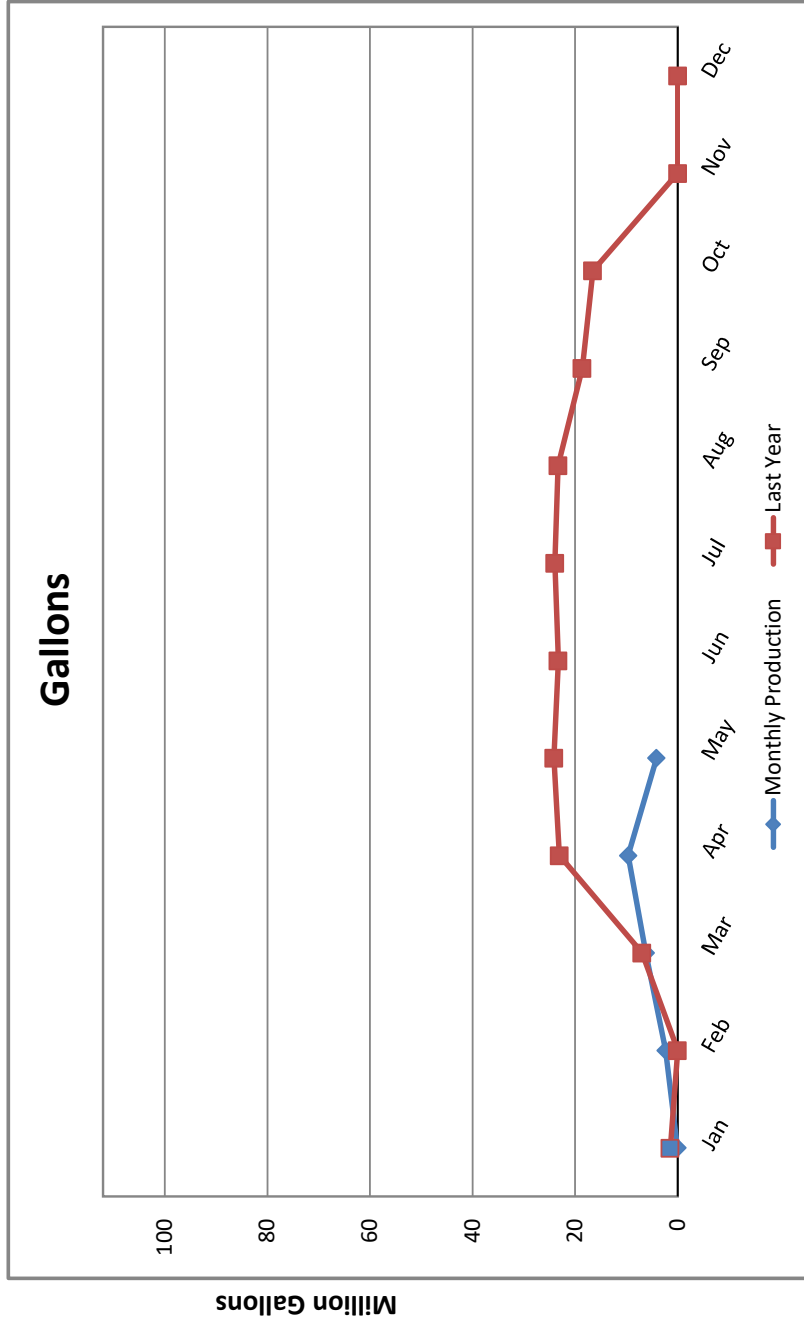
Volts: 462
Volts (Rated): 460

Amps A: 60
Amps A (Rated): 65
Amps B: 58
Amps B (Rated): 65
Amps C: 59
Amps C (Rated): 65

Hour Meter: 127.20
KW Hour Total: 5,178

Chlorine:

Dosing: 1.17 mg/L
Demand: 0.28 mg/L
Residual: 0.89 mg/L





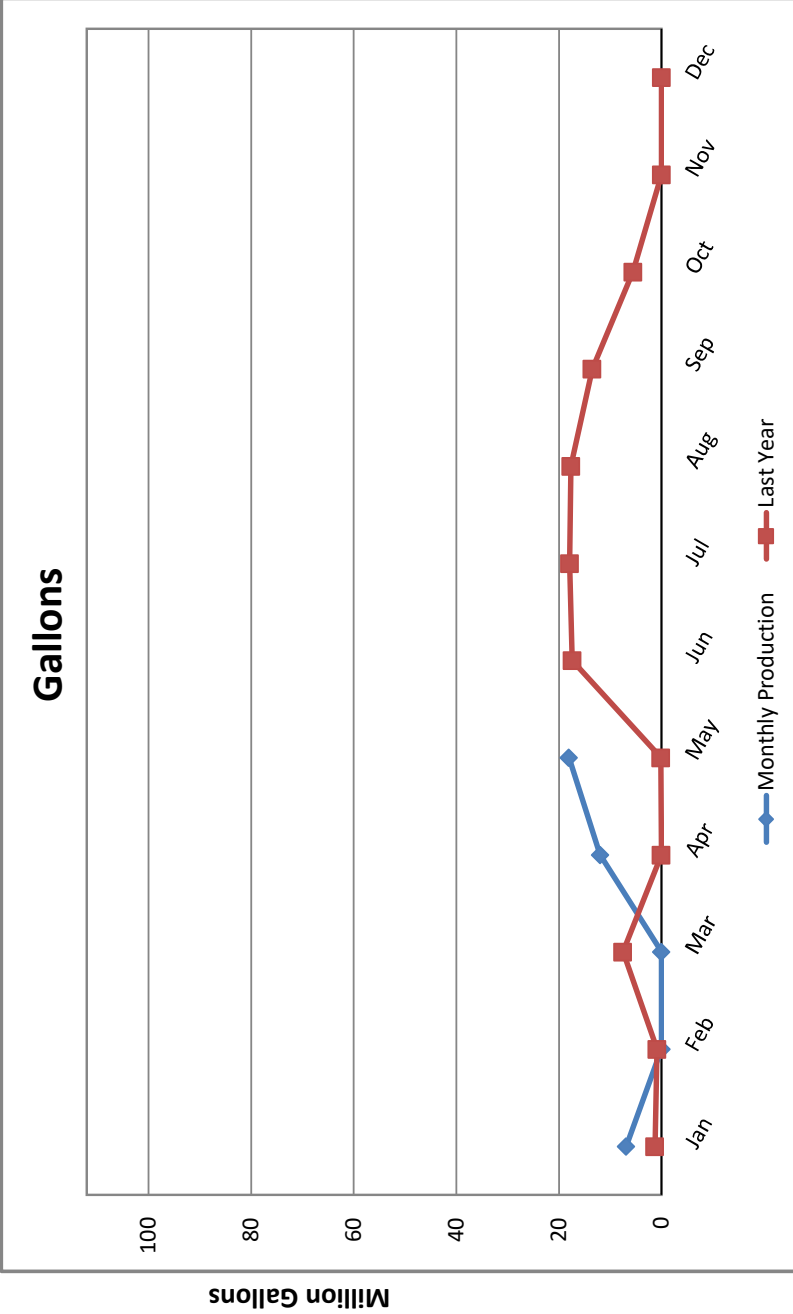
Elk Grove Water District

Monthly Production

Well 9 Polhemus -- May 2021
(Submersible)

Selected Month Production
18,042,069 Gallons

Average GPM: 492
Pump depth: 150 ft
Well depth: 556 ft



Motor:
Volts: 483
Volts (Rated): 460

Amps A: 57
Amps A (Rated): 65
Amps B: 58
Amps B (Rated): 65
Amps C: 62
Amps C (Rated): 65

Hour Meter: 611.20
KW Hour Total: 24,185

Chlorine:
Dosing: 1.05 mg/L
Demand: 0.17 mg/L
Residual: 0.88 mg/L



Elk Grove Water District

Monthly Production

Well 13 Hampton -- May 2021

Selected Month Production
38,102,272 Gallons

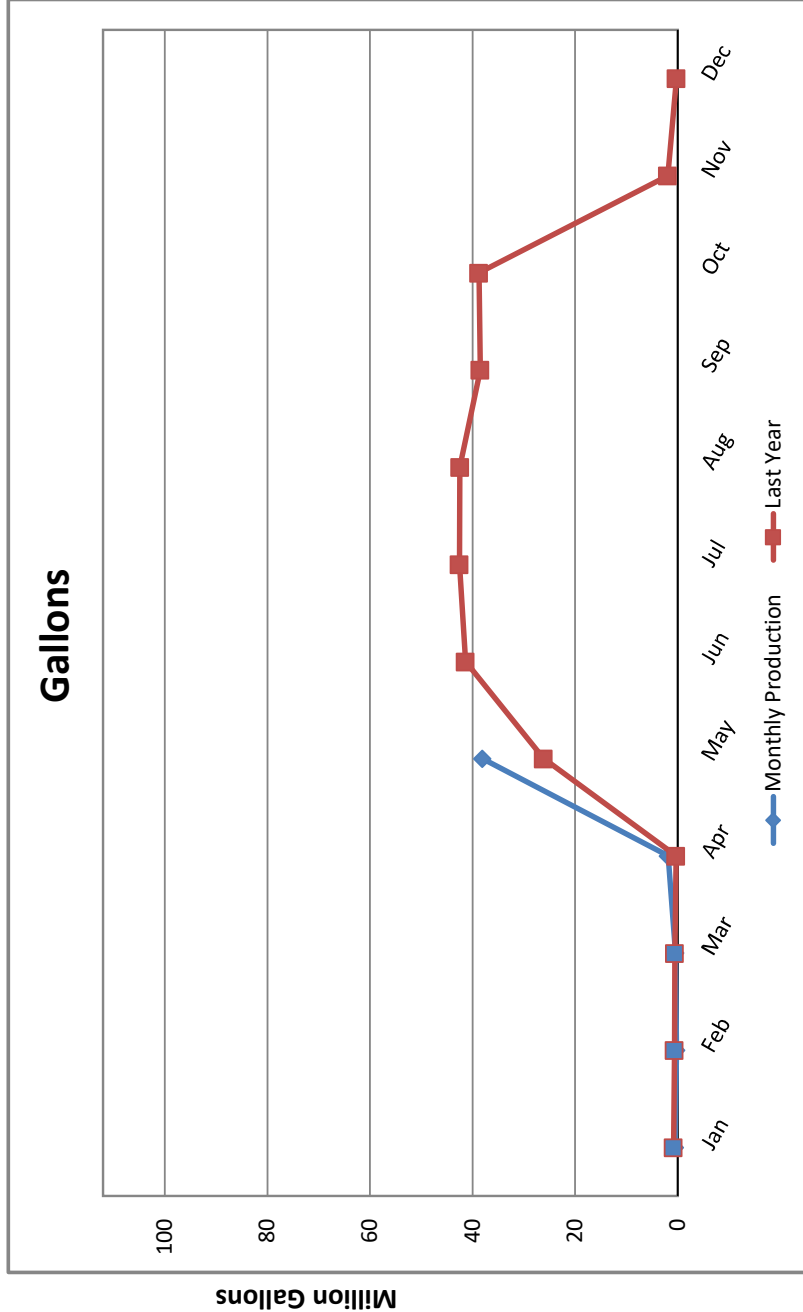
Average GPM: 946
Pump depth: 200 ft
Well depth: 500 ft

Motor:
Volts: 476
Volts (Rated): 460
RPM: 1785
RPM (Rated): 1785
Amps A: 103
Amps A (Rated): 141
Amps B: 105
Amps B (Rated): 141
Amps C: 106
Amps C (Rated): 141

Motor Temp.: 139.6 F
Hour Meter: 670.9
KW Hour Total: 49,860

Chlorine:
Dosing: 1.26 mg/L
Demand: 0.21 mg/L
Residual: 1.05 mg/L

Vibration Reading:
Base Line: 0.02 in/sec
Current: 0.02 in/sec





Elk Grove Water District

Combined Total Production

Service Area 1

May-2021

* In Aug. 2020, an additional 18 million gallons of water was purchased from Sacramento County Water Agency as a result of the emergency repair of the 36" transmission main.

Current Month Production:

161,903,489 Gallons

Highest Day Demand of the Month:

6,059,062

Date of Occurrence

12-May-21

Highest Day Demand of the Calendar Year:

6,059,062

Date of Occurrence

12-May-21

"Water Year" Rainfall: (Oct-20 to Sep-21)

Current Month:

0.01 in

Year To Date:

6.56 in

"Water Year" Rainfall: (Oct-19 to Sep-20)

May 2020

0.32 in

Year To Date:

9.71 in

Entire Year Total:

9.73 in

Temperature:

This Month High

104 F

This Month Low

43 F

This Month Average

69.05 F

MAY-20 High

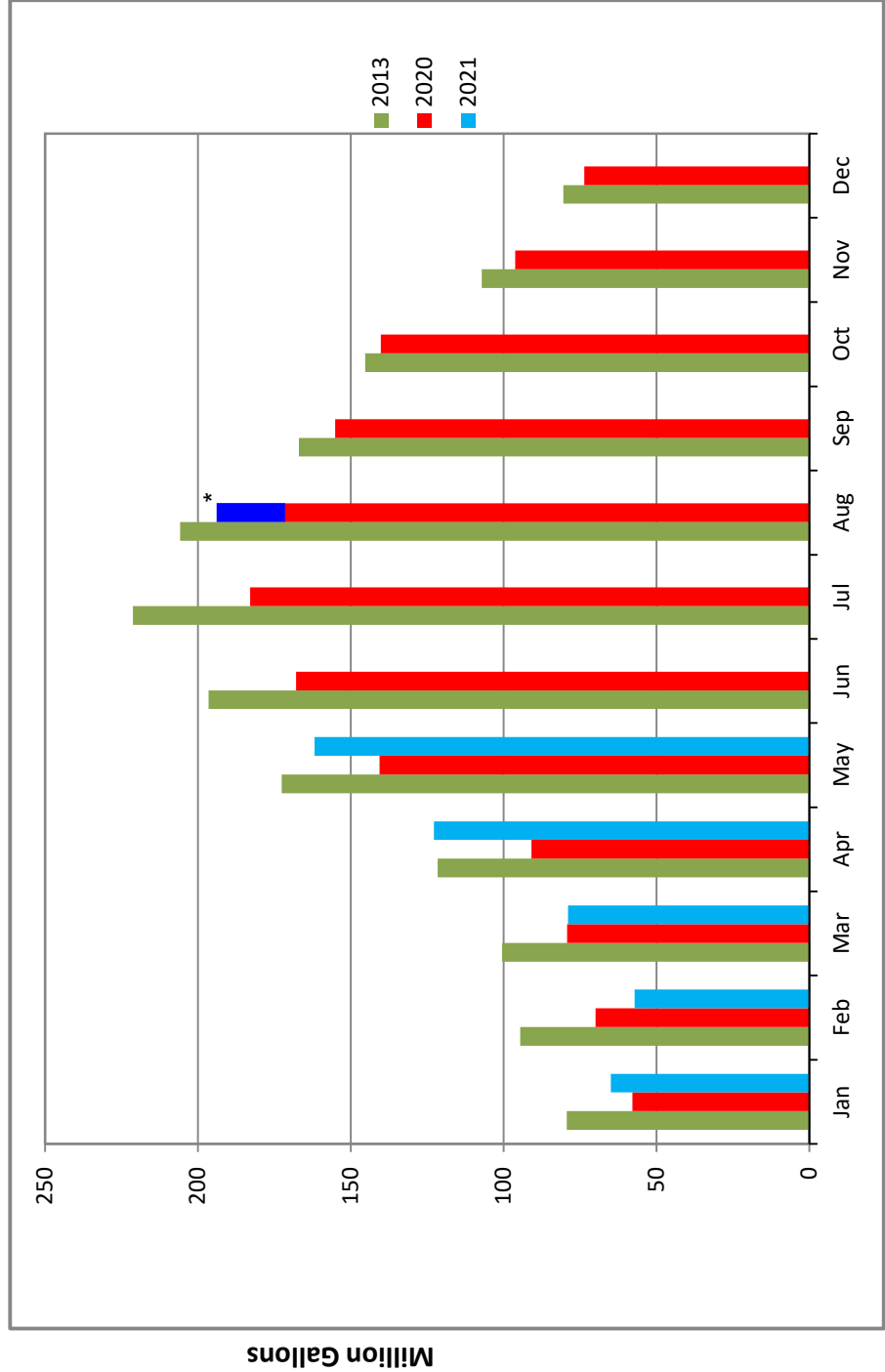
103 F

MAY-20 Low

44 F

MAY-20 Average

69.25 F



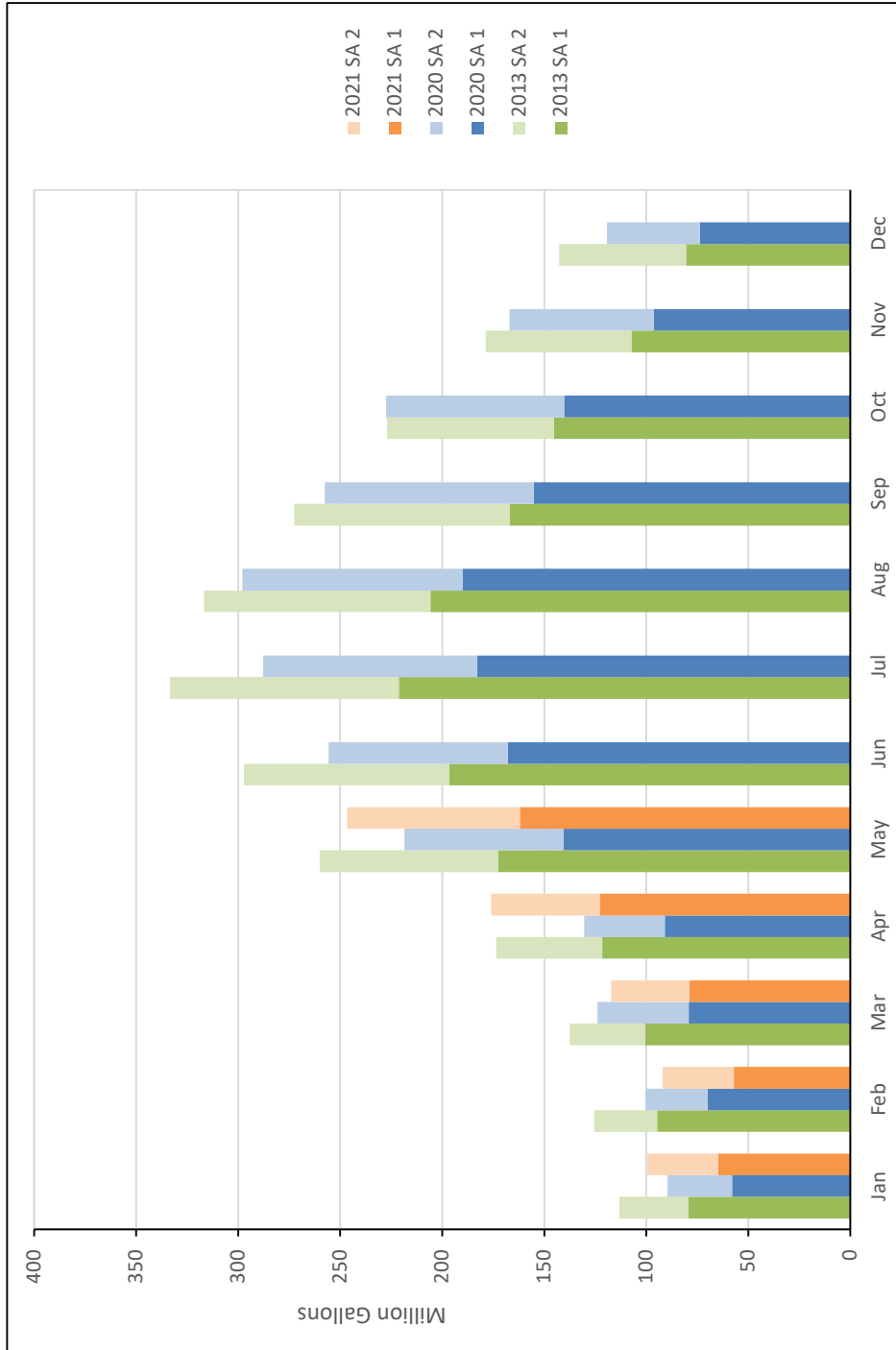
Million Gallons



Elk Grove Water District

Total Demand/Production

May-2021



Current Month Demand/Production:
246,629,449 Gallons
Reduction From March 2013: 5.18%
GPCD: 169.9 Gallons per Day
R-GPCD: 133.3 Gallons per Day

Service Area 1
Active Connections: 7,979
Current Month Demand/Production:
161,903,489 Gallons
Reduction From March 2013: 6.21%
GPCD: 182.6 Gallons per Day
R-GPCD: 144.8 Gallons per Day

Service Area 2
Active Connections: 4,901
Current Month Demand/Production:
84,725,960 Gallons
Reduction From March 2013: 3.14%
GPCD: 150.0 Gallons per Day
R-GPCD: 115.6 Gallons per Day

Elk Grove Water District Water Usage

		Monthly Production (gallons)											
		January	February	March	April	May	June	July	August	September	October	November	December
2013													
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
2018													
GW (SA1)		61,547,751	61,558,850	62,848,303	76,267,144	125,703,221	158,313,394	181,467,446	173,737,676	150,609,278	133,163,991	97,294,654	63,631,042
Purchased (SA2)		31,925,388	31,512,492	33,779,680	32,989,792	52,692,860	85,679,660	101,031,612	104,457,452	97,400,072	77,996,204	66,116,468	42,849,180
Total		93,473,139	93,071,342	96,627,983	109,256,936	178,396,081	243,993,054	282,499,058	278,195,128	248,009,350	211,160,195	163,411,122	106,480,222
2019													
GW (SA1)		58,847,001	50,827,497	59,064,385	81,981,728	114,733,502	153,176,826	175,692,823	179,038,979	151,703,906	134,920,719	105,816,168	62,755,985
Purchased (SA2)		29,895,316	30,359,076	32,485,640	34,994,432	61,802,004	72,657,728	96,524,164	101,818,508	99,590,964	82,897,100	69,704,624	45,161,996
Total		88,742,317	81,186,573	91,550,025	116,976,160	176,535,506	225,834,554	272,216,987	280,857,487	251,294,870	217,817,819	175,520,792	107,917,981
2020													
GW (SA1)		57,904,843	69,920,851	79,195,437	90,851,253	140,575,760	167,942,394	182,964,721	189,801,764	155,126,225	140,229,242	96,201,714	73,624,502
Purchased (SA2)		31,743,624	32,416,076	44,764,808	39,523,572	77,964,788	87,759,848	104,799,288	108,177,256	102,434,860	87,187,628	70,876,740	45,577,136
Total		89,648,467	102,336,927	123,960,245	130,374,825	218,540,548	255,702,242	287,764,009	297,979,020	257,561,085	227,416,870	167,078,454	119,201,638
2021													
GW (SA1)		64,881,378	57,088,452	78,904,998	122,759,415	161,903,489							
Purchased (SA2)		34,553,112	34,867,272	38,268,428	53,156,620	84,725,960							
Total		99,434,490	91,955,724	117,173,426	175,916,035	246,629,449	0	0	0	0	0	0	0

*Notes

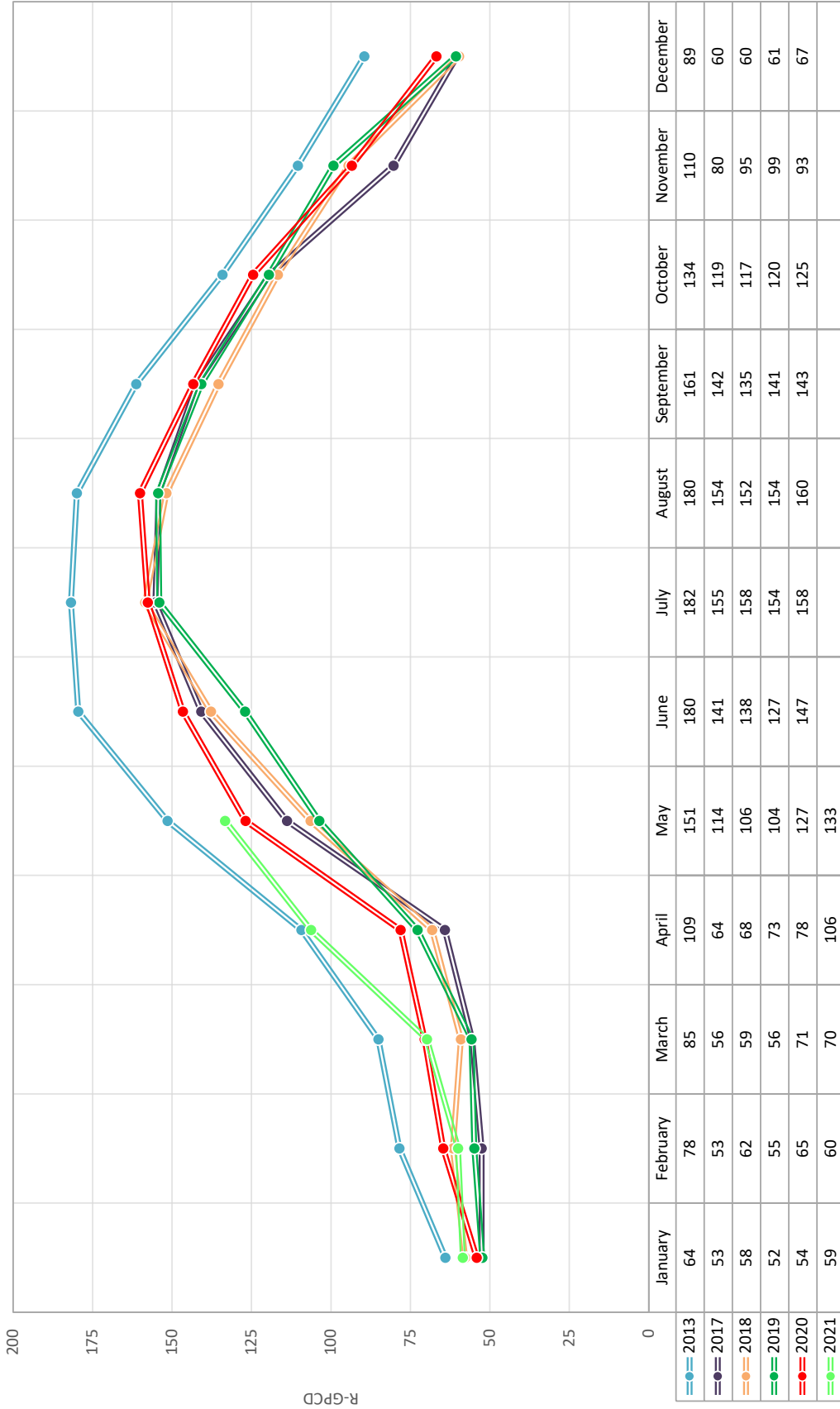
2013 January and February production numbers do not match actually recorded production because of an open intertie delivering water to SA2. Information below is further details.
 SA1 = Service Area 1, SA2 = Service Area 2. SA1 is all groundwater (GW) production. SA2 is all purchased water from SCWA.
 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.)
 2020 August production number for SA1 includes water delivered through open interties with SA2.
 SA1 = Service Area 1, SA2 = Service Area 2. SA1 is all groundwater (GW) production. SA2 is all purchased water from SCWA.
 Charlois and Springhurst Intertie 18,000,000 Gallons
 Charlois Intertie (Aug 2020) 8,706,529 Gallons (Determined from Bruce Kamilos calculations)
 Springhurst Intertie (Aug 2020) 14,511,000 Gallons (Number provided from meter read by SCWA)

Service Area 2		Consumption	
2021	# Accts	CCF	Gallons
Jan	4,900	46,194	34,553,112
Feb	4,901	46,614	34,867,272
Mar	4,901	51,161	38,268,428
Apr	4,901	71,065	53,156,620
May	4,901	113,270	84,725,960
Jun			0
Jul			0
Aug			0
Sep			0
Oct			0
Nov			0
Dec			0



EGWD COMBINED R-GPCD

● 2013
 ● 2017
 ● 2018
 ● 2019
 ● 2020
 ● 2021



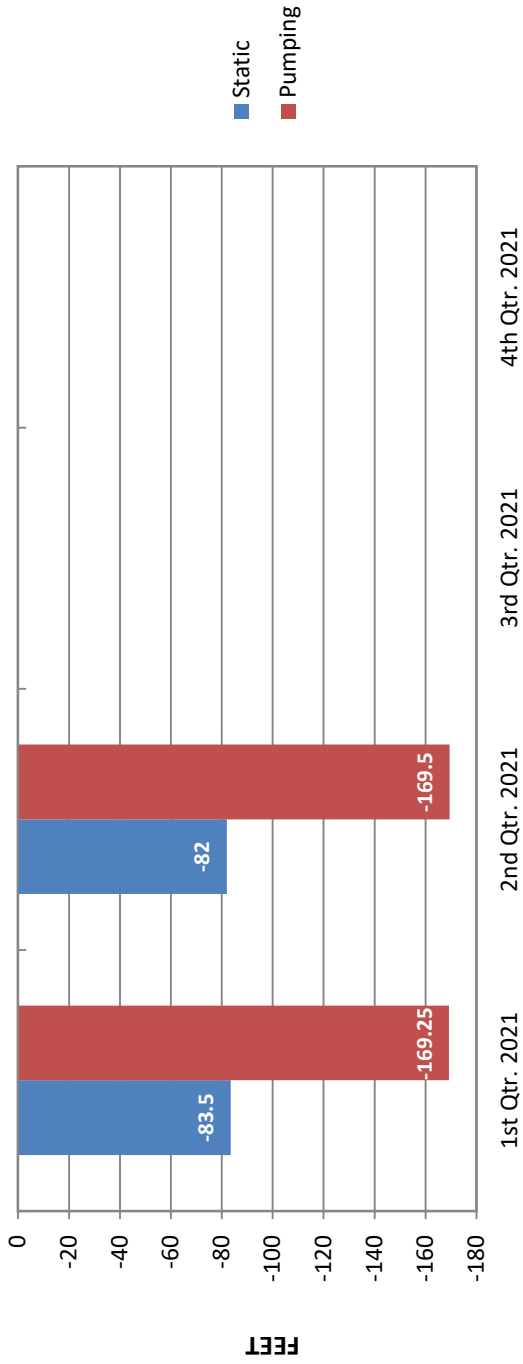
R-GPCD = Residential Gallons per Capita per Day



Elk Grove Water District

Static and Pumping Levels

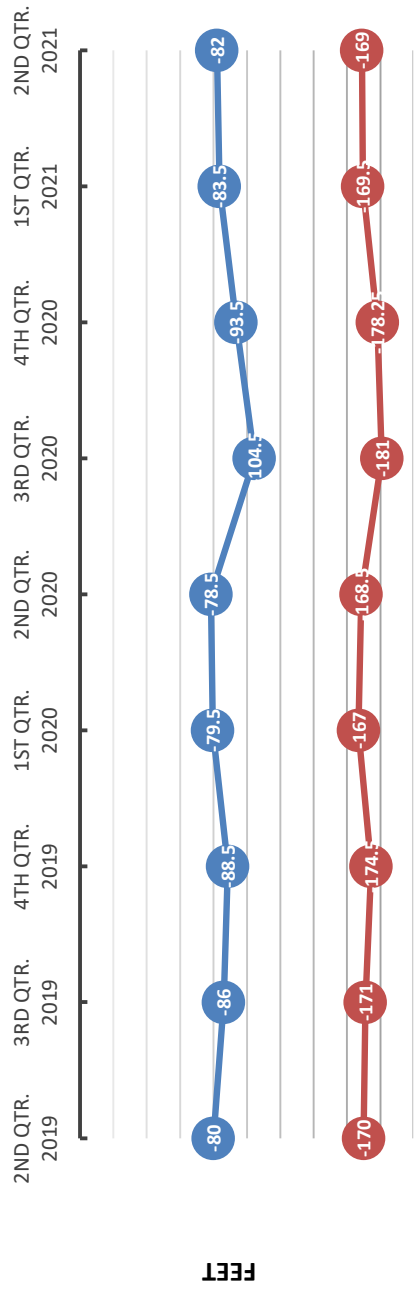
Well 1D School St



Latest Well Sounding

Static: 82 Ft
 Pumping: 169.5 Ft
 Drawdown: 87.5 Ft
 GPM: 1,792
 Specific Capacity: 20.480

Sounding Quarter/Year



Latest Sand Tester Results:

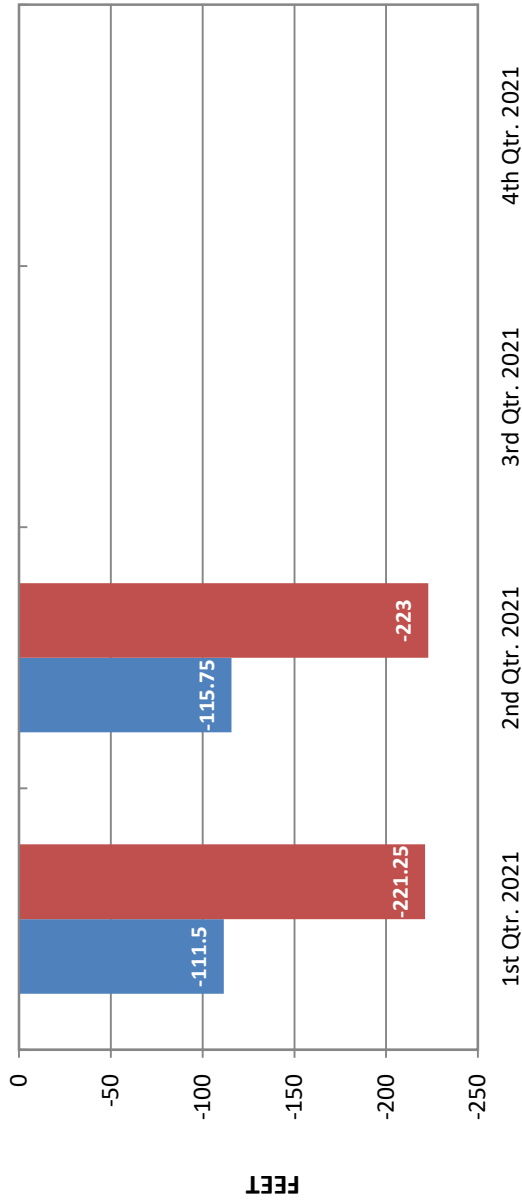
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

Well 4D Webb St



Latest Well Sounding

Static: 115.75 Ft
Pumping: 223 Ft
Drawdown: 107.25 Ft
GPM: 1,708
Specific Capacity: 15.922

■ Static
 ■ Pumping

Sounding Quarter/Year



Latest Sand Tester Results:

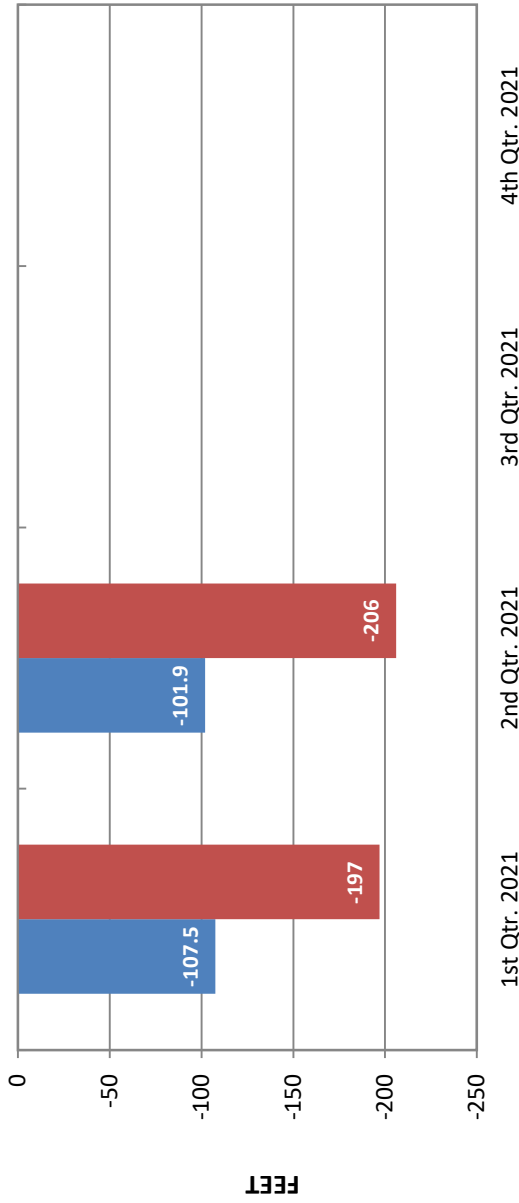
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

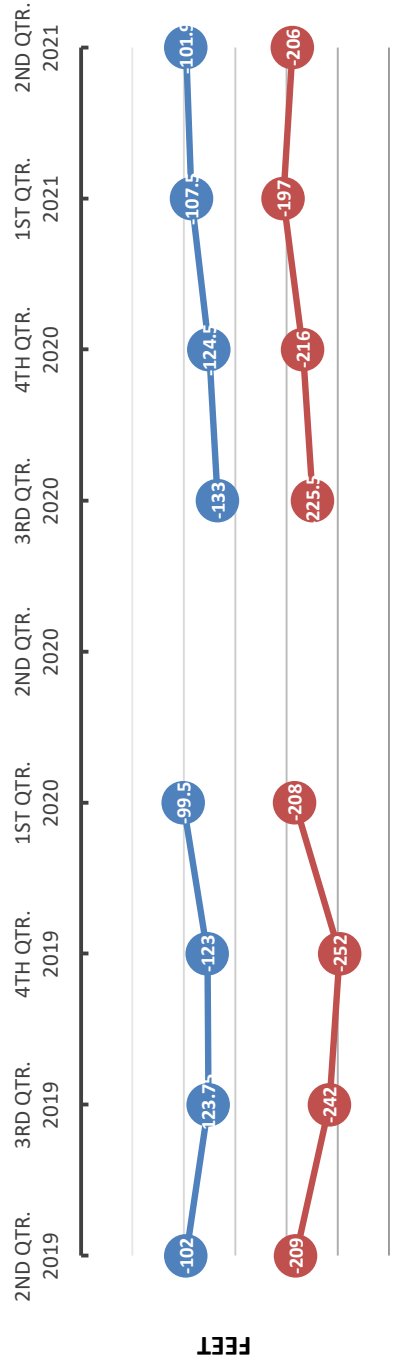
Well 11D Dino



Latest Well Sounding

Static: 101.9 Ft
 Pumping: 206 Ft
 Drawdown: 104.1 Ft
 GPM: 1,709
 Specific Capacity: 16.418

Sounding Quarter/Year



Latest Sand Tester Results:

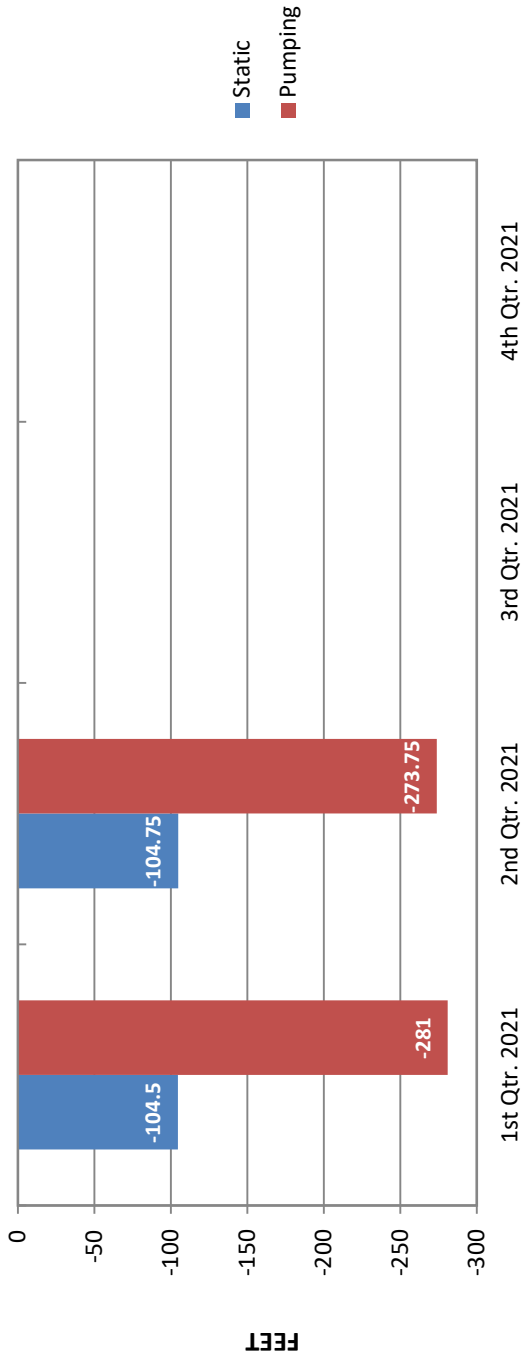
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

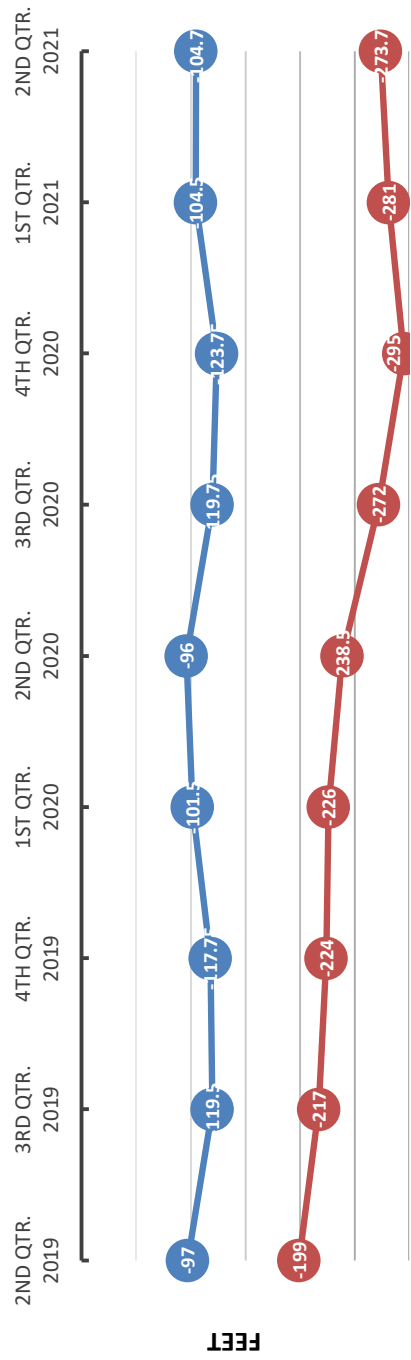
Well 14D Railroad



Latest Well Sounding

Static: 104.75 Ft
Pumping: 273.75 Ft
Drawdown: 169 Ft
GPM: 1,205
Specific Capacity: 7.130

Sounding Quarter/Year



Latest Sand Tester Results:

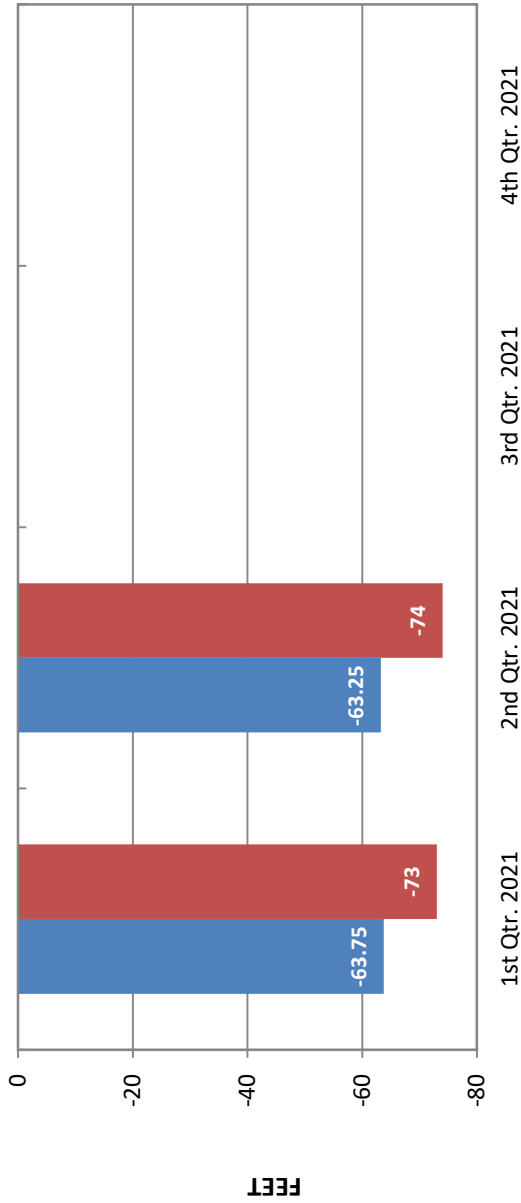
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

Well 8 Williamson

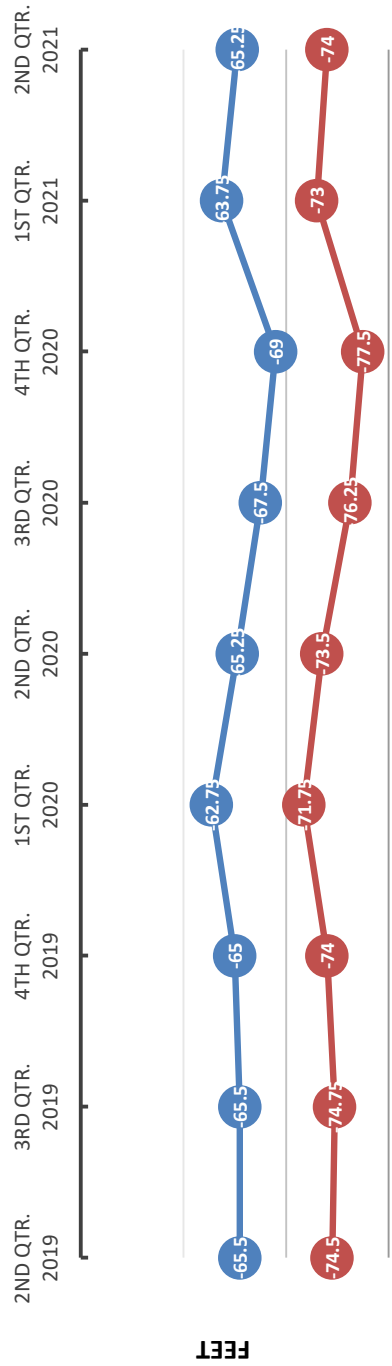


Latest Well Sounding

Static: 65.25 Ft
 Pumping: 74 Ft
 Drawdown: 8.75 Ft
 GPM: 544
 Specific Capacity: 62.227

■ Static
 ■ Pumping

Sounding Quarter/Year



Latest Sand Tester Results:

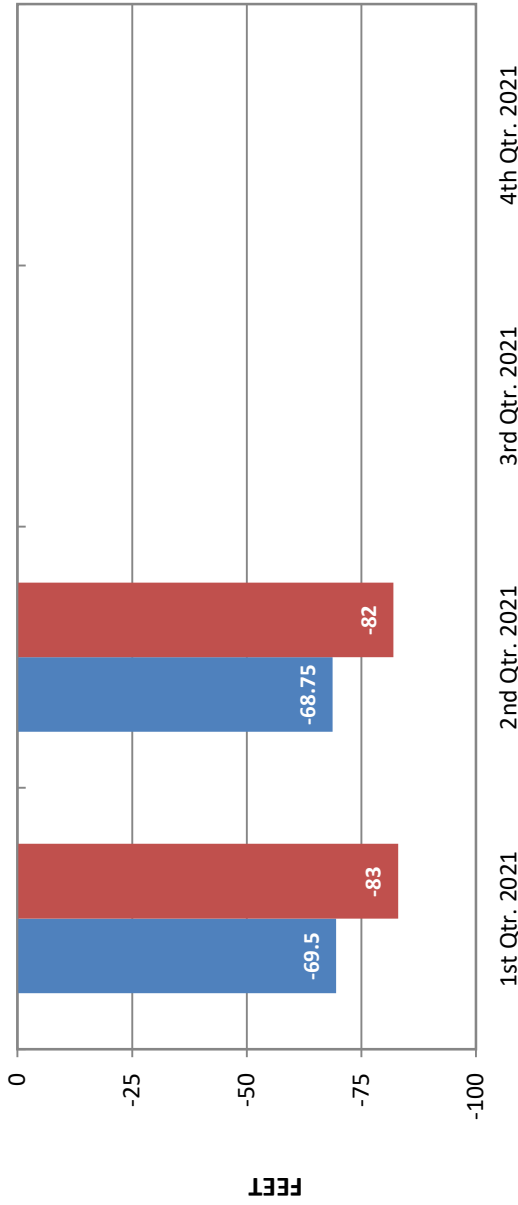
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

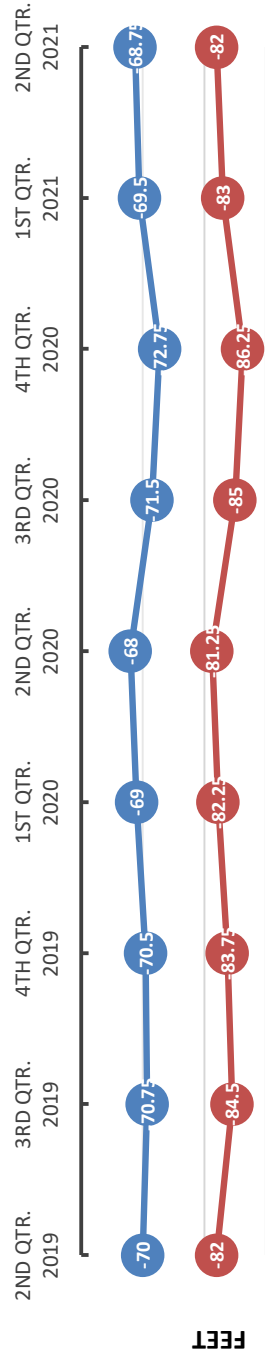
Well 9 Polhemus



Latest Well Sounding

Static: 68.75 Ft
Pumping: 82 Ft
Drawdown: 13.25 Ft
GPM: 497
Specific Capacity: 37.522

Sounding Quarter/Year



Latest Sand Tester Results:

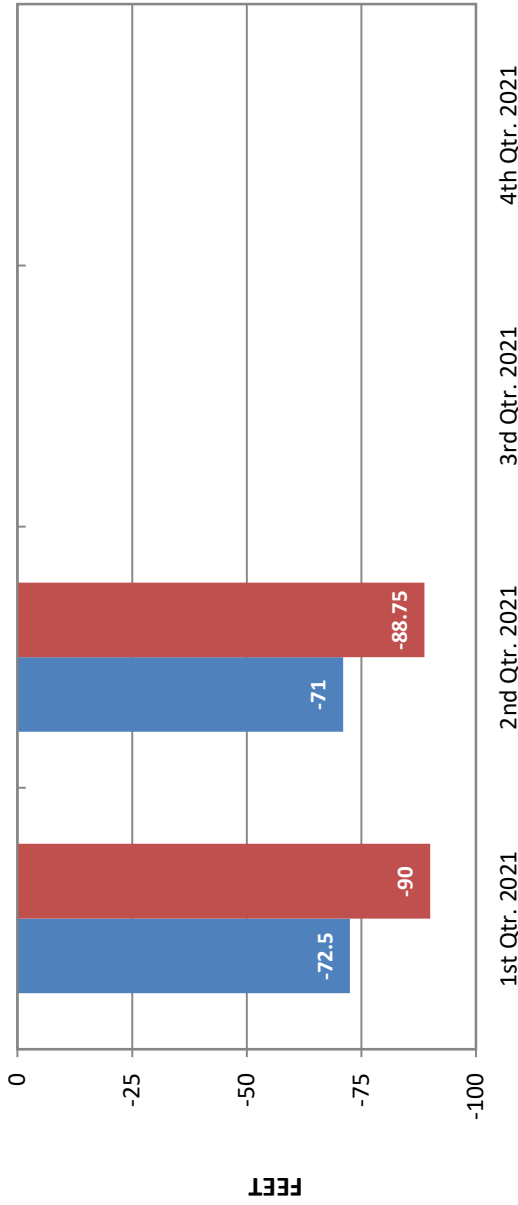
15 Min: < 5 ppm



Elk Grove Water District

Static and Pumping Levels

Well 13 Hampton

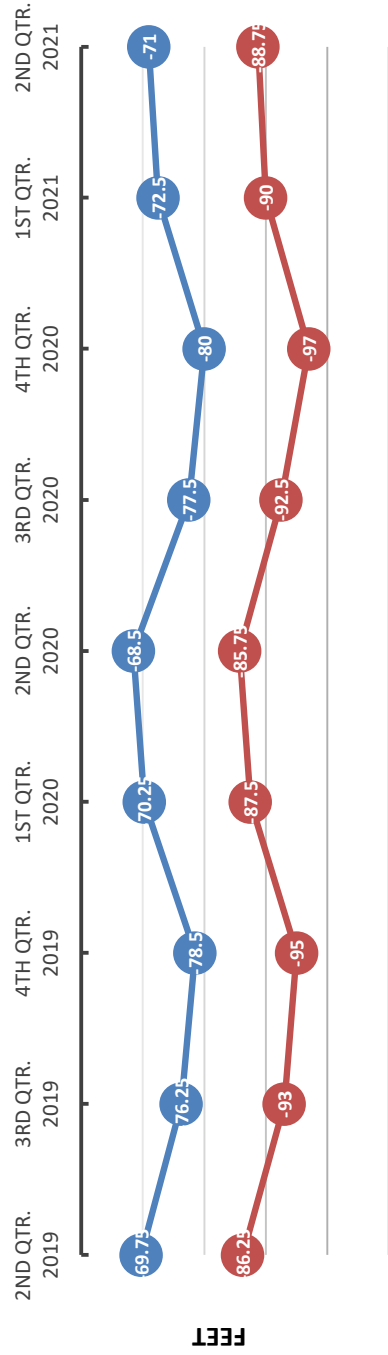


Latest Well Sounding

Static: 71 Ft
 Pumping: 88.75 Ft
 Drawdown: 17.75 Ft
 GPM: 957
 Specific Capacity: 53.915

■ Static
 ■ Pumping

Sounding Quarter/Year



Latest Sand Tester Results:

15 Min: < 5 ppm

Monthly Sample Report - May 2021
Water System: Elk Grove Water System

Sampling Point: 01 - 8693 W. Camden			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

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

Sampling Point: 02 - 9425 Emerald Vista			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: 03 - 8809 Valley Oak			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: Webb Well 04D - Raw Water			
Sample Date	Sample Class	Sample Name	Collection Occurrence
			Quarterly

Sampling Point: 04 - 10122 Glacier Point			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: 05 - 9230 Amsden Ct.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: 06 - 9227 Rancho Dr.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: 07 - Al Gates Park Mainline Dr.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

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

Sampling Point: 08 - 9436 Hollow Springs Wy.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

Sampling Point: Polhemus Well 9 Raw Water			
Sample Date	Sample Class	Sample Name	Collection Occurrence
			Quarterly

Sampling Point: 09 - 8417 Blackman Wy.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week
5/4/2021	Distribution System	Fluoride	Monthly

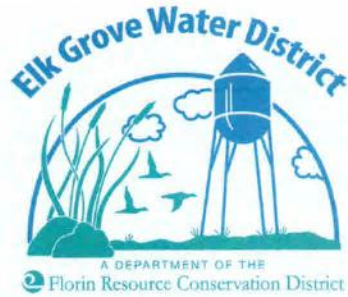
Sampling Point: 10 - 9373 Oreo Ranch Cir.			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/4/2021	Distribution System	Bacteriological	Week
5/11/2021	Distribution System	Bacteriological	Week
5/18/2021	Distribution System	Bacteriological	Week
5/25/2021	Distribution System	Bacteriological	Week

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

Sampling Point: Hampton Well 13 - Raw Water			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/3/2021	Source Water	Fe, Mn, As, Total	Weekly
5/10/2021	Source Water	Fe, Mn, As, Total	Weekly
5/18/2021	Source Water	Fe, Mn, As, Total	Weekly
5/24/2021	Source Water	Fe, Mn, As, Total	Weekly

Sampling Point: Hampton WTP Effluent			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/3/2021	Treated Effluent	Fe, Mn, As, Total	Weekly
5/10/2021	Treated Effluent	Fe, Mn, As, Total	Weekly
5/18/2021	Treated Effluent	Fe, Mn, As, Total	Weekly
5/24/2021	Treated Effluent	Fe, Mn, As, Total	Weekly
Sampling Point: Hampton WTP Backwash Tank			
Sample Date	Sample Class	Sample Name	Collection Occurrence
			Biannually
Sampling Point: Railroad Well 14D - Raw Water			
Sample Date	Sample Class	Sample Name	Collection Occurrence
			Quarterly
Sampling Point: Railroad WTP Effluent			
Sample Date	Sample Class	Sample Name	Collection Occurrence
5/3/2021	Treated Plant Effluent	WTP Eff - Fe,Mn,As,Al Total	Month
5/3/2021	Treated Plant Effluent	WTP Eff - Fe,Mn,As,Al Dissolved	Month
Sampling Point: Railroad WTP Backwash Tank			
Sample Date	Sample Class	Sample Name	Collection Occurrence
			Collection Occurrence
Sampling Point: Special Distribution/Construction Samples			
Sample Date	Sample Class	Sample Name	Collection Description
5/3/2021	Source	Fe,As,Mn,TDS	Well 14D PreRehab

Colors	Monthly Total	Yearly Total
Black = Scheduled	50	303
Green = Unscheduled	2	25
Red = Incomplete Sample	0	



June 3, 2021

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

WASTEWATER DISCHARGE COMPLIANCE REPORT FORM

Enclosed is the Wastewater Discharge Compliance Report Form from Elk Grove Water District for May 2021

If you have any further questions, you may contact me at 916-585-9386

A handwritten signature in blue ink, appearing to read "Steve Shaw", is written above the printed name.

STEVE SHAW
WATER TREATMENT SUPERVISOR

COMPLIANCE REPORT FORM

Attn: Michelle Pate	E-mail: patem@sacsewer.com	Wastewater Source Control Section
Phone (916) 875-9091		Fax (916) 875-6374
From: Steve Shaw		
Company: Elk Grove Water District		Permit # WTP010

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

Month:	May	Year:	2021
---------------	------------	--------------	-------------

Water use/flow meter report
 Hampton WTP- 1,060,331 Gallons
 Railroad WTP – 0 Gallons
 Analyzer Water –35,712 Gallons

	Date	Time	pH
Monitoring results/analytical report Hampton WTP			
Railroad WTP			

Discharge Rate

Check the statement below that applies to this report:

Based on a review of this facility's 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): Slug and sampling Control Plan

Domestic Calculation

Domestic Usage	Number of Employees	Business Days per Month	Allowance (gallons per day)	Gallons
Production	11	18	15	2,970
Office	4	18	10	720
Drivers/Field	3	18	3	162
Total				3,852

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 Water Treatment Supervisor
 (Name) (Title)

DATE:

6-3-2021



June 2, 2021

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 the Distribution System Coliform Monitoring report from Elk Grove Water District for May 2021.

If you have any further questions, you may contact me at 916-585-9386.

A handwritten signature in blue ink, appearing to read "Steve Shaw", is written above the printed name.

STEVE SHAW
WATER TREATMENT SUPERVISOR

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

System Name <p style="text-align: center; font-size: 1.2em;">Elk Grove Water District</p>	System Number <p style="text-align: center; font-size: 1.2em;">3410008</p>
Sampling Period <p style="text-align: center; font-size: 1.2em; color: blue;">May</p>	Year <p style="text-align: center; font-size: 1.2em;">2021</p>

	Number Required	Number Collected	Number Total Coliform Positives	Number E.coli Positives
1. Routine Samples (see note 1)	40	40	0	0
2. Repeat Samples following samples that are Total Coliform Positive and <i>E. coli</i> Negative (see notes 10 and 11)		0	0	0
3. Repeat Samples following Routine Samples that are Total Coliform Positive and <i>E. coli</i> Positive (see notes 10 and 11)		0	0	0
4. Treatment Technique (TT)/MCL Violation Computation for Total Coliform/ <i>E. coli</i> Positive Samples				
a. Totals (sum of columns)	40	40	0	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. Did the system trigger... a Level 2 Assessment TT? (see notes 2, 3, 4, 5 and 6 for trigger info) <i>If a Level 2 Assessment is triggered, see note 8 below.</i>			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
a Level 1 Assessment TT? (see note 7 for trigger info) <i>If a Level 1 Assessment is triggered, see note 9 below.</i>			<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Triggered Source Samples per Groundwater Rule (see notes 12 and 13)		0	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 <p style="text-align: center; font-size: 1.2em;">Water Treatment Supervisor</p>	Date <p style="text-align: center; font-size: 1.2em;">6/2/2021</p>
---------------	--	---

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 *E. coli* positive repeat (boxed entry) **constitutes an MCL violation and requires immediate notification to the Division** (22, CCR, Section 64426.1).
3. Note: For repeat sample following a *E. coli* positive sample, any total coliform positive repeat (boxed entry) **constitutes an MCL violation and requires immediate notification to the Division** (22, CCR, Section 64426.1).
4. Note: Failure to take all required repeat samples following an *E. coli* positive routine sample (22, CCR, Section 64426.1) **constitutes an MCL violation and requires immediate notification to the Division** (22, CCR, Section 64426.1).
5. Note: Failure to test for *E. coli* when any repeat sample tests positive for total coliform (22, CCR, Section 64426.1) **constitutes an MCL violation and requires immediate notification to the Division** (22, CCR, Section 64426.1).
6. Note: Second Level 1 treatment technique trigger in a rolling 12-month period.
7. Total coliform Treatment Technique (TT) Violation (**Notify Department within 24 hours of TT violation**):
 - a. For systems collecting less than 40 samples, if two or more samples are total coliform positive, then the TT is violated and a Level 1 Assessment is required.
 - b. For systems collecting 40 or more samples, if more than 5.0 percent of samples collected are total coliform positive, then the TT is violated and a Level 1 Assessment is required.
8. Contact the Division as soon as practical to arrange for the division to conduct a Level 2 Assessment of the water system. The water system shall complete a Level 2 Assessment and submit it to the Division within 30 days of learning of the trigger exceedance.
9. Conduct a Level 1 Assessment in accordance with as soon as practical that covers the minimum elements (22, CCR, Section 64426.8 (a), (2)). Submit the report to the Division within 30 days of learning of the trigger exceedance.
10. Positive results and their associated repeat samples are to be tracked on the Coliform Monitoring Worksheet.
11. 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. At least three samples shall be taken the month following a total coliform positive.
12. For systems subject to the Groundwater Rule: Positive results and the associated triggered source samples are to be tracked on the Coliform Monitoring Worksheet.
13. For triggered sample(s) required as a result of a total coliform routine positive sample, an *E. coli* positive triggered sample (boxed entry) **requires immediate notification to the Division, Tier 1 public notification, and corrective action.**



June 3, 2021

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

MONTHLY SUMMARY OF THE HAMPTON GROUNDWATER TREATMENT PLANT

Enclosed is the Monthly Summary of the Hampton GWTP report from Elk Grove Water District for May 2021.

If you have any further questions, you may contact me at 916-585-9386.

A handwritten signature in blue ink, appearing to read "Steve Shaw", is written above the name.

STEVE SHAW
WATER TREATMENT SUPERVISOR

Elk Grove Water District

Hampton GWTP Monthly Report

PWS Number 3410008-013

Hampton Water Treatment Plant

Month: May

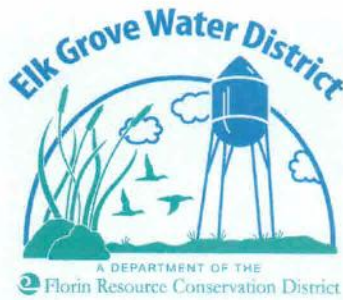
Date	Hour Meter	Run Hours	Production Meter	Well Production	Backwash Meter	Backwash Waste	Weekly In-House Monitoring (mg/L) R (Raw) T (Treated) As (ug/L)						Weekly Average		
last day	17969.7		67592095		21644572	25759714	Date	Fe, R	Fe, T	Mn, R	Mn, T	As, R	As, T	Inf. pH	Eff. pH
1	17969.7	0	67592095	0	21644572	25759714	5/3/2021	0.016	0.04	0.01	0.002	2	<2	Week 1: 7.0 to 7.4	
2	17969.7	0	67592095	0	21644572	25759714	5/10/2021	0.002	0.022	0.021	0.017	2	<2	Cl2	
3	17971	1.3	67662628	70533	21648158	25763145	5/18/2021	0.002	0.028	0.012	0	6	<2	Week 2: 7.0 to 7.1	0.89
4	17992.4	21.4	68877108	1214480	21677117	25797899	5/24/2021	0.001	0.013	0.018	0.001	7.5	<2	Cl2	
5	18017.1	24.7	70275326	1398218	21709599	25836337								Cl2	1.04
6	18040.7	23.6	71603711	1328385	21742011	25874045								Week 3: 7.0 to 7.1	
7	18064.6	23.9	72948657	1344946	21774467	25911708								Cl2	0.99
8	18087.6	23	74243876	1295219	21806821	25947399								Week 4: 7.0 to 7.0	
9	18112.2	24.6	75633576	1389700	21839298	25985913								Cl2	0.94
10	18136.1	23.9	76992774	1359198	21871646	26023025								Week 5: to	
11	18160	23.9	78354705	1361931	21904088	26059434								Cl2	
12	18185.2	25.2	79801238	1446533	21936513	26099594								Cl2	
13	18209	23.8	81162757	1361519	21968939	26136472								Cl2	
14	18234.1	25.1	82590978	1428221	22001364	26176246								Cl2	
15	18257.2	23.1	83906540	1315562	22032317	26211094								Cl2	
16	18281.1	23.9	85260819	1354279	22062611	26247926								Cl2	
17	18304.9	23.8	86611159	1350340	22091486	26284863								Cl2	
18	18329	24.1	87980144	1368985	22131028	26326397								Cl2	
19	18352.4	23.4	89318014	1337870	22158766	26362105								Cl2	
20	18377.1	24.7	90723833	1405819	22192213	26401269								Cl2	
21	18400.9	23.8	92079691	1355858	22221085	26438304								Cl2	
22	18424.7	23.8	93430722	1351031	22953503	26476019								Cl2	
23	18448.6	23.9	94780490	1349768	22282411	26513966								Cl2	
24	18472.1	23.5	96115738	1335248	22314813	26552550								Cl2	
25	18497.2	25.1	97538354	1422616	22347249	26591403								Cl2	
26	18520.6	23.4	98874707	1336353	22379762	26629902								Cl2	
27	18545.1	24.5	100262660	1387953	22412219	26668645								Cl2	
28	18569	23.9	101623298	1360638	22444629	26706534								Cl2	
29	18592.7	23.7	102968736	1345438	22476939	26744331								Cl2	
30	18616.9	24.2	104342541	1373805	22509282	26782603								Cl2	
31	18640.6	23.7	105694367	1351826	22541712	26820045								Cl2	
Total		670.9		38,102,272	897,140	1,060,331									

Total Gallons Sodium Hypochlorite: 351.15 Gal
Pounds per day 14.16 Lbs/Day
Dosage (Milligrams Per Liter @ 12.5% Cl) 1.8 mg/L
Total Gallons Ferric Chloride: 233.25 Gal
Dosage (Milligrams Per Liter @ 38% FeCl) .65mg/L
Total Gallons Sodium Hydroxide: 304.3 Gal
Dosage (Gallons Per Hour @ 30% NaOH) 0.48 Gal/Hr
Total Gallons Sulfuric Acid : 243.82 Gal
Dose (Gallons Per Hour @ 93% H2SO4) 0.33 Gal/Hr

Total Backwashed 897,140 Gal
Total Water Pumped 38,102,272 Gal
Total Run Hours 670.9 Hours
Total Backwash Waste 1,060,331 Gal

Reporting Limits/Units
Iron (Fe) = 0.100 mg/L
Manganese = 0.010 mg/L
Arsenic (As) = 1.0 µg/L
Maximum Contaminant Levels (MCLs)
Iron (Fe) = 0.300 mg/L (Secondary)
Manganese (Mn) = 0.050 mg/L (Secondary)
Arsenic (As) = 10 µg/L (Primary)

Prepared By: Steve Shaw Date: 6/3/2021



June 2, 2021

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

MONTHLY FLUORIDATION MONITORING REPORT

Enclosed is the Monthly Summary of the Fluoridation Monitoring from Elk Grove Water District for May 2021.

If you have any further questions, you may contact me at 916-585-9386.

A handwritten signature in blue ink, appearing to read "STEVE SHAW", is written over a horizontal line.

STEVE SHAW
WATER TREATMENT SUPERVISOR

ELK GROVE WATER DISTRICT AREA 2

DISTRIBUTION SYSTEM

MONTHLY FLUORIDATION MONITORING REPORT

May-21

Monitoring Results (mg/L)

Week	Location of Sample	Date	Time	Results
1	Hollow Springs	5/4/2021	10:12 AM	0.71
1	Al Gates Park	5/4/2021	10:40 AM	0.73
1	Oreo Ranch	5/4/2021	11:00 AM	0.64
1	Blackman	5/4/2021	12:05 PM	0.71
2	Hollow Springs	5/11/2021	9:55 AM	0.65
2	Al Gates Park	5/11/2021	10:13 AM	0.69
2	Oreo Ranch	5/11/2021	10:29 AM	0.62
2	Blackman	5/11/2021	11:37 PM	0.69
3	Hollow Springs	5/18/2021	8:49 AM	0.67
3	Al Gates Park	5/18/2021	9:04 AM	0.59
3	Oreo Ranch	5/18/2021	9:18 AM	0.62
3	Blackman	5/18/2021	11:32 PM	0.72
4	Hollow Springs	5/25/2021	9:10 AM	0.53
4	Al Gates Park	5/25/2021	9:36 AM	0.58
4	Oreo Ranch	5/25/2021	9:52 AM	0.72
4	Blackman	5/25/2021	11:06 AM	0.76
5	Hollow Springs			
5	Al Gates Park			
5	Oreo Ranch			
5	Blackman			

Monthly fluoride split sample results:

Date: 5/4/2021

Water System Results: 0.71 mg/L

Approved Lab: 0.67 mg/L

Contact Name: Steve Shaw

Telephone : (916) 585-9386

System PWS Number: 3410008

Elk Grove Water District

Preventative Maintenance Program

Groundwater Wells

		Monthly												Semi-annual			Annual		
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	1ST 6-MO.	2ND 6-MO.	Refer.	2021		
Well 14D Railroad	Initials	AH	AH	AH	AH	AH										Sect: 7.1			
	Date	1/6/21	2/26/21	3/4/21	4/8/21											Sect: 7.2			
	W.O.#	19344	19404	19459	19584	19664										Sect: 7.3			
Well 4D Webb	Initials	AH	AH	AH	BW	AH										Sect: 8.1			
	Date	1/14/21	2/22/21	3/2/21	4/7/21	5/11/21										Sect: 8.2			
	W.O.#	19345	19405	19460	19585	19665										Sect: 8.3			
Well 11D Dino	Initials	AH	AH	AH	AH	BW										Sect: 9.1			
	Date	1/13/21	2/22/21	3/2/21	4/6/21	5/7/21										Sect: 9.2			
	W.O.#	19346	19406	19461	19586	19666										Sect: 9.3			
Well 1D School	Initials	BW	AH	AH	AH	AH										Sect: 13.1			
	Date	1/4/21	2/24/21	3/4/21	4/7/21	5/20/21										Sect: 13.2			
	W.O.#	19347	19407	19462	19587	19667										Sect: 13.3			
Well 8 Williamson	Initials	BW	BW	AH	BW	BW										Sect: 11.1			
	Date	1/1/21	2/24/21	3/2/21	4/1/21	5/5/21										Sect: 11.4			
	W.O.#	19348	19408	19463	19588	19668										Sect: 11.4			
Well 9 Polhemus	Initials	BW	BW	AH	BW	BW										Sect: TBD			
	Date	1/1/21	2/24/21	3/2/21	4/9/21	5/5/21										Sect: TBD			
	W.O.#	19349	19409	19464	19589	19669										Sect: TBD			
Well 13 Hampton	Initials	AH	AH	AH	AH	AH										Sect: TBD			
	Date	1/18/21	2/25/21	3/8/21	4/8/21	5/13/21										Sect: TBD			
	W.O.#	19350	19410	19465	19590	19670										Sect: TBD			

█ = Well Rehab.

Year: 2021

Elk Grove Water District

Preventative Maintenance Program

Railroad Water Treatment and Storage Facility

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 th MO.	6 th MO.	Refer.	2021	
Clor-Tec System	Section: 4.2	AH 1/16/21 19351	BW 2/26/21 19395	AH 3/3/21 19452	AH/BW 4/15/21 19576	AH 5/24/21 19656								Section: 4.3	AH/BW 2/26/21 19399									Section: 4.4	
Filter System	Section: 5.1	AH 1/30/21 19352	AH 2/24/21 19396	AH 3/3/21 19453	AH 4/15/21 19577	AH/BW 5/6/21 19657								Section: 5.2	AH/BW 3/17/21 19466									Section: 5.3	
Backwash System	Section: 2.1	AH 1/30/21 19353	AH/BW 2/25/21 19397	AH/BW 3/4/21 19454	AH/BW 4/15/21 19578	AH 5/24/21 19658								Section: 2.2	AH 3/16/21 19498									Section: 2.3	
Booster Pumps	Section: 3.1	AH 1/30/21 19354	AH/BW 2/25/21 19398	AH/BW 3/4/21 19455	AH/BW 4/15/21 19579	AH/BW 5/26/21 19659								Section: TBD										Section: 3.2	
LAB														Section: 1.1	AH 3/22/21 19499									Section: 2.4	
Clear Wells																								Section: 1.2	
MCC																								Section: 1.2	

Year: 2021

Elk Grove Water District

Preventative Maintenance Program

Hampton Village Water Treatment Plant

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.	1 ST 6 TH MO.	2 ND 6 TH MO.	Refer.	2021	
Chemical Systems	Section: TBD	Initials AH Date 1/18/21 W.O. # 19355	Initials AH Date 2/25/21 W.O. # 19411	Initials AH Date 3/4/21 W.O. # 19456	Initials AH Date 4/8/21 W.O. # 19573	Initials AH Date 5/11/21 W.O. # 19653								Section: TBD	Initials AH/BW Date 3/9/21 W.O. # 19502					Section: TBD	Initials AH/BW Date 3/9/21 W.O. # 19502			
Filter System	Section: TBD	Initials AH Date 1/18/21 W.O. # 19356	Initials AH Date 2/25/21 W.O. # 19412	Initials AH Date 3/4/21 W.O. # 19457	Initials AH Date 4/8/21 W.O. # 19574	Initials AH Date 5/11/21 W.O. # 19654								Section: TBD	Initials AH Date 3/16/21 W.O. # 19502					Section: TBD	Initials AH Date 3/16/21 W.O. # 19502			
Backwash System	Section: TBD	Initials AH Date 1/18/21 W.O. # 19357	Initials AH Date 2/25/21 W.O. # 19413	Initials AH Date 3/4/21 W.O. # 19458	Initials AH Date 4/8/21 W.O. # 19575	Initials AH Date 5/11/21 W.O. # 19655								Section: TBD	Initials AH Date 3/16/21 W.O. # 19505					Section: TBD	Initials AH Date 3/16/21 W.O. # 19505			
LAB		Initials Date W.O. #												Section: TBD	Initials AH/BW Date 3/9/21 W.O. # 19503					Section: TBD	Initials AH/BW Date 3/9/21 W.O. # 19503			
MCC		Initials Date W.O. #												Section: TBD						Section: TBD				

Elk Grove Water District

Preventative Maintenance Program

Standby Generators

Item	Monthly												Annual		
	Refer.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Refer.	2021
Railroad	Initials Date W.O. #	Refer. Section: TBD	AH 1/31/21 19358	AH 2/26/21 19400	AH 3/4/21 19448	AH 4/19/21 19580	AH/BW 5/26/20 19660							Section: TBD	
Webb	Initials Date W.O. #	Refer. Section: TBD	AH 1/30/21 19359	AH 2/25/21 19401	AH 3/2/21 19449	AH 4/19/21 19581	BW 5/7/21 19661							Section: TBD	
Dino	Initials Date W.O. #	Refer. Section: TBD	AH 1/31/21 19360	AH 2/22/21 19402	AH 3/2/21 19450	AH 4/6/21 19582	AH 19662							Section: TBD	
Admin.	Initials Date W.O. #	Refer. Section: TBD	AH 1/31/21 19361	AH 2/25/21 19403	AH 3/4/21 19451	AH 4/28/21 19583	BW 5/27/21 19663							Section: TBD	
			= Load Test												

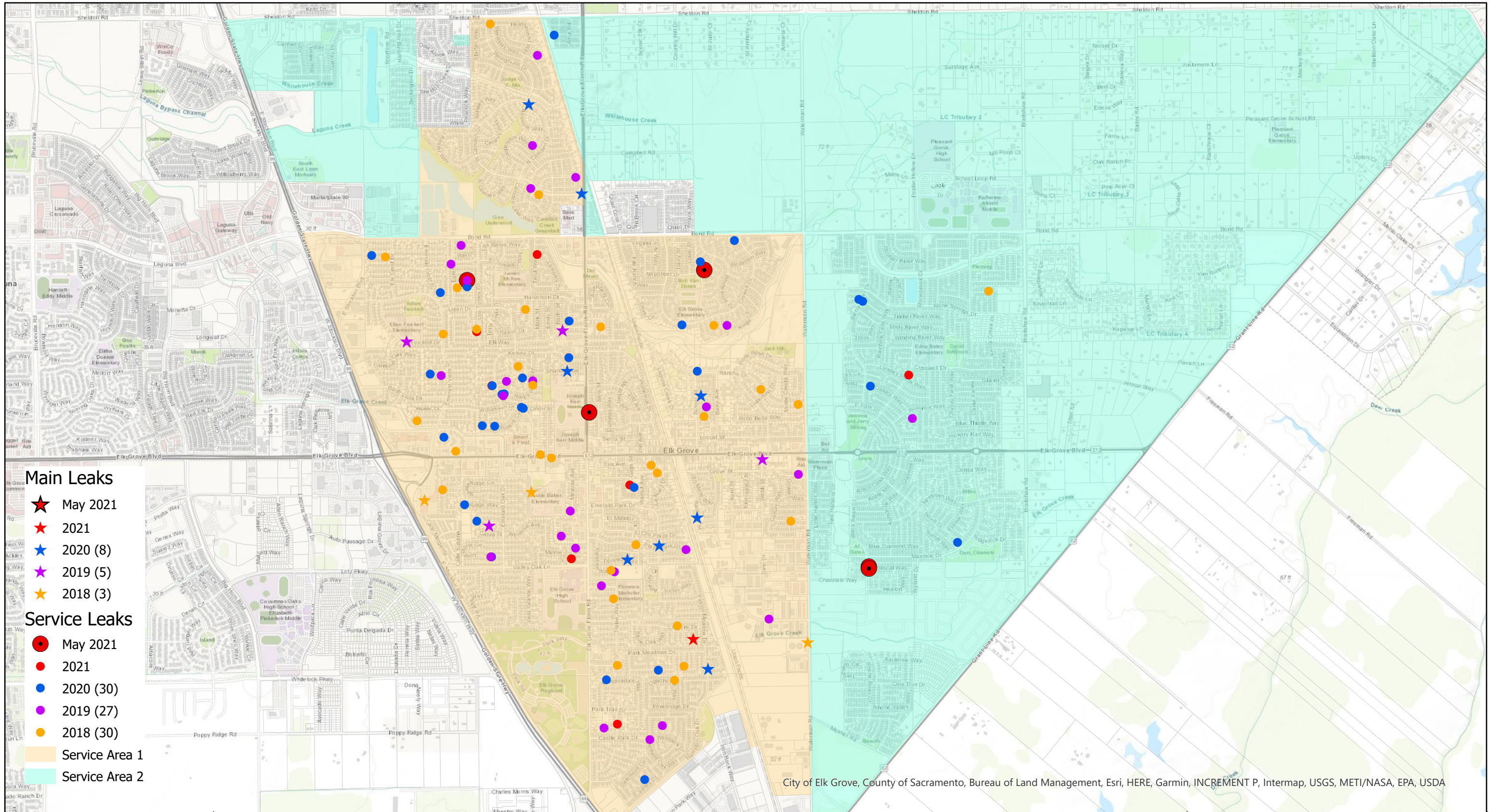
Elk Grove Water District

Cross Connection Control Program 2021

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Totals
First Test Notices Issued	47	40	83	21	61								252
Passed First Test Notice	25	14	69	12	26								146
Initial Balance	22	26	14	9	35								106
Notices Retracted	0	0	0	1	1								2
New Balance	22	26	14	8	34								104
Second Test Notices Issued	22	26	14	8	34								104
Passed Second Test Notice	3	12	7	0	5								27
Third Test Notice Issued	19	14	7	8									48
Passed Third Test Notice	17	14	7	7									45
Devices Locked Off	0	0	0	1									1
Monthly Outstanding Delinquents	0	0	0	1	29								30
													Total Outstanding Delinquents
													30

Elk Grove Water District
 Safety Meetings/Training
 May 2021

Date	Topic	Attendees	Hosted By
5/10/2021	Slips, Trips & Falls	Alan Aragon, Stefan Chanh, David Frederick, Sean Hinton, Aaron Hewitt, Brandon Kent, Justin Mello, Jose Mendoza, Sal Mendoza, Michael Montiel, Chris Phillips, Steve Shaw, John Vance, Brandon Wagner, Marcell Wilson	Sean Hinton & Steve Shaw
5/24/2021	Heat Illness	Alan Aragon, Stefan Chanh, David Frederick, Aaron Hewitt, James Hinegardner, Justin Mello, Sal Mendoza, Jose Mendoza, Michael Montiel, Chris Phillips, Steve Shaw, John Vance, Brandon Wagner	David Frederick & Steve Shaw



Main Leaks

- ★ May 2021
- ★ 2021
- ★ 2020 (8)
- ★ 2019 (5)
- ★ 2018 (3)

Service Leaks

- May 2021
- 2021
- 2020 (30)
- 2019 (27)
- 2018 (30)

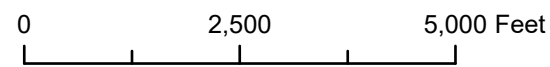
- Service Area 1
- Service Area 2

City of Elk Grove, County of Sacramento, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA

May 2021	
Main Line Leaks: 0	YTD: 1
Service Line Leaks: 5	YTD: 12
Total Leaks: 5	YTD: 13



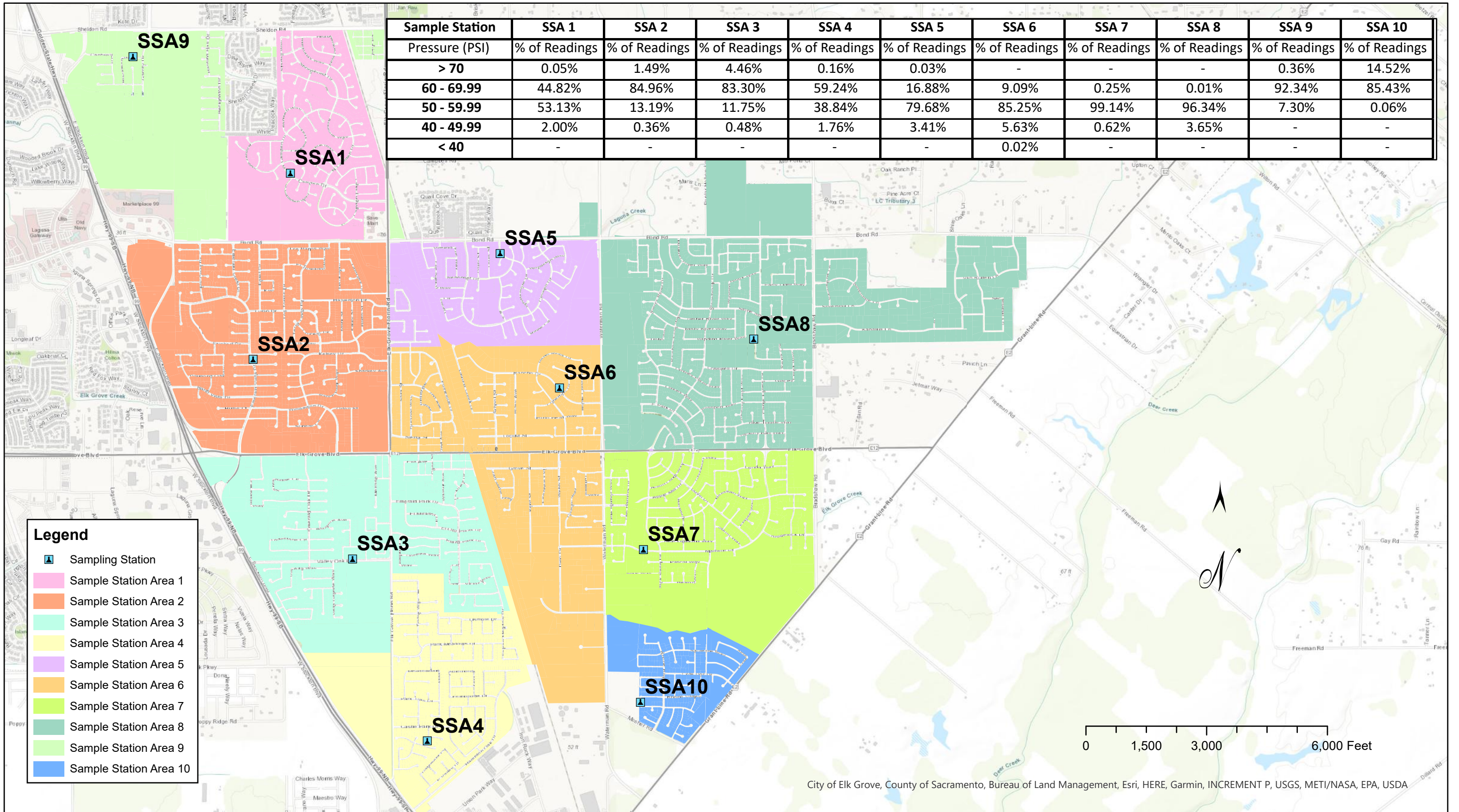
Elk Grove Water District Main and Service Line Leaks Map



Elk Grove Water District
Main & Service Line Leaks

Created by: Ben Voelz

Date: June 2, 2021



- Legend**
- Sampling Station
 - Sample Station Area 1
 - Sample Station Area 2
 - Sample Station Area 3
 - Sample Station Area 4
 - Sample Station Area 5
 - Sample Station Area 6
 - Sample Station Area 7
 - Sample Station Area 8
 - Sample Station Area 9
 - Sample Station Area 10

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: Ben Voelz

June 2, 2021