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

## Agenda

Wednesday, July 18, 2018

> 6:30 PM

## 9257 Elk Grove Blvd. <br> Elk Grove, CA 95624

Compliance with Government Code Section 54957.5
Public records, including writings related to an agenda item for an open session of a regular meeting of the Florin Resources Conservation District that are distributed less than 72 hours before the meeting, are available for public inspection during normal business hours at the Administration building of Elk Grove Water District, located at 9257 Elk Grove Blvd. Elk Grove, California. In addition, such writings may be posted, whenever possible, on the Elk Grove Water District website at www.egwd.org.

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

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

## CALL TO ORDER, ROLL CALL AND PLEDGE OF ALLEGIANCE

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

## 1. Proclamations and Announcements

## Associate Director Comment

Public Comment

2. Consent Calendar (Stefani Phillips, Secretary and Patrick Lee, Treasurer)
a. Minutes of Special Board Meeting of June 13, 2018
b. Minutes of Regular Board Meeting of June 20, 2018
c. FRCD Cash Flow Worksheet -June, 2018
d. Warrants Paid - June, 2018
e. Active Accounts - June, 2018
f. Bond Covenant Status for FY 2017-18 - June, 2018
g. Revenues and Expenses - Actual vs Budget FY 2017-18 - June, 2018
h. Cash Accounts - June, 2018
i. Consultants Expenses - June, 2018
j. Major Capital Improvement Projects - June, 2018

## Associate Director Comment

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

3. Committee Meetings (Stefani Phillips, Secretary)

Associate Director Comment
Public Comment
4. Elk Grove Water District Operations Report - June 2018
(Mark J. Madison, General Manager)
Associate Director Comment
Public Comment
5. Elk Grove Water District Fiscal Year 2017-18 Quarterly Operating Budget Status Report (Patrick Lee, Finance Manager/Treasurer)

Associate Director Comment
Public Comment
6. Elk Grove Water District Fiscal Year 2017-18 Quarterly Capital Reserve Status Report (Patrick Lee, Finance Manager/Treasurer)

Associate Director Comment
Public Comment
7. Elk Grove Water District Schedule of Charges, Rates, Fees and Deposits
(Patrick Lee, Finance Manager/Treasurer)
Associate Director Comment
Public Comment
Recommended Action: Adopt Ordinance 07.18.18.01, amending Ordinance No. 12.14.16.01, Exhibit A, in its entirety and revising the Elk Grove Water District's Schedule of Charges, Rates, Fees and Deposits.
8. Public Hearing and Consideration of the 2018 Water Rate Study and Adoption of New Water Service Rates and Private Fire Protection Service Rates (Patrick Lee, Finance Manager/Treasurer)

Associate Director Comment
Public Comment
Recommended Action: Adopt Ordinance 07.18.18.02, approving the 2018 Water Rate Study Report and adopt new water service rates and private fire protection service rates.
9. Outside Agency Meetings Report (Mark J. Madison, General Manager)

Associate Director Comment
Public Comment
10. Legislative Report (Sarah Jones, Program Manager)

Associate Director Comment
Public Comment

## 11. Directors Comments

Adjourn to Regular Meeting - August 15, 2018

July 18, 2018

TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District
FROM: Stefani Phillips, Board Secretary

## 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 $\mathrm{a}-\mathrm{j}$ are standing items on the Regular Board Meeting agenda.
By this action, the Board will approve Florin Resource Conservation District Consent Calendar items $\mathrm{a}-\mathrm{j}$.

## DISCUSSION

## Background

Consent Calendar items are standing items on the Regular Board Meeting agenda.
Present Situation
Consent Calendar items $\mathrm{a}-\mathrm{j}$ are standing items on the Regular Board Meeting agenda.

## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

Fiscal stability is in conformity with the District's Business Practice goals of the 2012-2017 Strategic Plan.

## CONSENT CALENDAR

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

## Wednesday, June 13, 2018

The special meeting of the Florin Resource Conservation District Board of Directors was called to order at 6:30 p.m. by Tom Nelson, Chairperson, at 9257 Elk Grove Blvd., Elk Grove, CA.

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

Directors Present:
Directors Absent:
Staff Present:

Bob Gray, Lisa Medina, Tom Nelson
Sophia Scherman, Jeanne Sabin
Mark J. Madison, General Manager; Bruce Kamilos, Assistant General Manager; Stefani Phillips, Board Secretary
Associate Directors Present: None present
General Counsel Present: None present
Consultants Present: None present

## Public Comment

No comments were made.

## 1. Closed Session

The Board of Directors voted unanimously to terminate the District's agreement with Meyers Nave' to serve as its General Counsel, effective July 1, 2018.

Adjourn to regular meeting on June 20, 2018 at 6:30 p.m.

Respectfully submitted,
Ostefani Dhillips
Stefani Phillips, Board Secretary
SP/AK

## minutes of the regular meeting of the florin resource CONSERVATION DISTRICT BOARD OF DIRECTORS

Wednesday, June 20, 2018
The regular meeting of the Florin Resource Conservation District Board of Directors was called to order at 6:30 p.m. by Tom Nelson, Chairperson, at 9257 Elk Grove Blvd., Elk Grove, CA.

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

| Directors Present: | Bob Gray, Lisa Medina, Tom Nelson <br> Directors Absent: |
| :--- | :--- |
| Sophia Scherman, Jeanne Sabin |  |
| Staff Present: | Mark Madison, General Manager; Bruce Kamilos, Assistant |
|  | General Manager; Stefani Phillips, Board Secretary; Patrick Lee, |
|  | Finance Manager; Donella Murillo, Finance Supervisor; and Sarah |
|  | Jones, Program Manager |
| Staff Absent: | None |
| Associate Directors Present: |  |
| Associate Directors Absent: | Ken Stromadhry |
| General Counsel Present: | Ren Nosky, Nosky Legal Group <br> Public Present: |
| Suzanne Pecci, Lynn Wheat |  |

## Public Comment

Suzanne Pecci, Sacramento Central Groundwater Authority's (SCGA) Agricultural-Residential representative commented she noticed the Elk Grove Water District (EGWD) is looking to contract with a new general counsel. She mentioned, with the rate study going on there should be a point made that the EGWD is a private corporation. Chairperson, Tom Nelson informed Ms. Pecci that the EGWD is not a private organization, that it is a subset of the Florin Resource Conservation District (FRCD), therefore making it a public agency. Mr. Madison followed, affirming that the EGWD is the FRCD, stating the District is a Resource Conservation District (RCD) formed under RCD laws. He mentioned that the EGWD is an enterprise of the FRCD, meaning it is a special function. There was much discussion on the topic.

Ms. Pecci submitted an article titled, "Ruling has environmentalists declaring victory over Stockton Water, Sewage".

Ratepayer, Lynn Wheat asked Mr. Madison to define enterprise. Mr. Madison responded that the EGWD is a function of the FRCD and runs the FRCD's activity of operating a water system, explaining that the money between the FRCD and EGWD is separate.

Ms. Pecci commented the accounts of the FRCD and EGWD were combined a couple months ago. Mr. Madison explained the decision made a few months ago to combine the FRCD and the EGWD only modified the activities of the FRCD to water related activities that benefit the EGWD ratepayers.

Mr. Madison advised Mr. Nelson that they not get into a debate on the subject because it is not an item on the agenda and are only accepting public comment at this time.

## 1. Proclamations and Announcements Nothing to report.

## 2. Closed Session

No reportable action was taken.
3. Professional Services Agreement For Interim General Counsel Services Between The Florin Resource Conservation District and Nosky Legal Group
Mr. Madison provided background on the subject, mentioning that on June 13, 2018, the FRCD Board of Directors (Board) terminated the professional services agreement between the FRCD and Meyers Nave for General Counsel Services. In summary, it is imperative that the FRCD retain General Counsel at all times and so it was recommended that the Board retain an attorney to provide legal services, primarily as the interim General Counsel for the FRCD. By this action, if approved, the FRCD Board would authorize the General Manager to execute a professional services agreement with the Nosky Legal Group to provide interim General Counsel legal services for a term of six months.

Mr. Gray stated, the rates quoted are competitive and he sees no reason to oppose; he thinks the agreement is good. Director Lisa Medina agreed with Vice-chair Gray's comments and believes the rates are reasonable. Mr. Nelson commented he agreed with the other board members and asked for comment from the associate directors.

Associate Director, Shahid Chaudhry stated, he believes it is a reasonable agreement. He questioned if the District used Nosky Legal Group in the past and parted ways, why the District was going back. Mr. Madison responded the Nosky Legal Group was used in the past as more of a guide for the District, helping assess and review proposals to find a law firm that would meet the criteria the FRCD was looking for. He mentioned the duration and scope of services provided from Nosky Legal Group at that time was limited.

Ms. Pecci asked what the new scope of services were for the Nosky Legal Group. Mr. Nelson responded that the scope is to provide legal services in many areas.

MSC (Gray/Medina) to authorize the General Manager to execute a Professional Services Agreement, between the Florin Resource Conservation District and Nosky Legal Group, for Interim General Counsel Services to be provided to the Florin Resource Conservation District and Elk Grove Water District. 3/0: Ayes: Gray, Medina, and Nelson.

## 4. Consent Calendar

a. Regular Board Meeting Minutes of May, 2018
b. FRCD Cash Flow Worksheet - May, 2018
c. Warrants Paid - May, 2018
d. Active Accounts - May, 2018
e. Bond Covenant Status - May, 2018
f. Revenues and Expenses - May, 2018
g. Cash Accounts - May, 2018
h. Consultants Expenses - May, 2018
i. Major Capital Improvement Projects - May, 2018

MSC (Medina/Gray) to approve FRCD Consent Calendar items a-i 3/0: Ayes: Gray, Medina, and Nelson.
5. Committee Meetings

Stefani Phillips, Board Secretary, presented the Committee Meetings to the Board. There were three (3) committee meetings held in the month of May. The Community Advisory Committee (CAC) and the Finance Committee (FC) held two (2) combined meetings on Wednesday, May 2, 2018 and May 23, 2018 to review the 2018-2022 Water Rate and Connection Fee Studies. On May 23, 2018, the FC met to review the Draft Fiscal Year 20182019 Elk Grove Water District Operating Budget.

MSC (Gray/Medina) to accept the minutes of the combined Community Advisory Committee and Finance Committee Meetings held on Wednesday, May 2, 2018 and May 23, 2018; and the Special Finance Committee Meeting held on Wednesday, May 23, 2018. 5/0: Ayes: Gray, Medina, Nelson, Sabin and Scherman.
6. Elk Grove Water District Operations Report - May 2018

Mr. Madison presented the Elk Grove Water District (EGWD) Operations Report - May 2018 to the Board.

Summary:

- Door tags and shutoffs ( 468 \& 67, respectively) remain a little higher than what is expected but not too much different than April.
- There were three pressure complaint, two were unsubstantiated but one was legitimate due to an operational problem with our shallow wells. This operational problem has now been corrected and we are also going to pilot test some new pressure monitoring equipment that may provide us with real time pressure date in our distribution system.
- There were five water quality complaints, two of which were unsubstantiated but three were legitimate. These three stemmed from an operational malfunction at the Hampton Water Treatment Plant which has now been corrected. Be advised that this was an aesthetic problem only and there was no significant impairment to water quality.
- 150 hydrants were checked. The District's hydrant maintenance target is set at 135 per month (ea. hydrant once per year).
- 159 valves were exercised. The District's valve exercising target is set at 120 per month (every valve once per 3 years).
- Wells 11D, 14D, 3, and 13 were the main sources of supply for Service Area 1.
- The refurbishment of Well 8 was completed and that well was placed back online at the end of the month.
- Production for Service Area 1 increased a lot compared to last month. 126 million gallons compared to 76 million gallons in April.
- Total customer usage for EGWD (SA1 and SA2) also rose by approximately 69 million gallons from April but remained down by 31.41\% compared to May 2013.
- The Static and Pumping Water level charts have the same $2^{\text {nd }}$ quarter date presented last month. The next set of measurements will occur in July.
- All required sampling was performed with no anomalies.
- All required regulatory reports were submitted on time and there were no excursions of any regulatory requirements.
- All preventative maintenance activities have been performed in compliance with our Standard Operating Procedures.
- Backflow prevention program. As of the end of February, we had 13 delinquent customers. All but one of these have been resolved as of this time.
- We had 3 formal safety meetings and it has been 854 days since we have had a lost time injury.
- Service Line Replacements - 21 service lines were replaced in May as our Utility crew now back working on that project. We hope to complete the Service Line Replacement project by November.
- There were 4 service line leaks in May. 3 were from pinholes and was an old saddle.
- Pressures in Service Area 1 remained stable in the 60 psi range. Pressures in Service Area 2 were also about the same.


## 7. Elk Grove Water District Fiscal Year 2019-23 Capital Improvement Program

Assistant General Manager, Bruce Kamilos presented the Fiscal Year (FY) 2019-23 Capital Improvement Program (CIP) to the Board. He provided a brief background, mentioning each
year staff and the Infrastructure Committee (IC) get together to thoroughly review each project in the CIP.

Mr. Kamilos highlighted the chlorine tank project has been eliminated from the CIP report and will reduce the CIP budget by $\$ 80,000$. He stated the CIP presented for approval is for $\$ 6.7$ million dollars in project costs over the next five (5) year window.

Mr. Kamilos mentioned that California Environmental Quality Act (CEQA) does not apply to the adoption of the CIP resolution. He stated that CEQA will be addressed on a project-byproject basis.

Mr. Gray mentioned it was the first time staff and the IC were able to agree on the CIP in one (1) meeting.

Mr. Madison complimented Bruce and his team for the development of the CIP and for maintaining cost control on the CIP.

Mr. Chaudhry asked if any of the projects are considered CEQA. Mr. Kamilos stated, by in large all the District's projects have categorical exemptions.

MSC (Nelson/Medina) to adopt Resolution No. 06.20.18.01, approving the Elk grove Water District Fiscal Year 2018-23 Capital Improvement Program and approving an appropriation of $\$ 1,314,000$ from designated reserve funds to the Fiscal Year 2018-19 Capital Improvement Program budget. 3/0: Ayes: Gray, Medina, and Nelson.

## 8. Elk Grove Water District Fiscal Year 2018-19 Operating Budget

Finance Manager, Patrick Lee presented the EGWD FY 2018-19 Operating Budget, providing background to the Board. In summary, the proposed EGWD FY 2018-19 Operating Budget reflects no revenue adjustment as recommended by the 2018 Water Rate Study. He mentioned the proposed EGWD FY 2018-19 Operating Budget contains revenues of approximately $\$ 14,821,253$ and projected expenditures of approximately $\$ 14,812,816$, including deposits into the Repair and Replacement and Long-Term Capital Improvement Reserves of approximately $\$ 1,445,400$. The projected revenues in excess of expenditures are approximately $\$ 8,436$, which will be added to operating reserves for future use.

Mr. Gray commented that it is a nice, balanced budget.
Mr. Madison stated the budget is based on an assumption that the rate study, which is pending based on the Proposition 218 protesting period, will stay essentially the same as when presented to the Board at the Regular FRCD Board Meeting on May 16, 2018. The budget will be based off the water rate adjustments in the study.

Mr. Madison complimented Mr. Lee for his work on the budget, which qualifies the District for a distinction award from the Government Finance Officers Association (GFOA).

MSC (Nelson/Medina) to adopt Resolution No. 06.20.18.02, approving the Elk Grove Water Districts Fiscal Year 2018-19 Operating Budget. 3/0: Ayes: Gray, Medina, and Nelson.

## 9. Investment Policy Guidelines Fiscal Year 2018-19

Mr. Lee presented the Investment Policy Guidelines for FY 2018-19. He explained which California Government Codes establish the investment policy guidelines. He also mentioned the guidelines have to be adopted every year.

Mr. Nelson mentioned the District may look at this policy later in the year.
Mr. Chaudhry asked if there were any changes made to the investment policy guidelines. Mr. Lee responded there were no changes, it was on the agenda as a formality to adopt the policy.

MSC (Medina/Nelson) to adopt Resolution No. 06.20.18.03, approving the Fiscal Year 201819 Investment Policy Guidelines of the Florin Resource Conservation District. 3/0: Ayes: Gray, Medina, and Nelson.
10. Revised Elk Grove Water District Reserve and Capital Investment Policy Mr. Lee presented the revised EGWD Reserve and Capital Investment Policy to the Board, explaining that it was las updated in August 2012. In summary, since 2012, staff have done financial analysis reviews on the reserve funds to insure financial stability. Due to the increase in elections, staff is proposing a revised reserve and capital investment policy specifically for the elections and special studies reserve fund. Currently the reserve fund is $\$ 120,000$ and the staff is recommending it be changed to $\$ 150,000$. The other five (5) reserve funds would remain unchanged.

Mr. Nelson clarified that the District will maintain \$150,000 each year, not add \$150,000 each year.

Mr. Gray suggested to consider an additional reserve bucket for a new administrative building. Mr. Nelson commented that would be a good discussion for a future board meeting.

Mr. Madison mentioned a goal of his is to have an expanded feasibility study on the administrative building. He mentioned that after there is a better understanding of what is needed and/or wanted, the Board can discuss an additional reserve bucket; part of the study would include how to appropriate funds and the use of funds and availability.

MSC (Gray/Medina) to adopt Resolution No. 06.20.18.04, approving a revised Elk Grove Water District Reserve and Capital Investment Policy. 3/0: Ayes: Gray, Medina, and Nelson.

## 11. Sacramento Central Groundwater Authority Proposed Budget Update

Mr. Madison presented the Sacramento Central Groundwater Authority (SCGA) proposed budget update to the Board. He started by providing the FRCD/EGWD's stance on past proposed SCGA budgets.

Mr. Madison mentioned the fundamental issue of the SCGA budget for FY 2018-19 is how the contributions have been calculated and assessed to the different parties. He explained he voted no at the last SCGA board meeting and that on May 13, 2018 he wrote a letter to Darrell Eck, Executive Officer of SCGA stating the concerns the District has. The four (4) basic problems the FRCD/EGWD has with the proposed budget are: 1. it is not equitable, 2. there is room for escapement, 3. the Zone 13 collections, and 4. the way the SCGA derives contributions are outside of the Joint Powers Agreement (JPA).

Ms. Medina asked if legal counsel looked into the agreement. Mr. Madison responded purportedly, yes. He mentioned SCGA's legal counsel verbally stated it was legal, but there was nothing in writing.

Mr. Madison mentioned that the first voting session resulted in a no, but there will be a revote at a special meeting dedicated to re-entertain the matter.

Ms. Medina asked if Mr. Madison has heard a response to the letter he sent to Mr. Eck. He mentions he has not heard back, but his requests were clear. He explained there are two (2) problems: 1 . The SCGA is dragging their feet on a rate study and 2 . Now the SCGA is not proposing adoption of new rate study for another 2 years.

Mr. Madison wants to make sure the District is not complicit so he recommends the FRCD only change its vote from no to yes on two (2) conditions: 1. Get clear reaffirmation from SCGA's legal that this does not violate JPA and 2. Get Board and staff to provide a firm commitment that they will move forward diligently on a rate study with intent to adopt before the start of the next fiscal year.

Ms. Medina asked if there has been a previous formal commitment from the Board to perform a rate study. Mr. Madison responded no.

Ms. Medina also asked how much the District is supposed to contribute. Mr. Madison responded, as of three (3) to four (4) years ago the contribution was $\$ 0$ due to an exemption of those who pumped less than 5,000 acre feet a year, which has now been waived. Now the District is being requested to pay $\$ 46,000$.

Ms. Medina asked if there is any way to determine how much of the contributions are for the Agriculture (Ag) sector from Zone 13. Mr. Madison responded that Zone 13 contributions collect $\$ 2.2$ million, with $\$ 120,000$ earmarked for the SCGA. In summary, the SCGA's budget is $\$ 860,000$. It is estimated that yearly, Ag pumps 60\%, Agriculture-Residential (Ag-Res) pumps $12 \%$, and urban contributors pump $28 \%$ of the groundwater pumped in the SCGA service area. If looking at Ag alone, even if the Zone 13 money only went towards Ag , it does not cover 60\% of the SCGA's budget. When looking at determining contributions based on how much water is pumped, Ag and Ag -Res are not paying their fair share.

Ms. Medina mentioned she wants the District to be protected. Discussion continued.
Ren Nosky, Nosky Legal Group provided clarity on the JPA, stating the budget itself only needs a majority vote including the five (5) signatories, but changes in the financial contributions of all the members needs a super majority. He mentioned, it seems that over time, some of the financial contributions in the SCGA budget that would otherwise require a super majority vote have been lumped into the budget to be passed with a majority vote.

Mr. Gray asked if there is a possibility of getting written commitment for the SCGA to perform a rate study and have it completed within one (1) year. Mr. Madison responded, it is not likely. There was much discussion on the topic.

Mr. Madison mentioned that Ag-Res also voted no. Ms. Pecci, the Ag-Res alternate board member, commented that she did not understand why Ag-Res voted no.

Mr. Madison asked if the Board would like him to change his vote from no to yes, and if so, should he add conditions with it. Ms. Medina mentioned she is hesitant to change the vote and does not understand why the SCGA will not answer the District's questions.

Mr. Chaudhry stated, all the factors Mr. Madison mentioned are very logical and reasonable. He mentioned that changing the vote from No to Yes without getting assurances from the SCGA is probably not a good idea, because the district would be giving up without getting anything in return; there should be give and take. He believes unless the District gets assurance in writing that a rate study will be done in the near future and a legal opinion in writing that they are in compliance with the JPA, the District should not change their vote.

Mr. Gray mentioned to change the vote to yes only if the SCGA gets a written legal opinion and they commit to complete a rate study by next year. He mentions that if not, the District will not pay next year. Mr. Madison commented that he likes Mr. Gray's idea because the District is telling the SCGA what they want to happen and if it does not happen, they do not get the District's money. In summary, this will be what Mr. Madison brings up at the SCGA Special Board Meeting.

## 12. Legislative Report

Program Manager, Sarah Jones presented the legislative report.
Mrs. Jones reported that water conservation bills AB 1668 and SB 606 were signed into law May 31, 2018. In summary, although the Regional Water Authority's (RWA) and the Association of California Water Agency's (ACWA) position was opposed unless amended, several key amendments were made late in the process that both agencies consider as a major improvement from the initial draft legislation.

Mrs. Jones also mentioned Proposition 68 was approved by voters. In summary, it will provide $\$ 1.6$ billion for water-related projects.

Mrs. Jones stated the proposed "water tax," language based on SB 623 that was included in the state's draft budget as a trailer bill was terminated in budget negotiations.

Other bills discussed include SB 998, which outlines a regulatory process for water shut-offs and $A B 3206$, which proposes regulations regarding meter accuracy testing by water agencies.

## 13. Directors Comments

Mr. Nelson thanked Ms. Phillips for the meeting minutes.
Adjourn to regular meeting on July 18, 2018 at 6:30 p.m.
Respectfully submitted,

## Ostefani Dhillips

Stefani Phillips, Board Secretary AK/SP


## FRCD Cash Flow

For the Month Ended June 30, 2018
Cash in Bank - Beginning ..... \$ 15,252.63
Grant Reimbursements: ..... \$ 5,587.24
Disbursements:
Check \# 1066-Card Services ..... -\$ 40.90
SLEWS-Materials
Check \# 1067-VOID ..... 0.00
Check \# 1068-EGUSD ..... -\$ 676.25SLEWS TransportationCheck \# 1069-EGWD-\$ 66.22Salary Allocation PM
Check \# 1070-VOID ..... 0.00Check \# 1071-EGUSD-\$237.10SLEWS Transportation
Cash in Bank - Ending ..... \$ 19,819.40

Clothing Reimbursement
Clothing Reimbursement
Temporary Trailer Rental－MOC
Bond Administration
Supplies－Treatment
Various Invoices－Sampling－Treatment
OPEB－2017－2018
Ethernet Service／Phones－MOC
Well 8 Pump Replacement
Account Closed－Customer Refund
Account Closed－Customer Refund
Contracted Services，Parking，Needs Assessment
Safety，Parking，Meals
Suplies，Parking \＆Employee Appreciation
Clothing Reimbursement
Fiber Optic Cable
Materials \＆Supplies－Distribution
HR Services
Replacement Desktop Computers（5）
Various Invoices－Sampling－Treatment Closed－Customer Refund
Supplies－Treatment
Pemporary Customer Service Help
Advertising－Associate Board of Directors
Clothing Reimbursement
Daily Tass／Help Tickets Well \＃9
Programm













ZOOM IMAGING SOLUTIONS, INC






| JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11,787 | 11,811 | 11,786 | 11,812 | 11,789 | 11,784 | 11,806 | 11,780 | 11,793 | 11,794 | 11,805 | 11,799 |
| 527 | 526 | 527 | 527 | 527 | 527 | 530 | 530 | 528 | 529 | 531 | 531 |
| 175 | 175 | 177 | 178 | 177 | 177 | 177 | 177 | 177 | 178 | 178 | 177 |
| 12,489 | 12,512 | 12,490 | 12,517 | 12,493 | 12,488 | 12,513 | 12,487 | 12,498 | 12,501 | 12,514 | 12,507 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| JULY | AUG | SEPT | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUNE |
| 11,670 | 11,674 | 11,671 | 11,800 | 11,784 | 11,779 | 11,780 | 11,782 | 11,792 | 11,801 | 11,805 | 11,803 |
| 520 | 521 | 523 | 525 | 524 | 525 | 524 | 526 | 528 | 524 | 525 | 528 |
| 174 | 174 | 175 | 175 | 175 | 175 | 175 | 175 | 176 | 175 | 175 | 175 |
| 12,364 | 12,369 | 12,369 | 12,500 | 12,483 | 12,479 | 12,479 | 12,483 | 12,496 | 12,500 | 12,505 | 12,506 |

Elk Grove Water District Active Account Information 6/30/2018
Water Accounts:
Metered Residential
Commercial Fire Service Total Accounts
Elk Grove Water District Active Account Information
FY 2016/2017
Water Accounts:
Metered
Residential Commercial
Total Accounts

# Elk Grove Water District Bond Covenant Status For Fiscal Year 2017-18 <br> As of June 30, 2018 <br> Adjusted for Prepayments 

Operating Revenues:Charges for Services\$ 14,734,710
Operating Expenses:
Salaries \& Benefits (2)3,972,961
Seminars, Conventions and Travel ..... 28,503
Office \& Operational ..... 931,703
Purchased Water ..... 2,918,805
Outside Services ..... 915,995
Equipment Rent, Taxes, an Utilities ..... 373,319
Total Operating Expenses ..... 9,141,286
Net Operating Income

| \$ $5,593,424$ |
| :--- |

Annual Interest \& Principal Payments\$3,823,349\$ 3,823,349
Debt Service Coverage Ratio, YTD Only: ..... 1.46
Required ..... 1.15
(1)
Notes:

1. Reflects budget divided by number of months year to date. However, first Principal/Interest Payments made in September. Projected Annual Budget Coverage Ratio is1.40
2. Reflects only YTD due to CalPERS, not entire prepayment for year.

Elk Grove Water District
Year to Date Revenues and Expenses Compared to Budget
As of June 30, 2018

|  | General Ledger Reference | YTD Activity |  | Annual Budget |  | 12/12=100.00\% |  | \% <br> Realized |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | ariance |  |
| Revenues | 4100-4900 | \$ | 14,734,710 |  |  | \$ | 14,294,096 | \$ | 440,613 | 103.08\% |
| Salaries \& Benefits (4) | 5100-5280 |  | 4,165,172 |  | 4,109,177 |  | 55,995 | 101.36\% |
| less Capitalized Labor |  |  | $(192,211)$ |  | $(560,829)$ |  | 368,618 | 34.27\% |
| Adjusted Salaries and Benefits: |  | \$ | 3,972,961 | \$ | 3,548,348 | \$ | 424,613 | 111.97\% |
| Seminars, Conventions and Travel | 5300-5350 |  | 28,503 |  | 50,500 |  | $(21,997)$ | 56.44\% |
| Office \& Operational | 5410-5494 |  | 931,703 |  | 984,881 |  | $(53,177)$ | 94.60\% |
| Purchased Water est. (3) | 5495-5495 |  | 2,918,805 |  | 3,010,765 |  | $(91,961)$ | 96.95\% |
| Outside Services | 5505-5580 |  | 915,995 |  | 941,110 |  | $(25,115)$ | 97.33\% |
| Equipment Rent, Taxes, Utilities | 5620-5760 |  | 373,319 |  | 409,000 |  | $(35,681)$ | 91.28\% |
| Total Operational Expenses |  | \$ | 9,141,286 | \$ | 8,944,604 | \$ | 196,682 | 102.20\% |
| Net Operating Inome |  | \$ | 5,593,424 | \$ | 5,349,492 | \$ | 243,931 | 104.56\% |
| Non-Operating Revenues |  |  |  |  |  |  |  |  |
| Interest Received | 9910-9910 |  | 102,474 |  | 110,000 |  | $(7,526)$ | 93.16\% |
| Unrealized Gains/Losses | 9911-9911 |  | $(81,648)$ |  | - |  | $(81,648)$ | - |
| Other Income/Expense | 9920-9973 |  | $(87,189)$ |  | 14,900 |  | $(102,089)$ | -585.16\% |
| Total Non-Operating Revenues |  | \$ | $(66,363)$ | \$ | 124,900 | \$ | $(191,263)$ | -53.13\% |
| Capital Expenses (2): |  |  |  |  |  |  |  |  |
| Capital Improvements |  |  | 805,562 |  | 980,000 |  | $(174,438)$ | 82.20\% |
| Capital Replacements |  |  | 463,368 |  | 630,185 |  | $(166,817)$ | 73.53\% |
| Equipment | 1705-1760 |  | 83,969 |  | 100,000 |  | $(16,031)$ | 83.97\% |
| Unforeseen Capital Projects |  |  | - |  | 45,815 |  | $(45,815)$ | 0.00\% |
| Capital Expenses: |  | \$ | 1,352,900 | \$ | 1,756,000 | \$ | $(403,100)$ | 77.04\% |
| Bond Interest Accrued | 7300-7300 |  | 1,833,349 |  | 1,833,349 |  | - | 100.00\% |
| Total Non Operating Expenses |  | \$ | 3,186,249 | \$ | 3,589,349 | \$ | $(403,100)$ | 88.77\% |
| Revenues in Excess of All Expenditures, including Capital |  | \$ | 2,340,812 | \$ | 1,885,043 | \$ | 455,769 | 124.18\% |
| Bond Retirement (1): |  | \$ | 1,990,000 | \$ | 1,990,000 | \$ | - | 100.00\% |
| Net Position after Capital and Debt Retirement Expenditures |  | \$ | 350,812 | \$ | $(104,957)$ | \$ | 455,769 |  |

Notes:

1. Bond retirement payments are made two times a year in September and March
2. YTD Activity includes $\$ 192,211$ in capitalized labor charged to capital projects
3. There is a lag in water billings from the Sacramento Water District. Included above is an estimate of costs to date based on water used.
4. Total salaries expense includes $\$ 537,500$ in pension expense related to GASB 68. Actual contributions of $\$ 317,812$ was deferred and will offset net pension liability in subsequent years
G/L Account Fund

|  |  |  | Account number/name | Investment Name | Investment Type |  |  |  | Restrictions |  | Market Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G/L Account Fund HELD BY BOND TRUSTEE: |  |  |  |  |  |  |  |  |  |  |  |
| 1110-000-20 | Water |  | BNY 892744 FRCD 2014A DEBT SERVICE | Dreyfus Inst Treasury | MM Mutual Fund |  |  |  | Restricted |  | 0.00 |
| 1112-000-20 |  |  | BNY 743850 FRCD 2016A DEBT SERVICE | Dreyfus Inst Treasury | MM Mutual Fund |  |  |  | Restricted |  | 0.00 |
|  |  |  |  |  |  |  |  |  | Subtotal | \$ | - |
| 1001-000-20 | Water |  | Cash on Hand |  |  |  |  |  | Unrestricted | \$ | 300.00 |
| HELD BY F\&M BANK: |  |  |  |  |  |  |  |  |  |  |  |
| 1011-000-10 | FRCD |  | F\&M 08-032009-01 CHECKING ACCOUNT |  |  |  |  |  | Unrestricted |  | 20,231.98 |
| 1011-000-20 | Water |  | F\&M 08-032017-01 OPERATING ACCOUNT |  |  |  |  |  | Unrestricted |  | 1,495,922.88 |
| 1084-000-20 | Water |  | F\&M 08-03201702-31 MONEY MARKET |  |  | 1.41\% |  |  | Unrestricted |  | 2,000,000.00 |
| 1031-000-20 | Water |  | F\&M 08-032912-01 CREDIT CARD ACCOUNT |  |  |  |  |  | Unrestricted |  | 890,605.67 |
| 1061-000-20 | Water |  | F\&M 08-032890-01 PAYROLL ACCOUNT |  |  |  |  |  | Unrestricted |  | 96,358.71 |
| 1071-000-20 | Water |  | F\&M 08-032920-01 DRAFTS ACCOUNT |  |  |  |  |  |  |  | 190,347.36 |
|  |  |  |  |  |  |  |  | Subtotal |  | \$ | 4,693,466.60 |
| INVESTMENTS |  |  |  |  |  |  |  |  |  |  |  |
| 1080-000-20 | Water |  | Office of the Treasurer - Sacramento California | LAIF | Investment Pool | 1.41\% |  |  | Unrestricted | \$ | 508,443.11 |
| 1081-000-20 | Water |  | CALTrust Medium Term |  | Investment | 1.45\% |  |  | Unrestricted | \$ | 1,276,260.34 |
| 1082-000-20 | Water |  |  |  |  |  |  |  |  |  |  |
|  | PURCHASE DATE | CUSIP | ISSUED BY | CALL DATE | MATURITY DATE | \% of Porffolio | Current Yield |  | COST BASIS |  | ARKET VALUE |
|  | 9/30/2016 | N/A | Union Bank of California | N/A | N/A | 1.89\% | 0.30\% | \$ | 151,097.32 | S | 151,097.32 |
|  | 6/14/2016 | 3130A8AZ6 | Federal Home Loan Bank (FHLB) | 6/14/17 - one time | 12/14/2018 | 6.230\% | 1.160\% | \$ | 500,745.00 | - | 497,755.00 |
|  | 6/28/2016 | $3134 \mathrm{G9VN} 4$ | Federal Home Loan Mortgage Corp. (FHLMC) | 9/28/16 - qrily | 6/28/2019 | 12.470\% | 1.510\% | \$ | 1,000,000.00 |  | 994,820.00 |
|  | 6/30/2016 | 3136G3SR7 | Federal National Mortgage Association (FNMA) | 12/30/16-qrtly | 12/30/2019 | 12.320\% | 1.400\% | \$ | 1,000,000.00 |  | 983,740.00 |
|  | 9/30/2016 | 3136G4DB6 | Federal National Mortgage Association (FNMA) | 3/30/17-qrtly | 3/30/2020 | 12.250\% | 1.280\% | \$ | 1,000,000.00 |  | 977,960.00 |
|  | 6/9/2016 | 3133EGCP8 | Federal Farm Credit Banks (FFCB) | 9/1/16 - cont. | 12/1/2020 | 12.210\% | 1.670\% | \$ | 1,000,000.00 |  | 974,520.00 |
|  | 6/16/2016 | 3136G3PY5 | Federal National Mortgage Association (FNMA) | 12/16/16 - qrity | 12/16/2020 | 12.210\% | 1.590\% | \$ | 1,000,000.00 |  | 975,000.00 |
|  | 11/1/2017 | 3133EHM34 | Federal Farm Credit Bank Bonds(FFCB) | 11/01/22 - cont. | 11/1/2022 | 12.17\% | 2.300\% | \$ | 1,000,000.00 |  | 971,600.00 |
|  | 9/30/2016 | 3136 G 4 CY 7 | Federal National Mortgage Association (FNMA) | 3/30/17-qrtly | 9/30/2021 | 6.00\% | 1.560\% | \$ | 500,000.00 |  | 479,360.00 |
|  | 11/2/2016 | $3130 A 9 R Z 6$ | Federal Home Loan Bank (FHLB) | 4/28/17- qrily | 10/28/2021 | 12.25\% | 1.020\% |  | 1,000,000.00 |  | 977,760.00 |
|  |  |  |  |  |  |  |  | \$ | 8,151,842.32 | \$ | 7,983,612.32 |
|  | $\begin{aligned} & \text { YTM = Yield to Maturity } \\ & \text { qtrly = quarterly } \\ & \text { cont. }=\text { continuous } \end{aligned}$ |  |  |  |  |  |  | Total |  | \$ 14,462,082.37 |  |
|  |  |  |  |  |  |  |  |  |  | \$ |  |
|  |  |  |  |  |  |  |  |  | al Unrestricted | \$ | 08237 |

Consultant Expenses
June 30, 2018
June 30, 2018

| Consultant | Description | Current Month | Paid to date | Budget/Contract Amount | Percent of year (92\%) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Meyers Nave Professional Law Corp | Task orders | \$ 8,586 | \$ 205,834 | \$ 205,000 | 100.41\% |
| Solutions by BG, Inc. | Task orders | \$ 17,820 | \$ 140,615 | \$ 127,920 | 109.92\% |
| Infinite IT Solutions Inc. | Task orders | \$ 12,320 | \$ 44,995 | \$ 250,000 | 18.00\% |
| Major Contracts |  |  |  |  |  |
| Consultant | Description | Current Month | Paid to date | Budget/Contract Amount | Percent of Contract |
| Eaton Pumps Sales \& Service | Well 1D Rehab | \$ | \$ 87,718 | \$ 86,968 | 100.86\% |
| HDR Engineering, Inc. | Water Rate Study | \$ 23,175 | \$ 76,545 | \$ 77,370 | 98.93\% |
| Norwood Construction Services | Meeting \& I.T. BLDG | \$ | \$ 558,497 | \$ 558,498 | 100.00\% |

Elk Grove Water District
Major Capital Improvement Projec Budget vs Actual
June 30, 2018

| Capital Project | Total Project Budget |  | ```Total Project Exp to Date``` |  | Percent Spent | Capitalized Labor |  | Fund Type | Project Type | 2017-18 Budget |  | Jun <br> Project Exp |  | Total YTD <br> (1) |  | YTD \% Spent |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Radio Antennas | \$ | 80,000 | \$ | 9,529 | 11.91\% | \$ | 2,033 | CIP | Treatment | \$ | 80,000 | \$ | 3,595 | \$ | 9,529 | 11.91\% |
| Well 8 Pump Replacement |  | 100,000 |  | 94,838 | 94.84\% |  | - | CIP | Treatment |  | 100,000 |  | 9,495 |  | 94,838 | 94.84\% |
| RRWTF Modular Meeting Room/IT Center |  | 591,568 |  | 645,395 | 109.10\% |  | 810 | CIP | Building and Site |  | 550,000 |  | - |  | 603,827 | 109.79\% |
| Fiber Optic Cable |  | 135,000 |  | 136,165 | 100.86\% |  | 645 | CIP | Building and Site |  | - |  | 14,755 |  | 17,521 | \#DIV/0! (2) |
| Service Line Replacements |  | 500,000 |  | 436,265 | 87.25\% |  | 58,261 | CIP | Supply/Distribution |  | 250,000 |  | 29,054 |  | 76,601 | 30.64\% |
| Well 1D Pump Replacement |  | 64,000 |  | 38,280 | 59.81\% |  | - | CIP | Supply/Distribution |  | - |  | - |  | 3,248 | \#DIV/0! (2) |
| Truck Replacements |  | 100,000 |  | 83,969 | 83.97\% |  | - | CIP | Building and Site |  | 100,000 |  | - |  | 83,969 | 83.97\% |
| Backyard Water Mains/Service Replacement |  | 138,000 |  | - | 0.00\% |  | - | R\&R | Supply/Distribution |  | 138,000 |  | - |  | - | 0.00\% |
| Well Rehabilitation (One Year) |  | 93,000 |  | 97,914 | 105.28\% |  | - | R\&R | Supply/Distribution |  | 93,000 |  | - |  | 97,914 | 105.28\% |
| Kent Street Water Main |  | 280,000 |  | 239,568 | 85.56\% |  | 87,032 | R\&R | Supply/Distribution |  | 280,000 |  | 189 |  | 239,568 | 85.56\% |
| Emerald Vista Water Main Relocations |  | - |  | 28,271 | \#DIV/0! |  | 15,720 | R\&R | Supply/Distribution |  | 28,271 |  | - |  | 28,271 | 100.00\% (3) |
| Camden Water Main Relocations |  | - |  | 25,914 | \#DIV/0! |  | 18,623 | R\&R | Supply/Distribution |  | 25,914 |  | - |  | 25,914 | 100.00\% (3) |
| Media Replacement Filter Vessels |  | 100,000 |  | 122,031 | 122.03\% |  | 9,088 | R\&R | Treatment |  | 50,000 |  | - |  | 66,887 | 133.77\% |
| Well 9 Fence Replacement |  | 15,000 |  | 4,814 | 32.09\% |  | - | R\&R | Building and Site |  | 15,000 |  | - |  | 4,814 | 32.09\% |
| Unforeseen Capital Projects |  | 100,000 |  | - | 0.00\% |  | - | - |  |  | 45,815 |  | - |  | - | 0.00\% (3) |
| Sub-Total | \$ | 2,296,568 | \$ | 1,962,952 | 85.47\% | \$ | 192,211 |  |  | \$ | 1,756,000 | \$ | 57,088 | \$ | 1,352,900 | 77.04\% |

[^0]July 18, 2018

TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District
FROM: Stefani Phillips, Board Secretary

## SUBJECT: COMMITTEE MEETINGS

## RECOMMENDATION

No action by the Florin Resource Conservation District Board of Directors is required at this time.

## SUMMARY

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

## DISCUSSION

## Background

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

## Present Situation

No committee meetings were held in the month of June.

## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

This item is in keeping with the District's Business Practice goals of the 2012-2017 Strategic Plan.

## COMMITTEE MEETINGS

Page 2

## FINANCIAL SUMMARY

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

Respectfully Submitted,

AGENDA ITEM No. 3

# SUBJECT: ELK GROVE WATER DISTRICT OPERATIONS REPORT - JUNE 2018 

## 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 June. Other notable events are described below.

## DISCUSSION

## Background

Every month, staff presents an update of the activities related to the operations of the District. Included for the Board's review is the EGWD's June 2018 Operations Report.

## Present Situation

The EGWD June 2018 Operations Report highlights are as follows:

- Operations Activities Summary - Notable items in the activities summary are that the District hung 450 door hangers for past due balances which resulted in 46 shutoffs. There were 3 water pressure complaints and 4 water quality complaints. One of the water quality complaints was validated. Staff identified and corrected the problem. Upon further inspection, none of the water pressure complaints were valid.
- Production - The Combined Total Service Area 1 production graph on page 13 shows that production during the month of June increased 1.83 percent compared to June 2017, and is 19.46 percent less than what was produced in 2013. The Total Demand/Production for both service areas on page 14 shows that customer

July 18, 2018

## ELK GROVE WATER DISTRICT OPERATIONS REPORT - JUNE 2018

Page 2
use during the month of June, compared to June 2013, was down by 17.92 percent.

- Static and Pumping Level Graphs - The second quarter soundings are shown and indicate that all of the static water levels in deeper zones have increased as compared to 2016. The shallow zones have also shown improvement.
- Treatment (Compliance Reporting) - All samples taken during the month are in compliance with all regulatory permit requirements. No exceedances of any maximum contaminant levels were found and all water supplied to the District's customers met or exceeded safe drinking water standards.
- Preventative Maintenance Program - The tables included in this section of the report also include certain activities completed to date. Below is a list of out-ofordinary maintenance work completed in June:
- Staff corrected an issue with a malfunctioning storage tank level transducer.
- Staff repaired/replaced various chemical fittings and lines at HVWTP.
- Staff facilitated PLC/SCADA reprogramming for wells 3,8 , and 9.
- Staff corrected an issue with a malfunctioning magnetic flowmeter at well \#8.
- Staff identified and replaced a malfunctioning solenoid valve at well \#13.
- Staff replaced both electrolytic cells in the sodium hypochlorite generation system at RRWTP.
- Backflow Prevention Program 2018 - There were 66 notices issued for the month. From the initial testing notices 24 devices passed. There were 42 secondary notices issued, of which we have received 24 passing tests. There is a total of 13 outstanding devices as of this month, which will require further investigation.
- Safety Meetings/Training - There were 2 safety training sessions conducted for the month. Only 2 safety sessions are required by OSHA standards.
- Service Line Replacement Map - The District replaced 9 residential service lines in the month of June.

July 18, 2018

## ELK GROVE WATER DISTRICT OPERATIONS REPORT - JUNE 2018

Page 3

- Service and Main Leaks Map - There were 3 service line leaks and no main leaks reported for the month.


## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

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

## FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully Submitted,


MARK J. MADISON
GENERAL MANAGER
MJM/ah

# EGWD OPERATIONS REPORT June 2018 

Elk
Grove Water District

© Florin Resource Conservation District

## Elk Grove Water District Operations Report

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## Operations Activities Summary

| Service Requests: | June-18 |  | YTD (Since Jan. 1, 2018) |  |
| :---: | :---: | :---: | :---: | :---: |
| Department | Service Request | Hours | Service Request | Hours |
| Distribution |  |  |  |  |
| Door Hangers | 450 | 26.75 | 2,981 | 157 |
| Shut offs | 46 | 26.28 | 356 | 121.03 |
| Turn ons | 50 | 11.10 | 401 | 90.10 |
| Investigations | 40 | 26.53 | 191 | 178.13 |
| USA Locates | 196 | 49 | 1,104 | 276 |
| Customer Complaints |  |  |  |  |
| -Pressure | 3 | 1.50 | 10 | 4.50 |
| -Water Quality | 4 | 3.75 | 11 | 12.50 |
| -Other | 0 | 0 | 0 | 0 |
| Work Orders: | June-18 |  | YTD (Since J | 018) |
| Department | Work Orders | Hours | Work Orders | Hours |
| Treatment: |  |  |  |  |
| Preventative Maint. | 30 | 72.50 | 135 | 291.50 |
| Corrective Maint. | 8 | 63 | 69 | 290 |
| Water Samples | 13 | 36 | 102 | 301 |
| Distribution: |  |  |  |  |
| Meters Installed | 0 | 0 | 1 | 0.75 |
| Meter Change Out | 24 | 19 | 117 | 99.25 |
| Preventative Maint. |  |  |  |  |
| -Hydrant Maintenance (135) | 150 | 30.5 | 964 | 302.50 |
| -Valve Exercising (120) | 166 | 27 | 933 | 208 |
| -Other | 0 | 0 | 0 | 0 |
| Corrective Maint. |  |  |  |  |
| -Leaks | 3 | 169.5 | 17 | 489.75 |
| -Other | 3 | 19 | 70 | 293.50 |
| Valve Locates | 0 | 0 | 0 | 0 |
| Utility: |  |  |  |  |
| Service Line Replacement | 16 | 274 | 67 | 990.60 |
| Corrective Maint. | 0 | 0 | 0 | 0 |












Elk Grove Water District Water Usage

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| L9t＇t6t＇08 | 65t＇98t＇LOT | $0 ¢ \mathrm{~S}^{\prime} \mathrm{Z} \varepsilon^{\prime} \mathrm{S} \mathrm{\downarrow} \mathrm{\tau}$ | 98S＇L66＇99］ | OS8＇0¢8＇SOZ | 88દ＇ऽદと＇tてZ | LET＇LSs＇96I | 6ع8＇とて9＇てくป | દZS＇દโ9＇tてT | でs＇でら＇00さ | โ6โ＇89と＇t8 | 916＇tऽて＇89 | （IVS）M9 |
| ләqயəวəด | ıəquəлоN | дəqоұО | גəquәədวS | 7Sn3n＊ | 介ın¢ | әuns | NeW | I！ 1 d $V$ | чЈ．еN | Menıqə」 | Kıenuer | £โOz |


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


| 2016 | January | February | March | April | May | June | July | August | September | October | November | December |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GW（SA1） | 54，579，679 | 53，455，693 | 56，776，025 | 80，317，655 | 110，937，338 | 148，518，660 | 164，758，463 | 159，501，571 | 140，200，584 | 99，019，629 | 63，087，762 | 59，635，559 |
| Purchased（SA2） | 27，516，676 | 26，507，624 | 27，531，636 | 34，054，196 | 51，071，196 | 75，541，268 | 96，246，656 | 93，992，184 | 86，904，136 | 75，682，640 | 37，088，084 | 28，894，492 |
| Total | 82，096，355 | 79，963，317 | 84，307，661 | 114，371，851 | 162，008，534 | 224，059，928 | 261，005，119 | 253，493，755 | 227，104，720 | 174，702，269 | 100，175，846 | 88，530，051 |


| 2017 | January | February | March | April | May | June | July | August | September | October | November | December |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GW（SA1） | 59，973，881 | 50，320，832 | 61，080，559 | 68，658，752 | 137，599，305 | 155，472，951 | 180，086，739 | 173，684，119 | 152，475，400 | 131，390，808 | 76，619，642 | 67，874，741 |
| Purchased（SA2） | 26，951，188 | 28，184，640 | 28，756，860 | 34，167，892 | 48，653，660 | 87，003，620 | 96，535，384 | 104，766，376 | 98，979，848 | 84，154，488 | 61，788，540 | 34，228，480 |
| Total | 86，925，069 | 78，505，472 | 89，837，419 | 102，826，644 | 186，252，965 | 242，476，571 | 276，622，123 | 278，450，495 | 251，455，248 | 215，545，296 | 138，408，182 | 102，103，221 |

[^1] 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 Actual Recorded Prod．（Feb．2013）－Service Area 1 To determine estimate of Feb． 2013 production $\begin{array}{lc}\text { Service Area } 1 \text { Multiplier }= & 1.39 \\ \text { Cald } & \end{array}$ $\begin{array}{ll}\text { Calc＇d Feb．} 2013 \text { Prod．}=\text { Feb．} 2014 \text { Prod．Data } \times 1.39= & 79,737,924 \\ \text { To determine estimate of Jan．} 2013 \text { production，use prorated amount from Feb．} 2013 \text { da }\end{array}$
To determine estimate of Jan． 2013 production，use prorated amount from Feb． 2013 data．（This method due to Jan． 2014 being unseasonably hot．）
Calc＇d Jan． 2013 Prod．＝（Feb． 2013 Prod．Data Calc＇d／Feb． 2013 Prod．Data Actual）x Jan． 2013 Prod．Data Actual $=\quad 68,254,916$


| Regional Monthly Water Production (Million Gallons) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
| 2018 | 6,461 | 6,468 | 6,632 | 8,129 | 13,031 |  |  |  |  |  |  |  |
| 2017 | 6,285 | 5,407 | 6,620 | 6,943 | 13,232 | 15,858 | 18,870 | 18,398 | 15,765 | 13,454 | 7,710 | 6,998 |
| 2016 | 6,154 | 5,900 | 6,354 | 8,435 | 11,413 | 15,136 | 17,257 | 17,190 | 14,696 | 10,357 | 6,910 | 6,407 |
| 2015 | 6,714 | 6,179 | 8,781 | 9,282 | 10,536 | 12,419 | 13,789 | 13,866 | 12,560 | 10,759 | 7,131 | 6,217 |
| 2014 | 7,528 | 5,724 | 6,741 | 8,034 | 12,069 | 15,536 | 16,196 | 14,996 | 13,357 | 11,201 | 7,201 | 6,090 |
| 2013 | 6,953 | 7,232 | 10,094 | 12,105 | 17,472 | 19,483 | 22,413 | 20,855 | 17,311 | 14,848 | 10,649 | 8,430 |



May 2018 Water Production by Source


■ Surface Water ■ Groundwater

Monthly Water Production by Source (MG)

|  | Jan. | Feb. | Mar. | Apr. | May | June | July |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SW | 3,793 | 3,949 | 4,331 | 5,625 | 9,595 |  |  |
| GW | 2,663 | 2,521 | 2,297 | 2,504 | 3,436 |  |  |
| Total | 6,456 | 6,469 | 6,627 | $\mathbf{8 , 1 2 9}$ | $\mathbf{1 3 , 0 3 1}$ |  |  |
|  |  |  |  |  |  |  |  |
|  | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
| SW |  |  |  |  |  |  | 27,293 |
| GW |  |  |  |  |  |  | 13,420 |
| Total |  |  |  |  |  |  | 40,713 |

SW=surface water
GW=groundwater



Monthly Sample Report - June 2018
Water System: Elk Grove Water System
Sampling Point: 01-8693 W. Camden

|  | Sampling Point: 01-8693 W. Camden |  | Collection Occurrence |
| :---: | :---: | :--- | :---: |
| Sample Date | Sample Class | Sample Name | Week |
| $6 / 5 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 12 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 19 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 26 / 2018$ | Distribution System | Bacteriological |  |
|  |  |  | Campling Point: School Well 01D - Raw Water |


Sampling Point: Webb Well 04D - Raw Water


| $6 / 28 / 2018$ | Source Water | Sampling Point: 08-9436 Hollow Springs Wy. | Quarterly |
| :---: | :---: | :---: | :---: |
| Sample Date | Sample Class | Sample Name | Collection Occurrence |
| $6 / 5 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 12 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 19 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 26 / 2018$ | Distribution System | Bacteriological | Week |
| $6 / 12 / 2018$ | Distribution System | Fluoride | Week |


Sampling Point: Dino Well 11D - Raw Water
Sample Name
Sample Date

| $6 / 5 / 2018$ | Source Water | Fe, Mn, As, Total | Weekly |
| :---: | :---: | :---: | :---: |
| $6 / 5 / 2018$ | Source Water | Bacteriological | Weekly |
| $6 / 12 / 2018$ | Source Water | Fe, Mn, As, Total | Weekly |
| $6 / 12 / 2018$ | Source Water | Bacteriological | Weekly |
| $6 / 19 / 2018$ | Source Water | Fe, Mn, As, Total | Weekly |
| $6 / 19 / 2018$ | Source Water | Bacteriological | Weekly |
| $6 / 26 / 2018$ | Source Water | Fe, Mn, As, Total | Weekly |
| $6 / 26 / 2018$ | Source Water | Bacteriological | Weekly |
|  |  |  |  |
|  | Sample Class | Sample Name | Collection Occurrence |
| Sample Date | Treated Effluent | Fe, Mn, As, Total | Weekly |
| $6 / 5 / 2018$ | Treated Effluent | Fe, Mn, As, Total | Weekly |
| $6 / 12 / 2018$ | Treated Effluent | Fe, Mn, As, Total | Weekly |
| $6 / 26 / 2018$ | Treated Effluent | Sampling Point: Hampton WTP Backwash Tank | Weekly |
|  |  | Sample Name |  |



|  | Sampling Point: Special Distribution/Construction Samples |  |  |
| :---: | :---: | :---: | :---: |
| Sample Date | Sample Class | Sample Name | Collection Description |
| $6 / 4 / 2018$ | Distribution System | Bacteriological | New Service Line 9620 E. Stockton Blvd |
| $6 / 12 / 2018$ | Distribution System | Bacteriological | New Service Line 9620 E. Stockton Blvd |



July 5, 2018

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

## MONTHLY COMPLIANCE REPORT

Enclosed is the Monthly Compliance Report Form from Elk Grove Water District for June 2018.

If you have any further questions, you may contact me at 916-585-9386


## STEVE SHAW

WATER TREATMENT SUPERVISOR

## COMPLIANCE REPORT FORM

| Attn: Neal Stallions | E-mail: stallionsn@sacsewer.com | Wastewater Source Control Section |
| :--- | ---: | ---: |
| Phone (916) 875-6656 | Fax (916) 875-6374 |  |
| From: Steve Shaw | Permit \#WTP010 |  |
| Company: Elk Grove Water District |  |  |

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

| Month: | June | Year: | 2018 |
| :--- | :--- | :--- | :--- |



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

Flow monitoring equipment certification (Flow or pH meter, etc.)
Other (describe):

## Domestic Calculation

| Domestic Usage | Number of <br> Employees | Business Days <br> per Month | Allowance <br> (gallons per day) | Gallons |
| :--- | :---: | :---: | :---: | :---: |
| Production | 3 | 18 | 15 | 810 |
| Office | 4 | 18 | 10 | 720 |
| Drivers/Field | 19 | 18 | 3 | 1026 |

## 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:

DATE:

| Steve Shaw | Water Treatment Supervisor |
| :--- | :---: |
| (Name) | (Title) |
| $7-5-2018$ |  |



July 3, 2018

State Water Resources Control Board Division of Drinking Water 1001 I Street
$13^{\text {th }}$ Floor
Sacramento, CA. 95814
MONTHLY SUMMARY OF DISTRIBUTION SYSTEM COLIFORM MONITORING

Enclosed is the Monthly Summary of Distribution System Coliform Monitoring report from Elk Grove Water District for June 2018.

If you have any further questions, you may contact me at 916-585-9386.

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

| Sssem Name | Elk Grove Water District |  | 3410008 |
| :--- | :---: | :--- | :---: |
| Syssem Number |  |  |  |
| Sonping Period | June | Year | 2018 |


|  | Number Required | Number <br> Collected | Number Total Coliform Positives | Number Fecal/ E.coli Positives |
| :---: | :---: | :---: | :---: | :---: |
| 1. Routine Samples (see note 1) | 40 | 40 | 0 | 0 |
| 2. Repeat Samples following Samples that are Total Coliform Positive and Fecal/E.coli Negative (see notes 5 and 6) |  | 0 | 0 |  |
| 3. Repeat Samples following Routine Samples that are Total Coliform Positive and Fecal/E.coli Positive (see notes 5 and 6) |  | 0 |  |  |

4. MCL Computation for Total Coliform Positive Samples
a. Totals (sum of columns)

40
0
b. If 40 or more samples collected in month, determine percent of samples that are total coliform positive [(total number positive/total number collected) $\times 100]=$ 0 \%
c. Is system in compliance. ... with fecal/E. coli MCL?
(see notes 2 and 3)
...with monthly MCL?YesNo
YesNo (see note 4)
5. Source Samples Triggered by Routine Samples that are Total Coliform Positive (This applies only to systems subject to the Groundwater Rule - see notes 7 and 8)
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 | ${ }^{\text {Tille }}$ |  | Date |
| :---: | :---: | :---: | :---: |
| 2 |  | Water TreatmentSupervisor | 7/3/18 |

NOTES AND INSTRUCTIONS:

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


July 5, 2018

State Water Resources Control Board Division of Drinking Water 1001 I Street
$13^{\text {th }}$ 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 June 2018.

If you have any further questions, you may contact me at 916-585-9386.


STEVE SHAW
WATER TREATMENT SUPERVISOR
Elk Grove Water District
Hampton GWTP Monthly Report


July 5, 2018

State Water Resources Control Board Division of Drinking Water
1001 I Street
$13^{\text {th }}$ Floor
Sacramento, CA. 95814

## MONTHLY SUMMARY OF DISTRIBUTION SYSTEM FLUORIDATION MONITORING

Enclosed is the Monthly Summary of Distribution System Fluoridation Monitoring report from Elk Grove Water District for June 2018.

If you have any further questions, you may contact me at 916-585-9386.


STEVE SHAW
WATER TREATMENT SUPERVISOR

# Elk Grove Water District Area 2 <br> DISTRIBUTION SYSTEM <br> MONTHLY FLUORIDATION MONITORING REPORT 

Water System Name: $\qquad$ Elk Grove Water District System Number: $\mathbf{3 4 1 0 0 0 8}$

Contact Name: Steve Shaw
Telephone: (916) 585-9386
Month/Year: June 2018

| Week | Location of samples taken* | Monitoring Results ( $\mathrm{mg} / \mathrm{L}$ ) |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Date | Time | Result |
| 1 | Hollow Springs | 6-5-2018 | 10:22 | . 74 |
| 1 | Al Gates Park | 6-5-2018 | 10:36 | . 71 |
| 1 | Oreo Ranch | 6-5-2018 | 10:50 | . 64 |
| 1 | Blackman | 6-5-2018 | 11:42 | . 72 |
|  |  |  |  |  |
| 2 | Hollow Springs | 6-12-2018 | 8:26 | . 59 |
| 2 | Al Gates Park | 6-12-2018 | 8:51 | . 64 |
| 2 | Oreo Ranch | 6-12-2018 | 9:04 | . 64 |
| 2 | Blackman | 6-12-2018 | 11:38 | . 68 |
|  |  |  |  |  |
| 3 | Hollow Springs | 6-19-2018 | 9:47 | . 74 |
| 3 | Al Gates Park | 6-19-2018 | 10:01 | . 63 |
| 3 | Oreo Ranch | 6-19-2018 | 10:20 | . 64 |
| 3 | Blackman | 6-19-2018 | 11:29 | . 56 |
|  |  |  |  |  |
| 4 | Hollow Springs | 6-26-2018 | 8:54 | . 63 |
| 4 | Al Gates Park | 6-26-2018 | 9:09 | . 65 |
| 4 | Oreo Ranch | 6-26-2018 | 9:21 | . 66 |
| 4 | Blackman | 6-26-2018 | 12:08 | . 65 |
|  |  |  |  |  |
| 5 | Hollow Springs |  |  |  |
| 5 | Al Gates Park |  |  |  |
| 5 | Oreo Ranch |  |  |  |
| 5 | Blackman |  |  |  |

Monthly fluoride split sample results:
Date: $\qquad$ 6-12-2018

Water system personnel: $\qquad$ .59 $\mathrm{mg} / \mathrm{L}$
Approved laboratory: .66 $\qquad$ $\mathrm{mg} / \mathrm{L}$

July 3, 2018

State Water Resources Control Board Division of Drinking Water
1001 I Street
$13^{\text {th }}$ Floor
Sacramento, CA 95814

## QUARTERLY REPORT FOR DISINFECTANT RESIDUALS COMPLIANCE MONITORING

Enclosed is the Quarterly Report for Disinfectant Residuals Compliance Monitoring from Elk Grove Water District for 2nd Quarter 2018.

If you have any further questions, you may contact me at 916-585-9386


STEVE SHAW
WATER TREATMENT SUPERVISOR

## Quarterly Report for Disinfectant Residuals Compliance <br> For Systems Using Chlorine or Chloramines

System Name: Elk Grove Water District Area 1
System No. 3410008

Calendar Year: 2018

| 1st Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. Chlorine Level $(\mathrm{mg} / \mathrm{L})$ |
|  | April |  | 0.96 |
|  | May |  | 0.99 |
|  | June |  | 1.00 |
|  | July |  | 0.94 |
|  | August |  | 1.00 |
|  | September |  | 0.99 |
|  | October |  | 0.96 |
|  | November |  | 0.99 |
|  | December |  | 0.89 |
|  | January | 30 | 0.91 |
|  | February | 24 | 0.92 |
|  | March | 24 | 0.92 |
| Running Annual Average (RAA): |  |  | 0.96 |
| Meets standard? <br> (i.e. RAA $\leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | Yes $\square$ No |

Quarter: 2nd

| 2nd Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. <br> Chlorine Level (mg/L) |
|  | July |  | 0.94 |
|  | August |  | 1.00 |
|  | September |  | 0.99 |
|  | October |  | 0.96 |
|  | November |  | 0.99 |
|  | December |  | 0.89 |
|  | January |  | 0.91 |
|  | February |  | 0.92 |
|  | March |  | 0.92 |
|  | April | 24 | 0.80 |
|  | May | 30 | 0.87 |
|  | June | 24 | 0.96 |
| Running Annual Average (RAA): |  |  | 0.93 |
| Meets standard? <br> (i.e. $R A A \leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\begin{aligned} & 1 / \mathrm{Yes} \\ & \square \mathrm{No} \end{aligned}$ |


| 4th Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. Chlorine Level (mg/L) |
|  | January |  | 0.91 |
|  | February |  | 0.92 |
|  | March |  | 0.92 |
|  | April |  | 0.80 |
|  | May |  | 0.87 |
|  | June |  | 0.96 |
|  | July |  | 0.98 |
|  | August |  | 1.26 |
|  | September |  | 0.92 |
|  | October | 30 | 1.00 |
|  | November | 24 | 0.92 |
|  | December | 24 | 0.87 |
| Running Annual Average (RAA): |  |  | 0.94 |
| Meets standard? <br> (i.e. $R A A \leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\begin{aligned} & \overline{\mathrm{Yes}} \\ & \square \mathrm{No} \end{aligned}$ |

Comments: The Elk Grove Water District is split into two different water systems. Area 1 water is produced and distributed by Elk Grove Water District.

## Quarterly Report for Disinfectant Residuals Compliance For Systems Using Chlorine or Chloramines

System Name: Elk Grove Water District Area 2
System No.: $\qquad$
Calendar Year: 2018
Quarter: 2nd

| 1st Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. Chlorine Level (mg/L) |
|  | April |  | 1.19 |
|  | May |  | 1.21 |
|  | June |  | 1.17 |
|  | July |  | 1.14 |
|  | August |  | 1.13 |
|  | September |  | 1.09 |
|  | October |  | 0.94 |
|  | November |  | 0.87 |
|  | December |  | 0.89 |
|  | January | 20 | 1.24 |
|  | February | 16 | 1.16 |
|  | March | 16 | 1.02 |
| Running Annual Average (RAA): |  |  | 1.09 |
| Meets standard? <br> (i.e. $R A A \leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\begin{aligned} & \sqrt{4} \text { Yes } \\ & \square \text { No } \end{aligned}$ |


| 2nd Quarter |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Month |  | Number of Samples Taken | Monthly Ave. Chlorine Level ( $\mathrm{mg} / \mathrm{L}$ ) |  |
|  | July |  |  | 1.14 |
|  | August |  |  | 1.13 |
|  | September |  |  | 1.09 |
|  | October |  |  | 0.94 |
|  | November |  |  | 0.87 |
|  | December |  |  | 0.89 |
|  | January |  |  | 1.24 |
|  | February |  |  | 1.16 |
|  | March |  |  | 1.02 |
|  | April | 16 |  | 1.07 |
|  | May | 20 |  | 1.35 |
|  | June | 16 |  | 1.21 |
| Running Annual Average (RAA): |  |  |  | 1.09 |
| Meets standard? <br> (i.e. RAA $\leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\square \mathrm{Yes}$ $\square$ No |  |


| 3rd Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. Chlorine Level (mg/L) |
|  | October |  | 0.94 |
|  | November |  | 0.87 |
|  | December |  | 0.89 |
|  | January |  | 1.24 |
|  | February |  | 1.16 |
|  | March |  | 1.02 |
|  | April |  | 1.07 |
|  | May |  | 1.35 |
|  | June |  | 1.21 |
|  | July | 16 | 1.41 |
|  | August | 20 | 1.65 |
|  | September | 16 | 1.15 |
| Running Annual Average (RAA): |  |  | 1.16 |
| Meets standard? <br> (i.e. RAA $\leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\begin{aligned} & \square \mathrm{Yes} \\ & \square \text { No } \end{aligned}$ |


| 4th Quarter |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Month | Number of Samples Taken | Monthly Ave. Chlorine Level (mg/L) |
|  | January |  | 1.24 |
|  | February |  | 1.16 |
|  | March |  | 1.02 |
|  | April |  | 1.07 |
|  | May |  | 1.35 |
|  | June |  | 1.21 |
|  | July |  | 1.41 |
|  | August |  | 1.65 |
|  | September |  | 1.15 |
|  | October | 20 | 1.20 |
|  | November | 16 | 1.34 |
|  | December | 16 | 1.38 |
| Running Annual Average (RAA): |  |  | 1.27 |
| Meets standard? <br> (i.e. $R A A \leq M R D L$ of $4.0 \mathrm{mg} / \mathrm{L}$ as $\mathrm{Cl}_{2}$ ) |  |  | $\begin{aligned} & \sqrt{V e s} \\ & \square \text { No } \end{aligned}$ |

Comments: The Elk Grove Water District is split into two different water systems. Area 2 is whole sale water from Sacramento County Water Agency. Date: July 3, 2018

July 10, 2018

State Water Resources Control Board Division of Drinking Water 1001 I Street
$13^{\text {th }}$ Floor
Sacramento, Ca. 95814

## QUARTERLY SUMMARY OF RAW GROUNDWATER COLIFORM MONITORING

Enclosed is the revised Quarterly Summary of Raw Groundwater Coliform Monitoring report from Elk Grove Water District for 2nd Quarter 2018.

If you have any further questions, you may contact me at 916-585-9386.


STEVE SHAW
WATER TREATMENT SUPERVISOR

QUARTERLY SUMMARY OF RAW GROUNDWATER COLIFORM MONITORING
Samples must be taken prior to chlorination

Water System Name

## Elk Grove Water District

## Sampling Period:

Month
April - June 2018 / 2nd Quarter

Water System Number
3410008

| Well Name | Status (On/Off) | Sample Time \& Date | Total Coliforms (PIA, CFU or MPN) | E. coli <br> (P/A, CFU or MPN) |
| :---: | :---: | :---: | :---: | :---: |
| Well \# 1D School St. | ON | 4/3/2018 9:26 | A | A |
| Well \# 4D Webb St. | ON | 4/10/2018 8:45 | A | A |
| Well \# 11D Dino Dr. | ON | 4/3/2018 9:10 | A | A |
| Well 14D Railroad St. | ON | 4/17/2018 8:00 | A | A |
| Well \# 3 Mar-Val | ON | 4/17/2018 8:25 | A | A |
| Well \# 8 Williamson | ON | 5/10/2018 | <1 | < 1 |
| Well \# 8 Williamson | ON | 5/15/2018 | < 1 | < 1 |
| Well \# 9 Polhemus | ON | 4/10/2018 9:00 | A | A |
| Well \# 13 Hampton | ON | 4/3/2018 11:04 | A | A |
| Well \# 13 Hampton | ON | 4/10/2018 13:00 | A | A |
| Well \# 13 Hampton | ON | 4/17/2018 10:45 | P | A |
| Well \# 13 Hampton | ON | 4/18/2018 13:26 | < 1 | < 1 |
| Well \# 13 Hampton | ON | 4/24/2018 11:45 | A | A |
| Well \# 13 Hampton | ON | 5/1/2018 10:06 | A | A |
| Well \# 13 Hampton | ON | 5/8/2018 9:40 | A | A |
| Well \# 13 Hampton | ON | 5/15/2018 13:32 | A | A |
| Well \# 13 Hampton | ON | 5/17/2018 12:53 | A | A |
| Well \# 13 Hampton | ON | 5/22/2018 8:52 | A | A |
| Well \# 13 Hampton | ON | 5/29/2018 12:30 | A | A |
|  |  |  |  |  |
|  |  |  |  |  |

July 5, 2018

State Water Resources Control Board
Division of Drinking Water
1001 I Street
$13^{\text {th }}$ Floor
Sacramento CA. 95814

## QUARTERLY TTHM AND HAA5 REPORT FOR DISINFECTION BYPRODUCTS COMPLIANCE

Enclosed is the Quarterly TTHM and HAA5 Report from Elk Grove Water District for the 2nd quarter 2018.

If you have any further questions, you may contact me at 916-585-9386.


STEVE SHAW
WATER TREATMENT SUPERVISOR

| System Name: Elk Grove Water District |  |  |  |  |  |  |  |  | System No.: |  | 3410008 |  |  | Year: | 2018 |  | Quarter: |  | 1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year: 2014 |  |  |  |  | 2015 |  |  |  | 2016 |  |  |  | 2017 |  |  |  | 2018 |  |  |  |
| Quarter: | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. |
| Sample Date (month/date): | 1/14 | 4/2 | $7 / 1$ | 10/21 | 1/6 | 4/8 | 7/14 | 10/13 | 1/12 | 4/5 | $7 / 5$ | 10/4 | 1/17 | 4/18 | 7/3 | 10/3 | 1/10 | 4/10 |  |  |
| Site Q1 TTHM Results | 1 | 1 | 0 | 23 | 23 | 0 | 0 | 1 | 1 | 5 | 0 | 0 | 1 | 37 | 0 | 0 | 1 | 3 |  |  |
| Lcn. Running Annual Average |  |  |  | 6.2 | 11.7 | 11.5 | 11.5 | 6.0 | 0.5 | 1.8 | 1.8 | 1.5 | 1.4 | 9.4 | 9.4 | 9.4 | 9.5 | 1.1 | 1.4 | 2.1 |
| Meets Standard? ${ }^{1}$ | Yes $\checkmark$ | Yes $V$ | Yes $V$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $V$ | Yes $V$ | Yes $V$ ] | Yes $V$ | Yes 7 | Yes $\checkmark$ | Yes V | Yes $V$ | Yes $V$ | Yes $\checkmark$ | Yes $V$ | Yes V | Yes $V$ | Yes | Yes |
| (check box) $\downarrow$ | No | No | No | No | No | No | No | No | No | No - | No $\square$ | No $\square$ | No $\square$ | No - | No $\square$ | No | No | No | No | No |
| Projected LRAA Next Quarter |  |  | 0 | 12 | 17 | 12 | 6 | 1 | 1 | 3 | 2 | 1 | 0 | 19 | 9 | 9 | 0 | 2 | 1 | 1 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes 1 | Yes | Yes |
| (check box) $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No 7 | No $\checkmark$ | No $\checkmark$ | No $\downarrow$ | No $\checkmark$ | No V | No J | No $\checkmark$ | No $\checkmark$ | No $v$ | No 1 | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No | No | No |
| Site Q2 TTHM Results | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |  |  |  |  |  |
| Lcn. Running Annual Average |  |  |  | 1.0 | 0.5 | 0.3 | 0.3 | 0.0 | 0.3 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.0 | \#DIV/0! | \#DIV/O! |
| Meets Standard? ${ }^{1}$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes V | Yes $V$ | Yes $V$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes 1 | Yes $\checkmark$ | Yes V | Yes $V$ | Yes $V$ | Yes $V$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes | Yes | Yes |
| (check box) $\checkmark$ | No | No | No $\square$ | No | No | No | No | No | No | No - | No | No | No | No | No | No $\square$ | No | No | No | No |
| Projected LRAA Next Quarter |  |  | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| (check box) $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No 4 | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $V$ | No | No $\checkmark$ | No $\checkmark$ | No | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No | No $\checkmark$ | No | No | No |
| Site Q3 TTHM Results | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 0 |  |  |
| Lcn. Running Annual Average |  |  |  | 0.8 | 0.5 | 0.3 | 0.3 | 0.3 | 0.5 | 0.3 | 0.8 | 1.0 | 1.0 | 1.3 | 1.0 | 0.9 | 1.0 | 0.8 | 0.7 | 0.8 |
| Meets Standard? ${ }^{1}$ | Yes $\checkmark$ | Yes $V$ | Yes $\checkmark$ | Yes $V$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $V$ | Yes $\checkmark$ | Yes $V$ | Yes $V$ | Yes $\checkmark$ | Yes $V$ | Yes $V$ | Yes $V$ | Yes V | Yes $V$ | Yes V | Yes V | Yes | Yes |
| (check box) $\checkmark$ | No | No | No $\square$ | No | No | No | No | No | No | No - | No - | No | No | No | No | No $\square$ | No | No | No | No |
| Projected LRAA Next Quarter |  |  | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| (check box) $\downarrow$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No | No |
| Site Q4 TTHM Results |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  |  |
| Lcn. Running Annual Average |  |  |  | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIVIO! | 1.0 | 1.1 | 1.1 | 1.1 | 1.2 |
| Meets Standard? ${ }^{1}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes $V$ | Yes $V$ | Yes $V$ | Yes | Yes |
| (check box) $\checkmark$ | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No |
| Projected LRAA Next Quarter |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| (check box) $\downarrow \checkmark$ | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No | No $V$ | No $\checkmark$ | No $\checkmark$ | No | No |
| Quarterly Average | 1 | 1 | 0 | 8 | 8 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 13 | 0 | - 1 | 1 | 2 | \#DIV/0! | \#DIV/0! |
| No. Samples This Quarter | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | 0 |

[^2]$\frac{\text { July 5, } 2018}{\text { Date }}$
*If, during the first year of monitoring, any individual quarter's average will cause the running annual average of that system to exceed the standard, then the system is out of compliance at

| System Name: |  |  |  |  |  |  |  |  | System No.: |  | 3410008 |  |  | Year: | 2018 |  | Quarter: |  | 2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  | 2015 |  |  |  | 2016 |  |  |  | 2017 |  |  |  | 2018 |  |  |  |
| Quarter: | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. | 1st Qtr. | 2nd Qtr. | 3rd Qtr. | 4th Qtr. |
| Sample Date (month/date): | 1/14 | 4/2 | 711 | 10/21 | 1/6 | 4/8 | 7/14 | 10/13 | 1/12 | 4/5 | 715 | 10/4 | 1/17 | 4/18 | $7 / 5$ | 10/3 | 1/17 | 4/10 |  |  |
| Site Q1 HAA5 Results | 2 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 0 | 0 | 0 | 0 |  |  |
| Lcn. Running Annual Average |  |  |  | 1.0 | 0.8 | 0.8 | 0.3 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.5 | 6.5 | 6.5 | 6.5 | 0.0 | 0.0 | 0.0 |
| Meets Standard? ${ }^{1}$ | Yes $V$ | Yes ${ }^{\text {d }}$ | Yes $\checkmark$ | Yes v | Yes ${ }^{\text {d }}$ | Yes $V$ | Yes V | Yes ${ }^{\text {d }}$ | Yes $\square^{-1}$ | Yes V | Yes ${ }^{\text {d }}$ | Yes $\checkmark$ | Yes V | Yes ${ }^{\text {L }}$ | Yes v | Yes ${ }^{\text {d }}$ | Yes LV | Yes $\checkmark$ | Yes | Yes L |
| (check box) $\checkmark$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No L | No $\square$ | No $\square$ | No $\square$ |
| Projected LRAA Next Quarter |  |  | 2 | 1 | 1 | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 13 | 7 | 7 | 0 | 0 | 0 | , |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| (check box) $\checkmark \checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No 4 | No 4 | No $\checkmark$ | No $V$ | No $V$ | No | No |
| Site Q2 HAA5 Results | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |
| Lcn. Running Annual Average |  |  |  | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | \#DIV/0! | \#DIV/0! |
| Meets Standard? ${ }^{1}$ | Yes V | Yes $V$ | Yes V | Yes 7 | Yes $\checkmark$ | Yes $\checkmark$ | Yes $\square^{-1}$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $V$ | Yes $\triangle$ | Yes V | Yes ${ }^{\text {d }}$ | Yes $\checkmark$ | Yes | Yes | Yes | Yes $\square$ | Yes $\square$ |
| (check box) $\checkmark \square$ | No | No | No $\square$ | No $\square$ | No - | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No | No L | No |
| Projected LRAA Next Quarter |  |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | , | 0 | 0 | 0 | 0 | 0 | No |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes $\square$ | Yes $\square$ | Yes |
| (check box) $\checkmark$ | No $\checkmark$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $\triangle$ | No $\checkmark$ | No 1 | No $v$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $v$ | No $v$ | No $v$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No | No | Yes |
| Site Q3 HAA5 Results | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
| Lcn. Running Annual Average |  |  |  | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meets Standard? ${ }^{1}$ | Yes 7 | Yes $\square$ | Yes $V$ | Yes $V$ | Yes V | Yes $V$ | Yes 7 | Yes $\checkmark$ | Yes ${ }^{1}$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $V$ | Yes $\checkmark$ | Yes $\checkmark$ | Yes $\square^{-1}$ | Yes $V$ | Yes $\checkmark$ | Yes [V] | Yes [ | Yes [ |
| (check box) [ $\checkmark$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No | No | No |
| Projected LRAA Next Quarter |  |  | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes $\square$ | Yes $\square$ | Yes $\square$ | Yes | Yes | Yes $\square$ | Yes | Yes | Yes $\square$ |
| (check box) $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No V | No | No $\checkmark$ | No $\checkmark$ | No $\checkmark$ | No | No $\checkmark$ | No $\checkmark$ | No V | No $\checkmark$ | No 4 | No | No 4 | No 1 | No | No |
| Site Q4 HAA5 Results |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 0 | 0 | 0 |  |  |
| Lcn. Running Annual Average |  |  |  | \#DIV/0! | \#DIVIO! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | \#DIV/0! | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Meets Standard? ${ }^{1}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes $\square$ | Yes $\square$ | Yes $\square^{\square}$ | Yes [ V | Yes $V$ | Yes | Yes |
| (check box) $\checkmark$ | No | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ | No $\square$ |
| Projected LRAA Next Quarter |  |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Op Evaluation Req'd? ${ }^{2}$ | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes $\square$ | Yes $\square$ | Yes $\square$ | Yes $\square$ | Yes $\square$ | Yes $\square$ | Yes $\square$ |
| (check box) $\checkmark$ | No | No | No | No | No $\square$ | No | No | No | No | No | No | No $\square$ | No $\square$ | No - | No | No $\checkmark$ | No $\checkmark$ | No 4 | No | No |
| Quarterly Average | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | \#DIV/0! | \#DIV/0! |
| No. Samples This Quarter | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 0 | HDV. |

[^3]

## Elk Grove Water District <br> Preventative Maintenance Program <br> 人



Preventative Maintenance Program
Standby Generators

|  |  | Monthly |  |  |  |  |  |  |  |  |  |  |  |  | Annual |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item |  | Refer. | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | Refer. | 2018 |
|  | Initials |  | WQ | WQ | WQ | WQ | WQ | WQ |  |  |  |  |  |  | $\begin{aligned} & \ddot{\vdots} \\ & \stackrel{\ddot{U}}{\ddot{W}} \\ & \text { O} \end{aligned}$ |  |
|  | Date |  | 1/19/19 | 2/14/18 | 3/9/18 | 4/9/18 | 5/14/18 | 6/12/18 |  |  |  |  |  |  |  |  |
|  | W.o. \# |  | 15479 | 15589 | 15681 | 15775 | 15896 | 16016 |  |  |  |  |  |  |  |  |
| - | Initials | $\begin{aligned} & \ddot{\dot{\circ}} \dot{\ddot{U}} \\ & \stackrel{\sim}{\sim} \end{aligned}$ | WQ | WQ | AH | wa | WQ | WQ |  |  |  |  |  |  |  |  |
|  | Date |  | 1/4/18 | 2/27/18 | 3/9/18 | 4/9/18 | 5/23/18 | 6/13/18 |  |  |  |  |  |  |  |  |
|  | W.o. \# |  | 15480 | 15590 | 15682 | 15776 | 15897 | 16017 |  |  |  |  |  |  |  |  |
| 음 | Initials | $\stackrel{\ddot{O}}{\stackrel{\ddot{U}}{\stackrel{U}{U}}}$ | WQ | WQ | WQ | wa | WQ | WQ |  |  |  |  |  |  |  |  |
|  | Date |  | 1/2/18 | 2/13/18 | 3/7/18 | 4/3/18 | 5/16/18 | 6/13/18 |  |  |  |  |  |  |  |  |
|  | w.o. \# |  | 15481 | 15591 | 15683 | 15777 | 15898 | 16018 |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \overline{0} \\ & \vdots \\ & \stackrel{0}{6} \\ & \stackrel{1}{1} \\ & \hline \end{aligned}$ | Initials |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Date |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | w.o. \# |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Initials |  | WQ | WQ | WQ | AH | AH | AH |  |  |  |  |  |  |  |  |
|  | Date |  | 1/31/18 | 2/27/18 | 3/9/18 | 4/5/18 | 5/18/18 | 6/14/18 |  |  |  |  |  |  |  |  |
|  | W.o. \# |  | 15482 | 15592 | 15684 | 15778 | 15899 | 15019 |  |  |  |  |  |  |  |  |
|  |  | = Load Test |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Elk Grove Water District
Backflow Prevention Program 2018

| Backflow Device Reports |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CURRENT | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |  | OCT | NOV | DEC |
| Notices Issued | 42 | 40 | 80 | 15 | 60 | 66 |  |  |  |  |  |  |  |
| Assemblies Tested | 35 | 37 | 49 | 1 | 31 | 24 |  |  |  |  |  |  |  |
| Passed Initial Test | 31 | 30 | 46 | 1 | 31 | 24 |  |  |  |  |  |  |  |
| Failed Initial Test | 4 | 7 | 3 |  |  |  |  |  |  |  |  |  |  |
| Failed Devices Retested----Passed | 3 | 7 | 2 |  |  |  |  |  |  |  |  |  |  |
| Investigations or Address Change |  |  |  |  | 2 |  |  |  |  |  |  |  |  |
| Inactivated Devices |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Schedule Code Changed |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Devices Turned Off |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2nd Notices Issued | 5 | 3 | 32 | 14 | 27 | 42 | 0 | 0 |  | 0 | 0 | 0 | 0 |


| 0 0 0 0  0 |
| :--- |

## Elk Grove Water District <br> Safety Meetings/Training <br> June 2018

| Date | Topic | Attendees | Hosted By |
| :---: | :---: | :---: | :---: |
| 6/25/2018 | Bloodborne Pathogens | David Frederick, Aaron Hewitt, Sean Hinton, Justin Mello, Jose Mendoza, Salvador Mendoza, Michael Montiel, Wilfredo Quintero, Richard Salas, Steve Shaw, John Vance, Brandon Wagner, Marcell Wilson | Sarah Jones |
| 6/27/2018 | Rattlesnake Safety | Alan Aragon, Aurelia Camilo, Jose Carrillo, Travis Franklin, David Frederick, Aaron Hewitt, Sean Hinton, Bruce Kamilos, Amber Kavert, Patrick Lee, Mark Madison, Denise Maxwell, Justin Mello, Jose Mendoza, Sal Mendoza, Mike Montiel, Donella Murillo, Stefani Phillips, Wilfredo Quintero, Cindy Robertson, William Sadler, Richard Salas, Steve Shaw, John Vance, Brandon Wagner, Tonia Williams, Marcell Wilson | Mark Madison |













July 18, 2018

TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District
FROM: Patrick Lee, Finance Manager/Treasurer

## SUBJECT: ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY OPERATING BUDGET STATUS REPORT

## RECOMMENDATION

This item is presented for discussion purposes only. No action is requested of the Florin Resource Conservation District Board of Directors at this time.

## SUMMARY

Staff is presenting the quarterly budget status report through the fourth quarter of Fiscal Year (FY) 2017-18. This report is to keep the Board and the public informed on the financial status of the Elk Grove Water District.

## DISCUSSION

## Background

On June 21, 2017, the Board approved the FY 2017-18 Elk Grove Water District (EGWD) Budget. The adopted FY 2017-18 EGWD Budget has total revenues of approximately $\$ 14.294$ million and total expenditures of approximately $\$ 14.298$ million, including deposits into the Repair and Replacement and Long-Term Capital Improvement Reserves of approximately $\$ 1.70$ million. On January 17, 2018, the Board approved the appropriation of $\$ 45,000$ from Operating Reserves for unbudgeted IT support services to be incurred during the remainder of FY 2017-18, bringing total budgeted expenditures for FY 2017-18 to approximately $\$ 14.343$ million. In addition, the projected expenditures in excess of revenues of approximately $\$ 48,955$ will be contributed by operating reserves.

## Present Situation

The following is a summary of the EGWD's financial status as of June 30, 2018:

## ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY OPERATING BUDGET STATUS REPORT

Page 2


July 18, 2018

## ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY OPERATING BUDGET STATUS REPORT

Page 3

The revenues collected through the fourth quarter of the fiscal year total \$14,734,710 which is $103.08 \%$ of the $\$ 14,294,096$ annual budget. The revenues are $\$ 523,739$ or $3.69 \%$ above the same quarter of the prior year.

Total Operational Expenses were \$9,141,286 through the fourth quarter and $102.20 \%$ of the annual budget. The actual expenses were $\$ 1,395,387$ or $18.01 \%$ above the same quarter of the prior fiscal year as follows:

Personnel expenditures through the fourth quarter total $\$ 3,972,961$ which is $111.97 \%$ of the $\$ 3,548,348$ annual budget. The actual expenses were $\$ 925,711$ or $30.38 \%$ above the same period of the prior fiscal year. The increase is due mainly to an increase of $\$ 283,815$ in non-exempt salaries related to COLA and step increases for staff as well as the recognition of $\$ 537,500$ in pension expense related to GASB 68 and net pension liability.

Seminars, Conventions and Travel expenditures total $\$ 28,504$, which is $56.44 \%$ of the annual budget of $\$ 50,500$. The actual expenses were $\$ 633$ or $2.17 \%$ below the same period of the prior fiscal year.

Office and Operational expenditures total $\$ 931,703$, which is at $94.60 \%$ of the annual budget of $\$ 984,881$. Some of the major costs include a $\$ 34,500$ payment to SCWRB, $\$ 34,000$ payment to SCGA and $\$ 55,000$ in repairs and maintenance expense related to treatment facilities. The actual expenses were $\$ 37,514$ or $3.87 \%$ below the same period of the prior fiscal year.

Estimated Purchased Water costs total $\$ 2,918,805$, which is at $96.95 \%$ of the annual budget of $\$ 3,010,765$. The actual expenses were $\$ 186,788$ or $6.84 \%$ above the same period of the prior fiscal year. The increase is due to increased consumption of water purchased from Sacramento County Water Agency (SCWA) as water restriction requirements have been reduced.

Outside Services expenditures total $\$ 915,995$ through the fourth quarter of the fiscal year. This represents $97.33 \%$ of the annual budget of $\$ 941,110$. The actual expenses were $\$ 305,775$ or $50.11 \%$ above the same period of the prior fiscal year. The increase is due to: an increase in Legal Services in the current year; an increase in Security relating to the contract with Infinite IT Solutions for additional IT security support; and a \$48,000 payment to SeNet for IT consulting services that was budgeted for in the prior year but paid out in the current year.

July 18, 2018

## ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY OPERATING BUDGET STATUS REPORT

Page 4

Equipment Rent, Taxes and Utilities expenditures total $\$ 373,319$ through the fourth quarter and is at $91.28 \%$ of the annual budget of $\$ 409,000$. The actual expenses were $\$ 15,260$ or $4.26 \%$ above the same period of the prior fiscal year. The major expenditures in this category are Electricity costs of $\$ 320,004$, which is $\$ 5,843$ above the same period of the prior fiscal year and Sewer and Garbage of $\$ 29,052$, which is $\$ 7,826$ above the same period of the prior fiscal year.

## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/EGWD's 2012-2017 Strategic Plan. Adoption and management of the annual EGWD budget is specifically identified as a goal in the financial stability challenge section of the Strategic Plan.

## FINANCIAL SUMMARY

This report is provided to the Board for information only. There is no financial impact associated with this item at this time. Staff has attached a copy of the June 30, 2018 Quarterly Budget Review for the fourth quarter. The Quarterly Budget Review includes the line item detail for the expenditure categories for the quarter-to-date for FY 2017-18, as well as the detail for last year's quarter-to-date.

Respectfully submitted,

## Attachment 1

## ELK GROVE WATER DISTRICT <br> QUARTERLY BUDGET REVIEW

THROUGH June 30, 2018

| Account Description | $\begin{gathered} \text { FY 2017-18 } \\ \text { Budget } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Y-T-D } \\ 6 / 30 / 2018 \\ \hline \end{gathered}$ | $\begin{gathered} 100.00 \% \\ \text { Percentage } \end{gathered}$ | $\begin{gathered} \text { Y-T-D } \\ 6 / 30 / 2017 \\ \hline \end{gathered}$ | Change from prior year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4100 Water Payment Revenues - Residential | \$ 12,259,300 | 12,402,068 | 101.16\% | \$ 12,220,127 | \$ | 181,941 |
| 4110 Water Payment Revenues - Commercial | 1,595,246 | 1,665,802 | 104.42\% | 1,525,449 |  | 140,353 |
| 4120 Water Payment Revenues - Fire Service | 198,550 | 188,957 | 95.17\% | 188,543 |  | 414 |
| 4200 Meter Fees/Plan Check/Water Capacity | 30,000 | 243,532 | 811.77\% | 72,188 |  | 171,343 |
| 4201 Backflow Installation | 25,000 | 14,804 | 59.21\% | 22,856 |  | $(8,052)$ |
| 4300 Fire Protection |  | 312 | - | 1,092 |  | (780) |
| 4520 Door Hanger Fees | 120,000 | 149,725 | 124.77\% | 121,850 |  | 27,875 |
| 4540 New account Fees | 25,000 | 22,791 | 91.16\% | 26,640 |  | $(3,849)$ |
| 4550 NSF Fees | 3,000 | 3,640 | 121.33\% | 3,430 |  | 210 |
| 4570 Shut-off Fees | 50,000 | 62,900 | 125.80\% | 51,100 |  | 11,800 |
| 457524 Hour Turn On | - | 200 |  | 100 |  | 100 |
| 4580 Restoration Fees | - | 25 |  | 25 |  | - |
| 4585 Administration Citations | - | - | - | 200 |  | (200) |
| 4590 Credit Card Fees | 8,000 | 10,000 | 125.00\% | 8,480 |  | 1,520 |
| 4591 Sac County Release of Lien Fee | - | 41 | - | (331) |  | 372 |
| 4900 Customer Refunds | $(20,000)$ | $(30,086)$ | 150.43\% | $(30,778)$ |  | 692 |
| TOTAL GROSS REVENUES | \$ 14,294,096 | \$ 14,734,710 | 103.08\% | \$ 14,210,971 | \$ | 523,739 |

## ELK GROVE WATER DISTRICT QUARTERLY BUDGET REVIEW THROUGH June 30, 2018 FISCAL YEAR 2017-18

Account Description
Salaries \& Benefits
5100 Executive Salary
5110 Exempt Salaries
5120 Non-Exempt Salaries
5130 Overtime Compensation
5140 On Call Pay
5150 Holiday Pay
5160 Vacation Pay
5170 Personal Time Pay
5180 Internship Program
5200 Medical Benefits
5195 EAP
5201 EGWD Contribution H.S.A
5210 Dental/Vision/Life Insurance
5220 Retirement Benefits
5225 Retirement Benefits - Post Employment
5230 Medical Tax, Social Security and SUI
5240 Worker's Compensation Insurance
5250 Education Assistance
5260 Employee Training
5270 Employee Recognition
5280 Meetings
Less Capitalized Expenditures
Category Subtotal

| FY 2017-18 <br> Budget | Y-T-D <br> $6 / 30 / 2018$ | $100.00 \%$ <br> Percentage | Y-T-D <br> $6 / 30 / 2017$ | Change from <br> prior year |
| ---: | ---: | ---: | ---: | ---: |
| 195,227 | 151,934 | $77.82 \%$ | 163,831 | $(11,897)$ |
| 524,199 | 525,448 | $100.24 \%$ | 511,040 | 14,408 |
| $1,469,064$ | $1,484,076$ | $101.02 \%$ | $1,200,261$ | 283,815 |
| 56,300 | 60,799 | $107.99 \%$ | 39,278 | 21,522 |
| 18,250 | 18,200 | $99.73 \%$ | 18,199 | 1 |
| 118,483 | 109,632 | $92.53 \%$ | 104,736 | 4,895 |
| 121,459 | 159,232 | $131.10 \%$ | 129,244 | 29,988 |
| 94,787 | 105,387 | $111.18 \%$ | 110,052 | $(4,665)$ |
| 15,000 | - | $0.00 \%$ | - | - |
| 720,244 | 647,241 | $89.86 \%$ | 568,711 | 78,530 |
| 960 | 825 | $85.93 \%$ | 825 | 0 |
| 15,000 | 13,352 | $89.02 \%$ | 13,149 | 203 |
| 64,665 | 58,270 | $90.11 \%$ | 50,227 | 8,043 |
| 371,962 | 537,500 | $144.50 \%$ | $(64,140)$ | 601,640 |
| 92,760 | 151,681 | $163.52 \%$ | 243,577 | $(91,896)$ |
| 62,353 | 50,867 | $81.58 \%$ | 45,154 | 5,713 |
| 123,873 | 72,358 | $58.41 \%$ | 94,085 | $(21,727)$ |
| 11,300 | 2,566 | $22.71 \%$ | 17,062 | $(14,496)$ |
| 29,640 | 12,152 | $41.00 \%$ | 7,286 | 4,866 |
| 2,520 | 3,463 | $137.41 \%$ | 1,577 | 1,886 |
| 1,131 | 189 | $16.67 \%$ | 167 | 21 |
| $(560,829)$ | $(192,211)$ | $34.27 \%$ | $(207,072)$ | 14,861 |
| $\mathbf{3 , 5 4 8 , 3 4 8}$ | $\mathbf{3 , 9 7 2 , 9 6 1}$ | $\mathbf{1 1 1 . 9 7 \%}$ | $\mathbf{3 , 0 4 7 , 2 5 0}$ | 925,711 |

Account Description
Seminars, Conventions and Travel 5300 Airfare 5310 Hotels 5320 Meals 5330 Auto Rental 5340 Seminars \& Conferences 5345 Seminars \& Conferences - Board 5350 Mileage Reimbursement, Parking, Tolls 5375 Auto Allowance

Category Subtotal

| 4,100 | 1,685 | $41.09 \%$ | 2,100 | $(415)$ |
| ---: | :---: | ---: | ---: | ---: |
| 11,800 | 4,628 | $39.22 \%$ | 7,431 | $(2,803)$ |
| 5,730 | 3,112 | $54.31 \%$ | 3,315 | $(203)$ |
| 1,900 | - | $0.00 \%$ | 10 | $(10)$ |
| 11,400 | 9,109 | $79.91 \%$ | 7,184 | 1,925 |
| 7,820 | 2,197 | $28.09 \%$ | 1,807 | 390 |
| 1,750 | 1,773 | $101.31 \%$ | 1,290 | 483 |
| 6,000 | 6,000 | $100.00 \%$ | 6,000 | - |
| $\mathbf{5 0 , 5 0 0}$ | $\mathbf{2 8 , 5 0 4}$ | $56.44 \%$ | $\mathbf{2 9 , 1 3 6}$ | $\mathbf{( 6 3 3 )}$ |

## ELK GROVE WATER DISTRICT <br> QUARTERLY BUDGET REVIEW <br> THROUGH June 30, 2018 FISCAL YEAR 2017-18

Account Description
Office \& Operational
5410 Advertising
5415 Association Dues
5420 Insurance
5425 Licenses, Certifications, Fees
5430 Repairs \& Maintenance - Automotive
5432 Repairs \& Maintenance - Building
5434 Repairs \& Maintenance - Computers
5435 Repairs \& Maintenance - Equipment
5438 Fuel
5440 Materials
5445 Chemicals
5450 Meter Repairs
5453 Permits
5455 Postage
5460 Printing
5465 Safety Equipment
5470 Software Programs \& Updates
5475 Supplies
5480 Telephone
5485 Tools
5490 Clothing Allowance
5491 EGWD-Other Clothing
5493 Water Conservation Materials
Category Subtotal

| FY 2017-18 <br> Budget | Y-T-D <br> $6 / 30 / 2018$ | $100.00 \%$ <br> Percentage | Y-T-D <br> $6 / 30 / 2017$ | Change from <br> prior year |
| ---: | ---: | ---: | ---: | ---: |
| 5,000 | 10,310 | $206.20 \%$ | 6,420 | 3,890 |
| 99,112 | 79,874 | $80.59 \%$ | 77,585 | 2,289 |
| 87,890 | 86,006 | $97.86 \%$ | 125,199 | $(39,193)$ |
| 3,600 | 2,154 | $59.83 \%$ | 3,147 | $(993)$ |
| 46,300 | 38,136 | $82.37 \%$ | 48,093 | $(9,956)$ |
| 18,000 | 28,402 | $157.79 \%$ | 25,902 | 2,500 |
| 24,759 | 21,196 | $85.61 \%$ | 33,518 | $(12,322)$ |
| 65,000 | 96,248 | $148.07 \%$ | 51,231 | 45,017 |
| 51,600 | 38,356 | $74.33 \%$ | 34,033 | 4,323 |
| 150,000 | 100,732 | $67.15 \%$ | 157,244 | $(56,512)$ |
| 50,000 | 42,494 | $84.99 \%$ | 19,507 | 22,987 |
| 12,000 | 27,055 | $225.46 \%$ | 6,563 | 20,492 |
| 82,200 | 83,498 | $101.58 \%$ | 93,895 | $(10,397)$ |
| 85,300 | 67,737 | $79.41 \%$ | 65,102 | 2,634 |
| 4,500 | 10,514 | $233.65 \%$ | 6,686 | 3,828 |
| 7,100 | 4,633 | $65.25 \%$ | 13,164 | $(8,531)$ |
| 92,868 | 94,105 | $101.33 \%$ | 103,776 | $(9,671)$ |
| 20,800 | 31,877 | $153.25 \%$ | 22,191 | 9,686 |
| 39,652 | 36,689 | $92.53 \%$ | 36,395 | 294 |
| 10,000 | 4,967 | $49.67 \%$ | 22,877 | $(17,909)$ |
| 10,200 | 8,206 | $80.45 \%$ | 9,691 | $(1,485)$ |
| 9,000 | 6,223 | $69.15 \%$ | 6,998 | $(775)$ |
| 10,000 | 12,289 | $122.89 \%$ | - | 12,289 |
| 984,881 | 931,703 | $94.60 \%$ | 969,217 | $(37,514)$ |

Account Description 5495 Purchased Water

## ELK GROVE WATER DISTRICT <br> QUARTERLY BUDGET REVIEW <br> THROUGH June 30, 2018 <br> FISCAL YEAR 2017-18

Account Description
Outside Services
5505 Administration Services
5510 Bank Charges
5515 Billing Services
5520 Contracted Services
5523 Water Conservation Services
5525 Accounting Services
5530 Engineering
5535 Legal Services
5540 Financial Consultants
5545 Community Relations
5550 Pre-employment
5552 Misc. Medical
5555 Janitorial
5560 Bond Administration
5570 Security
5575 Sampling
Category Subtotal

Account Description
Equipment Rent, Taxes and Utilities
5610 Occupancy
5620 Equipment Rental
5710 Property Taxes
5720 Water
5740 Electricity
5750 Natural Gas
5760 Sewer and Garbage
Category Subtotal

Total Operational Expenses

| FY 2017-18 <br> Budget | Y-T-D <br> $6 / 30 / 2018$ | $100.00 \%$ <br> Percentage | Y-T-D <br> $6 / 30 / 2017$ | Change from <br> prior year |
| ---: | ---: | ---: | ---: | ---: |
| 3,590 | 3,100 | $86.34 \%$ | 1,480 | 1,620 |
| 134,000 | 132,426 | $98.83 \%$ | 106,873 | 25,553 |
| 28,800 | 20,463 | $71.05 \%$ | 24,694 | $(4,232)$ |
| 232,520 | 286,949 | $123.41 \%$ | 266,148 | 20,801 |
| - | - | - | - | - |
| 35,000 | 26,760 | $76.46 \%$ | 24,553 | 2,207 |
| 75,000 | 31,585 | $42.11 \%$ | 10,188 | 21,398 |
| 205,000 | 191,694 | $93.51 \%$ | 76,958 | 114,736 |
| 85,000 | 110,842 | $130.40 \%$ | 13,427 | 97,414 |
| 16,200 | 8,679 | $53.57 \%$ | 15,895 | $(7,216)$ |
| 3,000 | 425 | $14.17 \%$ | 343 | 82 |
| 2,500 | 2,548 | $101.92 \%$ | 475 | 2,073 |
| 8,300 | 6,890 | $83.01 \%$ | 6,685 | 205 |
| 8,500 | 4,220 | $49.65 \%$ | 6,782 | $(2,562)$ |
| 68,700 | 50,706 | $73.81 \%$ | 12,444 | 38,263 |
| 35,000 | 38,710 | $110.60 \%$ | 43,275 | $(4,565)$ |
| 941,110 | 915,995 | $97.33 \%$ | $\mathbf{6 1 0} 0,220$ | $\mathbf{3 0 5 , 7 7 5}$ |


| FY 2017-18 | Y-T-D | $100.00 \%$ | Y-T-D | Change from |
| :---: | :---: | :---: | :---: | :---: |
| Budget | $6 / 30 / 2018$ | Percentage | $6 / 30 / 2017$ | prior year |


| - | - | - | - | - |
| ---: | ---: | ---: | ---: | ---: |
| 22,000 | 22,796 | $103.62 \%$ | 20,771 | 2,025 |
| 1,500 | 959 | $63.94 \%$ | 1,299 | $(340)$ |
| - | - | $0.00 \%$ | - | - |
| 359,000 | 320,004 | $89.14 \%$ | 314,161 | 5,843 |
| 600 | 507 | $84.54 \%$ | 601 | $(94)$ |
| $\mathbf{2 5 , 9 0 0}$ | 29,052 | $112.17 \%$ | 21,226 | 7,826 |
| $\mathbf{4 0 9 , 0 0 0}$ | $\mathbf{3 7 3 , 3 1 9}$ | $\mathbf{9 1 . 2 8 \%}$ | $\mathbf{3 5 8 , 0 5 9}$ | $\mathbf{1 5 , 2 6 0}$ |
|  |  |  |  |  |
| $\mathbf{8 , 9 4 4 , 6 0 4}$ | $\mathbf{9 , 1 4 1 , \mathbf { 2 8 6 }}$ | $\mathbf{1 0 2 . 2 0 \%}$ | $\mathbf{7 , 7 4 5 , 8 9 9}$ | $\mathbf{1 , 3 9 5 , 3 8 7}$ |

July 18, 2018

TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District
FROM: Patrick Lee, Finance Manager/Treasurer

## SUBJECT: ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY CAPITAL RESERVE STATUS REPORT

## 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 total amount available for reserves at July 1, 2017 was $\$ 12,871,285$. Based on Board policy adopted August 22, 2012, the reserves are allocated first to the Operating Reserve (120 days of budgeted operating and maintenance expenses), then to the Fiscal Year (FY) 2017-18 capital budget, followed by elections/special studies, with the balance allocated to future capital improvements and capital replacements in the ratio of $75: 25$, respectively.

Through the fourth quarter of FY 2017-18, the District expended $\$ 1,352,900$ for capital projects leaving a remaining total reserve balance at June 30, 2018 of $\$ 11,518,385$.

## DISCUSSION

## Background

On June 21, 2017, the Board approved the FY 2017-18 Elk Grove Water District (EGWD) Capital Improvement Program (CIP) that included an appropriation of \$1,506,000 in unrestricted funds to the FY 2017-18 CIP reserve fund. On August 14 ${ }^{\text {th }}, 2017$ a budget amendment was passed to appropriate an additional $\$ 250,000$ to the FY2017-18 Capital Improvement Fund.

## Present Situation

EGWD has appropriated Reserve Funds for FY 2017-18 as follows:

- Operations Reserves (120 days)
- FY 2017-18 Capital Improvement Fund
\$ 4,700,729
\$ 1,130,000


## ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY CAPITAL RESERVE STATUS REPORT

Page 2

- FY 2017-18 Capital Replacement Fund
- Elections and Special Studies
- Future Capital Improvements
- Future Capital Replacements
\$ 626,000
\$ 120,000
\$ 4,720,917

| $\$ 1,573,639$ |
| :--- |
| $\$ 12,871,285$ |

EGWD has expended $\$ 1,352,900$ for capital expenditures through June 30, 2018 as follows:

- Capital Improvement Fund
- Service Line Replacements
- Radio Antenna
- Well 1D Pump Replacement
- Well 8 Pump Replacement
- Trucks
- Fiber Optic Cable
- RRWTF Modular IT Center TOTAL

| \$ | 76,601 |
| ---: | ---: |
| $\$$ | 9,529 |
| $\$$ | 3,248 |
| $\$$ | 94,838 |
| $\$$ | 83,969 |
| $\$$ | 17,521 |
| $\$$ | 603,827 |
| $\$$ | 889,533 |

- Capital Replacement Fund
- Well 9 Fence Replacement

|  | 4,814 |
| :--- | ---: |
| $\$$ | 239,568 |
| $\$$ | 28,270 |
| $\$$ | 25,914 |
| $\$$ | 66,887 |
| $\$$ | 97,914 |
| $\$$ | 463,367 |

The EGWD remaining reserve fund balances as of June 30, 2018 are as follows:

- Operations Reserves (120 days)
- FY 2017-18 Capital Improvement Fund
- FY 2017-18 Capital Replacement Fund
- Elections and Special Studies
- Future Capital Improvements
- Future Capital Replacements

| $\$$ | $4,700,729$ |
| :--- | ---: |
| $\$$ | 240,467 |
| $\$$ | 162,633 |
| $\$$ | 120,000 |
| $\$$ | $4,720,917$ |
| $\$$ | $1,573,639$ |
| $\$$ | $1,518,385$ |

- Kent Street Water Main
- Emerald Vista Water Main Relocation
- Camden Water Main Relocation
\$ 25,914
- RRWTF Tanks \& Vessels
- Well Rehabilitation (one Year) TOTAL


# ELK GROVE WATER DISTRICT FISCAL YEAR 2017-18 QUARTERLY CAPITAL RESERVE STATUS REPORT 

Page 3

## ENVIRONMENTAL CONSIDERATIONS

There are no environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

This item conforms to the FRCD/EGWD's 2012-2017 Strategic Plan. Adoption and management of the annual EGWD budget is specifically identified as a goal in the financial stability challenge section of the Strategic Plan.

## FINANCIAL SUMMARY

There is no financial impact with this report.

Respectfully submitted,

Attachment

## Attachment 1

## ELK GROVE WATER RESERVES

Fiscal Year 2017-18
As of June 30, 2018


Capital Improvement Funds

| Supply/Dist. Improvements | Treatment Plant Improvements | Building \& Site Improvements | Unforeseen Capital Projects |
| :---: | :---: | :---: | :---: |
| Funded | Funded | Funded | Funded |
| \$ 250,000 | \$ 180,000 | \$ 650,000 | \$ 50,000 |
| Expended | Expended | Expended | Expended |
| \$ 79,849 | \$ 104,367 | \$ 705,317 |  |
| Remaining | Remaining | Remaining | Remaining |
| \$ 170,151 | \$ 75,633 | \$ $(55,317)$ | \$ 50,000 |

Capital Replacement Funds


# SUBJECT: ELK GROVE WATER DISTRICT SCHEDULE OF CHARGES, RATES, FEES AND DEPOSITS 

## RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors adopt Ordinance 07.18.18.01, amending Ordinance No. 12.14.16.01, Exhibit A, in its entirety and revising the Elk Grove Water District's Schedule of Charges, Rates, Fees and Deposits.

## SUMMARY

In January 2018, the Florin Resource Conservation District (District) initiated a review of the Elk Grove Water District's (EGWD) financial requirements and the preparation of a new five-year water rate study and a water connection fee study. Staff took this opportunity to also conduct a review of the cost recovery fees necessary for customer specific tasks, which were not factored into the revenue requirement analysis of the fiveyear water rate study. The exclusion of the costs related to customer specific task ensures that these costs are not absorbed by the entire customer base, but rather the customer requesting the specific task. This review process resulted in certain changes to the Schedule of Charges, Rate, Fees and Deposits, which is attached as Exhibit A.

## DISCUSSION

## Background

In December 2016, the District conducted a review of the District's Schedule of Charges, Rates, Fees and Deposits in an effort to capture the actual costs of providing the services for which the charges, rates, fees and deposits are assessed. Staff conducted a thorough review including analysis of labor and administrative costs to provide the services. The District adopted Ordinance 12.14.16.01 setting forth the Schedule of Charges, Rates, Fees and Deposits.

July 18, 2018

## ELK GROVE WATER DISTRICT SCHEDULE OF CHARGES, RATES, FEES AND DEPOSITS

Page 2

## Present Situation

As part of a complete and comprehensive review, and in concurrence with the District's 2018 Water Rate Study and 2018 Water Connection Fee Study, EGWD staff has reviewed cost recovery fees necessary for customer specific tasks. Activities such as account set-ups or returned check charges are covered by fees paid by the customer requesting those activities, rather than absorbing those costs into the entire customer base. Those fees are detailed in Exhibit A and cover only the cost of each item and do not contribute to the general District revenue.

## ENVIRONMENTAL CONSIDERATIONS

California Environmental Quality Act (CEQA) does not apply to the District's adoption of these rates since the Board specifically finds the rates are for the purpose of one or more of the following:
(1) Meeting operating expenses, including employee wage rates and fringe benefits,
(2) Purchasing or leasing supplies, equipment, or materials,
(3) Meeting financial reserve needs and requirements, and/or
(4) Obtaining funds for capital projects, necessary to maintain service within existing service areas.

## STRATEGIC PLAN CONFORMITY

Review and update of the Schedule of Charges, Rates, Fees and Deposits will ensure sufficient cost recovery, which complies with the Financial Stability goals of the 20122017 Strategic Plan.

## FINANCIAL SUMMARY

There are no direct financial impacts associated with this report, however, this report does recommend the adoption of Ordinance 07.18.18.01 which sets forth the Schedule of

ELK GROVE WATER DISTRICT SCHEDULE OF CHARGES, RATES, FEES AND DEPOSITS
Page 3

Charges, Rates, Fees and Deposits to recapture the costs of providing customer specific tasks.

Respectfully Submitted,


FINANCE MANAGER/TREASURER

Attachment

## AN ORDINANCE OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS <br> AMENDING ORDINANCE NO. 12.14.16.01, EXHIBIT A, IN ITS ENTIERTY AND REVISING THE ELK GROVE WATER DISTRICT'S SCHEDULE OF CHARGES, RATES, FEES AND DEPOSITS

WHEREAS, Government Code sections 66013 and 66016 authorize the Florin Resource Conservation District (the "District") to adopt a resolution or ordinance to establish and impose water service fees and charges; and

WHEREAS, the District Board of Directors ("Board of Directors") adopted Ordinance 12.14.16.01 on December 14, 2016, establishing the Schedule of Charges, Rates, Fees and Deposits; and

WHEREAS, the Board of Directors wishes to adjust several other miscellaneous water service fees and charges to reflect the actual cost of providing the service for which they are charged; and

WHEREAS, the above-described data sets forth reasonable cost estimates for the District's provision of the miscellaneous water service fees and charges and establishes that the proceeds generated by the fees and charges do not exceed the total of the estimated costs.

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS HEREBY DETERMINES AND ORDAINS AS FOLLOWS:

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

Section 2. Final Approval of the Schedule of Charges, Rates, Fees and Deposits. The Florin Resource Conservation District/Elk Grove Water District Schedule of Charges, Rates, Fees and Deposits is hereby approved.

Section 3. Amendment. Exhibit A of Ordinance 12.14.16.01 is hereby replaced in its entirety with the attached Exhibit A.

Section 4. California Environmental Quality Act Compliance.
(a) Pursuant to California Public Resources Code section 21080(b)(8), the District's adjustments to the water capacity charges and meter installation charges are not subject to the requirements of the California Environmental Quality Act. In accordance with Section 21080(b)(8), the District finds and determines that these adjustments constitute the modification of charges to meet operating expenses and for obtaining funds for capital projects necessary to provide and maintain water services within the District's service area.
(b) District staff is hereby directed to file a Notice of Exemption with the Sacramento County Clerk with three (3) business days after adoption of this Ordinance.

Section 5. Ordinance Effective Date. This ordinance shall take effect upon its adoption.

PASSED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this $18^{\text {th }}$ day of July 2018 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

Tom Nelson
Chairperson of the Board of Directors
ATTEST:

Stefani Phillips
Board Secretary

## EXHIBIT A

## Florin Resource Conservation District / Elk Grove Water District Water Ordinance <br> Schedule of Charges, Rates, Fees, and Deposits

1. Account Set-Up Fee. A new occupant of a residence will be considered a new account and will be charged an account set-up fee of $\$ 30.00$
2. Returned Check Service Charge. Any person who submits to the District a check for which there are insufficient funds shall be subject to a charge of $\$ 35.00$, in addition to the amount of the check.
3. 24 -Hour Turn-On Fee. $\$ 100.00$ shall be charged to a realtor or other responsible party for the temporary turn-on of water service at a vacant property for the purposes of inspection.
4. Over the Phone Payments. A $\$ 5.00$ credit card processing fee shall be charged for payments made by telephone.
5. Photocopies. A per-page fee of ten cents for black and white copies and fifteen cents for color copies shall be charged for copies provided in response to a Public Records Act request or other requests for substantial photocopy services.
6. Delinquency Shut-Off. When water service is discontinued because of delinquency in payment of a bill, the service shall not be restored until the Customer has paid:
a. The amount of the unpaid bill,
b. $\$ 25.00$ door tag fee, and
c. A shut-off/field service fee of $\$ 100.00$.

During the door-hanger period, termination of service may be avoided by payment of the unpaid bill and the $\$ 25.00$ door hanger fee. All of the forgoing fees must be paid in cash, cashier's check or money order only.
7. Change of Meter Size or Location. When a Customer requests a change of meter size or relocation of an existing meter or service connection for the Customer's convenience, the change will be made by the District and billed to the Customer at a time and materials costs.
8. Testing of Meters and Fire Flow. Meters will be tested upon request of the Customer and payment of the cost of the test and District staff's time at the hourly rate of $\$ 47.00$. If the meter is faulty, fees will be waived. Fire flows shall be tested upon request of the Customer and payment of a fee of $\$ 156.00$.
9. Backflow Tag Fee. All Customer backflow devices installed and tested, whether by the District or by a contractor, are assessed a $\$ 25$ tag fee.
10. Meter Re-read. A meter may be re-read upon request of the Customer. The first re-read will be performed at no charge. Each subsequent re-read will be subject to a charge of $\$ 25.00$.
11. Plan Check Fees for Water Systems Extensions. Any person required by this Ordinance to have plans checked shall deposit with the Elk Grove Water District the following fee or fees for the service:

| a. | Irrigation only: | $\$ 500.00$ |
| :--- | :--- | :--- |
| b. One lot, building unit, or EDU: | $\$ 500.00$ |  |
| c. Two to Nine lots, building units, or EDUs: | $\$ 2,000.00$ |  |

d. Ten or more lots, building units, or EDUs: \$5,000.00

This deposit will serve as credit towards fees for plan check, inspection, engineering and administrative costs of the project and actual fees will be calculated on a time and material basis. Expenses incurred beyond the deposit will be billed monthly and the project will not be accepted by Elk Grove Water District until all outstanding balances have been paid. Credits not used after acceptance of a project shall be refunded to the project.
11. Construction and other temporary services. Rates for construction and other temporary water service rendered for street paving, grading and trench flooding, and water delivered to tank trucks from fire hydrants or other outlets for such purposes, are as follows:

Permits will be charged an installation and removal charge of $\$ 194.00$ and a weekly rental fee of $\$ 50.00$ for use of the District's equipment (e.g., meter; reduced pressure backflow device). Charges for water actually used will be billed at the non-residential rate.

The applicant for temporary service shall be required to deposit with the District the amount of $\$ 2,000.00$. Upon permit expiration, the Contractor should bring the water meter used for the permit into the District where a final meter reading will be collected. The District will determine if additional monies or a refund is due, and collect the amount or process a refund. If a refund is owed, a check will be prepared and mailed to the Contractor.
12. Fines for Violation. Any violation of this Ordinance shall be subject to a fine in the amount of $\$ 100.00$ for the first occurrence, $\$ 200.00$ for the second occurrence within one year and $\$ 500.00$ for each additional occurrence within one year.

# TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District 

FROM: Patrick Lee, Finance Manager/Treasurer

## SUBJECT: PUBLIC HEARING AND CONSIDERATION OF THE 2018 WATER RATE STUDY AND ADOPTION OF NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES

## RECOMMENDATION

It is recommended that the Florin Resource Conservation District Board of Directors adopt Ordinance 07.18.18.02 approving the 2018 Water Rate Study Report and adopt new water service rates and private fire protection service rates.

## SUMMARY

In January 2018, the Florin Resource Conservation District (District) initiated a review of the District's water enterprise, the Elk Grove Water District's (EGWD), financial requirements and the preparation of a new five-year water rate study. This study, referred to as the 2018 Water Rate Study, was tentatively approved by the Board on May 16, 2018, subject to compliance with rate setting process governed under Proposition 218 and a public hearing to consider comments and protests.

The 2018 Water Rate Study recommends rate adjustments over the next 5 years with the first adjustment commencing on January 1, 2019 and subsequent adjustments commencing each January 1 thereafter, through and including January 1, 2023. The study recommends no revenue adjustments during calendar year 2019.

The Board will hold a public hearing to receive comments and consider protests received in compliance with Proposition 218. Following the public hearing, the Board will consider adoption of an ordinance which will include final approval of the 2018 Water Rate Study and adoption of new water service rates and private fire protection service rates prescribed by the study.

## DISCUSSION

## Background

In 2013, the EGWD completed a five-year financing plan and rate study, which resulted in a series of rate adjustments that first went into effect January 1, 2014. These adjustments were primarily intended to: 1) Ensure that the EGWD complied with major

# PUBLIC HEARING AND CONSIDERATION OF THE 2018 WATER RATE_STUDY AND ADOPTION OF NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES 

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bond covenants; 2) Fund the cost of major capital projects; and 3) continue to adhere to the EGWD reserve policy.

The EGWD implemented rate adjustments of 3\% in each calendar year 2014, 2015, 2016, 2017 and 2018. Although the 2013 Water Rate Study recommended rate adjustments of $3.5 \%$ for calendar year 2017 and $4.5 \%$ for calendar year 2018, the Board approved deferring one-half percent of the rate adjustment scheduled for January 1, 2017 and one and one-half percent of the rate adjustment scheduled for January 1, 2018, as the EGWD was able to avoid these increases by implementing a series of cost control measures, including significant employee concessions and water purchase cost savings.

Water utilities such as the EGWD typically conduct financial plans and rate studies about every five years to ensure that water rates are adequate and proportionate to the costs of providing water services. Consistent with this practice, the Board of Directors directed staff to initiate a new review of its revenue requirements and to seek proposals from consultants to perform a new water rate study.

In October 2017, the Board of Directors retained HDR Engineering, Inc. to conduct an extensive review of the EGWD's revenue requirements and prepare a new water rate study which would include a financial plan, a cost of service analysis, and a rate design plan. A separate study was also conducted to review the EGWD's connection fees (i.e., capacity charges); however, that study is not addressed in this report.

A Community Advisory Committee (CAC), comprising of EGWD rate payers, was formed to provide the EGWD with input regarding the 2018 Water Rate Study. There have been six meetings where the CAC and public has had an opportunity to provide comments and input to the EGWD. The CAC and public have contributed valuable assistance and input to ensure that the information and work products are accurate and equitable.

On May 16, 2018, the 2018 Water Rate Study was tentatively approved by the Board, subject to compliance with several procedural requirements, including those established by Proposition 218. Proposition 218 was passed by voters in 1996 and, for water rate increases, established a specific process for giving notice and receiving protests.

Proposition 218 requires that the public agency proposing to impose a new or increase to an existing property-related fee or charge, such as water service fees, hold a public hearing and provide written notice by mail of the public hearing to the record owner of each parcel upon which the fee or charge will be imposed and any tenant who is directly

## PUBLIC HEARING AND CONSIDERATION OF THE 2018 WATER RATE_STUDY AND ADOPTION OF NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES

Page 3
liable for the payment of the fee or charge (i.e., a customer of record). The notice must contain the following information:

- The amount of the fees proposed to be imposed;
- The basis upon which the fees were calculated;
- A statement regarding the reason for the imposition of the new, or increase to the existing fees; and
- The date, time and location of the public hearing at which the legislative body will consider the new fees or proposed increases to the existing fees.

On May 21, 2018, approximately 16,500 notices were mailed to EGWD customers, including both the tenants and owners of record for all properties served by the District. Proposition 218 requires that these tenants and owners be afforded 45 days to submit written protests before any rate increase can be considered by the Board.

It is important to note that the effect of the rate adjustments may differ from customer to customer, depending on water usages. Page 51 of the 2018 Water Rate Study provides a graphical bill impact comparison for residential, non-residential and irrigation customers. The EGWD will also assembled a bill calculator to be located on the EGWD website, which will allow customers to determine their current and future water rates depending on their respective water consumption.

## Present Situation

This Board item is the next step in the process and includes a public hearing to consider the adoption of the proposed rate increases to the water service rates and private fire protection service rates. At the public hearing, the District must hear and consider all public comments regarding the fees, but only written protests submitted prior to the close of the 45-day written protest period may be considered when determining whether a majority protest against the imposition of the fees exist. Upon the conclusion of the public hearing, if written protests against proposed increases to the existing water service fees are not presented by a majority of property owners of the identified parcels upon which the fees are proposed to be imposed and any customer of record, the Board may proceed with imposing the proposed rate increases to the water service rates. A final count of the written protests received will be provided by Staff to the Board at the conclusion of the public hearing.

If the number of written protests received for the properties served does not constitute a majority protest, Staff recommends that the Board approve the 2018 Water Rate Study

## PUBLIC HEARING AND CONSIDERATION OF THE 2018 WATER RATE_STUDY AND ADOPTION OF NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES

Page 4
and adopt the new water service rates and private fire protection service rates as recommended in that study.

The recommendations made in this report are supported by the members of the Community Advisory Committee.

## ENVIRONMENTAL CONSIDERATIONS

CEQA does not apply to the District's adoption of these rates since the Board specifically finds the rates are for the purpose of one or more of the following:
(1) Meeting operating expenses, including employee wage rates and fringe benefits,
(2) Purchasing or leasing supplies, equipment, or materials,
(3) Meeting financial reserve needs and requirements, and/or
(4) Obtaining funds for capital projects, necessary to maintain service within existing service areas.

## STRATEGIC PLAN CONFORMITY

Completion of the 2018 Water Rate Study complies with the Financial Stability goals of the 2012-2017 Strategic Plan.

## FINANCIAL SUMMARY

The recommended rate structure will generate a total of $\$ 2,083,000$ in additional revenue over the five years. The first rate adjustment will occur in January 2019 and have further adjustments each January.

The proposed rate adjustments, and the additional revenue generated per year, are as follows:

- January 2019 - 0\%
\$0

July 18, 2018
PUBLIC HEARING AND CONSIDERATION OF THE 2018 WATER RATE_STUDY AND ADOPTION OF NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES
Page 5

- January 2020 - 0\%
- January 2021 - 3\% \$0
- January 2022-3\%
\$228,000
- January 2023 - 3\%
\$688,000
\$1,167,000
The additional revenue generated will augment the existing reserves of approximately $\$ 12$ million to fund the District's operations, debt service and capital improvements.

Respectfully Submitted,

PATRICK LEE
FINANCE MANAGER/TREASURER

Attachment

# AN ORDINANCE OF THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS APPROVING THE 2018 WATER RATE STUDY REPORT AND ADOPTING NEW WATER SERVICE RATES AND PRIVATE FIRE PROTECTION SERVICE RATES 

WHEREAS, Government Code sections 66016 and 66018 authorize the Florin Resource Conservation District (the "District") to adopt a resolution or ordinance to establish and impose water service rates and private fire protection service rates; and

WHEREAS, Article XIII D Section 6 of the California Constitution authorizes the District to establish and impose property-related fees and charges including water rates; and

WHEREAS, the District Board of Directors ("Board of Directors") caused to have prepared the Elk Grove Water District 2018 Water Rate Study Report, dated May 9, 2018, which recommends changes to the existing water service rates and private fire protection service rates; and

WHEREAS, pursuant to Article XIII D Section 6 of the California Constitution and Government Code section 66018, the District held a public hearing on July 18, 2018, as part of a regularly scheduled meeting of its Board of Directors, during which the District gave members of the public the opportunity to make oral or written presentations to the Board of Directors on the proposed changes to the water service rates and private fire protection service rates; and

WHEREAS, the District published notice of the time and place of the July 18, 2018 public hearing, including a general explanation of the matter to be considered, at least ten days before the hearing as required by Government Code section 6062a and 66018; and

WHEREAS, at least ten days before the public hearing, the District made data publicly available that indicates (1) the estimated cost required to provide the services for which the District proposes to levy the water service rates and private fire protection service rates and (2) the revenue sources anticipated to provide such services, all according to Government Code section 66016; and

WHEREAS, the above-described data sets forth reasonable cost estimates for the District's provision of the water service rates and private fire protection service rates and establishes that the proceeds generated by the rates do not exceed the total of the estimated costs.

NOW, THEREFORE, THE FLORIN RESOURCE CONSERVATION DISTRICT BOARD OF DIRECTORS HEREBY DETERMINES AND ORDAINS AS FOLLOWS:

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

Section 2. Final Approval of Water Rate Study. The Elk Grove Water

District 2018 Water Rate Study Report dated May 9, 2018 is hereby approved.
Section 3. Water Service Rates. Beginning on January 1, 2019 and continuing annually thereafter on that same month and day through and including January 1,2023 , water service rates will be automatically increased according to the water service rates recommended in the "Elk Grove Water District 2018 Water Rate Study Report" dated May 9, 2018 and attached as Exhibit A. The Board of Directors has the discretion to defer all or partial annual rate increases to future years when it is determined that none or not all of the recommended rate increase is required to balance the annual operating budget.

Section 4. Private Fire Protection Service Rates. Beginning on January 1, 2019 and continuing annually thereafter on that same month and day through and including January 1, 2023, private fire protection service rates will be automatically increased according to the private fire protection service rates recommended in the "Elk Grove Water District 2018 Water Rate Study Report" dated May 9, 2018 and attached as Exhibit A. The Board of Directors has the discretion to defer all or partial annual rate increases to future years when it is determined that none or not all of the recommended rate increase is required to balance the annual operating budget.

Section 5. California Environmental Quality Act Compliance.
(a) Pursuant to California Public Resources Code section 21080(b)(8), the District's adjustments to the water rates and miscellaneous water service fees and charges are not subject to the requirements of the California Environmental Quality Act. In accordance with Section 21080(b)(8), the District finds and determines that these adjustments constitute the modification of charges to meet operating expenses and for obtaining funds for capital projects necessary to provide and maintain water services within the District's service area.
(b) District staff is hereby directed to file a Notice of Exemption with the Sacramento County Clerk with three (3) business days after adoption of this Ordinance.

Section 6. Ordinance Effective Date. This ordinance shall take effect upon its adoption.

PASSED AND ADOPTED by the Florin Resource Conservation District Board of Directors on this $18^{\text {th }}$ day of July 2018 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

## ATTEST:

Stefani Phillips
Board Secretary


Elk Grove Water District

## FINAL REPORT






Florin Resource Conservation District/Elk Grove Water District Water Rate Study May 2018

May 9, 2018
Mr. Mark Madison, P.E.
General Manager
Florin Resource Conservation District/ Elk Grove Water District
9257 Elk Grove Blvd.
Elk Grove, CA 95624

Subject: Comprehensive Water Rate Study Final Report
Dear Mr. Madison:
HDR Engineering, Inc. (HDR) is pleased to present to the Elk Grove Water District (District) the final report for the comprehensive water rate study. The District's comprehensive water rate study was developed to provide cost-based and equitable rates to adequately fund the operating and capital needs of the water utility. This report outlines the overall approach used to achieve these objectives, along with our findings, conclusions and recommendations.

The Elk Grove Water District operates a water supply, transmission, and distribution system. The costs associated with developing the water supply, treat the water, purchase the water, and the costs of distributing water to customers has been developed based on District adopted budgets and included within the development of the proposed water rates.

This study was developed utilizing generally accepted water rate setting principles and methodologies as outlined in the American Water Works Association M1 Manual "Principals of Water Rates, Fees, and Charges". This report provides the basis for developing and implementing water rates which are cost-based, equitable, and defensible to the District's customers.

We appreciate the assistance provided by the District's management team in the development of this study. More importantly, HDR appreciates the opportunity to provide these technical and professional services to the District.

Sincerely yours, HDR Engineering, Inc.


Shawn Koorn
Associate Vice President

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## Executive Summary

## Introduction

HDR was retained by the Florin Resource Conservation District to conduct a comprehensive water rate study for its water enterprise the Elk Grove Water District (District). The objective of the rate study was to review the District's operating and capital costs in order to develop a financial plan and develop cost-based and equitable rates for the District's water system customers. This study determined the adequacy of the existing water rates and provides the framework and cost basis for the proposed level of revenues and recommended water rates.

The District consists of two service areas, service area one (1) where the District owns and operates the distribution, transmission and service area two (2) where the District only owns and maintains the distribution system while the Sacramento County Water Agency owns and maintains the Transmission facilities which transports purchased water to the District. The District has two sources of supply, District owned treatment facilities, and water purchased from the Sacramento County Water Agency.

## Overview of the Rate Study Process

A comprehensive water rate study uses three interrelated analyses to address the adequacy and equity of a utility's rates. This approach and methodology is outlined in the American Water Works Association (AWWA) M1 Manual, Principles of water rates, fees and charges. These three analyses are a revenue requirement analysis, a cost of service analysis, and a rate design analysis. These three analyses are illustrated below in Figure ES - 1.

## Figure ES - 1

## Overview of the Comprehensive Water Rate Analyses



Compares the revenues to the expenses of the District to determine the overall rate adjustment required

Allocates the revenue requirement to the District's customer classes of service in a "fair and equitable" manner

Considers both the level and structure of the rate design to collect the target level of revenues from each customer class

Executive Summary
Elk Grove Water District - Comprehensive Water Rate Study

The above framework was utilized to review and evaluate the District's water rates for this study.

## Key Water Rate Study Results

The water rate study technical analysis was developed based on the District's operating and capital costs necessary to provide water service to the District's customers. The water rate analysis resulted in the following findings, conclusions, and recommendations.

- A revenue requirement analysis was developed for the review period of FY 2018/19 through FY 2027/28.
- The District's FY 2017/18 adopted operating and maintenance (O\&M) budget was used as the starting point of the analysis.
- O\&M expenses are projected to increase at various inflationary levels with no assumed changes to levels of service or anticipated extraordinary expenses.
- A cost of service analysis was developed to review the equity of the existing rates and proportionally allocate the revenue requirement to the various customer classes and residential tiers.
- The results of the cost of service analysis provided the unit costs (i.e., cost-based rates) which were used to establish the proposed rates.
■ The study has developed proposed rates for the FY 2018/19 through FY 2022/23 time period, by class of service.
- The study was prepared based on a generally accepted rate setting methodology (AWWA M1 Manual) to meet the intent of Proposition 218.


## Summary of the Water Revenue Requirement Analysis

A revenue requirement analysis is the first analytical step in the development of the water rate study. This analysis determines the adequacy of the level of current water rates. From this analysis, a determination can be made as to the overall level of water revenue adjustments needed to provide adequate and prudent funding for both operating and capital needs.

For this study, the revenue requirement was developed for the projected time period of FY 2017/18 - FY 2027/28. A ten-year time frame is recommended to better anticipate future financial requirements and allow the District, if necessary, to begin planning for these changes sooner, thereby minimizing short-term rate impacts and overall long-term rate levels. For the revenue requirement analysis, a "cash basis" approach was utilized. The "cash basis" approach is the most commonly used methodology by municipal utilities to set their revenue requirement and it includes an analysis of O\&M expenses, transfer payments, debt service, and capital projects funded from rates. This is also the method used historically by the District in past rate studies. The primary financial inputs in the development of the revenue requirement analysis were the District's adopted FY 2017/18 budget, historical billed customer and consumption data, and the District's most current capital improvement plan.

Once the operating and maintenance expenses have been projected over the time period, based on budgeted expenses and historical inflationary factors, the next step is to develop the capital
improvement funding plan. The proper and adequate funding of capital projects is an important step to help minimize rates over time. A general financial guideline states that, at a minimum, a utility should fund an amount equal to or greater than annual depreciation expense through rates. Given the District's historical pay as you go approach, the District has annually funded an amount greater than annual depreciation expense. Provided below in Table ES - 1 is a summary of the capital funding plan over the ten-year period.

| Table ES-1Overview of the Water Capital Improvement Plan (000's) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Projected |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \text { FY } \\ 18-19 \end{gathered}$ | $\begin{gathered} \text { FY } \\ \text { 19-20 } \end{gathered}$ | $\underset{\text { FY }}{\text { 20-21 }}$ | $\begin{gathered} \text { FY } \\ 21-22 \end{gathered}$ | $\underset{\text { FY-23 }}{\underset{22-2}{ }}$ | $\underset{\text { FY-24 }}{\substack{\text { FY } \\ \hline}}$ | $\underset{\text { FY-25 }}{\substack{\text { FY } \\ \hline}}$ | $\underset{25-26}{\underset{25}{ }}$ | $\underset{\text { 26-27 }}{\text { FY }}$ | $\underset{27-28}{\underset{27}{ }}$ |
| Capital Plan |  |  |  |  |  |  |  |  |  |  |
| Supply/Distribution | \$980 | \$1,072 | \$995 | \$1,188 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Treatment | 80 | 0 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building \& Site Improvements/Vehicles | 185 | 160 | 160 | 120 | 124 | 127 | 131 | 135 | 139 | 143 |
| Future Unidentified Projects | 100 | 100 | 100 | 100 | 1,676 | 1,723 | 1,769 | 1,815 | 1,861 | 1,907 |
| Total Revenue Requirement | \$1,345 | \$1,332 | \$1,435 | \$1,408 | \$1,800 | \$1,850 | \$1,900 | \$1,950 | \$2,000 | \$2,050 |
| Capital Reserve Funding | \$355 | \$368 | \$365 | \$492 | \$200 | \$250 | \$300 | \$350 | \$400 | \$450 |
| Total Capital Investment | \$1,700 | \$1,700 | \$1,800 | \$1,900 | \$2,000 | \$2,100 | \$2,200 | \$2,300 | \$2,400 | \$2,500 |
| Capital Plan Funding |  |  |  |  |  |  |  |  |  |  |
| Capital Improvement Reserve | \$195 | \$280 | \$390 | \$745 | \$962 | \$989 | \$1,016 | \$1,043 | \$1,070 | \$1,097 |
| Capital Replacement Reserve | 1,150 | 1,052 | 1,045 | 663 | 838 | 861 | 884 | 907 | 930 | 953 |
| Future Capital Improvement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Future Capital Replacement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low Interest Loans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Revenue Bonds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rate Funding | 355 | 368 | 365 | 492 | 200 | 250 | 300 | 350 | 400 | 450 |
| Total Capital Funding | \$1,700 | \$1,700 | \$1,800 | \$1,900 | \$2,000 | \$2,100 | \$2,200 | \$2,300 | \$2,400 | \$2,500 |

[^4]As noted, the District's current approach to capital funding is a pay as you go approach. Capital projects often vary substantially from year to year which the District budgets, but for rate setting purposes the study assumes a level amount of funds for capital projects through rates. Any project funding needs greater than rate funding levels are funded through reserves.

The revenue requirement analysis for District was developed to determine the necessary revenues to meet the costs of providing water service to the customers based on the specific costs of the water utility. Provided below, in Table ES - 2 , is a summary of the revenue requirement analysis (financial plan) developed for the water utility. A more detailed analysis of the revenue requirements can be found in Section 3 of this report.
Executive Summary
Elk Grove Water District - Comprehensive Water Rate Study

| Budget |  | Projected |  |  |  | $\underset{24-25}{\text { FY }}$ | $\begin{gathered} \text { FY } \\ 25-26 \end{gathered}$ | $\underset{26-27}{\underset{26}{ }}$ | $\begin{gathered} \text { FY } \\ 27-28 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { FY } \\ \mathbf{1 8 - 1 9} \end{gathered}$ | $\begin{gathered} \text { FY } \\ 19-20 \end{gathered}$ | $\underset{20-21}{\text { FY }}$ | $\underset{\text { FY }}{\mathbf{F 1 - 2 2}}$ | $\underset{\text { 22-23 }}{\text { FY }}$ | $\begin{gathered} \text { FY } \\ 23-24 \end{gathered}$ |  |  |  |  |
| \$15,076 | \$15,150 | \$15,223 | \$15,298 | \$15,372 | \$15,447 | \$15,523 | \$15,598 | \$15,674 | \$15,750 |
| 292 | 300 | 304 | 306 | 308 | 309 | 311 | 313 | 314 | 315 |
| \$15,369 | \$15,449 | \$15,527 | \$15,604 | \$15,680 | \$15,756 | \$15,834 | \$15,911 | \$15,988 | \$16,065 |
| \$3,587 | \$3,747 | \$3,914 | \$4,090 | \$4,273 | \$4,465 | \$4,667 | \$4,877 | \$5,098 | \$5,330 |
| 52 | 53 | 54 | 56 | 57 | 59 | 60 | 62 | 63 | 65 |
| 4,176 | 4,364 | 4,562 | 4,768 | 4,985 | 5,211 | 5,448 | 5,697 | 5,957 | 6,229 |
| 927 | 960 | 994 | 1,028 | 1,064 | 1,102 | 1,140 | 1,180 | 1,221 | 1,264 |
| 418 | 426 | 435 | 444 | 454 | 463 | 473 | 483 | 493 | 504 |
| 65 | 66 | 68 | 70 | 72 | 73 | 75 | 77 | 79 | 81 |
| 1,700 | 1,700 | 1,800 | 1,900 | 2,000 | 2,100 | 2,200 | 2,300 | 2,400 | 2,500 |
| 3,824 | 3,827 | 3,855 | 3,882 | 3,883 | 3,887 | 3,888 | 3,942 | 3,981 | 3,977 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 620 | 306 | 73 | 53 | 59 | 60 | 64 | 13 | (27) | (27) |
| \$15,369 | \$15,449 | \$15,756 | \$16,292 | \$16,847 | \$17,420 | \$18,015 | \$18,630 | \$19,265 | \$19,922 |

As can be seen, the revenue requirement has summed $O \& M$, transfers, annual debt service, rate funded capital, and reserve funding. The total revenue requirement is then compared to the total sources of funds which are annual rate revenues, at present rate and consumption levels, and other miscellaneous revenues. From this comparison a balance or deficiency of funds in each year can be determined. This deficiency of funds is then compared to the projection of rate revenues to determine the overall revenue adjustment needed to meet the costs of providing water service. It is important to note the "Balance/(Deficit) Funds" row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in the later years.

In FY 2018/19 the overall levels of water rate revenues are sufficient to fund the revenue requirement but over time the District's revenue becomes insufficient and rate adjustments are needed to fully fund operations and capital needs. With this in mind, it is proposed that the District raise rates annually in FY 2020/21 through FY 2022/23 by 3\%.

Based on the revenue requirement analysis developed, HDR has concluded that the District will need to adjust the level of water rate revenues as noted above to meet annual O\&M and capital expenses over the next five years. HDR has developed the following recommendations:

- Revenue adjustments are necessary to meet the operating and capital costs of providing water service to the District's customers.
- The proposed revenue adjustments enhance the District's financial health and provide long-term sustainable funding levels.
- Prior to the end of the financial planning projected period, the District should complete a review of the water revenue levels and costs at that time.

HDR would recommend that the District adopt the proposed revenue adjustments to provide sufficient funding for the projected operating and capital needs of the water utility. Detailed technical exhibits of the revenue requirement analysis have been included within the Technical Appendix.

## Summary of the Water Cost of Service Analysis

A cost of service analysis determines the equitable allocation of the revenue requirement to the various customer classes of service (e.g., Residential, Non-Residential, Irrigation). The objective of the cost of service analysis is different from determining the revenue requirement analysis. Whereas a revenue requirement analysis determines the utility's overall financial needs, the cost of service analysis determines the proportional and equitable manner to collect that revenue requirement from each customer class of service based on how each customer class utilizes (benefits) from the system.

After analyzing the customer classes and usage data, it is recommended that the current customer classes of service be maintained for the cost of service allocation and distribution and rate setting purposes. The District currently has three rate classes, residential, non-residential,
and irrigation. The residential rate structure currently has a two tiered rate structure plus a variable meter charge, while non-residential and irrigation have a uniform rate, with different consumption charges, and a variable meter charge. In addition to these three customer classes of service, the District also has a private fire protection rate which was also analyzed as part of this study.

In summary form, the cost of service analysis began by functionalizing the revenue requirement for the District's water utility. The functionalized revenue requirement was then allocated into the various cost components (e.g., average day, peak day, customer related). The individual allocation totals were then proportionally distributed to the various customer classes of service based on the appropriate distribution factor. The distributed expenses for each customer class were then aggregated to determine each customer class's overall revenue responsibility. Given this, proposed water rates can be developed that reflect the costs incurred to provide service to these customers. As a result, the cost of service proportionally allocated costs to residential, nonresidential, and irrigation/other customer classes. Table ES - 3 provides the summary of the cost of service analysis for the FY 2018/19 test year.

| Table ES - 3Summary of the Cost of Service Analysis (\$000) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Class of Service | Present Revenues (FY 2018/19) | Allocated Costs | \$ <br> Difference | $\$$ <br> Difference |
| Residential | \$13,043 | \$13,036 | \$8 | -0.1\% |
| Non-Residential | 1,262 | 1,224 | 38 | -3.0\% |
| Irrigation | 581 | 629 | (48) | 8.2\% |
| Private Fire Protection | 189 | 187 | 2 | -0.9\% |
| Total | \$15,076 | \$15,076 | \$0 | 0.0\% |

The cost of service study proportionally distributes the revenue requirement to each customer class based on their use of the system and facilities. The results of the analysis indicate that minor cost of services differences exist between the various customer classes of service. The results show that, for example, the residential, non-residential, and private fire protection customers' proportional share of costs is approximately equal to the respective current revenues. However, the cost of service shows the need to adjust the irrigation customers revenues (i.e., rate levels) based on the customer class' customer characteristics and infrastructure needs. This is the result of the allocation of costs and residential customer's proportional share of costs based on average day, peak day, and customer related costs. This means that the rates for residential, nonresidential, and private fire can be slightly decreased to reflect the cost of service while irrigation should be increased to reflect their cost of service. It is important to understand that a cost of service analysis is based on a projection of customer consumption data based on recent year's consumption history. The key outcome of the cost of service analysis is the unit costs stated on
a billing unit basis, which for the District is on a dollar per hundred cubic foot basis (\$/CCF). The unit costs provide the cost basis for the development of the proposed water rates.

The cost of service goes a step further than just allocating costs to customer classes. The analysis allocates costs to the tiers of residential which is done in order to satisfy the administrative record requirements of Proposition 218, especially in light of the San Juan Capistrano Decision.

Provided in Table ES - 4 is a summary of the consumption related unit costs derived in the cost of service analysis that will be used to develop the proposed rate designs.

\left.| Table ES - 4 |  |  |  |
| :---: | ---: | ---: | ---: |
| Summary of the Consumption Related Unit Costs (\$ / CCF) |  |  |  |$\right)$

As can be seen in Table ES - 4, for residential customers, the tiered rate structures have been maintained for residential customers and the costs of providing service at each tier have been developed based on the peaking factors and system requirements to provide water service at higher levels.

Section 4 of this report provides a detailed discussion of the cost of service analysis conducted for the District and the development of the unit costs provided in Table ES - 4. Given the results of the cost of service analysis, HDR would recommend that the unit costs, as developed, are the basis for the rate designs. The Technical Appendix contains the various exhibits and additional details associated with the cost of service analysis.

## Summary of the Present and Proposed Water Rate Designs

The final step of the comprehensive rate study process is the design of water rates to collect the desired levels of revenue, based on the results of the revenue requirement and cost of service analysis. To review, the revenue requirement analysis provides a set of recommendations in the form of annual revenue adjustments - that is, the level of total revenues necessary to provide sufficient funding - while the cost of service analysis results provide recommendations as to how the revenue is collected proportionally from each customer classes of service. The rate design, therefore, incorporates both of the prior analyses to design the proposed rates for the District.

Developing cost-based and equitable rates is of paramount importance in developing proposed water rates. Given this, the District's proposed water rates have been developed with the intent of meeting the legal requirements of California constitution article XIII D, section 6 (Article XIII D). A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated among the various customer classes of service.

HDR would point out that there is no single methodology for equitably assigning costs to the various customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing rates; consequently, HDR developed the District's proposed water rates based on the AWWA M1 manual methodology to meet the requirements of Article XIII D and recent legal decisions to provide an administrative record of the steps taken to establish the District's water rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service). The proposed rates are designed to collect the overall revenue requirement of the District's water utility.
- The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed. The revenues derived from the District's water rates are used exclusively to operate and maintain the District's water system.
- The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel. This study has focused on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service (Residential, Non-residential, Irrigation, and Private Fire Service) that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Article XIII D by having differing rates reflecting both the level of revenue to be collected by the District for sufficient funding and the manner in which these costs are incurred and equitably assigned based on each classes' proportional impact and burden on the water system and water resources.

Given the prior discussion of the difference in the consumption patterns of the various customer classes and the need to develop rates based on cost of service principles, the proposed water rates were developed for the District's customers based on the cost of service unit costs as shown in Table ES - 4. However, the proposed monthly service charge for residential and non-residential customers is moved to the same rates based on meter size which varies by size based on the current meter equivalency factors based on a $1^{\prime \prime}$ meter.

As noted, the consumption characteristics for each customer class were reviewed. Based on the review of the residential and non-residential customer characteristics, the sizing of the consumption tiers is maintained based on the current consumption patterns. The pricing of the tiers is revised, however, to reflect the cost of service analysis unit costs which specifically reflect the cost of providing service at higher consumption levels.

Provided in Table ES - 5 is a summary of the present and proposed water rates over the five-year review period.

| Table ES-5 Current and Proposed Rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current | $\begin{gathered} \text { FY } \\ \text { 18-19 } \end{gathered}$ | $\begin{gathered} \text { FY } \\ \text { 19-20 } \end{gathered}$ | $\begin{gathered} \text { FY } \\ 20-21 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 21-22 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 22-23 \end{gathered}$ |
| Monthly Charge by Meter Size |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$66.67 | \$61.15 | \$61.15 | \$62.99 | \$64.88 | \$66.82 |
| 1 1/2" | 93.84 | 86.07 | 86.07 | 88.65 | 91.31 | 94.05 |
| $2{ }^{\prime \prime}$ | 126.44 | 115.97 | 115.97 | 119.45 | 123.04 | 126.73 |
| 3" | 202.52 | 185.76 | 185.76 | 191.33 | 197.07 | 202.98 |
| 4" | 311.19 | 285.43 | 285.43 | 293.99 | 302.81 | 311.90 |
| $6 "$ | 582.89 | 534.64 | 534.64 | 550.68 | 567.20 | 584.21 |
| 8" | 908.93 | 833.69 | 833.69 | 858.70 | 884.46 | 910.99 |
| 10" | 1,289.30 | 1,182.57 | 1,182.57 | 1,218.05 | 1,254.59 | 1,292.23 |
| Residential |  |  |  |  |  |  |
| Consumption less than 30 CCF | \$1.57 | \$1.92 | \$1.92 | \$1.98 | \$2.04 | \$2.10 |
| Consumption Greater than 30 CCF | \$3.11 | \$4.04 | \$4.04 | \$4.17 | \$4.29 | \$4.42 |
| Non-Residential |  |  |  |  |  |  |
| All Consumption | \$1.77 | \$1.79 | \$1.79 | \$1.84 | \$1.90 | \$1.95 |
| Irrigation |  |  |  |  |  |  |
| All Consumption | \$1.91 | \$2.27 | \$2.27 | \$2.34 | \$2.41 | \$2.48 |
| Private Fire Protection |  |  |  |  |  |  |
| Monthly Charge by Line Size |  |  |  |  |  |  |
| $2{ }^{\prime \prime}$ | \$3.04 | \$3.02 | \$3.02 | \$3.11 | \$3.21 | \$3.30 |
| 3" | 8.86 | 8.78 | 8.78 | 9.04 | 9.31 | 9.59 |
| $4 "$ | 18.88 | 18.71 | 18.71 | 19.27 | 19.85 | 20.44 |
| $6 "$ | 54.85 | 54.34 | 54.34 | 55.97 | 57.65 | 59.38 |
| 8" | 116.88 | 115.80 | 115.80 | 119.27 | 122.85 | 126.54 |
| 10" | 210.19 | 208.25 | 208.25 | 214.49 | 220.93 | 227.56 |
| 12" | 339.51 | 336.37 | 336.37 | 346.47 | 356.86 | 367.57 |

As can be seen in Table ES - 5, the service charge rate structure has been maintained and the proposed rates have been adjusted to reflect the overall revenue needs of the water utility based on the revenue requirement and cost of service analysis unit costs for FY 2018/19. The proposed consumption charges are based on each customer class's contribution to the costs of the system and are based on the unit costs calculated and shown in Table ES-4. It is recommended that the proposed rates be effective January 1, 2019. After the initial rate cost of service adjustments, and

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the movement to the cost-based rates, the future adjustments will be "across the board" meaning all components will be adjusted proportionally based on the overall rate revenue adjustment.

Section 5 of this report provides a detailed discussion of the present and proposed water rates.

## Water Rate Study Recommendations

Based on the results of the water rate study, HDR finds and recommends the following:

- Rate adjustments are necessary to prudently fund operating and capital renewal and replacement expenses.
- Water revenues are sufficient to meet the utilities needs for the FY 2018-19 to FY 201920 period but should be adjusted annually there after by $3.0 \%$ through FY 2022/23.
- The proposed rates reflect the results of the cost of service analysis and the proportional allocation of costs to each customer class of service.
- HDR would recommend the adoption of a multi-year rate plan to implement the proposed rates through FY 2022/23.
- The District should maintain the current minimum target reserve policy of 120 days of O\&M expenses.
- Prior to the implementation of the FY 2022/23 rates the District should complete a review of the water rates to confirm the basis for future proposed rates.


## Summary of the Water Rate Study

This completes the summary of the development of the comprehensive water rate study for the Elk Grove Water District. The focus of this study has been the prudent and adequate funding of the utility, and developing the cost-basis for the proposed rates. A full and complete discussion of the development of the comprehensive water rate study can be found in following sections of this report.

## 1. Introduction and Overview

### 1.1 Introduction

The Elk Grove Water District (EGWD) is a Department of the Florin Resource Conservation District (FRCD). The FRCD acquired the Elk Grove Water Works in 1999 from a local family who had owned and operated the water utility as a private water company for 103 years. This acquisition changed the governance of the water utility from private ownership to a publicly owned and operated agency. The FRCD also structured this agency as an enterprise-funded department of the FRCD thereby keeping all financial activities of the water utility separate from other activities of the FRCD. In the early 2000's the Elk Grove Water Works was renamed as the Elk Grove Water District and is classified as a medium sized water purveyor serving approximately 45,000 people.

HDR was retained by the Florin Resource Conservation District to conduct a comprehensive water rate study for its water enterprise, the Elk Grove Water District (District). The objective of the rate study was to review the District's operating and capital costs in order to develop a financial plan and develop proposed cost-based and proportional rates for the District's water customers. This study determined the adequacy of the existing water rates and provides the framework and cost basis for any needed future adjustments.

The District consists of two service areas, service area one (1) where the District owns and operates the distribution, transmission and service area two (2) where the District only owns and maintains the distribution system while the Sacramento County Water Agency owns and maintains the Transmission facilities which transports purchased water to the District. The District has two sources of supply, District owned treatment facilities, and water purchased from the Sacramento County Water Agency.

### 1.2 Goals and Objectives

The District had a number of key objectives in developing the water rate study. These key objectives provided a framework for policy decisions in the analysis that follows. These key objectives were as follows:

- Develop the study in a manner that is consistent with the principles and methodologies established by the American Water Works Association (AWWA), M1 Manual, Principles of Water Rates, Fees, and Charges.
- When establishing the District's rates, review and utilize best industry practices, while recognizing and acknowledging the specific and unique characteristics of the District's system and customers.
- Review the District's rates utilizing "generally accepted" rate making methodologies to determine adequacy and equity (proportionality) of the water rates.
- Develop a final proposed financial plan which adequately supports the utility's funding
requirements, while attempting to minimize overall impacts to rates.
■ Propose rates designed to meet the intent of Article XIII D (Proposition 218).


### 1.3 Overview of the Rate Study Process

User rates must be set at a level where a utility's operating and capital expenses are met with the revenues received from customers. This is an important point, as failure to achieve this objective may lead to insufficient funds to maintain system integrity. To evaluate the adequacy of the existing rates, a comprehensive rate study is often performed. A comprehensive water rate study consists of three interrelated analyses. Figure 1-1 provides an overview of these analyses.

## Figure 1-1

Overview of the Comprehensive Water Rate Analyses


Compares the revenues to the expenses of the District to determine the overall rate adjustment required

Allocates the revenue requirement to the various customer classes of service in a "fair and equitable" manner

Considers both the level and structure of the rate design to collect the target level of revenues

The above framework for reviewing and evaluating rates was utilized for the District's water system.

### 1.4 Organization of the Study

This report is organized in a sequential manner that first provides an overview of utility rate setting principles, followed by sections that detail the specific steps used to review the District's water rates. The following sections comprise the District's water rate study report:

- Section 2 - Overview of Water Rate Setting Principles
- Section 3 - Development of the Revenue Requirement Analysis
- Section 4 - Development of Cost of Service Analysis
- Section 5 - Development of the Proposed Rate Designs

A Technical Appendix is attached at the end of this report, which details the various technical analyses that were undertaken in the preparation of this study.

### 1.5 Summary

This report will review the comprehensive water rate analyses prepared for the District. This report has been prepared utilizing generally accepted water rate setting techniques as outlined in the AWWA M1 Manual.

## 2. Overview of Water Rate Setting Principles

### 2.1 Introduction

This section of the report provides background information about the water rate setting process, including descriptions of generally accepted principles, types of utilities, methods of determining a revenue requirement, the cost of service analysis, and rate design. This information is useful for gaining a better understanding of the details presented in Sections 3 through 5 of this report.

### 2.2 Generally Accepted Rate Setting Principles

As a practical matter, all utilities should consider setting their rates around some generally accepted or global principles and guidelines. Utility rates should be:

- Cost-based, equitable, and set at a level that meets the utility's full revenue requirement.
- Easy to understand and administer.
- Designed to conform to "generally accepted" rate setting techniques.
- Stable in their ability to provide adequate revenues for meeting the utility's financial, operating, and regulatory requirements.
- Established at a level that is stable from year-to-year from a customer's perspective.
- Meet legal and regulatory requirements.


### 2.3 Determining the Revenue Requirement

Most public utilities utilize the "cash basis" ${ }^{1}$ approach for establishing the revenue requirement for rate setting purposes. This approach conforms to most public utility budgetary requirements. A public utility totals its cash expenditures for a period of time to determine required revenues. The revenue requirement for a public utility is usually comprised of the following costs or expenses:

■ Total Operating Expenses: This includes a utility's operation and maintenance (O\&M) expenses, plus any applicable taxes or transfer payments (e.g., reserve transfers). Operation and maintenance expenses include the materials, electricity, labor, supplies, etc., necessary to provide service.

- Total Capital Expenses: Capital expenses are calculated by adding debt service payments (principal and interest) to capital improvements financed with rate revenues. In lieu of including capital improvements financed with rate revenues, a utility sometimes includes

[^5]depreciation expense to stabilize the annual revenue requirement.
Under the "cash basis" approach, the sum of the total O\&M expenses plus the total capital expenses equals the utility's revenue requirement during any selected period of time (historical or projected).

| Table 2-1 <br> Cash versus Utility Basis Comparison |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Cash Basis |  | Utility Basis (Accrual) |
| + | O\&M Expenses | + | O\&M Expenses |
| + | Taxes/Transfer Payments | + | Taxes/Transfer Payments |
| + | Rate Funded Capital <br> ( $\geq$ Depreciation Expense) | + | Depreciation Expense |
| + | Debt Service (Principal + Interest) | + | Return on Investment |
|  | Total Revenue Requirement |  | Total Revenue Requirement |

Note that the two portions of the capital expense component (debt service and capital improvements financed from rates) are necessary under the cash basis approach because utilities generally cannot finance all their capital facilities with long-term debt. At the same time, it is often difficult to pay for capital expenditures on a "pay-as-you-go" basis given that some major capital projects may have significant rate impacts upon a utility, even when financed with longterm debt. Many utilities have found that some combination of pay-as-you-go funding and longterm financing will often lead to minimization of rate increases over time.

### 2.4 Analyzing Cost of Service

After the total revenue requirement is determined, it is equitably distributed to the users of the service. The distribution, analyzed through a cost of service analysis, reflects the cost relationships for producing and delivering water services. A cost of service analysis requires three analytical steps:

1. Costs are functionalized or grouped into the various cost categories related to providing service (supply, distribution, pumping, etc.). This step is largely accomplished by the utility's accounting system.
2. The functionalized costs are then allocated to specific cost components. Allocation refers to the arrangement of the functionalized data into cost components. For example, a water utility's costs are typically allocated as average day, peak day, or customer-related.
3. Once the costs are allocated into components, they are proportionally distributed to the customer classes of service (e.g., residential, non-residential, irrigation). The distribution is based on each customer class' relative contribution (proportional share) of each cost component (i.e., benefits received from and burdens placed on the system and its resources). For example, customer-related costs are distributed to each class of service
based on the total number of customers in that class of service. Once costs are distributed, the unit costs from each customer class of service required to achieve costbased rates can be determined.

### 2.5 Designing Water Rates

Rates that meet the utility's objectives are designed based on both the revenue requirement and the cost of service analysis. This approach results in rates that are strictly cost-based and does not consider other non-cost based goals and objectives (conservation, economic development, ability to pay, revenue stability, etc.). In designing the final proposed rates, factors such as ability to pay, continuity of past rate philosophy, economic development, ease of administration, and customer understanding may be taken into consideration. However, the proposed rates must take into consideration each customer class's proportional share of costs allocated through the cost of service analysis to meet the intent of Proposition 218.

### 2.6 Economic Theory and Rate Setting

One of the major justifications for a comprehensive rate study is founded in economic theory. Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained. This statement's implications on utility rate designs are significant. For example, a water utility usually incurs capacity-related costs to meet summer outdoor watering needs. It follows that the customers who create excessive peak demands on the system and create the need for upsizing of the distribution system should pay for those over-sized facilities in
"Economic theory suggests that the price of a commodity must roughly equal its cost if equity among customers is to be maintained." proportion to their contribution to total peaking requirements. When costing and pricing techniques are refined, consumers have a more accurate understanding of what the commodity costs to produce and deliver.

### 2.7 Summary

This section of the report has provided a brief introduction to the general principles, techniques, and economic theory used to set water rates. These principles and techniques will become the basis for the District's water rate study.

## 3. Development of the Revenue Requirement

### 3.1 Introduction

This section describes the development of the revenue requirement for the District. The District provided detailed revenue and expenses data (e.g., adopted budgets, audited financial statements) for the water system that allowed for the development of the revenue requirement. The revenue requirement analysis is the first analytical step in the comprehensive rate study process. This analysis determines the adequacy of the District's overall water rates at current rate levels. From this analysis, a determination can be made as to the overall level of revenue adjustment needed to provide adequate and prudent funding for both operating and capital needs. HDR developed an independent analysis based on information provided by the District as part of the development of the proposed cost-based rates.

### 3.2 Determining the Revenue Requirement

In developing the District's revenue requirement, the water utility must be properly funded and financially "stand on its own" given that water rates are the primary funding source for the District. As a result, the revenue requirement analysis, as developed herein, assumes the full and proper funding needed to operate and maintain the District's water system on a financially sound and prudent basis.

### 3.3 Establishing a Time Frame and Approach

The first step in calculating the revenue requirement for the District was to establish a time frame for the revenue requirement analysis. For this study, the revenue requirement was developed for the projected time period of FY 2017/18 - FY 2027/28. This included the budget year (FY 2017/18) followed by a projected ten-year rate setting period (FY 2018/19 - FY 2027/28). Reviewing a multi-year time period is recommended in order to identify any major expenses that may be on the horizon. By anticipating future financial requirements, the District can begin planning for these changes sooner, thereby minimizing short-term revenue needs and overall long-term revenue levels. For rate setting purposes the study focused on the five-year period of FY 2018/19 - FY 2022/23.

The second step in determining the revenue requirement for the District was to decide on the basis of accumulating costs. In this particular case, for the revenue requirement analysis a "cash basis" approach was used. The "cash basis" approach is the most common methodology used by municipal utilities to set their revenue requirement. This is also the methodology that the District has historically used to establish its water revenue requirement. Table 3-1 provides a summary of the "cash basis" approach and cost components used to develop the District's revenue requirement.
$+\quad$ Water Operation and Maintenance Expenses
$+\quad$ Debt Service (Principal + Interest) - Existing and Future
$+\quad$ Rate Funded Capital
$\pm \quad$ Reserve Funding
$=\quad$ Total Water Revenue Requirement

- Miscellaneous Revenues
$=\quad$ Net Revenue Requirement (Balance Required from Water Rates)

Given a time period around which to develop the revenue requirement, and a method to accumulate the costs, the focus shifts to the projection of the District's revenues and expenses over the test period.

The primary financial inputs in the development of the revenue requirement were the District's FY 2018/19 adopted budget, 2016/17 billed customer and consumption data, and the current capital improvement plan. Provided in the following sections of this report is a detailed discussion of the steps and key assumptions contained in the development of the projections of the District's water revenue requirement analysis.

### 3.4 Projecting Rate and Other Miscellaneous Revenues

The starting point of the revenue requirement is to develop a projection of the water rate revenues, at present rate levels. In general, this process involved developing projected billing units for each customer group (e.g., residential, non-residential, Irrigation). The billing units for each customer group were then multiplied by the applicable current water rates. This method of independently calculating revenues links the projected revenues used within the analysis to the projected billing units. It also helps to confirm that the billing units used within the study are reasonable for purposes of projecting future revenues,

> ". . . the State of California implemented additional required conservation savings in 2016 which impacted the level of consumption and resulting consumption based revenues."

A key aspect of the projection of water rate revenues was to develop a projection of consumption levels considering the recent drought. In addition, the State of California implemented additional required conservation savings through 2016 which impacted the level of consumption and resulting consumption-based revenues. In an effort to reflect anticipated future consumption levels, and in discussion with District staff, it was determined that the consumption levels of calendar year 2016/17 would be used as a base level of consumption as they appear to reflect "normal" consumption for the next several years given customers response to the drought and changes in behavior as a result of conservation practices. Overall future consumption levels will also be impacted by the State's conservation plan which, when adopted, will outline the conservation practices the District will need to implement.

The
District
currently has a rate structure for each of their four customer class. As noted above, the projection of revenues, and subsequent cost allocation, is
 based on specific customer classes of service. Given this, a revenue projection was developed for each of the customer classes of service. The majority of the District's rate revenues are derived from the residential customer class. The District also has customer classes of non-residential, irrigation and private fire protection. In total, and at current rate levels, the District is projected to receive approximately $\$ 15.1$ million in rate revenue in FY 2018/19, based on the projection of metered consumption levels. Over time, the study has assumed a conservative level of customer growth, based on historical growth levels of $0.5 \%$ per year. This results in rate revenues increasing to approximately $\$ 15.4$ million, at present rate levels, in FY 2022/23 and $\$ 15.8$ million in 2027/28 as a result of the estimated growth on the system.

In addition to rate revenues, the District receives miscellaneous revenues from operations. These are revenues related to interest earnings, fees, and other miscellaneous revenues. In total, the District is projected to receive approximately $\$ 292,000$ in miscellaneous revenues in FY 2018/19. This amount is anticipated to grow over the projected five-year rate setting period and be approximately $\$ 308,000$ in FY 2022/23 and ultimately $\$ 315,000$ in 2027/28.

On a combined basis, taking into account the rate revenues and the miscellaneous revenues, the District's water utility has total projected revenues of approximately $\$ 15.4$ million in FY 2018/19, increasing to approximately $\$ 15.7$ million by FY 2022/23 and $\$ 16.1$ million in 2027/28.

### 3.5 Projecting Operation and Maintenance Expenses

Operation and maintenance (O\&M) expenses are incurred by the District to provide water service (supply, treatment, and distribution) as well as to operate and maintain the existing infrastructure. As mentioned, the District provided detailed O\&M expenses based on the FY 2018/19 adopted budget. The budgeted O\&M expenses were projected over the time period based on historical inflationary factors experienced by the District and the general economy.

Based on the FY 2017/18 budget, the total O\&M expenses for the District are $\$ 9.2$ million. Over the planning horizon, total O\&M expenses for the District are projected to increase to approximately $\$ 10.9$ million by FY 2022/23, then to $\$ 13.5$ million in $2027 / 28$. This reflects an
average increase of $4.2 \%$ per year and is based on historical inflationary factors experienced by the District.

### 3.6 Projecting Capital Funding Needs

A key component in the development of the water revenue requirement was properly and adequately funding capital improvement needs. One of the major issues facing utilities across the U.S. is the amount of deferred capital projects and the funding pressure from growth/expansion-related improvements. The proper and adequate funding of capital projects is an important issue for all water utilities and is not just a local issue or concern of the District.

In general, there are three types of capital projects that a utility may need to fund. These include the following types:

- Renewal \& replacement projects
- Growth / capacity expansion projects
- Regulatory-related projects

A renewal and replacement project is essentially a project required for maintaining the existing system that is in place today. As the existing plant or pipelines become worn out, obsolete, etc., the utility should be making continuous investments to maintain the integrity of the facilities. In contrast to this, a utility may make capital investments to expand the capacity of facilities to accommodate future capacity needs (customers). Finally, certain projects may be a function of a regulatory requirement in which the Federal or State government mandates the need for an improvement to the system to meet a regulatory standard. Understanding these different types of capital projects is important because it may help to explain why costs are increasing and the cost drivers for any needed rate adjustment. In addition, and more importantly, the way in which projects are funded may vary by the type of capital project. For example, renewal and replacement projects may be paid for via rates and funded on a "pay-as-you-go basis." In contrast to this, growth or capacity expansion projects may be funded via the collection of development or connection fees (i.e., growth-related charges) in which new development pays an equitable share of the cost of facilities necessary to serve their development (impact). Finally, regulatory projects may be funded by a variety of different means, which may include rates, long-term debt, grants, etc.

While the above discussion appears to neatly divide capital projects into three clearly defined categories, the reality of working with specific capital projects may be more complex. For example, a pump may be replaced, but while being replaced, it is up-sized to accommodate greater capacity to serve increasing demands or new development. There are many projects that share these "joint" characteristics. At the same time, projects may not be "replacement" related, but rather "improvement" related. For purposes of developing the capital funding plan the District provided its capital improvement plan (CIP) which has been summarized in Table 3-2 along with the expected funding sources developed as part of the rate study.

| Table 3-2 <br> Overview of the Water Capital Improvement Pla |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Projected |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} \text { FY } \\ 18-19 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 19-20 \end{gathered}$ | $\underset{20-21}{\text { FY }}$ | $\begin{gathered} \text { FY } \\ 21-22 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 22-23 \end{gathered}$ | $\begin{gathered} \text { FY } \\ \text { 23-24 } \end{gathered}$ | $\begin{gathered} \text { FY } \\ 24-25 \end{gathered}$ | $\underset{\substack{\text { FY } \\ 25-26}}{ }$ | $\underset{\text { 26-27 }}{\text { FY }}$ | $\underset{\text { FY-28 }}{\text { FY }}$ |
| Capital Plan |  |  |  |  |  |  |  |  |  |  |
| Supply/Distribution | \$980 | \$1,072 | \$995 | \$1,188 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Treatment | 80 | 0 | 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building \& Site Improvements/Vehicles | 185 | 160 | 160 | 120 | 124 | 127 | 131 | 135 | 139 | 143 |
| Future Unidentified Projects | 100 | 100 | 100 | 100 | 1,676 | 1,723 | 1,769 | 1,815 | 1,861 | 1,907 |
| Total Revenue Requirement | \$1,345 | \$1,332 | \$1,435 | \$1,408 | \$1,800 | \$1,850 | \$1,900 | \$1,950 | \$2,000 | \$2,050 |
| Capital Reserve Funding | \$355 | \$368 | \$365 | \$492 | \$200 | \$250 | \$300 | \$350 | \$400 | \$450 |
| Total Capital Investment | \$1,700 | \$1,700 | \$1,800 | \$1,900 | \$2,000 | \$2,100 | \$2,200 | \$2,300 | \$2,400 | \$2,500 |
| Capital Plan Funding |  |  |  |  |  |  |  |  |  |  |
| Capital Improvement Reserve | \$195 | \$280 | \$390 | \$745 | \$962 | \$989 | \$1,016 | \$1,043 | \$1,070 | \$1,097 |
| Capital Replacement Reserve | 1,150 | 1,052 | 1,045 | 663 | 838 | 861 | 884 | 907 | 930 | 953 |
| Future Capital Improvement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Future Capital Replacement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low Interest Loans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Revenue Bonds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Rate Funding | 355 | 368 | 365 | 492 | 200 | 250 | 300 | 350 | 400 | 450 |
| Total Capital Funding | \$1,700 | \$1,700 | \$1,800 | \$1,900 | \$2,000 | \$2,100 | \$2,200 | \$2,300 | \$2,400 | \$2,500 |

The capital improvements are primarily related to renewal and replacement of aging water system as well as annual equipment purchases. While the total amount required to fund projects may vary from year-to-year, the rate study capital funding plan has developed a plan to provide a consistent funding source for capital improvements. In this case, rates will annually fund an amount ranging from approximately $\$ 1.7$ million to $\$ 2.5$ million (as highlighted in Table 3 - 2). As a point of reference, the District's annual depreciation expense was approximately $\$ 1.7$ million for FY 2016/17.

A desirable and recommended minimum funding target for rate funded capital is an amount equal to or greater than annual depreciation expense. As can be seen, this financial plan provides the District with funding in equal to or in excess of annual depreciation expense over the analysis period. This is critical as the replacement cost of an asset may be between $1.5-2.0$ times the original costs. This funding level will remain important to fund as the District's water system continues to age and the demand for funding renewal and replacement projects increases. In developing this financial plan, HDR and the District have attempted to minimize rate impacts while funding the necessary capital improvement projects.

### 3.7 Projection of Debt Service

The District currently has two (2) outstanding debt issues for the water utility: the 2014 and 2016 Revenue Bonds. The total annual debt service payment is approximately $\$ 3.8$ million in FY 2018/19. The analysis shows that there is no need for additional borrowing during the analysis period.

As part of this study, HDR is not providing municipal advice as it relates to bonds, terms, or structures of debt issuance. Rather, this study is simply identifying the existing annual debt service payments for rate setting purposes.

### 3.8 Reserve Funding

The final component of the revenue requirement analysis is the transfer to, or from, reserves to either maintain prudent ending fund balances or for future funding of specific projects. In future years as rates are adjusted and reach sufficient levels, funds are being transferred to the operating reserves to meet minimum target levels. A more detailed discussion of the District's water reserve funds in provided in Section 3.10.

### 3.9 Summary of the Revenue Requirement

Given the above projections of revenues and expenses, a summary of the District's revenue requirement analysis can be developed. In developing the revenue requirement analysis, consideration was given to the financial planning considerations of the District. In particular, emphasis was placed on minimizing rates, while providing adequate funds to support the operational activities and capital improvement needs throughout the test period. Presented below in Table 3-3 is a summary of the District's revenue requirement based on projected expenses and current rates. Detailed exhibits of this analysis can be found in the Technical Appendices.

Development of the Revenue Requirement

As can be seen, the revenue requirement has summed the O\&M, annual debt service, rate funded capital, and reserve funding. The total revenue requirement is then compared to the total sources of funds which are the rate revenues, at present rate and consumption levels, and other miscellaneous revenues. From this comparison a balance or deficiency of funds in each year can be determined. This balance or deficiency of funds is then compared to the rate revenues to determine the level of revenue adjustment needed to meet the revenue requirement. It is important to note the "Bal. / (Def.) of Funds" row is cumulative. That is, any adjustments in the initial years will reduce the deficiency in the later years.

In FY 2018/19 and 2019/20 revenue is projected to be sufficient to meet the District's capital and operational needs. However, the overall level of revenues need to be increased over the remaining test period to meet the operating and capital needs of the water utility. Based on the analysis, the District will need to adjust revenue levels starting in FY 2020/21 with a 3.0\% adjustment per year through out the remaining analysis period. It is proposed that the revenue adjustments will be effective January 1 , of each year.

The deficiency in future years is primarily driven by inflationary increases in O\&M costs, and the need to fund renewal and replacement projects to maintain the system. Based on the rate transition plan, as can be seen above in Table 3-3, the proposed annual rate adjustments (light blue shaded line) have been developed to meet the operating and capital needs of the District.

### 3.10 Reserve Levels

In addition to the revenue requirement analysis, a key element of determining the financial health and sustainability of the District is to review the level of available reserve levels. Utilities can have several different reserves each with a different purpose. The typical types of reserves utilities maintain are generally referenced as an operating reserve, a capital reserve, a connection (growth) fee, and in some cases an emergency and/or rate stabilization reserve. Each of these funds should have a target minimum ending balance that for example, if reached or falls below is a signal that the District should review the revenue sources associated with each fund. The minimum ending balances will vary depending on the purpose of the fund and the expected revenue sources.

For the District, there are three primary reserves. These are the operating, capital replacement, and capital improvement reserves. Each of these is discussed further below.

## - Operating Reserve

The operating reserve is in place to meet the District's annual cash flow needs. The target minimum ending balance for an operating reserve is 120 days of annual $O \& M$ expenses. This is a prudent target minimum and reflects industry standard approaches and is a target level recommended by HDR. This target results in a minimum ending balance of approximately $\$ 3.7$ million on average over the ten-year rate setting period. This target minimum is in place to help the utility target an amount that will be able to fund operations of the water utility should any issues adversely affect the District's revenue sources. Over the ten-year rate

Development of the Revenue Requirement
setting period the operating reserve meets the minimum target after the final rate adjustment.

## - Capital Improvement Reserve Fund

The capital improvement reserve is used as the primary funding source for expansion related capital improvement projects. The target for this fund is annual capital improvement projects. Over the 10-year period, the District is projected to have capital reserve remain above the minimum target.

## - Capital Replacement Reserve Fund

The capital replacement reserve is used as the primary funding source for renewal and replacement capital improvement projects. The target for this fund is annual capital replacement projects. Over the 10 -year period, the District is projected to have capital reserve remain above the minimum target.

Each of the previously mention reserves were reviewed during the development of the rate study process with the focus being on meeting the target ending fund balances. The restricted reserve is not shown as only unrestricted cash balances are relevant to the target ending balance.

In addition to the reserve fund mentioned above the District also has three additional funds that are effectively overflow funds where additional funds are held when the reserve targets of the above funds are met. These fund are the Election reserve, Future Capital Improvement Reserve and Future Capital Replacement Reserve.

### 3.11 Debt Service Coverage Ratios

When long-term debt is issued, and specifically for municipal revenue bonds, the District enters into an agreement that requires a specific level of revenue be generated each year in excess of O\&M expenses and annual debt service payments. This is known as a debt service coverage ratio. As noted previously, the District has two (2) outstanding debt issuances. Based on the proposed revenue adjustments, and subsequent increase in revenues, the District will be exceeding the minimum debt service coverage ratio of 1.15 which is a typical industry standard. As noted, HDR is not providing municipal advice as it relates to the District meeting debt service coverage ratios. The District will need to work with its financial advisor or legal counsel to determine the appropriate debt service coverage ratio calculation to meet any applicable legal bond covenants.

### 3.12 Consultant's Conclusions

The revenue requirement developed above has indicated the need for annual revenue increases to adequately fund the District's operating and capital needs for the water utility. The proposed annual rate revenue adjustments are 3.0\% from FY 2020/21 through FY 2022/23. All revenue adjustments are assumed to be effective on January 1 of each calendar year. HDR has reached this conclusion for the following reasons:

- Revenue adjustments are necessary to meet the operating and capital costs of providing water service to the District's customers.
- Revenue adjustments are necessary to reflect the reduction in annual water consumption due to the recent drought and State mandated conservation targets.
> This new level of consumption is reflective of the new level of water consumption for the foreseeable future.
- The proposed revenue adjustments enhance the District's financial health and provide longterm sustainable funding levels.
- Prior to the end of the financial planning projected period, the District should complete a review of the water revenue levels and costs at that time.

In reaching this conclusion, HDR would recommend that the District adopt the proposed rate revenue adjustments for FY 2018/19 through FY 2022/23 in order to provide the funding for the operating expenses, capital improvement program, and maintain sufficient reserve levels.

## 4. Development of the Cost of Service Analysis

### 4.1 Introduction

In the previous section, the revenue requirement analysis focused on the total sources and application of funds required to adequately fund the District's water utility. This section will provide an overview of the cost of service analysis developed for the District.

A cost of service analysis determines the equitable allocation of the total revenue requirement proportionally between the various customer classes of service (e.g., residential, nonresidential). The previously developed revenue requirement was utilized in the development of the cost of service analysis.

### 4.2 Objectives of a Cost of Service Study

There are two primary objectives in conducting a cost of service analysis:

- Equitably (proportionally) allocate the District's revenue requirement among the customer classes of service; and
- Derive average unit costs (i.e., cost-based rates) for subsequent rate designs.

The objectives of the cost of service analysis are different from determining a revenue requirement. As noted in the previous section, a revenue requirement analysis determines the District's overall financial needs, while the cost of service analysis determines the equitable and proportional manner to collect the revenue requirement from each customer class of service.

The results of the cost of service analysis determine the unit costs, for each customer class, which are used in the development of the final proposed rate designs. The cost of service analysis provides per unit cost of water consumption based on each customer class's equitable (proportional) share of costs. For example, a water utility incurs costs primarily related to average day, peak day, and customer-related cost components. A water utility must build sufficient capacity ${ }^{2}$ to meet peak capacity events. Therefore, those customers contributing to those peak demands on the system should pay their proportional share of the costs to provide the capacity in the system. The unit costs provide the relationship between these components which are then used to set cost-based rates.

[^6]
### 4.3 Determining the Customer Classes of Service

The first step in a cost of service analysis is to determine the customer classes of service. As part of the cost of service analysis, the customer characteristics (monthly consumption patterns) were reviewed. Based on the review, customer classes of service were established that reflect like customers, in both a customer type and customer use characteristics (e.g., peaking factors). Based on this review, the following customer classes of service were used to develop the cost of service analysis:

## - Residential

- Non-Residential
- Irrigation
- Private Fire Protection

In determining classes of service for cost of service purposes, the objective is to group customers together into similar or homogeneous groups based upon similar facility requirements and/or demand characteristics. Currently, the District has a rate structure for each customer class (i.e., residential, non-residential, irrigation, Private fire service). The proposed customer classes of service reflect the consumption patterns of each customer type. For example, residential customers have a different peaking factor and consumption use characteristics than the non-residential customers. This is a key aspect of the cost of service analysis that allows for the appropriate and equitable (proportional) allocation of costs to establish the proposed rates for each customer class of service.

For example, a residential customer class and rate schedule was developed based on the consumption patterns of residential customers who typically peak in the summer based on outdoor watering needs. It should also be noted that the consumption patterns of residential customers is similar from customer to customer. The non-residential customer class is for those customers that are not residential, irrigation or private fire service. These are primarily businesses (restaurants,
use of water. However, the non-residential customers do not peak at the same level as residential customers. Irrigation customers are those customers that have a separate meter for outdoor landscape watering. Consumption patterns also vary significantly from residential or nonresidential customers and a separate customer class is appropriate given the different consumption patterns. Finally, private fire service customers are those customers that have service specifically for private fire protection in the form of a private hydrant or fire line serving a sprinkler system. These customers were separated and a specific rate structure developed based on the costs related to provide service. Based on these customer classes of service, each with their own unique customer consumption patterns and characteristics, the cost of service can be developed.

### 4.4 General Cost of Service Procedures

In order to determine the cost to serve each customer class of service on the District's system, a cost of service analysis is conducted. A cost of service analysis utilizes a three-step approach to review costs. These steps take the form of functionalization, allocation, and distribution. Provided below is a detailed discussion of the water cost of service study conducted for the District, and the specific steps taken within the analysis. The approach used for this study conforms to generally accepted cost of service methodologies as outlined in the AWWA M1 manual.

### 4.4.1 Functionalization of Costs

The first analytical step in the cost of service process is called functionalization. Functionalization is the arrangement of expenses and asset (e.g., wells, distribution system) data by major operating functions (e.g., supply, transmission, storage, distribution, etc.). Within this study, there was a limited amount of functionalization of the cost data since it was largely accomplished within the District's system of accounts.

### 4.4.2 Allocation of Costs

The second analytical task performed in a water cost of service study is the allocation of the costs. The allocation of costs examines why the expenses were incurred or what type of need is being met. The allocation of costs is a critical step in developing cost-based and proportional rates for each customer class of service as utilities do not track costs by customer type. Given this, the development of a cost allocation approach, as outlined in the AWWA M1 Manual, provides the methodology to equitably allocate costs to the various cost components to develop unit costs which are the proposed rates by customer class of service. Absent this analysis, there is no basis for establishing rates that reflects each customer class' proportional share of system costs based on how they utilize the system and infrastructure. The following cost allocators were used to develop the cost of service analysis:

[^7]as a month or year. Chemicals or utilities (electricity) are examples of commodity-related cost as these costs tend to vary based upon the total demand of water. For the proposed tiered rate structure for residential, the commodity costs are allocated for each tier based on the total consumption billed in each tier based on the proposed tier sizes.

Capacity Related Costs: Capacity costs are those which vary with peak demand, or the maximum rates of flow to customers. System capacity is required when there are large demands for water placed upon the system (e.g., summer lawn watering). For water utilities, capacity related costs are generally related to the sizing of facilities needed to meet a customer's maximum water demand at any point in time. For example, portions of distribution storage reservoirs, pumps, and mains (pipes) must be adequately sized to meet for this particular type of requirement. Similar to the commodity related costs, capacity related costs are allocated for each tier based on the peaking factor for those customers in each tier to reflect the costs associated with higher consumption in each tier. Capacity costs were split between supply capacity, related to providing peak event consumption, and distribution capacity, related to individual peak demands.

- Customer Related Costs: Customer costs are those costs which vary with the number of customers on the water system. They do not vary with system output or consumption levels. These costs are also sometimes referred to as readiness to serve or availability costs. Customer costs may also sometimes be further classified as either actual or weighted. Actual customer costs vary proportionally, from customer to customer, with the addition or deletion of a customer regardless of the size of the customer. An example of an actual customer cost is postage for mailing bills. This cost does not vary from customer to customer, regardless of the size or consumption characteristics of the customer. In contrast, a weighted customer cost reflects a disproportionate cost, from customer to customer, with the addition or deletion of a customer. Examples of weighted customer costs are items such as meter maintenance expenses, where a large non-residential customer requires a significantly more expensive meter than a typical residential customer.
- Fire Protection Related Costs: Fire protection costs are those costs related to the public fire protection functions. Usually, such costs are those related to public fire hydrants and the over-sizing of mains and distribution storage reservoirs for fire protection purposes.

Revenue Related Costs: Some costs associated with the utility may vary with the amount of revenue received by the utility. An example of a revenue related cost would be a utility tax which is based on the gross utility revenue.

### 4.5 Development of the Distribution Factors

Once the allocation process is complete, and the customer groups have been defined, the various allocated costs were distributed to each customer group. The District's allocated costs were allocated to the previously identified customer groups using the following distribution factors; see Exhibits 6-10 in the Technical Appendix.

- Commodity Distribution Factor: As noted earlier, commodity-related costs vary with the total water consumption. Therefore, the commodity distribution factor was based on the projected total metered consumption plus losses for each class of service and tier for the projected test period. As noted, the consumption reflects the projected new baseline consumption levels. These projected levels are based on estimates of customer behavior changing due to customers' response to the recent drought (circa 2012-2016). A distribution factor was developed for each tier for the proposed residential rates to reflect the consumption in each tier.
- Capacity Distribution Factor: The capacity distribution factor was developed based on the assumed contribution to peak day use of each class. Peak day use by customer class of service and tier was developed using peaking factors for each customer group and tier. In this particular case, the peaking factor was defined as the relationship between peak day contribution and average day use and determined for each customer group based on a review of the average month to peak month usage. Given an estimated peaking factor, the peak day contribution for each class of service was developed. The peak factors were developed for each tier of the proposed residential rate structures based on the consumption in each tier which reflects the increased peaking factor for those customers using higher levels of consumption.

Capacity costs were split into two categories: supply capacity and distribution capacity. Supply capacity is related to the customer class's peak use. Therefore, coincident peak day demand is used to allocate water supply related costs. Distribution capacity costs were allocated based on the capacity requirements of each customer class. The overall system capacity is designed based on the sum total of demands placed on it by each individual customer meter. Therefore non-coincident peak day demand was used to allocate costs incurred as a result of the capacity requirements of the water mains and storage tanks.

- Customer Distribution Factor: Customer costs vary with the number of customers on the system. Two basic types of customer distribution factors were identified - actual and weighted. The distribution factor for actual customers was based on the projection of the number of customers developed within the revenue requirement. The weighted customer distribution factors is also broken down further into two factors which attempt to reflect the disproportionate costs associated with serving different types of customers. The first weighted customer factor is for customer service and accounting. This weighted customer allocation factor takes into account the fact that it may take more time to read a meter and process a bill for various customers. The second weighted customer distribution factor is for meters and services. This factor attempts to reflect the different costs and capacity demands associated with providing larger sized meters. For example, there is a significant difference in the demands a $5 / 8^{\prime \prime}$ meter places on the system when compared to the demands a 6 " meter can place on the system. This difference is reflected within the allocation factor.
- Fire Protection Distribution Factor: The development of the distribution factor for public fire protection expenses involved an analysis of each class of service and their fire flow requirements. The analysis took into account the gallon per minute fire flow requirements in the event of a fire, along with the duration of the required flow. The fire flow rates used within the distribution factor were based on industry standards and similar experiences with other water cost of service studies. The minimum fire flow requirements are then multiplied by the number of customers in each class of service, and the assumed duration of the fire, to determine the class' prorated fire flow requirements.
- Revenue Related Distribution Factor: The revenue related distribution factor was developed from the projected rate revenues for FY 2018/19 for each customer class of service. These same revenues were used within the revenue requirement analysis discussed previously.

As mentioned before, in a typical cost of service study, the distribution factors represent a group of similar customers such as residential and non-residential customers. However, to meet the intent of Proposition 218, additional cost detail was needed when allocating costs. To reflect this, and as noted above, the commodity and capacity distribution factors were developed by customer class and by tier to develop the cost basis for the proposed rates (i.e., unit costs).

### 4.6 Functionalization and Allocation of Plant in Service

As noted, one of the first steps of the cost of service is the functionalization and allocation of plant in service. In performing the functionalization of plant in service, HDR used the District's historical plant (asset) records. Once the plant assets were functionalized, the analysis shifted to the allocation of the asset. The allocation process included reviewing each group of assets and determining which cost allocator the assets were related to. For example, the District assets were allocated as: commodity-related, capacity-related, customer-related, revenue-related, fire protection-related, or a direct assignment.

Table 4-1 provides a summary of the basic functionalization and allocation of the major water plant items. A more detailed exhibit of the functionalization and allocation of Districts water plant (assets) can be found in the Technical Appendix in Exhibit 13.

|  | Summary of the Classification of Water Utility Plant in Service |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

### 4.7 Functionalization and Allocation of Operating Expenses

As noted in the AWWA M1 Manual, operating expenses are generally functionalized and allocated in a manner similar to the corresponding plant account. For example, maintenance of distribution mains is typically allocated in the same manner (allocation percentages) as the plant account for distribution mains. This approach to allocating the District's operating expenses was used for this analysis. Although in general, the District does separate O\&M expenses by function (e.g., supply, distribution), however, not all of the O\&M is functionalized which is not uncommon for utilities. As a result, the approach to allocate the operating expenses was based on the classification of the plant, or asset data, which reflects the investment made by the District to provide service.

For the study, the revenue requirement for FY 2018/19 was functionalized and allocated based on the approach noted above. As noted earlier, the District utilized a cash basis revenue requirement, which was comprised of operation and maintenance expenses, rate funded capital, debt service, and reserve funding. Provided in Table 4-2 is a summary of the allocation of the water revenue requirement to the cost classifiers.

|  | Table $4-2$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Summary of the Classification of the Water Revenue Requirement (\$000) |

### 4.8 Major Assumptions of the Cost of Service Study

A number of key assumptions were used within the District's cost of service study. Below is a brief discussion of the major assumptions used.

- A test period is used for the cost of service analysis in order to select the expenses which should be allocated. The revenue and expense data was previously developed within the revenue requirement study for FY 2018/19.
- A cash basis approach was utilized which conforms to generally accepted water cost of service approaches and methodologies.
- The allocation of plant in service was developed based upon generally accepted cost allocation techniques (i.e., AWWA M1 Manual). Furthermore, they were developed using the District's specific system data and customer information.
- Consumption by tier and class of service used within this study was developed for each class of service from historical usage information provided by the District.
- Peak day capacity allocation factors were developed based upon each customer group's, and tier where applicable, average to peak month relationship.


### 4.9 Summary Results of the Cost of Service Analysis

In summary form, the cost of service analysis began by functionalizing the District's revenue requirement. The functionalized revenue requirement was then allocated into the various cost components. The individual allocation totals were then distributed to the various customer classes of service and tiers based on the appropriate distribution factor. For example, commodity related costs were allocated based on the commodity allocation factor which was based on annual water consumption. Each customer class is allocated their proportional share of commodity costs based on total annual water consumption by tier. Similarly, capacity costs were allocated proportionally based on the capacity allocation factor. This factor reflects the peaking characteristics of each class, and tier. In this way, each class, and tier, is allocated the proportional share of costs allocated to the capacity component.

The distributed expenses for each customer class were then aggregated to determine each customer class's overall revenue responsibility. Shown below in Table 4-3 is a summary of the distributed costs to each customer class of service.

| Table $4-3$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Summary of the Allocation of the Water Revenue Requirement (\$000) |  |  |

Development of the Cost of Service Analysis

The cost of service study equitably allocates the operating and capital costs to each customer class with their respective benefit received from and burdens placed on the water system (proportional allocation).

It is important to understand that a cost of service analysis is based on one year's O\&M expense data and projected customer usage information. Given this, the results of the cost of service analysis may change from year to year. As the District continues to monitor rates and cost of service results through future studies, future cost of service adjustments may be necessary to reflect costs and customer consumption patterns at that time. While the cost allocation is important to the overall rate setting process, the basis for the proposed rates is the unit costs. The unit costs are the allocated costs, by cost component, divided by the appropriate consumption unit. For example, commodity related costs are divided by the total consumption by customer and tier. Provided in Table 4-4 is a summary of the cost of service unit costs.

|  | Table $4-4$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Summary of the Unit Costs |  |  |  |  |  |$]$

A more detailed analysis of the development of the above unit costs is provided in Section 5 of this report.

### 4.10 Consultant's Conclusions and Recommendations

Given the requirements of Article XIII D, section 6 the results of the cost of service will be used to establish the proposed rate designs for each of the District's customer classes of service. A more detailed discussion of the use of the cost of service results, and unit costs, is provided in the rate design section (Section 5) of this report.

### 4.11 Summary of the Cost of Service Analysis

This section of the report has provided the recommendations resulting from the cost of service analysis developed for the District's water utility. This analysis was prepared using generally accepted cost of service techniques as provided in the AWWA M1 Manual. The following section of the report will provide a summary of the present and proposed rates for the District's water utility.

## 5. Development of the Rate Designs

### 5.1 Introduction

The final step of the District's water rate study is the design of rates to collect the necessary levels of revenues, based on the results of the revenue requirement and cost of service analyses. In reviewing current rates, consideration is given to the level of the rates as well as the structure of the rates. The level of rates reflects the amount of revenues that should be collected while the structure of the rates is how it is collected (charged) from the customers.

The overall revenue level for the District has been established in the revenue requirement analysis (Section 3) while the equitable allocation of costs and subsequent unit costs for the various customer classes has been developed in the cost of service analysis (Section 4) which provides the revenue levels to be collected from each class of service.

### 5.2 Rate Design Criteria and Considerations

Prudent rate administration dictates that several criteria should be considered when setting utility rates. Some of these rate design criteria are listed below:

- Rates which are easy to understand from the customer's perspective
- Rates which are easy for the District to administer
- Affordability
- Continuity, over time, of the rate making philosophy
- Policy considerations (encourage efficient use, economic development, etc.)
- Provide revenue stability from month to month and year to year
- Promote efficient allocation of the resource
- Equitable and non-discriminatory (cost-based)
- Legally Defensible

It is important that the District provide its customers with a proper price signal as to what their consumption and peaking (demand) requirements are costing. This goal may be approached through rate level and structure. When developing the proposed rate designs, all the above listed criteria were taken into consideration. However, it should be noted that it is difficult, if not impossible, to design a rate that meets all the goals and objectives listed above. For example, it may be difficult to design a rate that takes into consideration the customer's ability to pay, and one which is cost-based. In designing rates, there are always trade-offs between these various goals and objectives.

### 5.3 Development of Cost-Based Water Rates

Developing cost-based and equitable rates is of paramount importance in developing proposed water rates. While always a key consideration in developing rates, meeting the legal
requirements, and documenting the steps taken to meet the requirements, has been in the forefront with the recent legal challenges in the State of California on water rates. Given this, the District's proposed water rates have been developed to meet the legal requirements of California constitution article XIII D, section 6 (Article XIII D). A key component of Article XIII D is the development of rates which reflect the cost of providing service and are proportionally allocated among the various customer classes of service. HDR would point out that there is no single prescribed methodology for equitably assigning costs to the various customer groups. The American Water Works Association (AWWA) M1 Manual clearly delineates various methodologies which may be used to establish cost-based rates. Article XIII D does not prescribe a particular methodology for establishing cost-based rates; consequently, HDR developed the District's proposed water rates based on the methodologies provided in the AWWA M1 Manual to meet the requirements of Article XIII D and recent legal decisions to provide an administrative record of the steps taken to establish the District's water rates.

HDR is of the opinion that the proposed rates comply with legal requirements of Article XIII D. HDR reaches this conclusion based upon the following:

- The revenue derived from water rates does not exceed the funds required to provide the property related service (i.e., water service). The proposed rates are designed to collect the overall revenue requirements of the District's water utility.
- The revenues derived from water rates shall not be used for any purpose other than that for which the fee or charge is imposed. The revenues derived from the District's water rates are used exclusively to operate and maintain the District's water system.
- The amount of a fee or charge imposed upon a parcel or person as an incident of property ownership shall not exceed the proportional costs of the service attributable to the parcel. This study has focused almost exclusively on the issue of proportional assignment of costs to customer classes of service. The proposed rates have appropriately grouped customers into customer classes of service, residential, and non-residential, that reflect the varying consumption patterns and system requirements of each customer class of service. The grouping of customers and rates into these classes of service creates the equity and fairness expected under Article XIII D by having differing rates by customer classes of service which reflect both the level of revenue to be collected by the utility, but also the manner in which these costs are incurred and equitably assigned to customer classes of service based upon their proportional impacts and burdens on District's the water system.

The District currently has a separate rate structure for each customer classes of service. For residential, that includes a monthly service charge - which varies by meter size - and a 2 -tiered usage charge on a dollar per CCF basis. Like residential, non-residential and irrigation customers are charged a monthly service charge based on the meter size but the usage charge is the same for all consumption. Finally, the private fire service rate structure consists only of a monthly fixed service charge based on service line size.

In discussion with the District, it was determined that the current rate structure was appropriate and adequately addressed achieving the District's rate design goals and objectives. The current rate structure, which differentiates between residential, non-residential, irrigation, and Private fire protection has been used when establishing the cost of service analysis and proposed rates. Developing a separate rate for each customer class that reflects the consumption patterns and impacts placed on the system provides the cost-basis and meets the intent of Proposition 218.

As a part of this study, HDR developed a water rate design discussion to clearly demonstrate and support the proposed water rates and tiered pricing. The following discussion provides a more detailed analysis of the costing techniques and methodologies used to support the District's proposed rate design.

### 5.3.1 Determination of Sizing and Number of Tiers

The first step in reviewing the District's current, and proposed, tiered rate structure is to identify the number of tiers and determine the size of the tiers. The original tier sizing was established in the 2013 rate study and was designed to capture the majority of the residential customer consumption in the first tier. After reviewing the customer consumption patterns, it was determined that the current tier sizes still captures the majority of winter water consumption as intended when the tiers were originally set and reflect the consumption patterns of the residential customers. A summary of the number of customers by block is shown in the graphic below. As can be seen, the rate structure appears to be working effectively by having the majority of customer in the first tier. Then, as the time period shifts into summer, more customers are in the second tier which are designed around the peak summer customer needs. Given this, the District's tiers have been developed to reflect the consumption patterns of the District's customers to capture the majority of consumption within the first tier and all additional use in tier 2.


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Given the variability of non-residential customer overall use, or the total amount of consumption by customer type, it is difficult to develop tiers which reflect the typical customer consumption habits like is done in residential. As an example, residential customers behave in a much more like manner, while non-residential customers have similar peaking requirements, the total consumption can vary (e.g., restaurant vs. grocery store). Given this, it is difficult, if not impossible, to develop equitable tiered structures for the non-residential customer class.

As can be seen from the chart below, the residential customers have a much more significant peak on the system than non-residential customers. A more detailed discussion of the peaking factors by customer class is provided 5.4.2.

After the number and size of tiers and the seasonal periods have been identified, the pricing of the tiers is the next analytical step.


### 5.3.2 Establishing the Cost-Basis for Pricing Tiers

Given past legal decisions regarding water rates, HDR has concluded that utilities have available to them at least three technical approaches to be able to demonstrate (i.e., cost justify) the individual pricing of the tiers. These technical approaches encompass the following areas:

1. Cost differences in water supply (i.e., stacking of water supply resources to tiers).
2. Cost differences from high peak use consumers (relationship of average use to peak use).
3. Direct assignment of costs to specific tiers (conservation program costs, etc.).

In certain cases, the cost differences may be related to the cost of water supply when a utility has more than one source of water supply. Additionally, this water supply approach may also include the cost of alternative water supplies (e.g., recycled or reuse water). For example, reuse
water may be assigned to higher tiers to reflect outdoor use or the need for additional/alternative water supply to meet the demands of the high use customers.

The second possible source of cost differences for the pricing of tiers is related to high-peak use (peak demand) customers. Customers that use more water create greater demands and costs on the system. A water supply and distribution system must be sized to meet these peak use requirements. In other words, on the hottest day of the year when everyone is watering their lawn, the supply and distribution system must be sized to meet those peak use demands. Economic theory clearly states that equity is achieved when those that create the demand event, pay for the demand event. In this particular case, this has implications upon the equitable allocation of capacity-related costs to the different usage tiers (low use vs. high peak use).

Finally, certain costs may be directly assigned to specific tiers. For example, a conservation program which focuses on outdoor water use may be directly assigned to the water tiers, or seasons, which are most directly related to outdoor use. The direct assignment to a specific price tier will create a price differential for that tier.

For the District's study, the focus of the analysis was on the second method of determining the cost impacts and cost differences associated with peak use. The pricing of the tiers, or uniform rate, was developed to provide the cost-basis and meet the intent of Proposition 218.

### 5.4 Development of the Unit Costs for Rate Designs

To begin the assignment of costs related to specific tiers, the results of the cost of service analysis is utilized. As noted in Section 4, the cost of service analysis allocates the revenue requirement between the various cost components of average use (commodity), peak use (capacity), and customer (actual and weighted). However, the results provided in Table 4-2 which allocated the totals to the various customer classes of service are further allocated between the rate structure components (e.g., service charge, usage charge, tiers). Provided in Table 5-2 is a summary of the classification of the FY 2018/19 revenue requirement from the cost of service analysis (same as Table 4-2).


The total of the above allocated costs, of approximately $\$ 15.1$ million, is the same as the total costs allocated in Table 4-2 of the cost of service analysis. This allocation of the total revenue
requirement for FY 2018/19 is then distributed to the various customer classes of service. Prior to the recent legal decisions, the analyses would have been complete. However, given the legal requirement to provide the cost-basis for each rate, both fixed and variable pricing, the allocated costs are further distributed between the various rate structure components based on the corresponding distribution factors. The distribution factors were discussed for the costs of service in Section 4 of this report. For example, the commodity costs are divided through by each customer class's consumption from a given tier. Provided below is a discussion of the approach used to allocate the revenue requirement between the various customer classes of service as established in Sections 3 and 4 to the various rate components for each customer class of service.

### 5.4.1 Commodity Allocation Factor

The commodity allocation factor is based on the average annual use for each of the customer classes of service, and more importantly by tier. For the development of the pricing of the proposed rates the following customer class components were used:

- Residential
$>$ Tier 1
> Tier 2
- Non-residential
- Irrigation
- Private Fire Protection

To develop the commodity allocation factor for each customer class, the usage for each class, and tier plus a proportional share of system losses, was divided by the total usage of the system. System losses are included in the calculation as this is either water produced by the District, or purchased by the District, for customer consumption. However, given that there is not a water system that does not have losses, this is added to the calculation to reflect the cost associated with water loss. This produces the percent of the system that each class is responsible for and, therefore, their contribution to commodity related costs. Provided below in Table 5-3 is a summary of the commodity allocation factor.

|  | Tab |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | the Comm | ity Allocati | n Factor |  |
| Reference <br> Calculation | A | B | $\begin{gathered} C \\ C=A+B \end{gathered}$ | D |
|  | FY 18-19 Consumption CCF | Est. System Losses CCF | Total Annual Use (CCF) | $\% \text { of }$ Total |
| Residential |  |  |  |  |
| Tier 1 | 1,812,220 | 119,607 | 1,931,827 | 68.7\% |
| Tier 2 | 236,494 | 15,609 | 252,103 | 9.0\% |
| Residential Total | 2,048,714 | 135,215 | 2,183,929 | 77.7\% |
| Non-residential | 404,260 | 26,681 | 430,941 | 15.3\% |
| Irrigation | 183,809 | 12,131 | 195,940 | 7.0\% |
| Private Fire Protection | 0 | 0 | 0 | 0.0\% |
| Total | 2,636,783 | 174,028 | 2,810,811 | 100.0\% |

As can be seen, the development of the commodity distribution factor is fairly straightforward. It is important to note that the distribution factor is based on the actual metered consumption each class and tier, plus assumed losses on the system. In this way, those costs allocated to the commodity component can be proportionally allocated to the appropriate customer class and customer class tier. As an example, Tier 1 consumption of the residential class of service represents $69.5 \%$ of the total consumption on the system. As a result, $69.5 \%$ of the commodity related costs are then allocated to Tier 1 of the residential customers.

This approach is used for each of the customer classes of service for each rate component and tier. Using the costs allocated to the commodity component in the cost of service analysis from Table 5-2, and the commodity distribution factor in Table 5-3, the distribution of costs to each tier or customer class can be developed. The summary of the distributed commodity costs are shown below in Table 5-4.

| Table 5-4 <br> Allocated Commodity Costs (\$000s) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Reference Calculation | A | B | C | $\begin{gathered} D \\ \mathrm{D}=\mathrm{B} / \mathrm{C} \end{gathered}$ |
|  | \% of <br> Total | Commodity Costs | Water Sales (CCF) | Unit Cost (\$/CCF) |
| Residential |  |  |  |  |
| Tier 1 | 68.73\% | \$1,209 | 1,812,220 | \$0.67 |
| Tier 2 | 8.97\% | 158 | 236,494 | \$0.67 |
| Residential Total | 77.70\% | 1,366 | 2,048,714 | \$0.67 |
| Non-residential | 15.33\% | \$270 | 404,260 | \$0.67 |
| Irrigation | 6.97\% | 123 | 183,809 | \$0.67 |
| Private Fire Protection | 0.00\% | 0 | 0 | \$0.00 |
| Total | 100.00\% | \$1,759 | 2,636,783 | \$0.67 |

The figures in column A are from column D in Table 5-3. The costs shown in column B are based on the total commodity related costs from column A of Table 5-2. Column C is from column A in Table 5-3, or the actual consumption that is billed to the customers.

From the unit costs developed in Table 5-4 above, the per unit cost basis of the tiered and uniform rates can be determined for the commodity related costs identified in the cost of service analysis (Column D). For example, for the proposed residential tier 1 rate, the commodity component is $\$ 0.67$ per CCF. This applies to each tier and customer class (e.g., residential and non-residential).

### 5.4.2 Capacity-Supply Allocation Factor

As was mentioned in the development of the allocation and distribution for the cost of service analysis, the capacity costs were split between capacity-supply and capacity-distribution. The capacity-distribution costs we added to the fixed service charge whereas the capacity-supply costs are included in the costs developed for the usage charge calculation and are developed herein. The capacity-supply allocation factor utilizes the same customer classes, and tiers, as has been established for the cost of service study. Whereas commodity costs are related to the volume of water used by each class of service by tier, the capacity supply costs are related to how the class uses that water in each tier or annually. Customers use water in different ways and at different times, thus creating different usage patterns and resulting in different peaking factors. These usage patterns drive how the District must size the system to meet the peak demands of customers. To determine the allocation by tier or annually, peaking factors need to be developed for each customer class of service tier or season. The peaking factors for each class of service must be estimated due to a lack of specific metered data related to peak day usage by each class of service. One method discussed in the AWWA M1 Manual used to estimate a class's peaking factor is to review the average monthly volume of water consumed and compare it to the maximum monthly usage of water. By dividing the maximum month by the average month, a

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peak-day factor is calculated. Essentially, this factor provides a seasonal surrogate for the difference between the average use and peak day use in each tier or season. For example, if a customer used 10 CCF per month on average and in the peak month 15 CCF was used, the peaking factor would be $1.50(15 / 10=1.50)$. In this example, the peaking factor is stating that the maximum usage in a month is 1.50 time higher than the average usage per month.

For the District's study the consumption patterns of each customer class and tier were reviewed and peaking factors were developed for each tier. In other words, a peak factor for each customer, by tier was developed to depending on the amount of water used and the peak demands of those customers within that tier compared to the average customer consumption peak. Shown below in Table 5-5 is a summary of the capacity-supply allocation factor for each customer class.

| Table 5-5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Summary of the Capacity-Supply Allocation Factor |  |  |  |  |
| Reference <br> Calculation | A | $B$ | $\begin{gathered} C \\ C=A * B \end{gathered}$ | D |
|  | $\qquad$ | Peaking <br> Factors | Peak Day Use (MGD) | \% of <br> Total |
| Residential |  |  |  |  |
| Tier 1 | 3.96 | 1.56 | 6.19 | 58.0\% |
| Tier 2 | 0.52 | 4.21 | 2.17 | 20.3\% |
| Residential Total | 4.48 | 1.87 | 8.36 | 78.3\% |
| Non-residential | 0.88 | 1.43 | 1.26 | 11.8\% |
| Irrigation | 0.40 | 2.18 | 0.88 | 8.2\% |
| Private Fire Protection | 0.00 | 0.00 | 0.18 | 1.7\% |
| Total | 5.76 | 1.85 | 10.68 | 100.0\% |

Table 5-5 above shows the development of the capacity-supply distribution factor. For example, based on the District's residential customer consumption data, those customers that stayed within tier 1 have a peak factor of 1.56 . In other words, those customers that stay within tier 1 use 1.56 times more water in the peak period than on average. This is compared to customers in the remaining tiers which show a higher peaking factor based on how the customers in these tiers consume water. These peaking factors were developed around the District's specific customers consumption patterns. Similar to the distribution of commodity costs to the tiers or customer classes, the capacity-supply related costs are distributed in the same manner. For example, $58.0 \%$ of the capacity-supply costs are allocated to Tier 1 of the residential customers based on column D in Table 5-5. To determine this, the average day use (column A) of each tier or class is multiplied by the peaking factor (column B). The total peak use by tier or class is divided by the system total peak use to develop the proportional distribution.

Table 5-6 provides a summary of the distributed capacity-supply costs to each tier and season.
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| Table 5-6 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Allocated Capacity-Supply Costs (\$000s) |  |  |  |  |
| Reference <br> Calculation | A | B | c | $\begin{gathered} D \\ \mathrm{D}=\mathrm{B} / \mathrm{C} \end{gathered}$ |
|  | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ | Capacity Costs | Water Sales (CCF) | Unit Cost (\$/CCF) |
| Residential |  |  |  |  |
| Tier 1 | 58.0\% | \$2,275 | 1,812,220 | 1.26 |
| Tier 2 | 20.3\% | 799 | 236,494 | 3.38 |
| Residential Total | 78.3\% | \$3,074 | 2,048,714 | 1.50 |
| Non-Residential | 11.8\% | \$463 | 404,260 | 1.15 |
| Irrigation/Other | 8.2\% | 322 | 183,809 | 1.75 |
| Private Fire Protection | 1.7\% | 66 | 0 | 0.00 |
| Total | 100.0\% | \$3,925 | 2,636,783 | 1.49 |

The figures in column $A$ are from column $D$ in Table 5-5. The costs shown in column $B$ are based on the total capacity related costs from column B of Table 5-2. Column C is from column A in Table 5 - 3. For example, the proposed rate for Tier 2 includes a capacity component cost of $\$ 1.26$ per CCF while the Tier 2 capacity cost is $\$ 3.38$ per CCF. This difference reflects the costs associated with providing consumption at higher tiers and the costs of providing that capacity.

### 5.4.3 Summary of the Consumption Based Unit Costs

Combining the unit costs from the commodity and capacity-supply unit costs result in the basis of the tiered rate pricing. The summary Table $5-7$ below shows the summation of the costs for each tier / rate. This table sums the costs from Table 5-4 column D and Table 5-6 column D.

\left.|  | Table 5-7 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Summary of the Unit Costs for Rate Design |  |  |  |  |  |  |  |$\right]$

The results shown in Table 5-7 above are the basis for the District's consumption pricing for the proposed rates. The analysis and costs shown above have been developed to meet the intent of Proposition 218 and recent legal decisions related to developing cost-based water rates.

### 5.4.4 Summary of the Customer (Fixed) Costs

It is also important to note that the customer related costs as well as the Tier 1 consumption costs and the capacity-distribution costs are used to establish the monthly service charge which varies by meter size. As a result, the total customer costs were divided by the number of equivalent meters on the system. An equivalent meter uses the capacity ratio of a 1-inch meter to the larger meter sizes to determine the pricing for each meter size. In this way the meter charge reflects the equitable proportion of fixed costs on the system based on the capacity demands the customer can place on the system based on the size of the meter. The analysis maintained the current meter ratios utilized by the District. Shown below in Table $5-8$ is a summary of the customer related costs and customer charge development.

| Summary of the Customer Charge for Rate Design |  |  |
| :---: | :---: | :---: |
|  | Current District Ratios | Cost (\$ / Acct. / Mo) |
| Total Customer Costs |  |  |
| Total 1" Meter Equiv. |  | 12,799 |
| Cost per Equiv. Meter |  | \$61.15 |
| Proposed Rates |  |  |
| $1{ }^{\prime \prime}$ | 1.00 | \$61.15 |
| 11/2" | 1.41 | 86.07 |
| $2{ }^{\prime \prime}$ | 1.90 | 115.97 |
| 3" | 3.04 | 185.76 |
| 4" | 4.67 | 285.43 |
| $6{ }^{\prime \prime}$ | 8.74 | 534.64 |
| 8" | 13.63 | 833.69 |
| 10" | 19.34 | 1,182.57 |

Given the District's current capacity ratios, and the cost per equivalent meter from the unit costs, the proposed fixed charge schedule can be developed. The cost per equivalent meter is based on the costs allocated to the customer component divided by the total number of equivalent meters. To calculate the rate, the cost per equivalent meter ( $\$ 61.15$ ) is multiplied by the capacity ratio for each meter size. In this way, the fixed charge collects the costs allocated to the customer component on a variable meter size basis. This approach is the most common approach used by water utilities to establish the fixed charges for a water utility.

### 5.5 Summary of the Present and Proposed Water Rates

Given the development of the unit costs for rate design purposes, the next step is to develop the proposed rates for the next five year period. As a note, the proposed rates are being developed for the test year FY 2018/19 based on the unit costs as discussed in the previous section of this report based on generally accepted cost of service principles. Provided in the following is a summary of the present and proposed rates for each customer class of service for each year of the review period.

As noted, the rate structure for all customer classes has been maintained and only the pricing of the components have been adjusted. The proposed rates reflect the results of the revenue requirement and cost of service analysis. Provided below in Table 5-9 is a summary of the current and proposed rates for the District's customers. As noted, the proposed rates in are based on the previously discussed unit costs.

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| Table 5-9 Current and Proposed Rates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current | $\begin{gathered} \text { FY } \\ 18-19 \end{gathered}$ | $\begin{gathered} \text { FY } \\ \text { 19-20 } \end{gathered}$ | $\begin{gathered} \text { FY } \\ 20-21 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 21-22 \end{gathered}$ | $\begin{gathered} \text { FY } \\ 22-23 \end{gathered}$ |
| Monthly Charge by Meter Size |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$66.67 | \$61.15 | \$61.15 | \$62.99 | \$64.88 | \$66.82 |
| 1 1/2" | 93.84 | 86.07 | 86.07 | 88.65 | 91.31 | 94.05 |
| $2{ }^{\prime \prime}$ | 126.44 | 115.97 | 115.97 | 119.45 | 123.04 | 126.73 |
| 3" | 202.52 | 185.76 | 185.76 | 191.33 | 197.07 | 202.98 |
| 4" | 311.19 | 285.43 | 285.43 | 293.99 | 302.81 | 311.90 |
| $6 "$ | 582.89 | 534.64 | 534.64 | 550.68 | 567.20 | 584.21 |
| 8" | 908.93 | 833.69 | 833.69 | 858.70 | 884.46 | 910.99 |
| 10" | 1,289.30 | 1,182.57 | 1,182.57 | 1,218.05 | 1,254.59 | 1,292.23 |
| Residential |  |  |  |  |  |  |
| Consumption less than 30 CCF | \$1.57 | \$1.92 | \$1.92 | \$1.98 | \$2.04 | \$2.10 |
| Consumption Greater than 30 CCF | 3.11 | 4.04 | 4.04 | 4.17 | 4.29 | 4.42 |
| Non-residential |  |  |  |  |  |  |
| All Consumption | \$1.77 | \$1.79 | \$1.79 | \$1.84 | \$1.90 | \$1.95 |
| Irrigation |  |  |  |  |  |  |
| All Consumption | \$1.91 | \$2.27 | \$2.27 | \$2.34 | \$2.41 | \$2.48 |
| Private Fire Protection |  |  |  |  |  |  |
| Monthly Charge by Line Size |  |  |  |  |  |  |
| $2{ }^{\prime \prime}$ | \$3.04 | \$3.02 | \$3.02 | \$3.11 | \$3.21 | \$3.30 |
| 3" | 8.86 | 8.78 | 8.78 | 9.04 | 9.31 | 9.59 |
| 4" | 18.88 | 18.71 | 18.71 | 19.27 | 19.85 | 20.44 |
| $6 "$ | 54.85 | 54.34 | 54.34 | 55.97 | 57.65 | 59.38 |
| 8" | 116.88 | 115.80 | 115.80 | 119.27 | 122.85 | 126.54 |
| 10" | 210.19 | 208.25 | 208.25 | 214.49 | 220.93 | 227.56 |
| 12" | 339.51 | 336.37 | 336.37 | 346.47 | 356.86 | 367.57 |

It is important to note that the bill impacts will not only vary between customer classes, as the cost of service results show cost differences, but also customers in the same class. This is due to the tier pricing being based on the costs associate with the District's costs and allocated based on a snapshot of consumption characteristics. Shown below are typical customer bill impacts; these are not meant to be prescriptive for projecting a customers' bill impact but rather representative.



Irrigation Bill Comparison
11/2" Meter


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As part of the study, the District also reviewed the application of a private fire protection charge. This rate is for those customers who typically have a separate service line to provide fire protection services. HDR researched the application of private fire protection charges and based on the discussion in the AWWA M1 Manual, and other utilities, and determined that the District's private fire protection charge is cost-based and equitable.

### 5.6 Summary of the Proposed Rate Revenues

The rates for each customer class of service meet the results of the revenue requirement and cost of service results. Provided in Table 5-10 is a summary of the revenue targets based on the revenue requirement and cost of service analyses for the FY 2018/19 proposed rate adjustment.

| Table 5-10 |  |  |  |
| :---: | :---: | :---: | :---: |
| Comparison of the FY 2018/19 Proposed Revenues and Allocated Costs |  |  |  |
|  | Present <br> Revenue | Allocated Revenue | Proposed Revenue |
| Residential | \$13,043 | \$13,036 | \$13,114 |
| Non-Residential | 1,262 | 1,224 | 1,224 |
| Irrigation | 581 | 629 | 629 |
| Private Fire Protection | 189 | 187 | 187 |
| Total | \$15,076 | \$15,076 | \$15,155 |

The proportional allocation of costs to the various customer classes of service is based on District budgeted O\&M expenses as well as capital projects as identified in the revenue requirement analysis. Additionally, actual consumption data was based on 2017 to allocate costs to specific customer classes and tiers, where applicable. For the table above, the difference between allocated and proposed revenue is due the use of the system average customer unit costs. The resulting disparity is within the expected margin of error based the projected range of customer growth and is not materially significant. A more detailed analysis of the projection of the proposed revenues is included within the Technical Appendix of this report in Exhibit 7.

This concludes the discussion of the proposed water rates. Detailed exhibits for the various rate designs are included within the water technical appendices.

### 5.7 Water Rate Study Recommendations

Based on the results of the water rate study, HDR finds and recommends the following:

- Revenue adjustments are necessary to prudently fund operating and capital renewal and replacement expenses.
■ Water revenues should be adjusted 3.0\% in FY 2020/21 through FY 2027/28.
> The proposed rates would be effective January 1 of each calendar year.
- The proposed rates reflect the results of the cost of service analysis and the proportional allocation of costs to the various customer classes of service.
- The District should maintain the current minimum target reserve policy of 120 days of $0 \& M$ expenses.
- Prior to the end of the financial planning projected period, the District should complete a review of the water revenue levels and costs at that time.


### 5.8 Summary of the Water Rate Study

This completes the analysis for the Elk Grove Water District. This study has provided a comprehensive review and development of proposed water rates for the District. Adoption of the proposed water rates will allow the District to meet its current and projected water system financial obligations for the time period reviewed based on the assumed customer growth, capital plan and deferred capital, and inflationary increases in operating costs. Should these assumptions change, the proposed rate adjustments may also need to be revised to reflect the current conditions.

## Technical Appendix - Water Technical Analysis

|  | Projected |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |
| Revenue |  |  |  |  |  |  |  |  |  |  |
| Rate Revenue at Current Rates | \$15,076 | \$15,150 | \$15,223 | \$15,298 | \$15,372 | \$15,447 | \$15,523 | \$15,598 | \$15,674 | \$15,750 |
| Miscellaneous Revenue | 292 | 300 | 304 | 306 | 308 | 309 | 311 | 313 | 314 | 315 |
| Total Revenue | \$15,369 | \$15,449 | \$15,527 | \$15,604 | \$15,680 | \$15,756 | \$15,834 | \$15,911 | \$15,988 | \$16,065 |
| Expenditures |  |  |  |  |  |  |  |  |  |  |
| Salaries \& Benefits | \$3,587 | \$3,747 | \$3,914 | \$4,090 | \$4,273 | \$4,465 | \$4,667 | \$4,877 | \$5,098 | \$5,330 |
| Seminars, Conventions, \& Travel | 52 | 53 | 54 | 56 | 57 | 59 | 60 | 62 | 63 | 65 |
| Office \& Operational | 4,176 | 4,364 | 4,562 | 4,768 | 4,985 | 5,211 | 5,448 | 5,697 | 5,957 | 6,229 |
| Outside Services | 927 | 960 | 994 | 1,028 | 1,064 | 1,102 | 1,140 | 1,180 | 1,221 | 1,264 |
| Rents, Taxes, and Utilities | 418 | 426 | 435 | 444 | 454 | 463 | 473 | 483 | 493 | 504 |
| Election Costs | 65 | 66 | 68 | 70 | 72 | 73 | 75 | 77 | 79 | 81 |
| Total Expenditures | \$9,224 | \$9,617 | \$10,027 | \$10,456 | \$10,904 | \$11,373 | \$11,863 | \$12,376 | \$12,911 | \$13,472 |
| Rate Funded Capital | \$1,700 | \$1,700 | \$1,800 | \$1,900 | \$2,000 | \$2,100 | \$2,200 | \$2,300 | \$2,400 | \$2,500 |
| Debt Service | \$3,824 | \$3,827 | \$3,855 | \$3,882 | \$3,883 | \$3,887 | \$3,888 | \$3,942 | \$3,981 | \$3,977 |
| Transfers | \$620 | \$306 | \$73 | \$53 | \$59 | \$60 | \$64 | \$13 | (\$27) | (\$27) |
| Total Revenue Requirement | \$15,369 | \$15,449 | \$15,756 | \$16,292 | \$16,847 | \$17,420 | \$18,015 | \$18,630 | \$19,265 | \$19,922 |
| Balance/Deficiency of Funds | \$0 | \$0 | (\$228) | (\$688) | $(\$ 1,167)$ | $(\$ 1,664)$ | $(\$ 2,181)$ | $(\$ 2,718)$ | $(\$ 3,277)$ | $(\$ 3,857)$ |
| Rate Adj. as a \% of Rate Rev | 0.0\% | 0.0\% | 1.5\% | 4.5\% | 7.6\% | 10.8\% | 14.1\% | 17.4\% | 20.9\% | 24.5\% |
| Proposed Rate Adjustment | 0.0\% | 0.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% |
| Rate Revenue After Adjustment | \$15,076 | \$15,150 | \$15,452 | \$15,986 | \$16,539 | \$17,111 | \$17,704 | \$18,317 | \$18,951 | \$19,607 |
| Debt Service Coverage Ratio |  |  |  |  |  |  |  |  |  |  |
| Before Rate Asjustment | 1.61 | 1.52 | 1.43 | 1.33 | 1.23 | 1.13 | 1.02 | 0.90 | 0.77 | 0.65 |
| After Rate Adjustment | 1.61 | 1.52 | 1.49 | 1.50 | 1.53 | 1.56 | 1.58 | 1.59 | 1.60 | 1.62 |
| Average Residential Bill (1" meter +10 CCF) | \$79.93 | \$79.93 | \$82.33 | \$84.80 | \$87.34 | \$89.96 | \$92.66 | \$95.44 | \$98.30 | \$101.25 |
| \$ Change Per Month | 0.00 | 0.00 | 2.40 | 2.47 | 2.54 | 2.62 | 2.70 | 2.78 | 2.86 | 2.95 |
| Cumulative \$ Change per Month | 0.00 | 0.00 | 2.40 | 4.87 | 7.41 | 10.03 | 12.73 | 15.51 | 18.37 | 21.32 |
| Days of O\&M | 223 | 226 | 219 | 212 | 205 | 199 | 193 | 185 | 176 | 168 |
| Days of Reserves | 581 | 583 | 575 | 570 | 549 | 528 | 508 | 488 | 467 | 447 |




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## Elk Grove Water District Water Utility Water Utility Revenue Require <br> Exhibit 1 - Escalation Factors Medium Inflation/Medium Customer Growth

## Other Revenues Meter Fees / Plan Check / Water Capacity

 Backflow Install EGWDRevenues
Rate Revenue
Residential
rrigation
Total Rate Revenues
Elk Grove Water District
Water Utility Water Utility
Revenue Requi
Revenue Requirement
Exhibit 2 - Sources \& Application of Funds
Expenses
Salaries \& Benefits
Executive Salary
Exempt Salaries
Non-Exempt Salaries
Overtime Compensation
On Call Pay
Holiday Pay
Vacation Pay
Personal Time Pay
Internship Program
Medical Benefits
EAP
EGWD Contribution H.S.A
Dental/Vision/Life Insurance
Retirement Benefits
Retirement Benefits - Post Employment
Medical Tax, Social Security and SUI
Worker's Compensation Insurance
Education Assistance
Employee Training
Employee Recognition
Meetings
Less Capitalized Expenses
Total Salaries \& Benefits
Seminars, Conventions, \& Travel
Airfare
Hotels
Meals
Auto Rental
Seminars \& Conferences
Seminars \& Conferences - Board
Mileage Reimbursement, Parking, Tolls
Auto Allowance
Total Seminars, Conventions, \& Travel
Elk Grove Water District
Water Utility
Water Utility
Revenue Requit
Revenue Requirement
Exhibit 2 - Sources \& Application of Funds

| $\$ 6,720$ | As Materials \& Supplies |
| ---: | :--- |
| 126,872 | As Miscellaneous |
| 118,117 | As Insurance |
| 4,608 | As Miscellaneous |
| 63,750 | As Repairs \& Maintenance |
| 24,784 | As Repairs \& Maintenance |
| 34,091 | As Repairs \& Maintenance |
| 89,498 | As Repairs \& Maintenance |
| 62,900 | As Utilities |
| 201,587 | As Materials \& Supplies |
| 6,196 | As Materials \& Supplies |
| 16,523 | As Repairs \& Maintenance |
| 105,223 | As Miscellaneous |
| 114,636 | As Materials \& Supplies |
| 6,048 | As Materials \& Supplies |
| 10,260 | As Equipment |
| 134,198 | As Equipment |
| 27,953 | As Materials \& Supplies |
| 57,299 | As Equipment |
| 14,450 | As Equipment |
| 13,057 | As Miscellaneous |
| 11,521 | As Miscellaneous |
| 13,439 | As Materials \& Supplies |
| $4,904,219$ | As Purchased Water |
| $\$ 6,228,949$ |  |
| $4,6 \%$ |  |


Elk Grove Water District
Water Utility
Water Utility
Revenue Requir
Revenue Requirement
Exhibit 2 - Sources \& Application of Funds

|  | Actual |  | Budget | Projected |  |  |  |  |  |  |  |  |  | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 15-16 | FY 16-17 |  | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |  |
| Rents, Taxes, and Utilities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Occupancy | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | As Miscellaneous |
| Equipment Rental | 13,493 | 20,771 | 22,000 | 22,825 | 23,681 | 24,569 | 25,490 | 26,446 | 27,438 | 28,467 | 29,534 | 30,642 | 31,791 | As Equipment |
| Property Taxes | 1,328 | 1,299 | 1,500 | 1,538 | 1,576 | 1,615 | 1,656 | 1,697 | 1,740 | 1,783 | 1,828 | 1,873 | 1,920 | As Miscellaneous |
| Water | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Utilities |
| Electricity | 284,865 | 314,161 | 359,000 | 366,180 | 373,504 | 380,974 | 388,593 | 396,365 | 404,292 | 412,378 | 420,626 | 429,038 | 437,619 | As Utilities |
| Natural Gas | 425 | 601 | 600 | 612 | 624 | 637 | 649 | 662 | 676 | 689 | 703 | 717 | 731 | As Utilities |
| Sewer \& Garbage | 17,368 | 21,226 | 25,900 | 26,418 | 26,946 | 27,485 | 28,035 | 28,596 | 29,168 | 29,751 | 30,346 | 30,953 | 31,572 | As Utilities |
| Other Expenses | 0 | 12,036 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Miscellaneous |
| Additional O\&M Expenses | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Total Rents, Taxes, and Utilities | \$317,479 | \$370,094 | \$409,000 | \$417,573 | \$426,331 | \$435,280 | \$444,424 | \$453,766 | \$463,313 | \$473,068 | \$483,037 | \$493,223 | \$503,633 |  |
|  |  | 16.6\% | 10.5\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% | 2.1\% |  |
| Election Costs | \$0 | \$126,527 | \$0 | \$64,845 | \$66,466 | \$68,128 | \$69,831 | \$71,577 | \$73,366 | \$75,201 | \$77,081 | \$79,008 | \$80,983 | As Miscellaneous |
| Total Operations \& Maintenance Expense | \$6,848,893 | \$7,549,205 | \$8,899,602 | \$9,224,408 | \$9,616,974 | \$10,027,273 | \$10,456,143 | \$10,904,465 | \$11,373,163 | \$11,863,208 | \$12,375,614 | \$12,911,452 | \$13,471,840 |  |
|  |  | 10.2\% | 17.9\% | 3.6\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% | 4.3\% |  |
| Total Rate Funded Capital |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital Improvement Reserve | \$0 | \$0 | \$1,130,000 | \$195,000 | \$280,000 | \$390,000 | \$745,000 | \$1,061,800 | \$1,113,654 | \$1,165,564 | \$1,217,531 | \$1,269,556 | \$1,321,643 | Equal to Cap Impvmnt Pjcts |
| Capital Replacement Reserve | 0 | 0 | 626,000 | 1,150,000 | 1,052,000 | 1,045,000 | 663,000 | 938,200 | 986,346 | 1,034,436 | 1,082,469 | 1,130,444 | 1,178,357 | Equal to Cap Rplcmnt Pjets |
| Rate Funded Capital | 0 | 0 | 0 | 355,000 | 368,000 | 365,000 | 492,000 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Total Total Rate Funded Capital | \$1,700,000 | \$1,700,000 | \$1,756,000 | \$1,700,000 | \$1,700,000 | \$1,800,000 | \$1,900,000 | \$2,000,000 | \$2,100,000 | \$2,200,000 | \$2,300,000 | \$2,400,000 | \$2,500,000 | FY 14-15 Dep. Exp. \$1,696,678 |
|  |  | 0.0\% | 3.3\% | $-3.2 \%$ | 0.0\% | 5.9\% | 5.6\% | 5.3\% | 5.0\% | 4.8\% | 4.5\% | 4.3\% | 4.2\% |  |
| Debt Service |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2002 Refunding Bond | \$3,655,240 | \$375,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | CAFR |
| 2014 Series A Bonds | 0 | 2,078,519 | 2,794,719 | 2,961,119 | 2,967,269 | 2,994,769 | 3,026,019 | 3,026,394 | 3,030,394 | 3,027,269 | 2,787,613 | 2,830,147 | 2,830,200 | Debt Schedule |
| 2016 Series A Bonds | 0 | 736,400 | 1,028,630 | 862,790 | 859,470 | 860,700 | 856,480 | 856,810 | 856,600 | 860,760 | 1,153,890 | 1,150,900 | 1,147,010 | Debt Schedule |
| New Low Interest Loan | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Calculated @ 4.5\% for 20 yrs |
| New Revenue Bond | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Calculated @ 3\% for 10 yrs |
| Total Debt Service | \$3,655,240 | \$3,189,919 | \$3,823,349 | \$3,823,909 | \$3,826,739 | \$3,855,469 | \$3,882,499 | \$3,883,204 | \$3,886,994 | \$3,888,029 | \$3,941,503 | \$3,981,047 | \$3,977,210 |  |
|  |  | -12.7\% | 19.9\% | 0.0\% | 0.1\% | 0.8\% | 0.7\% | 0.0\% | 0.1\% | 0.0\% | 1.4\% | 1.0\% | -0.1\% |  |
| To / (From) Reserves |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| To / (From) Operating Reserve | \$0 | \$1,729,057 | \$839,080 | \$620,403 | \$305,784 | \$72,858 | \$53,354 | \$58,963 | \$60,231 | \$63,546 | \$12,536 | (\$27,345) | $(\$ 26,926)$ |  |
| Total To / (From) Reserves | \$0 | \$1,729,057 | \$839,080 | \$620,403 | \$305,784 | \$72,858 | \$53,354 | \$58,963 | \$60,231 | \$63,546 | \$12,536 | $(\$ 27,345)$ | $(\$ 26,926)$ |  |
| Total Revenue Requirements | \$12,204,133 | \$14,168,181 | \$15,318,030 | \$15,368,720 | \$15,449,497 | \$15,755,599 | \$16,291,996 | \$16,846,632 | \$17,420,388 | \$18,014,782 | \$18,629,652 | \$19,265,154 | \$19,922,123 |  |

Elk Grove Water District
Water Utility
Revenue Requir
Revenue Requirement
Exhibit 2 - Sources \& Application of Funds

| Actual |  | Budget |
| :---: | :---: | :---: |
| FY 15-16 | FY 16-17 | FY 17-18 |


|  | Actual |  | Budget | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | Projected |  | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 15-16 | FY 16-17 |  |  |  |  |  | FY 22-23 | FY 23-24 |  |  |  |  |
| Balance / ( Deficiency) of Funds | \$1,291,036 | \$0 | \$0 | \$0 | \$0 | $(\$ 228,349)$ | $(\$ 688,398)$ | (\$1,166,757) | $(\$ 1,664,057)$ | $(\$ 2,181,059)$ | (\$2,718,379) | $(\$ 3,276,715)$ | $(\$ 3,856,788)$ |
| Rate Adjust. as a \% of Rate Rev | -9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 1.5\% | 4.5\% | 7.6\% | 10.8\% | 14.1\% | 17.4\% | 20.9\% | 24.5\% |
| Proposed Rate Adjustment [January] | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% | 3.0\% |
| Months of Adjustment | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Addt'I Rev from Proposed Adj. | \$0 | \$0 | \$0 | \$0 | \$0 | \$228,349 | \$688,398 | \$1,166,757 | \$1,664,057 | \$2,181,059 | \$2,718,379 | \$3,276,715 | \$3,856,788 |
| Net Bal/(Def) of Funds After Rate Adj. | \$1,291,036 | \$0 | \$0 | \$0 | \$0 | (\$0) | \$0 | \$0 | (\$0) | \$0 | \$0 | \$0 | \$0 |
| Additional Rate Increase Needed | -9.9\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |
| Debt Service Coverage Ratio |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Before Rate Adjustment | 1.82 | 2.07 | 1.68 | 1.61 | 1.52 | 1.43 | 1.33 | 1.23 | 1.13 | 1.02 | 0.90 | 0.77 | 0.65 |
| After Rate Adjustment | 1.82 | 2.07 | 1.68 | 1.61 | 1.52 | 1.49 | 1.50 | 1.53 | 1.56 | 1.58 | 1.59 | 1.60 | 1.62 |
| Average Residential Bill (1" meter +10 CCF) | \$79.93 | \$79.93 | \$79.93 | \$79.93 | \$79.93 | \$82.33 | \$84.80 | \$87.34 | \$89.96 | \$92.66 | \$95.44 | \$98.30 | \$101.25 |
| \$Change Per Month |  | 0.00 | 0.00 | 0.00 | 0.00 | 2.40 | 2.47 | 2.54 | 2.62 | 2.70 | 2.78 | 2.86 | 2.95 |
| Cumulative \$ Change per Month |  | 0.00 | 0.00 | 0.00 | 0.00 | 2.40 | 4.87 | 7.41 | 10.03 | 12.73 | 15.51 | 18.37 | 21.32 |
| Cash Reserves |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$4,182,889 | \$5,021,969 | \$5,642,372 | \$5,948,155 | \$6,021,013 | \$6,074,367 | \$6,133,330 | \$6,193,561 | \$6,257,106 | \$6,269,642 | \$6,242,297 |
| Plus: Additions | 0 | 1,729,057 | 839,080 | 620,403 | 305,784 | 72,858 | 53,354 | 58,963 | 60,231 | 63,546 | 12,536 | 0 | 0 |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $(27,345)$ | $(26,926)$ |
| Ending Balance | \$0 | \$1,729,057 | \$5,021,969 | \$5,642,372 | \$5,948,155 | \$6,021,013 | \$6,074,367 | \$6,133,330 | \$6,193,561 | \$6,257,106 | \$6,269,642 | \$6,242,297 | \$6,215,371 |
| Target Balance (120 Days O\&M) |  |  | \$2,925,897 | \$3,032,682 | \$3,161,745 | \$3,296,638 | \$3,437,636 | \$3,585,030 | \$3,739,122 | \$3,900,233 | \$4,068,695 | \$4,244,861 | \$4,429,098 |
| Capital Improvement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$1,130,000 | \$1,130,000 | \$1,307,500 | \$1,491,500 | \$1,674,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 |
| Plus: Additions | 0 | - | 1,130,000 | 372,500 | 464,000 | 572,500 | 991,000 | 1,061,800 | 1,113,654 | 1,165,564 | 1,217,531 | 1,269,556 | 1,321,643 |
| Uses: Supply / Distribution | 0 | 0 | $(250,000)$ | $(30,000)$ | $(70,000)$ | 0 | $(575,000)$ | 0 | 0 | 0 | 0 | 0 | 0 |
| Uses: Treatment | 0 | 0 | $(180,000)$ | 0 | 0 | $(180,000)$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Uses: Building \& Site / Vehicles | 0 | 0 | $(650,000)$ | $(115,000)$ | $(160,000)$ | $(160,000)$ | $(120,000)$ | $(123,600)$ | $(127,308)$ | $(131,127)$ | $(135,061)$ | $(139,113)$ | $(143,286)$ |
| Uses: Unforseen Projects | 0 | 0 | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(938,200)$ | $(986,346)$ | $(1,034,436)$ | $(1,082,469)$ | $(1,130,444)$ | $(1,178,357)$ |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ending Balance | \$0 | \$0 | \$1,130,000 | \$1,307,500 | \$1,491,500 | \$1,674,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 | \$1,920,000 |
| Target Balance: Average Annual Capital I |  |  | \$548,000 | \$563,000 | \$578,000 | \$594,000 | \$610,000 | \$626,000 | \$643,000 | \$660,000 | \$678,000 | \$696,000 | \$715,000 |


| Elk Grove Water District |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Utility <br> Revenue Requirement <br> Exhibit 2 - Sources \& Application of Funds |  |  |  |  |  |  |  |  |  |  |  |  |  | Page 6 of 6 |
|  | Actual |  | Budget | Projected |  |  |  |  |  |  |  |  |  | Notes |
|  | FY 15-16 | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |  |
| Capital Replacement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$626,000 | \$626,000 | \$803,500 | \$987,500 | \$1,170,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 |  |
| Plus: Additions | 0 | 0 | 626,000 | 1,327,500 | 1,236,000 | 1,227,500 | 909,000 | 938,200 | 986,346 | 1,034,436 | 1,082,469 | 1,130,444 | 1,178,357 |  |
| Uses: Supply / Distribution | 0 | 0 | $(511,000)$ | $(950,000)$ | $(1,002,000)$ | $(995,000)$ | $(613,000)$ | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Uses: Treatment | 0 | 0 | $(50,000)$ | $(80,000)$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Uses: Building \& Site / Vehicles | 0 | 0 | $(15,000)$ | $(70,000)$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Uses: Unforseen Projects | 0 | 0 | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(50,000)$ | $(938,200)$ | $(986,346)$ | $(1,034,436)$ | $(1,082,469)$ | $(1,130,444)$ | $(1,178,357)$ |  |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Ending Balance | \$0 | \$0 | \$626,000 | \$803,500 | \$987,500 | \$1,170,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 | \$1,416,000 |  |
| Target Balance: Annual Capital Replacement |  |  | \$907,200 | \$932,000 | \$957,000 | \$983,000 | \$1,010,000 | \$1,037,000 | \$1,065,000 | \$1,094,000 | \$1,124,000 | \$1,154,000 | \$1,185,000 | 2.7\% / Yr. Growth |
| Elections / Special Studies Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 |  |
| Plus: Additions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Ending Balance | \$0 | \$0 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 |  |
| Target Balance: \$120,000 |  |  | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 | \$120,000 |  |
| Future Capital Improvement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 |  |
| Plus: Additions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Ending Balance | \$0 | \$0 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 | \$5,109,297 |  |
| Future Capital Replacement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning Balance | \$0 | \$0 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 |  |
| Plus: Additions | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Less: Uses of Funds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Ending Balance | \$0 | \$0 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 | \$1,703,099 |  |
| Total Reserve Funds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning | \$0 | \$0 | \$12,871,285 | \$13,710,365 | \$14,685,768 | \$15,359,551 | \$15,797,409 | \$16,342,763 | \$16,401,726 | \$16,461,957 | \$16,525,502 | \$16,538,038 | \$16,510,693 |  |
| Ending | \$0 | \$1,729,057 | \$13,710,365 | \$14,685,768 | \$15,359,551 | \$15,797,409 | \$16,342,763 | \$16,401,726 | \$16,461,957 | \$16,525,502 | \$16,538,038 | \$16,510,693 | \$16,483,767 |  |

Elk Grove Water District
Water Utility
Revenue Requirement
Exhibit 3 - Capital Improvement Plan

|  | Actual | Budget |  | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | Proje |  | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 15-16 | FY 16-17 | FY 17-18 |  |  |  |  | FY 22-23 | FY 23-24 |  |  |  |  |
| Supply / Distribution |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Line Replacements | \$0 | \$0 | \$250,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Kent St. Waer Main | 0 | 0 | 280,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Truman St. / Adams St. Water Main | 0 | 0 | 0 | 0 | 0 | 0 | 240,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| School / Locust / Summit Alley Wtr Main | 0 | 0 | 0 | 0 | 0 | 495,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elk Grove Blvd Grove St Alley Water Main | 0 | 0 | 0 | 0 | 0 | 290,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Locust St. - Elk Grove Blvd Alley / Derr St. Wtr Main | 0 | 0 | 0 | 0 | 0 | 210,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Elk Grove Blvd Wate Main | 0 | 0 | 0 | 0 | 0 | 0 | 500,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lark St. Water Main | 0 | 0 | 0 | 0 | 170,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Well Rehabilitation Program | 0 | 0 | 93,000 | 0 | 98,000 | 0 | 103,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Railroad Corridor Water Line | 0 | 0 | 0 | 0 | 0 | 0 | 75,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Backyard Water Mains / Service Replacement | 0 | 0 | 138,000 | 950,000 | 734,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cadura Circle Water Main Looping | 0 | 0 | 0 | 30,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mormon Church Water Main Looping | 0 | 0 | 0 | 0 | 70,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kilkenny Ct Water Main | 0 | 0 | 0 | 0 | 0 | 0 | 135,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Leo Virgo Ct. Water Main | 0 | 0 | 0 | 0 | 0 | 0 | 135,000 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Supply / Distribution | \$0 | \$0 | \$761,000 | \$980,000 | \$1,072,000 | \$995,000 | \$1,188,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Media Replacement Filter Vessels | \$0 | \$0 | \$50,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Chlorine Tank Replacement - ClorTec Room | 0 | 0 | 0 | 80,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Well 3 Pump Replacement / VFD | 0 | 0 | 0 | 0 | 0 | 180,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Well 8 Pump Replacement | 0 | 0 | 100,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Radio Antennas | 0 | 0 | 80,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Treatment | \$0 | \$0 | \$230,000 | \$80,000 | \$0 | \$180,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Building \& Site Imprvmnts / Vehicles |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Truck Replacements | \$0 | \$0 | \$100,000 | \$115,000 | \$160,000 | \$160,000 | \$120,000 | \$123,600 | \$127,308 | \$131,127 | \$135,061 | \$139,113 | \$143,286 |
| RRWTF Modular Meeting Room IT Center | 0 | 0 | 550,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| HVWTP Roof Replacement | 0 | 0 | 0 | 20,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| RRWTF Parking Lot Repaving | 0 | 0 | 0 | 50,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Well 9 Fence Replacement | 0 | 0 | 15,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Building \& Site Imprumnts / Vehicles | \$0 | \$0 | \$665,000 | \$185,000 | \$160,000 | \$160,000 | \$120,000 | \$123,600 | \$127,308 | \$131,127 | \$135,061 | \$139,113 | \$143,286 |

Elk Grove Water District
Exhibit 3 - Capital Improvement Plan

|  | Actual | Budget |  | Projected |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 15-16 | FY 16-17 | FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 | FY $25-26$ | FY 26-27 | FY $27-28$ |
| Future Unidentified Capital Projects |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Budgeted | \$1,700,000 | \$1,700,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 |
| Unbudgeted | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,776,400 | 1,872,692 | 1,968,873 | 2,064,939 | 2,160,887 | 2,256,714 |
| Future Capital Funded Projects | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | \$1,700,000 | \$1,700,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$1,876,400 | \$1,972,692 | \$2,068,873 | \$2,164,939 | \$2,260,887 | \$2,356,714 |
| Total Capital Improvement Projects | \$1,700,000 | \$1,700,000 | \$1,756,000 | \$1,345,000 | \$1,322,000 | \$1,435,000 | \$1,408,000 | \$2,000,000 | \$2,100,000 | \$2,200,000 | \$2,300,000 | \$2,400,000 | \$2,500,000 |


| \$0 | \$0 | \$0 | \$177,500 | \$184,000 | \$182,500 | ,000 | \$0 | \$0 | so | (\$0) | \$0 | \$0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 177,500 | 184,000 | 182,500 | 246,000 | 0 | 0 | 0 | (0) | 0 |  |
| \$0 | \$0 | \$0 | \$355,000 | \$368,000 | \$365,000 | \$492,00 | S | \$0 | \% | (\$0) | \$0 | \$0 |


| Capital and And Reserve Funding | $\$ 1,700,000$ | $\$ 1,700,000$ | $\$ 1,756,000$ | $\$ 1,700,000$ | $\$ 1,700,000$ | $\$ 1,800,000$ | $\$ 1,900,000$ | $\$ 2,000,000$ | $\$ 2,100,000$ | $\$ 2,200,000$ | $\$ 2,300,000$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\$ 2,400,000$ | $\$ 2,500,000$ |  |  |  |  |  |  |  |  |  |

Less: Outside Funding Sources
\$0
in
in in $\begin{array}{r}\circ \\ \underset{\sim}{0} \\ \stackrel{\sim}{7} \\ \hline\end{array}$


- 望
0000
Water Utility

| Operating Reserve | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Improvement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply / Distribution Improvement | \$969,000 | \$1,000,000 | \$250,000 | \$30,000 | \$70,000 | \$0 | \$575,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Treatment Improvement | 0 | 0 | 180,000 | 0 | 0 | 180,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building \& Site / Building Improvement | 0 | 0 | 650,000 | 115,000 | 160,000 | 160,000 | 120,000 | 123,600 | 127,308 | 131,127 | 135,061 | 139,113 | 143,286 |
| Unforseen Improvements | 0 | 0 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 938,200 | 986,346 | 1,034,436 | 1,082,469 | 1,130,444 | 1,178,357 |
| Capital Replacement Reserve |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Supply / Distribution Replacement | \$731,000 | \$700,000 | \$511,000 | \$950,000 | \$1,002,000 | \$995,000 | \$613,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Treatment Replacement | 0 | 0 | 50,000 | 80,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Building \& Site / Building Replacement | 0 | 0 | 15,000 | 70,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Unforseen Replacement | 0 | 0 | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 | 938,200 | 986,346 | 1,034,436 | 1,082,469 | 1,130,444 | 1,178,357 |
| Future Capital Improvement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Future Capital Replacement Reserve | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Low Interest Loans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Revenue Bonds | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Funding Sources | \$1,700,000 | \$1,700,000 | \$1,756,000 | \$1,345,000 | \$1,332,000 | \$1,435,000 | \$1,408,000 | \$2,000,000 | \$2,100,000 | \$2,200,000 | \$2,300,000 | \$2,400,000 | \$2,500,000 |
| Rate Funded Capital | \$0 | \$0 | \$0 | \$355,000 | \$368,000 | \$365,000 | \$492,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |


| Total |  |  |
| :---: | :---: | :---: |
| Total <br> Principal | Total Interest | Fiscal Year Total |
| \$1,065,000 | \$813,859 |  |
| 0 | 936,059 | \$2,814,919 |
| 1,990,000 | 936,059 |  |
| 0 | 897,289 | \$3,823,349 |
| 2,070,000 | 897,289 |  |
| 0 | 856,619 | \$3,823,909 |
| 2,165,000 | 856,619 |  |
| 0 | 805,119 | \$3,826,739 |
| 2,300,000 | 805,119 |  |
| 0 | 750,349 | \$3,855,469 |
| 2,440,000 | 750,349 |  |
| 0 | 692,149 | \$3,882,499 |
| 2,560,000 | 692,149 |  |
| 0 | 631,054 | \$3,883,204 |
| 2,675,000 | 631,054 |  |
| 0 | 580,939 | \$3,886,994 |
| 2,780,000 | 580,939 |  |
| 0 | 527,089 | \$3,888,029 |
| 2,935,000 | 527,089 |  |
| 0 | 479,413 | \$3,941,503 |
| 3,075,000 | 479,413 |  |
| 0 | 426,634 | \$3,981,047 |
| 3,180,000 | 426,634 |  |
| 0 | 370,576 | \$3,977,210 |
| 3,295,000 | 370,576 |  |
| 0 | 310,960 | \$3,976,536 |
| 3,430,000 | 310,960 |  |
| 0 | 234,170 | \$3,975,130 |
| 3,595,000 | 234,170 |  |
| 0 | 158,190 | \$3,987,360 |
| 3,745,000 | 158,190 |  |
| 0 | 80,735 | \$3,983,925 |
| 3,900,000 | 80,735 |  |
| 0 | 0 | \$3,980,735 |


| $\begin{aligned} & \text { Payment } \\ & \text { Date } \\ & \hline \end{aligned}$ | Fiscal Year | 2014 Series A Bonds |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Principal | Interest | Total |
| 9/1/2016 | FY 16-17 | \$715,000 | \$688,909 | \$1,403,909 |
| 3/1/2017 | FY 16-17 | 0 | 674,609 | 674,609 |
| 9/1/2017 | FY 17-18 | 1,475,000 | 674,609 | 2,149,609 |
| 3/1/2018 | FY 17-18 | 0 | 645,109 | 645,109 |
| 9/1/2018 | FY 18-19 | 1,705,000 | 645,109 | 2,350,109 |
| 3/1/2019 | FY 18-19 | 0 | 611,009 | 611,009 |
| 9/1/2019 | FY 19-20 | 1,790,000 | 611,009 | 2,401,009 |
| 3/1/2020 | FY 19-20 | 0 | 566,259 | 566,259 |
| 9/1/2020 | FY 20-21 | 1,910,000 | 566,259 | 2,476,259 |
| 3/1/2021 | FY 20-21 | 0 | 518,509 | 518,509 |
| 9/1/2021 | FY 21-22 | 2,040,000 | 518,509 | 2,558,509 |
| 3/1/2022 | FY 21-22 | 0 | 467,509 | 467,509 |
| 9/1/2022 | FY 22-23 | 2,145,000 | 467,509 | 2,612,509 |
| 3/1/2023 | FY 22-23 | 0 | 413,884 | 413,884 |
| 9/1/2023 | FY 23-24 | 2,245,000 | 413,884 | 2,658,884 |
| 3/1/2024 | FY 23-24 | 0 | 371,509 | 371,509 |
| 9/1/2024 | FY 24-25 | 2,330,000 | 371,509 | 2,701,509 |
| 3/1/2025 | FY 24-25 | 0 | 325,759 | 325,759 |
| 9/1/2025 | FY 25-26 | 2,170,000 | 325,759 | 2,495,759 |
| 3/1/2026 | FY 25-26 | 0 | 291,853 | 291,853 |
| 9/1/2026 | FY 26-27 | 2,285,000 | 291,853 | 2,576,853 |
| 3/1/2027 | FY 26-27 | 0 | 253,294 | 253,294 |
| 9/1/2027 | FY 27-28 | 2,365,000 | 253,294 | 2,618,294 |
| 3/1/2028 | FY 27-28 | 0 | 211,906 | 211,906 |
| 9/1/2028 | FY 28-29 | 2,450,000 | 211,906 | 2,661,906 |
| 3/1/2029 | FY 28-29 | 0 | 167,500 | 167,500 |
| 9/1/2029 | FY 29-30 | 2,150,000 | 167,500 | 2,317,500 |
| 3/1/2030 | FY 29-30 | 0 | 113,750 | 113,750 |
| 9/1/2030 | FY 30-31 | 1,610,000 | 113,750 | 1,723,750 |
| 3/1/2031 | FY 30-31 | 0 | 73,500 | 73,500 |
| 9/1/2031 | FY 31-32 | 1,435,000 | 73,500 | 1,508,500 |
| 3/1/2032 | FY 31-32 | 0 | 37,625 | 37,625 |
| 9/1/2032 | FY 32-33 | 1,505,000 | 37,625 | 1,542,625 |
| 3/1/2033 | FY 32-33 | 0 | 0 | 0 |


| 2016 Series A Bonds |  |  |
| :---: | :---: | :---: |
| Principal | Interest | Total |
| \$350,000 | \$124,950 | \$474,950 |
| 0 | 261,450 | 261,450 |
| 515,000 | 261,450 | 776,450 |
| 0 | 252,180 | 252,180 |
| 365,000 | 252,180 | 617,180 |
|  | 245,610 | 245,610 |
| 375,000 | 245,610 | 620,610 |
| 0 | 238,860 | 238,860 |
| 390,000 | 238,860 | 628,860 |
| 0 | 231,840 | 231,840 |
| 400,000 | 231,840 | 631,840 |
| 0 | 224,640 | 224,640 |
| 415,000 | 224,640 | 639,640 |
| 0 | 217,170 | 217,170 |
| 430,000 | 217,170 | 647,170 |
| 0 | 209,430 | 209,430 |
| 450,000 | 209,430 | 659,430 |
| 0 | 201,330 | 201,330 |
| 765,000 | 201,330 | 966,330 |
| 0 | 187,560 | 187,560 |
| 790,000 | 187,560 | 977,560 |
|  | 173,340 | 173,340 |
| 815,000 | 173,340 | 988,340 |
| 0 | 158,670 | 158,670 |
| 845,000 | 158,670 | 1,003,670 |
| 0 | 143,460 | 143,460 |
| 1,280,000 | 143,460 | 1,423,460 |
| 0 | 120,420 | 120,420 |
| 1,985,000 | 120,420 | 2,105,420 |
| 0 | 84,690 | 84,690 |
| 2,310,000 | 84,690 | 2,394,690 |
| 0 | 43,110 | 43,110 |
| 2,395,000 | 43,110 | 2,438,110 |
| 0 | 0 | 0 |

Elk Grove Water District Water Utility
Revenue Requirement
Exhibit 5 -Revenue at Present Rates

|  | Effective |  | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. 12017 | Jan. 12018 |  |  |  |  |  |  |  |  |  |  |  |  | Total |
| Residential |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge | \$/Mo. | \$/Mo. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$64.73 | \$66.67 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 | 11,759 |
| 11/2" | \$91.10 | 93.84 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2 " | \$122.76 | 126.44 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| $3 "$ | \$196.62 | 202.52 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $4 "$ | \$302.13 | 311.19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $6 "$ | \$565.91 | 582.89 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8" | \$882.45 | 908.93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10 "$ | \$1,251.75 | 1,289.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Total | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 | 11,765 |
| Commodity Charge | \$/CCF | \$/CCF |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-30 CCF | \$1.52 | \$1.57 | 205,570 | 231,502 | 234,982 | 226,903 | 203,187 | 113,118 | 96,105 | 85,088 | 86,596 | 86,508 | 100,742 | 132,903 | 1,803,204 |
| $30+$ CCF | \$3.02 | 3.11 | 30,707 | 52,257 | 55,909 | 45,373 | 28,364 | 4,090 | 2,382 | 2,307 | 3,570 | 2,131 | 2,277 | 5,951 | 235,317 |
|  |  | Total | 236,278 | 283,758 | 290,891 | 272,276 | 231,551 | 117,208 | 98,486 | 87,395 | 90,166 | 88,640 | 103,019 | 138,854 | 2,038,521 |
|  |  |  | 20 | 24 | 25 | 23 | 20 | 10 | 8 | 7 | 8 | 8 | 9 | 12 |  |
| Revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge |  |  | \$761,785 | \$761,785 | \$761,785 | \$761,785 | \$761,785 | \$761,785 | \$784,617 | \$784,617 | \$784,617 | \$784,617 | \$784,617 | \$784,617 | \$9,278,413 |
| Commodity Charge |  |  | 405,203 | 509,698 | 542,799 | 497,347 | 407,216 | 190,315 | 158,291 | 140,763 | 147,058 | 142,447 | 165,247 | 227,165 | 3,533,546 |
|  | Total Revenues |  | \$1,166,988 | \$1,271,483 | \$1,304,584 | \$1,259,132 | \$1,169,001 | \$952,100 | \$942,908 | \$925,379 | \$931,674 | \$927,063 | \$949,863 | \$1,011,782 | \$12,811,959 |
| -8\% |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-Residential |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge | \$/Mo. | \$/Mo. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $1 "$ | \$64.73 | \$66.67 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 | 159 |
| 11/2" | \$91.10 | 93.84 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| 2 " | \$122.76 | 126.44 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 |
| $3 "$ | \$196.62 | 202.52 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| $4{ }^{\prime \prime}$ | \$302.13 | 311.19 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| $6 "$ | \$565.91 | - 582.89 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 8" | \$882.45 | -908.93 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $10^{\prime \prime}$ | \$1,251.75 | 1,289.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Total | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 | 407 |
| Commodity Charge | \$/CCF | \$/CCF |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Use | \$1.72 | \$1.77 | 19,872 | 19,414 | 18,094 | 17,741 | 17,161 | 21,951 | 26,603 | 48,576 | 52,723 | 50,353 | 59,781 | 49,981 | 402,249 |
|  |  | Total | 19,872 | 19,414 | 18,094 | 17,741 | 17,161 | 21,951 | 26,603 | 48,576 | 52,723 | 50,353 | 59,781 | 49,981 | 402,249 |
| Revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge |  |  | \$44,049 | \$44,049 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$45,370 | \$541,802 |
| Commodity Charge |  |  | 34,180 | 33,392 | 32,027 | 31,401 | 30,375 | 38,853 | 47,087 | 85,980 | 93,319 | 89,124 | 105,812 | 88,466 | 710,016 |
|  | Total Revenues |  | \$78,229 | \$77,441 | \$77,397 | \$76,772 | \$75,745 | \$84,223 | \$92,457 | \$131,350 | \$138,689 | \$134,495 | \$151,183 | \$133,836 | \$1,251,818 |

Elk Grove Water District
Revenue Requirement
Effective
Jan. $12017 \quad$ Jan.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jan. 12017 | Jan. 12018 | Jul-17 | Aug-17 | Sep-17 | Oct-17 | Nov-17 | Dec-17 | Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Total |
| Irrigation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge | \$/Mo. | \$/Mo. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $1{ }^{1 \prime}$ | \$64.73 | \$66.67 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 |
| 11/2" | 91.10 | 93.84 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| $2 "$ | 122.76 | 126.44 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 | 65 |
| $3 "$ | 196.62 | 202.52 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| $4 "$ | 302.13 | 311.19 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| $6 "$ | 565.91 | 582.89 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $8{ }^{\prime \prime}$ | 882.45 | 908.93 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $10^{\prime \prime}$ | 1,251.75 | 1,289.30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  | Total | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 | 169 |
| Commodity Charge | \$/CCF | \$/CCF |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All Use | \$1.85 | \$1.91 | 13,786 | 6,131 | 3,859 | 3,705 | 3,795 | 4,898 | 5,770 | 20,255 | 23,390 | 41,622 | 28,797 | 26,885 | 182,894 |
|  |  | Total | 13,786 | 6,131 | 3,859 | 3,705 | 3,795 | 4,898 | 5,770 | 20,255 | 23,390 | 41,622 | 28,797 | 26,885 | 182,894 |
| Revenues |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge |  |  | \$18,641 | \$18,641 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$19,201 | \$229,288 |
| Commodity Charge |  |  | 25,504 | 11,343 | 7,371 | 7,077 | 7,248 | 9,355 | 11,021 | 38,687 | 44,676 | 79,498 | 55,002 | 51,351 | 348,133 |
|  | Total Revenues |  | \$44,146 | \$29,984 | \$26,571 | \$26,278 | \$26,449 | \$28,556 | \$30,222 | \$57,887 | \$63,876 | \$98,698 | \$74,203 | \$70,552 | \$577,422 |
| Fire Protection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Effective | Jan. 12017 | Jan. 12018 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fixed Charge | \$/Mo. | \$/Mo. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $2 "$ | \$2.96 | \$3.04 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | \$2 | 2 | 2 | 2 | 2 | 2 |
| $3 "$ | 8.60 | 8.86 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $4 "$ | 18.33 | 18.88 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 | 37 |
| $6{ }^{\prime \prime}$ | 53.25 | 54.85 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 | 185 |
| $8{ }^{\prime \prime}$ | 113.48 | 116.88 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 |
| $10^{\prime \prime}$ | 204.06 | 210.19 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| 12 " | 329.62 | 339.51 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
|  |  |  | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 | 258 |
| Private Fire Charges Revenue |  |  | \$15,244 | \$15,244 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$15,702 | \$187,504 |


| Input | Projected |  |  |  |  |  |  |  |  |  | Notes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FY 17-18 | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 | FY 23-24 | FY 24-25 | FY 25-26 | FY 26-27 | FY 27-28 |  |
| 11,759 | 11,818 | 11,877 | 11,936 | 11,996 | 12,056 | 12,116 | 12,177 | 12,238 | 12,299 | 12,360 | As Residential |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | As Residential |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | As Residential |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Residential |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Residential |
| 0 | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Residential |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Residential |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Residential |
| 11,765 | 11,824 | 11,883 | 11,942 | 12,002 | 12,062 | 12,122 | 12,183 | 12,244 | 12,305 | 12,366 |  |
| 1,803,204 | 1,812,220 | 1,821,281 | 1,830,387 | 1,839,539 | 1,848,737 | 1,857,981 | 1,867,271 | 1,876,607 | 1,885,990 | 1,895,420 | As Consumption |
| 235,317 | 236,494 | 237,676 | 238,864 | 240,058 | 241,258 | 242,464 | 243,676 | 244,894 | 246,118 | 247,349 | As Consumption |
| 2,038,521 | 2,048,714 | 2,058,957 | 2,069,251 | 2,079,597 | 2,089,995 | 2,100,445 | 2,110,947 | 2,121,501 | 2,132,108 | 2,142,769 |  |
| 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 | As Non-Residential |
| 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | As Non-Residential |
| 186 | 187 | 188 | 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | As Non-Residential |
| 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | As Non-Residential |
| 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | As Non-Residential |
| 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | As Non-Residential |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | As Non-Residential |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | As Non-Residential |
| 407 | 409 | 411 | 413 | 415 | 417 | 419 | 421 | 423 | 425 | 427 |  |
| 402,249 | 404,260 | 406,281 | 408,312 | 410,354 | 412,406 | 414,468 | 416,540 | 418,623 | 420,716 | 422,820 | As Consumption |
| 402,249 | 404,260 | 406,281 | 408,312 | 410,354 | 412,406 | 414,468 | 416,540 | 418,623 | 420,716 | 422,820 |  |



Fixed
$\quad$ Residential
$\quad$ Non-Residential
Irrigation
$\quad$ Fire Protection
Consumption Charge
Residential
Non-Residential
Irrigation
Total Revenue
Non-Residential
Irrigation
Fire Protection
Elk Grove Water District Water Utility
Development of Allocation Factors
Exhibit 7 - Commodity \& Capacity

|  | Commodity |  |  |  | Capacity |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Water (CCF) | $\begin{gathered} 6.6 \% \\ \text { Losses }^{[1]} \end{gathered}$ | Water <br> Flow (MGD) | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ | Peaking <br> Factor | Peak Day ${ }^{[2]}$ <br> Use (MGD) | Average Daily Use (MGD) | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ |
| Residential |  |  |  |  |  |  |  |  |
| Tier 1 | 1,812,220 | 119,607 | 3.96 | 68.7\% | 1.56 | 6.19 | 3.96 | 58.0\% |
| Tier 2 | 236,494 | 15,609 | 0.52 | 9.0\% | 4.21 | 2.17 | 0.52 | 20.3\% |
| Non-Residential | 404,260 | 26,681 | 0.88 | 15.3\% | 1.43 | 1.26 | 0.88 | 11.8\% |
| Irrigation | 183,809 | 12,131 | 0.40 | 7.0\% | 2.18 | 0.88 | 0.40 | 8.2\% |
| Private Fire Protection | 0 | 0 | 0.00 | 0.0\% | 0.00 | 0.18 | 0.00 | 1.7\% |
| Total | 2,636,783 | 174,028 | 5.76 | 100.0\% | 1.85 | 10.68 | 5.76 | 100.0\% |
|  |  | Production ${ }^{[3]}$ | 5.18 |  | Actual Peak ${ }^{[4]}$ | 10.62 |  |  |

Allocation Factor
[1] - 2015 Urban Water Management Plan Adopted June 22, 2016 (pg. 4-11)
[2] - Calculated based on data from November 2016 - October 2017
(COM)
[4] - Peak daily demand was 6.87 mgd based on well production. Peak factor using well production is 2.05 times average production. [*] - Prior Rate Study in 2012 had average day at 6.49 mgd and 11.65 mgd for Peak demand
Elk Grove Water District
Water Utility
Development of Allocation Factors
Exhibit 8 - Customer

|  | Actual Customer |  | Customer Service \& Accounting |  |  | Meters \& Services |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Billing Units | $\%$ of <br> Total | Weighting Factor | Weighted Customer | \% of <br> Total | Equiv. <br> Meters | \% of <br> Total |
| Residential | 11,824 | 93.4\% | 1.00 | 11,824 | 93.4\% | 11,828 | 92.4\% |
| Non-Residential | 409 | 3.2\% | 1.00 | 409 | 3.2\% | 683 | 5.3\% |
| Irrigation | 169 | 1.3\% | 1.00 | 169 | 1.3\% | 288 | 2.3\% |
| Private Fire Protection | 259 | 2.0\% | 1.00 | 259 | 2.0\% | 0 | 0\% |
| Total | 12,661 | 100.0\% |  | 12,661 | 100.0\% | 12,799 | 100.0\% |
| Allocation Factor |  | (AC) |  |  | (WCA) |  | (WCMS) |

Elk Grove Water District
Exhibit 9 - Fire Protection and Revenue Alloc

|  | Fire Protection |  |  |  |  | Revenue Related |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Accounts | Fire Prot. Requirmt's (gals/min) ${ }^{[1]}$ | $\begin{gathered} \text { Duration } \\ \text { (minutes) }^{[1]} \end{gathered}$ | Total PFP Requirements (1,000 g/min) | \% of <br> Total | FY 18-19 <br> Revenue at <br> Present Rates | \% of <br> Total |
| Residential | 11,824 | 1,500 | 60 | 1,064,160 | 89.7\% | \$13,043,485 | 87.6\% |
| Non-Residential | 409 | 2,500 | 120 | 122,700 | 10.3\% | 1,262,301 | 8.5\% |
| Irrigation | 169 | 0 | 0 | 0 | 0.0\% | 581,482 | 3.9\% |
|  | 12,402 |  |  | 1,186,860 | 100.0\% | \$14,887,268 | 100.0\% |
| Private Fire Protection |  |  |  |  |  | 189,078 |  |
| Allocation Factor |  |  |  |  | (FP) |  | (RR) |

Elk Grove Water District
Water Utility
Development of Allocation Factors
Page 1 of 1


Exhibit 11 - Plant In Service

|  | $\begin{gathered} \text { Total } \\ \text { Plant } \\ 2017 \text { Rplmt } \\ \hline \end{gathered}$ | Commodity (COM) | Capacity (CAP-1) | Capacity - <br> Equiv. Meters <br> (CAP-2) | Customer Related |  |  | Revenue Related (RR) | Fire Protection (FP) | Direct Assign. (DA) | Basis of Classification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Weight | for: |  |  |  |  |
|  |  |  |  |  | Actual Customer (AC) | Customer Acct/Svcs (WCA) | Meters \& Svcs (WCMS) |  |  |  |  |
| SCADA | \$460,000 | \$248,400 | \$211,600 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 54\% (COM)/ 46\% (CAP-1) |
| Transmission/Distribution |  |  |  |  |  |  |  |  |  |  |  |
| Distribution | \$125,170,749 | \$0 | \$53,197,568 | \$30,040,980 | \$28,789,272 | \$0 | \$0 | \$0 | \$13,142,929 | \$0 | 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11 |
| Transmission | 9,063,127 | 0 | 3,851,829 | 2,175,150 | 2,084,519 | 0 | 0 | 0 | 951,628 | 0 | 43\% (CAP-1)/ 24\% (CAP-2)/ $23 \%$ (AC)/ 11 |
| Total Trans/Dist. | 134,233,876 | 0 | 57,049,397 | 32,216,130 | 30,873,791 | 0 | 0 | 0 | 14,094,557 | 0 |  |
| Water Production |  |  |  |  |  |  |  |  |  |  |  |
| Well Casing | \$9,600,000 | \$5,184,000 | \$4,416,000 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 54\% (COM)/ 46\% (CAP-1) |
| Flow Meter | 80,000 | 43,200 | 36,800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Pump Motor | 325,000 | 175,500 | 149,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Piping | 555,000 | 299,700 | 255,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Well Pump | 210,000 | 113,400 | 96,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| surge Tank | 300,000 | 162,000 | 138,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Pressure Transducer | 10,000 | 5,400 | 4,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| VFD | \$125,000 | 67,500 | 57,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Total Water Production | \$11,205,000 | \$6,050,700 | \$5,154,300 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |  |
| Water Treatment |  |  |  |  |  |  |  |  |  |  |  |
| Coagulant Dosing | \$20,000 | \$10,800 | \$9,200 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | 54\% (COM)/ 46\% (CAP-1) |
| Polymer Dosing | 20,000 | 10,800 | 9,200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| ChlorTec | 105,000 | 56,700 | 48,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Flow | 160,000 | 86,400 | 73,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Pump | 170,000 | 91,800 | 78,200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Piping | 4,110,000 | 2,219,400 | 1,890,600 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Backwash | 385,000 | 207,900 | 177,100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Sodium Hypochlorite | 155,000 | 83,700 | 71,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Booster | 150,000 | 81,000 | 69,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Salt Brine | 25,000 | 13,500 | 11,500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Clear Well | 2,000,000 | 1,080,000 | 920,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Reaction | 100,000 | 54,000 | 46,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Filter | 1,705,000 | 920,700 | 784,300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 54\% (COM)/ 46\% (CAP-1) |
| Total Water Treatment | \$9,105,000 | \$4,916,700 | \$4,188,300 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |  |
| Plant Before General Plant | \$155,003,876 | \$11,215,800 | \$66,603,597 | \$32,216,130 | \$30,873,791 | \$0 | \$0 | \$0 | \$14,094,557 | \$0 |  |
| Plant | Ceneral Plant | 7.2\% | 43.0\% | 20.8\% | 19.9\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% |  |
| General Plant |  |  |  |  |  |  |  |  |  |  |  |
| Vehicles \& Mobile Equipment | \$2,273,750 | \$164,524 | \$977,007 | \$472,578 | \$452,887 | \$0 | \$0 | \$0 | \$206,753 | \$0 | as Plant Before General Plant |
| Buildings | 4,650,000 | 336,466 | 1,998,058 | 966,460 | 926,191 | 0 | 0 | 0 | 422,826 | 0 | as Plant Before General Plant |
| HVAC | 160,000 | 11,577 | 68,750 | 33,255 | 31,869 | 0 | 0 | 0 | 14,549 | 0 | as Plant Before General Plant |
| Security | 750,000 | 54,269 | 322,267 | 155,881 | 149,386 | 0 | 0 | 0 | 68,198 | 0 | as Plant Before General Plant |
| Grounds | 310,000 | 22,431 | 133,204 | 64,431 | 61,746 | 0 | 0 | 0 | 28,188 | 0 | as Plant Before General Plant |
| Electrical | 3,035,000 | 219,607 | 1,304,109 | 630,797 | 604,514 | 0 | 0 | 0 | 275,974 | 0 | as Plant Before General Plant |
| Total General Plant | \$11,178,750 | \$808,874 | \$4,803,396 | \$2,323,400 | \$2,226,592 | \$0 | \$0 | \$0 | \$1,016,488 | \$0 |  |
| Total Net Plant In Service | \$166,182,626 | \$12,024,674 | \$71,406,993 | \$34,539,531 | \$33,100,384 | \$0 | \$0 | \$0 | \$15,111,045 | \$0 |  |
| \% Of Net Water Plant | 100.0\% | 7.2\% | 43.0\% | 20.8\% | 19.9\% | 0.0\% | 0.0\% | 0.0\% | 9.1\% | 0.0\% |  |

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\begin{aligned}
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| Expenses |
| :--- |
| Salaries \& Benefits |
| Executive Salary |
| Exempt Salaries |
| Non-Exempt Salaries |
| Overtime Compensation |
| On Call Pay |
| Holiday Pay |
| Vacation Pay |
| Personal Time Pay |
| Internship Program |
| Medical Benefits |
| EAP |
| EGWD Contribution H.S.A |
| Dental/Vision/Life Insurance |
| Retirement Benefits |
| Retirement Benefits - Post Employment |
| Medical Tax, Social Security and SUI |
| Worker's Compensation Insurance |
| Education Assistance |
| Employee Training |
| Employee Recognition |
| Meetings |
| Less Capitalized Expenses |
| Total Salaries \& Benefits |

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Elk Grove Water District
Outside Service
Administration Services
Bank Charges
Billing Services
Contracted Services
Water Conservation Services
Accounting Services
Engineering
Legal Services
Financial Consultants
Community Relations
Misc. Medical
Pre-employment
Janitorial
Bond Administration
Security
Sampling
Board Secretary/Treasurer
Total Outside Service

Rents, Taxes, and Utilities
Occupancy
Equipment Rental
Property Taxes
Water
Electricity
Natural Gas
Sewer \& Garbage
Other Expenses
Additional O\&M Expenses
Total Rents, Taxes, and Utilities

| Total Expenses FY 18-19 | Commodity (COM) | Capacity (CAP-1) | Capacity Equiv. Meters (CAP-2) | Actual Customer (AC) | Weighted for: |  | Revenue Related <br> (RR) | Fire Protection $(F P)$ <br> (FP) | Direct Assign. (DA) | Basis of Classification |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Customer Acct/Svcs (WCA) | Meters \& Svcs (WCMS) |  |  |  |  |
| \$3,716 | \$0 | \$1,579 | \$892 | \$855 | \$0 | \$0 | \$0 | \$390 |  | \$0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 138,690 | 0 | 58,943 | 33,286 | 31,899 | 0 | 0 | 0 | 14,562 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 29,808 | 0 | 12,668 | 7,154 | 6,856 | 0 | 0 | 0 | 3,130 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 240,658 | 0 | 102,280 | 57,758 | 55,351 | 0 | 0 | 0 | 25,269 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/23\% (AC)/ $11 \%$ (FP) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 36,225 | 0 | 15,396 | 8,694 | 8,332 | 0 | 0 | 0 | 3,804 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/23\% (AC)/ $11 \%$ (FP) |
| 77,625 | 0 | 32,991 | 18,630 | 17,854 | 0 | 0 | 0 | 8,151 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 212,175 | 0 | 90,174 | 50,922 | 48,800 | 0 | 0 | 0 | 22,278 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 87,975 | 0 | 37,389 | 21,114 | 20,234 | 0 | 0 | 0 | 9,237 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 16,767 | 0 | 7,126 | 4,024 | 3,856 | 0 | 0 | 0 | 1,761 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 2,588 | 0 | 1,100 | 621 | 595 | 0 | 0 | 0 | 272 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 3,105 | 0 | 1,320 | 745 | 714 | 0 | 0 | 0 | 326 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 8,591 | 0 | 3,651 | 2,062 | 1,976 | 0 | 0 | 0 | 902 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 8,798 | 0 | 3,739 | 2,111 | 2,023 | 0 | 0 | 0 | 924 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 24,530 | 0 | 10,425 | 5,887 | 5,642 | 0 | 0 | 0 | 2,576 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 36,225 | 0 | 15,396 | 8,694 | 8,332 | 0 | 0 | 0 | 3,804 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/23\% (AC)/ 11\% (FP) |
| \$927,474 | \$0 | \$394,176 | \$222,594 | \$213,319 | \$0 | \$0 | \$0 | \$97,385 |  | \$0 |
| \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |  | \$0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 22,825 | 0 | 9,701 | 5,478 | 5,250 | 0 | 0 | 0 | 2,397 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 1,538 | 0 | 653 | 369 | 354 | 0 | 0 | 0 | 161 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 366,180 | 0 | 155,627 | 87,883 | 84,221 | 0 | 0 | 0 | 38,449 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| 612 | 0 | 260 | 147 | 141 | 0 | 0 | 0 | 64 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/23\% (AC)/ $11 \%$ (FP) |
| 26,418 | 0 | 11,228 | 6,340 | 6,076 | 0 | 0 | 0 | 2,774 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ 11\% (FP) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 43\% (CAP-1)/ 24\% (CAP-2)/ 23\% (AC)/ $11 \%$ (FP) |
| \$417,573 | \$0 | \$177,468 | \$100,217 | \$96,042 | \$0 | \$0 | \$0 | \$43,845 |  | \$0 |

Elk Grove Water District Water Utility
Functionalization and Classification
Exhibit 12 - Revenue Requirement
Elk Grove Water District
Exhibit 13 - Allocation by Component - COM, CAP \& DA

| Classification Components | FY 18-19 | Residential |  | Non-Residential | Irrigation | Private Fire Protection |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Tier 1 | Tier 2 |  |  |  |
| Commodity | \$1,758,604 | \$1,208,661 | \$157,730 | \$269,621 | \$122,592 | \$0 |
| Capacity | \$3,925,435 | \$2,275,157 | \$798,680 | \$463,053 | \$322,395 | \$66,151 |
| Direct Assignment | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$5,684,039 | \$3,483,818 | \$956,410 | \$732,674 | \$444,986 | \$66,151 |

Elk Grove Water District Water Utility
Exhibit 14 - Allocation by Component - Cust. Fire, Rev.

| Classification Components | FY 18-19 | Residential | Non-Residential | Irrigation | Private <br> Fire Protection | Allocation Factor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Customer Related |  |  |  |  |  |  |
| Actual Customer | \$1,465,433 | \$1,368,556 | \$47,339 | \$19,561 | \$29,978 | (AC) |
| Customer Acct/Svcs | 0 | 0 | 0 | 0 | 0 | (WCA) |
| Meters \& Svcs | 5,929,172 | 5,479,175 | 316,587 | 133,411 | 0 | (WCMS) |
| Total Customer Related | \$7,394,606 | \$6,847,731 | \$363,926 | \$152,971 | \$29,978 |  |
| Equiv. Meters | \$1,389,705 | \$1,284,232 | \$74,203 | \$31,269 | \$0 | (CAP-2) |
| Revenue Related | \$0 | \$0 | \$0 | \$0 | \$0 | (RR) |
| Fire Protection | \$607,996 | \$463,374 | \$53,428 | \$0 | \$91,193 | (FP) |
| Net Revenue Requirment | \$9,392,306 | \$8,595,337 | \$491,557 | \$184,241 | \$121,171 |  |

Elk Grove Water District Water Utility

Cost of Service Summary
Exhibit 15 - Summary of Cost Allocation
6T-8I 人
Private
ire Protection Source
\$189,078
$\$ 629,227 \quad \$ 187,322$
$(\$ 47,745) \quad \$ 1,756$
8.2\% $\quad-0.9 \%$
8.2\%

|  | $\begin{array}{r} \text { FY } 18-19 \\ \text { Total } \\ \hline \end{array}$ | Residential | Non-Residential | Irrigation | Private Fire Protection | Source |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues at Present Rates | \$15,076,345 | \$13,043,485 | \$1,262,301 | \$581,482 | \$189,078 |  |
| Allocated Revenue Requirement | \$15,076,345 | \$13,035,565 | \$1,224,231 | \$629,227 | \$187,322 |  |
| Subtotal Balance/(Deficiency) of Funds | \$0 | \$7,920 | \$38,070 | (\$47,745) | \$1,756 |  |
| \% Change Over Present Rates | 0.0\% | -0.1\% | -3.0\% | 8.2\% | -0.9\% |  |

Elk Grove Water District Water Utility
Cost of Service Summary
Exhibit 15 - Average Unit Cost
FY 18-19


|  | Current | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residential |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$66.67 | \$61.15 | \$61.15 | \$62.99 | \$64.88 | \$66.82 |
| $11 /{ }^{\prime \prime}$ | 93.84 | 86.07 | 86.07 | 88.65 | 91.31 | 94.05 |
| $2{ }^{\prime \prime}$ | 126.44 | 115.97 | 115.97 | 119.45 | 123.04 | 126.73 |
| $3{ }^{\prime \prime}$ | 202.52 | 185.76 | 185.76 | 191.33 | 197.07 | 202.98 |
| $4{ }^{\prime \prime}$ | 311.19 | 285.43 | 285.43 | 293.99 | 302.81 | 311.90 |
| $6{ }^{\prime \prime}$ | 582.89 | 534.64 | 534.64 | 550.68 | 567.20 | 584.21 |
| 8" | 908.93 | 833.69 | 833.69 | 858.70 | 884.46 | 910.99 |
| 10" | 1,289.30 | 1,182.57 | 1,182.57 | 1,218.05 | 1,254.59 | 1,292.23 |
| Commodity Charge |  |  |  |  |  |  |
| 0-30 CCF | 1.57 | 1.92 | 1.92 | 1.98 | 2.04 | 2.10 |
| $30+$ CCF | 3.11 | 4.04 | 4.04 | 4.17 | 4.29 | 4.42 |
|  |  |  |  |  |  |  |
| Non-Residential |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$66.67 | \$61.15 | \$61.15 | \$62.99 | \$64.88 | \$66.82 |
| $11 /{ }^{\prime \prime}$ | 93.84 | 86.07 | 86.07 | 88.65 | 91.31 | 94.05 |
| $2{ }^{\prime \prime}$ | 126.44 | 115.97 | 115.97 | 119.45 | 123.04 | 126.73 |
| $3{ }^{\prime \prime}$ | 202.52 | 185.76 | 185.76 | 191.33 | 197.07 | 202.98 |
| $4{ }^{\prime \prime}$ | 311.19 | 285.43 | 285.43 | 293.99 | 302.81 | 311.90 |
| $6{ }^{\prime \prime}$ | 582.89 | 534.64 | 534.64 | 550.68 | 567.20 | 584.21 |
| 8" | 908.93 | 833.69 | 833.69 | 858.70 | 884.46 | 910.99 |
| 10" | 1,289.30 | 1,182.57 | 1,182.57 | 1,218.05 | 1,254.59 | 1,292.23 |
| Commodity Charge | \$1.77 | \$1.79 | \$1.79 | \$1.84 | \$1.90 | \$1.95 |

Elk Grove Water District
Customer Data Projection
Exhibit 16 - Summary of Rate Design

|  | Current | FY 18-19 | FY 19-20 | FY 20-21 | FY 21-22 | FY 22-23 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Irrigation |  |  |  |  |  |  |
| $1{ }^{\prime \prime}$ | \$66.67 | \$61.15 | \$61.15 | \$62.99 | \$64.88 | \$66.82 |
| $11 / 2^{\prime \prime}$ | 93.84 | 86.07 | 86.07 | 88.65 | 91.31 | 94.05 |
| $2{ }^{\prime \prime}$ | 126.44 | 115.97 | 115.97 | 119.45 | 123.04 | 126.73 |
| 3" | 202.52 | 185.76 | 185.76 | 191.33 | 197.07 | 202.98 |
| $4 "$ | 311.19 | 285.43 | 285.43 | 293.99 | 302.81 | 311.90 |
| $6{ }^{\prime \prime}$ | 582.89 | 534.64 | 534.64 | 550.68 | 567.20 | 584.21 |
| 8" | 908.93 | 833.69 | 833.69 | 858.70 | 884.46 | 910.99 |
| 10" | 1,289.30 | 1,182.57 | 1,182.57 | 1,218.05 | 1,254.59 | 1,292.23 |
| Commodity Charge | \$1.91 | \$2.27 | \$2.27 | \$2.34 | \$2.41 | \$2.48 |
| Private Fire |  |  |  |  |  |  |
| $2 "$ | \$3.04 | \$3.02 | \$3.02 | \$3.11 | \$3.21 | \$3.30 |
| 3" | 8.86 | 8.78 | 8.78 | 9.04 | 9.31 | 9.59 |
| $4{ }^{\prime \prime}$ | 18.88 | 18.71 | 18.71 | 19.27 | 19.85 | 20.44 |
| $6{ }^{\prime \prime}$ | 54.85 | 54.34 | 54.34 | 55.97 | 57.65 | 59.38 |
| 8" | 116.88 | 115.80 | 115.80 | 119.27 | 122.85 | 126.54 |
| 10" | 210.19 | 208.25 | 208.25 | 214.49 | 220.93 | 227.56 |
| 12 " | 339.51 | 336.37 | 336.37 | 346.47 | 356.86 | 367.57 |

Elk Grove Water District
Water Utility
Rate Design
Exhibit 17 - Residential Bill Comparison

| Consumption | Current <br> Rate | Proposed <br> Rate | \$ <br> Change | \% <br> Change |
| :---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| 4 | $\$ 66.67$ | $\$ 61.15$ | $(\$ 5.52)$ | $-8 \%$ |
| 6 | 72.95 | 68.84 | $(4.11)$ | $-6 \%$ |
| 10 | 76.09 | 72.69 | $(3.40)$ | $-4 \%$ |
| 14 | 82.37 | 80.38 | $(1.99)$ | $-2 \%$ |
| 18 | 88.65 | 88.06 | $(0.59)$ | $-1 \%$ |
| 22 | 94.93 | 95.75 | 0.82 | $1 \%$ |
| 26 | 101.21 | 103.44 | 2.23 | $2 \%$ |
| 30 | 107.49 | 111.13 | 3.64 | $3 \%$ |
| 34 | 113.77 | 118.82 | 5.05 | $4 \%$ |
| 38 | 126.21 | 135.00 | 8.79 | $7 \%$ |


| Meter Size | Current | Proposed |
| :---: | ---: | ---: |
| 1" | $\$ 66.67$ | $\$ 61.15$ |
| 11/2" | 93.84 | 86.07 |
| 2" | 126.44 | 115.97 |
| 3" | 202.52 | 185.76 |
| 4" | 311.19 | 285.43 |
| 6" | 582.89 | 534.64 |
| 8" | 908.93 | 833.69 |
| $10 "$ | $1,289.30$ | $1,182.57$ |

Commodity Charge

| $0-30$ CCF | $\$ 1.57$ | $\$ 1.92$ |
| :--- | :--- | :--- |
| $30+$ CCF | $\$ 3.11$ | $\$ 4.04$ |

Elk Grove Water District
Water Utility
Rate Design
Exhibit 18 - Non-residential Bill Comparison

| Consumption | Current Rate | Proposed Rate | \$ <br> Change | \% <br> Change |
| :---: | :---: | :---: | :---: | :---: |
| 1" Meter |  |  |  |  |
| 0 | \$66.67 | \$61.15 | (5.52) | -8\% |
| 20 | 102.07 | 96.91 | (5.16) | -5\% |
| 40 | 137.47 | 132.66 | (4.81) | -3\% |
| 60 | 172.87 | 168.42 | (4.45) | -3\% |
| 80 | 208.27 | 204.17 | (4.10) | -2\% |
| 100 | 243.67 | 239.93 | (3.74) | -2\% |
| 120 | 279.07 | 275.69 | (3.38) | -1\% |
| 2" Meter |  |  |  |  |
| 40 | \$197.24 | \$187.48 | (9.76) | -5\% |
| 60 | 232.64 | 223.24 | (9.40) | -4\% |
| 80 | 268.04 | 259.00 | (9.04) | -3\% |
| 120 | 338.84 | 330.51 | (8.33) | -2\% |
| 140 | 374.24 | 366.26 | (7.98) | -2\% |
| 160 | 409.64 | 402.02 | (7.62) | -2\% |
| 180 | 445.04 | 437.78 | (7.26) | -2\% |
| Meter Size | Current | Proposed |  |  |
| $1 "$ | \$66.67 | \$61.15 |  |  |
| 1 1/2" | 93.84 | 86.07 |  |  |
| 2 | 126.44 | 115.97 |  |  |
| 3" | 202.52 | 185.76 |  |  |
| 4" | 311.19 | 285.43 |  |  |
| $6 "$ | 582.89 | 534.64 |  |  |
| 8" | 908.93 | 833.69 |  |  |
| 10" | 1,289.30 | 1,182.57 |  |  |
| Commodity Charge |  |  |  |  |
| All Consumption /CCF | \$1.77 | \$1.79 |  |  |

Elk Grove Water District
Water Utility
Rate Design
Exhibit 19 - Irrigation Bill Comparison

| Consumption | Current Rate | Proposed Rate | $\$$ <br> Change | \% Change |
| :---: | :---: | :---: | :---: | :---: |
| 1 1/2" Meter |  |  |  |  |
| 0 | \$93.84 | \$86.07 | (7.77) | -8\% |
| 100 | 284.84 | 313.42 | 28.58 | 10\% |
| 200 | 475.84 | 540.78 | 64.94 | 14\% |
| 300 | 666.84 | 768.13 | 101.29 | 15\% |
| 400 | 857.84 | 995.48 | 137.64 | 16\% |
| 500 | 1,048.84 | 1,222.83 | 173.99 | 17\% |
| 600 | 1,239.84 | 1,450.18 | 210.34 | 17\% |
| 2" Meter |  |  |  |  |
| 0 | \$126.44 | \$115.97 | (10.47) | -8\% |
| 100 | 317.44 | 343.33 | 25.89 | 8\% |
| 200 | 508.44 | 570.68 | 62.24 | 12\% |
| 300 | 699.44 | 798.03 | 98.59 | 14\% |
| 400 | 890.44 | 1,025.38 | 134.94 | 15\% |
| 500 | 1,081.44 | 1,252.73 | 171.29 | 16\% |
| 600 | 1,272.44 | 1,480.09 | 207.65 | 16\% |
|  | Meter Size | Current | Proposed |  |
|  | 1" | \$66.67 | \$61.15 |  |
|  | 1 1/2" | 93.84 | 86.07 |  |
|  | $2{ }^{\prime \prime}$ | 126.44 | 115.97 |  |
|  | 3" | 202.52 | 185.76 |  |
|  | 4" | 311.19 | 285.43 |  |
|  | $6 "$ | 582.89 | 534.64 |  |
|  | 8" | 908.93 | 833.69 |  |
|  | 10" | 1,289.30 | 1,182.57 |  |
| Commodity Charge |  |  |  |  |
| All Consumption /CCF |  | F \$1.91 | \$2.27 |  |

July 18, 2018

TO: $\quad$ Chairperson and Directors of the Florin Resource Conservation District
FROM: Mark J. Madison, General Manager

## SUBJECT: OUTSIDE AGENCY MEETINGS REPORT

## 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 Outside Agency Meetings Report has been recently requested by the Board and will be included as a standing item on the regular board meeting agenda.

Staff and Board Members attended numerous outside agency meetings since the last regular Board meeting. This report is intended to inform the Board of any content included in those meetings that potentially affects the Elk Grove Water District.

## DISCUSSION

## Background

Per the Board's direction during the February 21, 2018 Board meeting, staff will report 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, and the report will be given orally by the staff or Board Members in attendance.

## Present Situation

The outside agency meetings attended since June 20, 2018 were as follows:
6/22 AWWA Government Affairs Committee
6/26 RWA Public Outreach Committee Meeting
6/27 SCGA Special Board Meeting
6/28 RWA Legislative Committee Meeting
7/11 Elk Grove City Council Meeting
7/12 Regional Water Authority Meeting
(Jones)
(Jones)
(Madison)
(Jones)
(Madison)
(Madison)

## OUTSIDE AGENCY MEETINGS REPORT

Page 2

Staff will orally present the major content items addressed in these meetings during the regular Board meeting.

## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

The District's Strategic Plan addresses responsible business practices and the importance of providing the community with safe drinking water. Specifically, the Plan recommends an ongoing goal of partnering with RWA and other regional organizations. Attendance at these meetings, and this monthly report, assists the District in maintaining sound business practices, delivering safe drinking water, and meeting all regulatory and legal requirements.

## FINANCIAL SUMMARY

There is no financial impact associated with this report.

Respectfully Submitted,


MARK J. MADISON
GENERAL MANAGER
MJM/mm

July 18, 2018

TO: $\quad$ Chairman and Directors of the Florin Resource Conservation District
FROM: Sarah Jones, Program Manager

## SUBJECT: LEGISLATIVE UPDATE

## RECOMMENDATION

This item is presented for information only. No action by the Florin Resource Conservation District Board of Directors is proposed at this time.

## SUMMARY

The California Legislature is currently in summer recess until August 6, there are no updates at this time. Proposition 68, The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act was approved by voters in June which authorized $\$ 4.1$ billion in general obligation bonds. Proposition 3, the Water Supply and Water Quality Act of 2018 will be on the November ballot. If approved by voters this water bond would allocate 8.9 billion dollars for water related projects. Grant funding through Proposition 68 and Proposition 3 (if passed) may be available for various projects throughout the state.

## DISCUSSION

## Background

The Board is periodically updated on legislative and statewide water issues.

## Present Situation

The California Legislature is currently in summer recess until August 6, there are no updates at this time.

Proposition 68, The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act was approved by voters. Proposition 68 authorized $\$ 4$ billion in general obligation bonds for state and local parks, environmental protection and restoration projects, water infrastructure projects, and flood protection projects. This includes an allocation of 1.6 billion for water-related projects including funding to provide safe drinking water to disadvantaged communities, improve water supply reliability, help

July 18, 2018

## LEGISLATIVE UPDATE

Page 2
implement the Sustainable Groundwater Management Act and restore critical watersheds.

Proposition 3, the Water Supply and Water Quality Act of 2018 will be on the November ballot. If approved by voters this water bond would allocate 8.9 billion dollars to fund projects for water supply and quality, watershed restoration, fish and wildlife protection, sustainable groundwater management and repair of existing dams and canals. Grant funding through Proposition 68 and Proposition 3 (if passed) may be available for various projects and infrastructure improvements throughout the state (attachment).

## ENVIRONMENTAL CONSIDERATIONS

There are no direct environmental considerations associated with this report.

## STRATEGIC PLAN CONFORMITY

Tracking active legislation complies with the District's Regulatory Compliance goals of the 2012-2017 Strategic Plan.

## FINANCIAL SUMMARY

There is no direct financial impact associated with this report.

Respectfully submitted,


Attachment

## Attachment 1

## WATER BONDS FUNDING COMPARISON

| Funding Category | Proposistion 68 \$4.1 B <br> (June Ballot) | November Bond \$8.9 B |
| :---: | :---: | :---: |
|  | Funding in Millions | Funding in Millions |
| Forest Protection | \$110 | \$120 |
| Recycled Water and Desalination | \$80 | \$800 |
| Safe Drinking Water (and Wastewater) | \$330 | \$750 |
| SGMA Implementation | \$50 | \$640 |
| Conservation | \$20 | \$365 |
| Flood Management | \$550 | \$500 |
| Stormwater | \$100 | \$400 |
| Oroville Dam Safety | \$0 | \$222 |
| Madera \& Friant-Kern Canals Improvements | \$0 | \$750 |

This is a highlight comparison of the funding categories in the two water bonds. This is not a complete list of the funding categories.

This publication is intended to provide general information about how Proposition 68 and the proposed November water bond would affect ACWA member agencies. Readers are encouraged to research the opponents' and proponents' views on both bonds.

## FOR MORE INFORMATION

Questions about the two water bonds may be directed to ACWA Deputy Executive Director for Government Relations Cindy Tuck at cindyt@acwa.com.


[^0]:    (1) Includes $\$ 192,211$ in capitalized labor through 6/30/18
    (2) Capital projects budgeted for in prior years, however, work carried over and completed in current year.

[^1]:    
    $\begin{array}{lllllllllllllllllllll}\text { \％Reduction from } 2013 & 8.38 \% & 17.12 \% & 29.72 \% & 37.04 \% & 31.41 \% & 17.92 \% & 100.00 \% & 100.00 \% & 100.00 \% & 100.00 \% & 100.00 \% & 100.00 \%\end{array}$

[^2]:    Comments: $\quad$ ?

    Identify the sample locations in the table below.

    | Site | Sample Location |
    | :--- | :--- |


    | Site | Sample Location |  |
    | :---: | :--- | :--- |
    | Q1 | 9436 Hollow Springs |  |

    Q2 9425 Emerald Vista (Discontinued 4th qtr per revised SAP)
    Q4 9230 Amsden Ct (Beginning 4th qtr 2017 per revised SAP)
    ${ }^{1}$ Meets Standard - LRAA, calculated quarterly, is less than $80 \mathrm{ug} / \mathrm{L}$
    ${ }^{2}$ Operation Evaluation Req'd - Projected LRAA, calculated quarterly, is greater than $80 \mathrm{ug} / \mathrm{L}$

[^3]:    Comments: $\quad$

    > Identify the sample locations in the table below.
    > Q4 9230 Amsden Ct. (Beginning 4th qtr 2017 per revised SAP)

    ${ }^{1}$ Meets Standard - LRAA, calculated quarterly, is less than $60 \mathrm{ug} / \mathrm{L}$
    ${ }^{2}$ Operation Evaluation Req'd - Projected LRAA, calculated quarterly, is greater than $60 \mathrm{ug} / \mathrm{L}$

[^4]:    Executive Summary
    Elk Grove Water District - Comprehensive Water Rate Study

[^5]:    1 "Cash basis" as used in the context of rate setting is not the same as the terminology used for accounting purposes and recognition of revenues and expenses. As used for rate setting, "cash basis" simply refers to the specific cost components to be included within the revenue requirement analysis.

[^6]:    ${ }^{2}$ System capacity is the system's ability to supply water to all delivery points at the time when demanded. Coincident peaking factors are calculated for each customer class at the time of greatest system demand. The time of greatest demand is known as peak demand. Both the operating costs and capital assets related costs incurred to accommodate the peak demands are generally allocated to each customer class based upon the class's contribution to the peak month, day or hour event.

[^7]:    Commodity Related Costs: Commodity costs are those costs which tend to vary with the total quantity of water consumed by a customer class. Commodity costs are those incurred under average load (demand) conditions and are generally specified for a period of time such

