Due to the COVID-19 State of Emergency and pursuant waivers to certain Brown Act provisions under the Governor’s Executive Orders, meetings of the Board and Board Committees will be conducted via Zoom Meeting (webinar/teleconference) and there will be no physical location from which members of the public may participate. Instead, the public may listen to the meeting proceedings and provide public comment and comments on specific agenda items by following these instructions:

You may join the meeting by clicking the link below:

https://us02web.zoom.us/j/88387658559?pwd=bXhPMjl5TUx2amczeS9ZQVE0ME80Zz09

Meeting ID: 883 8765 8559
Password: 090154
888 475 4499 US Toll-free

**Instructions for Making Public Comment:** Members of the public who wish to address the Board of Directors under public comment or on specific agenda items may do so in one of the following ways:

- You can send written comments to the Board Secretary for receipt **no later than 7:30 am on May 7, 2020** to be read during the appropriate portion of the meeting. Written comments must be limited to 300 words/ have a reading limit of 3 minutes for each comment and emailed to kjohnson@sfidwater.org, mailed to the attention of Kim Johnson, Board Secretary, SFID, P. O. Box 409, Rancho Santa Fe, CA 92067, or physically deposited in the District’s payment drop box located in the public parking lot at the District’s Administrative Office at or mail to 5920 Linea del Cielo, Rancho Santa Fe, California 92067.
• On Zoom via phone, you can also raise your hand by pressing *9 when to notify the moderator that you wish to speak during the current item.

These public comment procedures supersede the District’s standard public comment policies and procedures to the contrary.

CALL MEETING TO ORDER

ORAL COMMUNICATIONS
Opportunity for members of the public to address the Committee (Government Code Section 54954.3) Individuals may address the Committee regarding items not appearing on the posted agenda, which are within the subject matter jurisdiction of the Board, at any time. Comments and inquiries pertaining to items listed on the agenda will be received during the deliberation of the agenda item. Speakers are asked to state their name, address, and topic, and to observe a time limit of three (3) minutes each. Members of the public desiring to address the Committee are asked to complete a speaker’s card, available at the table near the entrance and present it to the Board Secretary prior to the start of the meeting.

ACTION AND DISCUSSION ITEMS

1. Approval of February 27, 2020 Meeting Minutes (pages 4-6)
2. Review and Discuss FY21 Proposed Capital Improvement Project Budget and Revised Capital Acquisition Program Budget (pages 7-11)
3. Consider a Resolution Adopting Amendments to the District Administrative Code Articles 23, 26, and 27 (pages 12-32)
4. Consider Authorizing the General Manager to Approve a Contract Extension with Cal-Chem for the Procurement of Aluminum Chlorohydrate (pages 33-34)
5. Lake Hodges Status Update (verbal)  

REPORTS

6. FY20 Capital Improvement Projects Status Report (verbal)
7. Engineering Services Manager’s Report (verbal)
8. Distribution System Manager’s Report (verbal)
9. Water Treatment Plant Manager’s Report (verbal)
10. General Manager’s Report  (verbal)
11. Committee Members’ Comments (verbal)

INFORMATION ITEMS - None

PowerPoint Presentation added following page 35
ADJOURN

Next Scheduled Water Resources Committee meeting: Thursday, June 4, 2020 at 9:00 a.m.
MINUTES
SANTA FE IRRIGATION DISTRICT
WATER RESOURCES COMMITTEE

February 27, 2020
Santa Fe Irrigation District
5920 Linea del Cielo, Rancho Santa Fe, CA 92067

PRESENT: Chairman Andy Menshek, Director Marlene King, General Manager Al Lau, Executive Assistant Kim Johnson, Engineering Services Manager Rania Amen, Administrative Services Manager Seth Gates, Associate Civil Engineer Marissa Potter, Water Treatment Plant Manager Tim Bailey, and Distribution System Manager Chris Bozir were present.

Chairman Menshek called the meeting to order at 9:00 a.m.

ORAL COMMUNICATIONS - None

ACTION AND DISCUSSION ITEMS:

1. APPROVAL OF FEBRUARY 6, 2020 MEETING MINUTES

The Committee approved the minutes as presented.

2. CONSIDER EXECUTING PURCHASE CONTRACT FOR MAINTENANCE VEHICLE

WTPM Bailey presented the item and responded to questions from the Committee. After discussion, the Committee agreed with staff’s recommendation for approval and directed staff to move the item forward for full Board consideration at their regular March meeting as a Consent item.

3. CONSIDER EXECUTING CONTRACT FOR MODULAR BUILDINGS ROOF REPLACEMENT

DSM Bozir presented the item and responded to questions from the Committee. After discussion, the Committee agreed with staff’s recommendation for approval and directed staff to move the item forward for full Board consideration at their regular March meeting as a Consent item.

4. CONSIDER ACTIONS RELATED TO AND FOR THE MECHANICAL DEWATERING IMPROVEMENTS AND THE SAN DIEGUITO DAM IMPROVEMENTS PROJECTS (PROJECTS J-1752/1753/1754)
ESM Amen presented the item and responded to questions from the Committee. After discussion, the Committee agreed with staff’s recommendation for approval and directed staff to move the item forward for full Board consideration at their regular March meeting.

REPORTS

5. FY20 CAPITAL IMPROVEMENT PROJECTS STATUS REPORT

ESM Amen noted there were no changes in status of the FY20 capital projects since the February 6, 2020 WRC meeting.

6. ENGINEERING SERVICES MANAGER’S REPORT – No report

7. DISTRIBUTION SYSTEM MANAGER’S REPORT

DSM Bozir reported on the Capital Acquisition Program projects due to be completed prior to the end of the fiscal year including the exterior painting of the Administration building which will also address window trim maintenance issues. He added other projects are repaving and redesign of the front parking lot and lighting enhancements for safety and security.

8. WATER TREATMENT PLANT MANAGER’S REPORT

WTPM Bailey reported the Plant is running well and the recent rains have increased the level in Lake Hodges, which is continually monitored to ensure the level remains below the maximum level required by the Department of Safety of Dams.

9. GENERAL MANAGER’S REPORT

GM Lau reported he attended the Solana East Community Group meeting on February 26th where he gave a water supply update.

10. COMMITTEE MEMBERS’ COMMENTS - None

INFORMATION ITEMS – None

CLOSED SESSION

Item 11 was not considered.

11. CONFERENCE WITH LEGAL COUNSEL- ANTICIPATED LITIGATION
SIGNIFICANT EXPOSURE TO LITIGATION PURSUANT TO PARAGRAPH (2) OF SUBDIVISION (D) OF GOVERNMENT CODE SECTION 54956.9
ONE (1) POTENTIAL CASE
INFORMATION ITEMS – None

ADJOURN

Chairman Menshek adjourned the meeting at 9:48 a.m.

_____________________________
Andy Menshek, Chairman
DATE: May 7, 2020

TO: Water Resources Committee

FROM: General Manager

SUBJECT: Review and Discuss FY21 Proposed Capital Improvement Project Budget and Revised Capital Acquisition Program Budget

RECOMMENDATION:

It is the Staff recommendation that the Water Resources Committee:

1. Review and discuss the FY21 Proposed Capital Improvement Project (CIP) Budget and Revised Capital Acquisition Program (CAP) Budget; and

2. Take other action as appropriate.

BACKGROUND:

The FY21 CAP and CIP Budgets were presented for review and discussion at the April 16, 2020 meeting of the Board of Directors (Board). Based on feedback received by the Board, Staff has reviewed the CAP and prepared a revised appropriation request for FY21 and a corresponding risk assessment for items that are included in the budget proposal. Additionally, a risk assessment is presented for those CAP items that Staff is recommending that not be funded as previously presented. Attachment A outlines the revised FY21 CAP and corresponding analysis for discussion and review.

Staff requests spending / appropriations for the FY21 CIP Budget remain unchanged. This is due to these projects being one or more of the following: contract awarded / currently underway; a priority for the District and customers; grant funding secured for the project; and previous deferrals that were identified in the current asset management master plan. A risk analysis for each CIP project is included in Attachment B for discussion and review.

Each attachment also reviews the cost split between the District (SFID) and San Dieguito Water District (SDWD), where applicable.

FISCAL IMPACT:

The revised FY21 CAP total is $1,210,000 ($954,763 SFID, $255,237 SDWD), which is an overall reduction of $182,000 from the $1,392,000 ($1,105,713 SFID, $286,287 SDWD) presented in the April FY21 Budget review. The FY21 CIP spend still totals $11,736,405 ($7,239,346 SFID, $4,443,059 SDWD) as presented in the April FY21 Budget review.

Attachment A: Revised FY21 CAP and Analysis
Attachment B: CIP Project Risk Assessment

Prepared by: Seth Gates, Administrative Services Manager
Approved by: Albert C. Lau, P.E., General Manager
## FY21 Capital Acquisition Program Budget - Revised Proposal

<table>
<thead>
<tr>
<th>Item</th>
<th>April Request</th>
<th>Revised Request</th>
<th>Variance</th>
<th>Revision Information</th>
<th>Possible Reduction Risk</th>
<th>Measures to Mitigate Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior Painting</td>
<td>50,000</td>
<td>50,000</td>
<td>-</td>
<td></td>
<td>Deterioration of exterior</td>
<td>Increase expenditure in future fiscal year to repair increase in damage</td>
</tr>
<tr>
<td>Improvements - Front Lot</td>
<td>70,000</td>
<td>70,000</td>
<td>-</td>
<td></td>
<td>ADA safety, aesthetics, deferral will likely cause more degradation of surface, may raise cost for repairs after another year</td>
<td>Grind sidewalk curb &amp; monitor spot needs</td>
</tr>
<tr>
<td>Plant</td>
<td>16,000</td>
<td>16,000</td>
<td>-</td>
<td></td>
<td>Reduction in audience participation ability</td>
<td>Continue with current setup</td>
</tr>
<tr>
<td>Vehicle</td>
<td>9,000</td>
<td>9,000</td>
<td>-</td>
<td></td>
<td>Decreased reliability in speed / connectivity of District internet</td>
<td>Replace individual servers based on failure</td>
</tr>
<tr>
<td>Vehicle (Replacement of 2</td>
<td>90,000</td>
<td>90,000</td>
<td>-</td>
<td></td>
<td>Inability to service &amp; increased downtown of data</td>
<td>Mileage reimbursements for staff to use personal vehicles / assess to ensure funds for repairs</td>
</tr>
<tr>
<td>Hardware</td>
<td>35,000</td>
<td>-</td>
<td>(35,000)</td>
<td>Delay requisition of new vehicle</td>
<td>Potential of increase repair costs, down time</td>
<td>Increase expenditure with consultant(s)</td>
</tr>
<tr>
<td>District Administration</td>
<td>200,000</td>
<td>255,000</td>
<td>(55,000)</td>
<td></td>
<td>Inability to do in-house water modeling</td>
<td></td>
</tr>
<tr>
<td>As - Yard / Rear Lot</td>
<td>60,000</td>
<td>-</td>
<td>(60,000)</td>
<td>Postpone improvements</td>
<td>Safety, aesthetics, deferral will likely cause more degradation of surface, may raise cost for repairs after another year</td>
<td>Continue to monitor safety risks, repair areas</td>
</tr>
<tr>
<td>Modular Buildings</td>
<td>50,000</td>
<td>32,000</td>
<td>(18,000)</td>
<td>Replace Engineering building only</td>
<td>Safety/aesthetics/Used for secondary board room</td>
<td>Spread project into 2 phases, continue to monitor safety risks, repair areas</td>
</tr>
<tr>
<td>Signage and awning repair</td>
<td>25,000</td>
<td>-</td>
<td>(25,000)</td>
<td>Postpone improvements / spot repair</td>
<td>Further sun and water damage to structure/awnings are not to fire code compliance, fire risk</td>
<td>Assess replacing awnings with facilities budget</td>
</tr>
<tr>
<td>Rooftop Building roof repairs</td>
<td>35,000</td>
<td>35,000</td>
<td>-</td>
<td></td>
<td>Water intrusion &amp; leaks/wood rot and fascia board falling from building/further damage to structure/damage to inventory-fittings, valves, pipe, meters</td>
<td>Continue to monitor safety risks, repair areas</td>
</tr>
<tr>
<td>LRB Compliance</td>
<td>55,000</td>
<td>55,000</td>
<td>-</td>
<td></td>
<td>Diesel compliance CA Emissions, increase repair costs, increase in down time</td>
<td>Rental equipment/outside service/assess maintenance budget to explore repairs</td>
</tr>
<tr>
<td>Vehicle</td>
<td>35,000</td>
<td>35,000</td>
<td>-</td>
<td></td>
<td>Diesel compliance CA Emissions, increase repair costs, increase in down time</td>
<td>Rental equipment/outside service/assess maintenance budget to explore repairs</td>
</tr>
<tr>
<td>Vehicle - Unit 06</td>
<td>75,000</td>
<td>75,000</td>
<td>-</td>
<td></td>
<td>High mileage, increased repair costs and down time/ delay in response to DIG ALERT tickets, CA State requirement</td>
<td>Rental equipment/outside service/assess maintenance budget to explore repairs</td>
</tr>
<tr>
<td>Vehicle with Backhoe Loader/Breaker</td>
<td>125,000</td>
<td>150,000</td>
<td>25,000</td>
<td>Quotes exceed previous estimate</td>
<td>Diesel compliance, increase repair costs, down time/ Consolildates skid steer w/breaker and skip loader. Provided More functionality for crew.</td>
<td>Rental equipment/outside service/assess maintenance budget to explore repairs</td>
</tr>
</tbody>
</table>

**District Operations** 460,000 382,000 (78,000)
## FY21 Capital Acquisition Program Budget - Revised Proposal

<table>
<thead>
<tr>
<th>Item</th>
<th>April Request</th>
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<th>Revision Information</th>
<th>Possible Reduction Risk</th>
<th>Measures to Mitigate Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Cameras</td>
<td>15,000</td>
<td>15,000</td>
<td>-</td>
<td>Inability to monitor access and dam face</td>
<td>Current monitoring of reservoir would continue &amp; respond to any spills</td>
<td>Infrastructure improvements</td>
</tr>
<tr>
<td></td>
<td>60,000</td>
<td>60,000</td>
<td>-</td>
<td>Inability to service &amp; increased downtown of data</td>
<td>Replace individual servers based on failure</td>
<td>Safety measures for routine maintenance and monitoring</td>
</tr>
<tr>
<td>Pump Station</td>
<td>22,000</td>
<td>22,000</td>
<td>-</td>
<td>SCADA impairment at pump station</td>
<td>Failure would require staff monitoring systems and change operation</td>
<td>Staff training and equipment upgrades</td>
</tr>
<tr>
<td></td>
<td>20,000</td>
<td>20,000</td>
<td>-</td>
<td>Potential battery failure and SCADA system impairment during power shutoff</td>
<td>Continue with current batteries &amp; reschedule current APC inventory in event of emergency</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td></td>
<td>35,000</td>
<td>35,000</td>
<td>-</td>
<td>Increased turbidity and reduced efficacy of treatment process</td>
<td>Decommission filter if possible on failure, delay repair / replacement</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td>Forklift Replacement</td>
<td>180,000</td>
<td>-</td>
<td>(180,000)</td>
<td>Forklift currently repaired &amp; operating postpone purchase</td>
<td>Further downtime of forklift &amp; need to rent replacement &amp; incur repair costs</td>
<td>Sufficient rental budget to manage the delay if necessary</td>
</tr>
<tr>
<td></td>
<td>35,000</td>
<td>35,000</td>
<td>-</td>
<td>Safety hazard for staff traversing tank farm</td>
<td>Implement safety policies to mitigate risk of collapse / fall</td>
<td>Equipment upgrades and safety measures for personnel</td>
</tr>
<tr>
<td>Drive Units</td>
<td>35,000</td>
<td>35,000</td>
<td>-</td>
<td>Failure of one unit already occurred, failure of additional units with parts that</td>
<td>Replace individual units based on failure, fix if at all possible</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td></td>
<td>225,000</td>
<td>225,000</td>
<td>-</td>
<td>Continuation of inefficiency in backwash, potential failure and downtime for</td>
<td>Decommission filter if possible on failure, delay repair / replacement;</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td></td>
<td>56,000</td>
<td>56,000</td>
<td>-</td>
<td>June SDCWA shutdown postponed, installation will be performed in Dec.</td>
<td>Delay implementation until FY22 and pay storage costs</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td></td>
<td>37,000</td>
<td>37,000</td>
<td>-</td>
<td>Did not acquire in FY20</td>
<td>Rental equipment/outside service/assess maintenance budget to end repairs</td>
<td>Equipment upgrades and maintenance plan</td>
</tr>
<tr>
<td>Valves and Actuators</td>
<td>15,000</td>
<td>15,000</td>
<td>-</td>
<td>Valves and actuators have already been purchased for ~$138,000, delaying installation</td>
<td>Decreased SCADA overview of plant &amp; clearwell operations</td>
<td>Monitor any release to San Diego Reservoir</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>will cost additional funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Died in FY20</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Diesel compliance CA Emissions, increase repair costs, increase in down time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valves and Actuators</td>
<td></td>
<td></td>
<td></td>
<td>Increased turbidity and reduced efficacy of treatment process</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>Decommission filter if possible on failure, delay repair / replacement</td>
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<td></td>
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<td>Delay implementation until FY22 and pay storage costs</td>
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<td></td>
<td></td>
<td>Rental equipment/outside service/assess maintenance budget to end repairs</td>
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<td></td>
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<td></td>
<td></td>
<td>Temporary replacement with purchase of new meters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint Facilities</td>
<td>642,000</td>
<td>573,000</td>
<td>(69,000)</td>
<td>Joint Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Santa Fe Irrigation District Cost</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>305,713</td>
<td>317,763</td>
<td>(1,050)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>286,287</td>
<td>255,237</td>
<td>(31,050)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total Acquisition Budget

| Santa Fe Irrigation District Cost | 1,105,713 | 954,763 | (150,950) |
| San Diego Water District Cost   | 286,287   | 255,237 | (31,050)  |

---

PAGE TWO of TWO

Agenda page 9
# Capital Improvement Budget - Risk Assessment
## Fiscal Year 2021

<table>
<thead>
<tr>
<th>PROJECT</th>
<th>Total Estimated Cost of Project</th>
<th>FY21 Budget Projected Expenditures</th>
<th>Justification/ Possible Risks</th>
<th>Measures to Mitigate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL DISTRICT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Automated Metering Program Phase 5          | $1,525,000                      | $225,000                          | • Currently under a contract with Aqua-Metrics  
  • All materials have been purchased  
  • Maximize prior investments in Sensus | Not Recommended                    |
| Automated Metering Program Phase 6          | $1,000,000                      | $1,000,000                        | • Delay the completion of the entire AMI program  
  • Phase 6 customers will not receive the benefit of AMI | Partially implement phase  
  • Evaluate utilizing in-house skills  
  • Potential cost savings  
  • Update the outreach of Phase 6 |
| Government Road Pipeline                     | $3,500,000                      | $150,000                          | • Legal liability for easement rights  
  • Lack of maintenance due to limited access  
  • Potential pipe failure and property damage | Perform additional acreage evaluation  
  • Revise the scope of work  
  • Pipes relocation  
  • Perform additional pipeline assessment |
| **GENERAL DISTRICT CIP SUBTOTAL**           | $6,025,000                      | $1,375,000                        |                                                                                             |                                   |
| **JOINT FACILITIES (Budget includes BOTH SFID and SDWD Portions)** |                                 |                                   |                                                                                             |                                   |
| Clearwell Seismic Improvements               | $2,400,000                      | $1,320,000                        | • Structural failure of a critical facility during a seismic event  
  • Impact to the treatment process  
  • Jeopardize $2.6 Million of grant funding | Not Recommended                    |
| Washwater Tank Seismic Improvements          | $3,375,000                      | $1,785,000                        |                                                                                             |                                   |
| Mechanical Dewatering Improvements*         | $9,500,729                      | $4,710,000                        | • Project is in the Construction Award Phase  
  • Increase project cost if delayed  
  • Potential operation impacts with sludge processing | Not Recommended                    |
| Handrail Improvements at San Dieguito Reservoir* | $260,229                      | $200,229                          | • Project is in the Construction Award Phase  
  • Workers safety  
  • Compliance with DSOD requirements | Not Recommended                    |
<p>| San Dieguito Dam Concrete Refurbishment*     | $492,676                        | $417,176                          |                                                                                             |                                   |</p>
<table>
<thead>
<tr>
<th>PROJECT</th>
<th>Total Estimated Cost of Project</th>
<th>FY21 Budget Projected Expenditures</th>
<th>Justification/ Possible Risks</th>
<th>Measures to Mitigate</th>
</tr>
</thead>
</table>
| R.E. Badger Operation Building Roofing Replacement Project              | $ 825,000                       | $ 660,000                         | • Workers safety  
• Further building and equipment damage  
• 100% design complete - additional cost might be required if the project delayed | Not Recommended            |
| R.E. Badger Filters and Sedimentation Basins Concrete Repair           | $ 985,000                       | $ 394,000                         | • Perform only the design in FY21  
• Construction may be delayed to FY22  
• Further deterioration of the Filters concrete | • Monitor the condition closely  
• Frequently alternate the top slabs  
• Eliminate critical loading  
• Replace valves  
• Overhauling parts of the valves |                          |
| Cielo Pump Station Valve Replacement Project                           | $ 650,000                       | $ 625,000                         | • The project is 100% design  
• 4 valves are currently none operational  
• Possible complete failure of the suction valves  
• Not being able to pump water out of Hodges for local water supply | • Attempt to perform additional troubleshooting with the valves  
• Look into temporary fix of replacing parts of the valves  
• If necessary, operate temporarily with an isolation valve in Lahaina |                          |
| Reline or Replace 15-in Drain Line to SDR                              | $ 2,230,000                     | $ 100,000                         | • The pipelines run through a housing subdivision and plant staff have limited or no access to areas where the lines were installed.  
• Pipes hydraulic performance and capacity to be evaluated  
• Operation of the forcemain is imperative as it is the only means of bringing water from SDR to the WFP.  
• Failure of this line could result in damages to homes and plant staff may not be able to access the line to make repairs. | Not Recommended            |
| Reline or Replace Existing 30-in SDPS Forcemain to Plant               | $ 4,900,000                     | $ 150,000                         |                                                                                                                                               |                            |

**JOINT FACILITIES CIP SUBTOTAL**                                  | $ 25,618,634                   | $ 10,361,405                     |                                                                                                                                               |                            |

**CIP PROGRAM TOTAL**                                                | $ 31,643,634                   | $ 11,736,405                     |                                                                                                                                               |                            |
DATE: May 7, 2020

TO: Water Resources Committee

FROM: General Manager

SUBJECT: Consider Resolution Adopting Amendments to the District Administrative Code Articles 23, 26, and 27

RECOMMENDATION:

It is the Staff recommendation that the Water Resources Committee:

1. Review proposed revisions to the District Administrative Code Article 23 – Extension of District Lines; Article 26 – Fire Hydrants; and Article 27 – Back Flow Prevention; and

2. Recommend the Board of Directors adopt this Resolution amending the District’s Administrative Code; and

2. Discuss and take other action as appropriate.

DISCUSSION:

Provided as Attachment B for your review are proposed revisions to Articles 23, 26, and 27 of the District Administrative Code in redline format.

These policies have not been revised or amended in many years, so these revisions will clean up old language and conform to current practices and regulations. The proposed changes include:

1. Article 23, Extension of District Lines – Updating language to be consistent with current practices;

2. Article 26, Fire Hydrants – Updating language to be consistent with current practice and added clarity for responsibility;

3. Article 27, Back Flow Prevention – Extensive updates were required to provide adequate protection for District facilities and clearly identify property owner requirements.

These proposed revisions have all been reviewed by General Counsel.

All updates to the Administrative Code must be adopted by resolution. A draft resolution is included as Attachment A.
FISCAL IMPACT:

There is no fiscal impact as a result of this action.

Attachment A: Draft Resolution Adopting Amendments to the District Administrative Code – Articles 23, 26, and 27

Attachment B: Redlined Versions of Articles 23, 26, and 27

Prepared by: Kim Johnson, Executive Assistant
Reviewed by: Rania Amen, P. E., Engineering Services Manager
Approved by: Albert C. Lau, P. E., General Manager
ATTACHMENT “A”

RESOLUTION NO. 20-__

RESOLUTION OF THE BOARD OF DIRECTORS
OF SANTA FE IRRIGATION DISTRICT
ADOPTING AMENDMENTS TO THE DISTRICT
ADMINISTRATIVE CODE – ARTICLES 23, 26, AND 27

WHEREAS, the Santa Fe Irrigation District (“District”) is an irrigation district organized and existing pursuant to the Irrigation District Law, commencing with Section 20500 of the California Water Code; and

WHEREAS, pursuant to Water Code section 22075, the District may do any act necessary to furnish sufficient water in the District for any beneficial use; and

WHEREAS, to facilitate the District’s ability to furnish sufficient water for beneficial use, the District has, from time to time, adopted rules and regulations regarding the operation and administration of the District; and

WHEREAS, the District has compiled the rules and regulations in an Administrative Code; and

WHEREAS, the District has revised the Administrative Code on numerous occasions; and

WHEREAS, the District has reviewed and desires to revise certain Articles of the Administrative Code, as indicated in Exhibit “A”, attached hereto.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Santa Fe Irrigation District as follows:

1. The matters set forth in the recitals to this Resolution are true and correct statements.

2. The amendment of the Administrative Code is not subject to the California Environmental Quality Act.

3. The Santa Fe Irrigation District Administrative Code, Articles 23, 26, and 27 are amended as set forth in Exhibit “A”, attached hereto and incorporated herein.

4. This Resolution shall take effect immediately.
PASSED, ADOPTED, AND APPROVED at a regular meeting of the Board of Directors of the Santa Fe Irrigation District held on the 21st day of May 2020 by the following vote, to wit:

AYES:
NOES:
ABSTAIN:
ABSENT:

ATTEST:

Michael T. Hogan, President

Albert C. Lau, P. E., Secretary

Seal:
ARTICLE 23. - EXTENSION OF DISTRICT PIPELINES

SEC. 23.1 PIPELINE EXTENSION COSTS
District pipelines within its service areas may shall be extended at the request of a property owner subject to evaluation and at the total expense of the owner. Santa Fe Irrigation District (the District) shall not finance the construction of any pipeline extensions.

SEC. 23.2 SUBDIVISIONS
Lines-Pipelines and facilities, installed by a developer within a subdivision, will be accepted by the District as part of its system, provided that plans for the system are prepared by a licensed engineer in the State of California and approved in advance by the District. Before a letter or report will be given to the Division of Real Estate, the developer must agree in writing to install such facilities and such agreement must be secured by an approved surety bond from a California admitted surety. A developer must grant to the District any operation and maintenance access easements, including operation and maintenance access easements, which the District requires for the location of proposed water facilities.

SEC. 23.3 DISTRICT SPECIFICATIONS
The District has a master set of specifications—adopted the San Diego Water Agencies’ Standards (SDWAS) for the design and construction of pipelines, services and valves. All facilities that are to become the property of the District must be designed and installed in accordance with the District’s specifications SDWAS with no exceptions. A copy of the Specifications may be obtained at the District office at a cost of $10.00, or mailed at a cost of $15.00.

SEC. 23.4 PLAN CHECKING, INSPECTION AND HYDRAULIC ANALYSIS FEES
A payment of the applicable plan checking fee set forth in the District’ Schedule of Fees and Charges as established by the Board of Directors, of $300 shall be charged for plan checking of a proposed water facility system by developers, inspection of the installation and any hydraulic analysis on other design review performed by an outside consulting engineer the District. This fee will shall be paid by the developer. A fee for inspection of $500 for a project of 500 feet or less of main line shall be charged. A fee of $1.00/feet of pipe to be installed for jobs greater than 500 feet will be charged. The charge for providing hydraulic analysis will be at cost to the District plus 15%, with a minimum charge of $750.—All fees shall be paid prior to review, inspection or analyses performed by the District. The fees are as established by the Board.

SEC. 23.5 WATER AVAILABILITY LETTERS
Prior to the District signing a water availability letter to the County or City, the Owner/Developer must submit specific plans for the proposed tentative parcel map for the subdivision, proposed lot split, proposed lot line adjustment, or other improvement. In addition, the Owner/Developer shall provide documentation from the applicable Fire Department that the fire flow requirements for the proposed development meets the requirements for fire
Demand. All fees shall be as noted in the District’s Schedule of Fees and Charges. Prior to the District submitting a water availability letter to the Department of Health, the proposed tentative parcel map for the subdivision or lot split must be submitted to the District for review, along with a fee. The fee will be as follows:

Development of 2 or more lots $100
Development of a condominium $100
Lot Line Adjustment No Charge
Addition to existing residence No Charge
ARTICLE 26. - FIRE HYDRANTS

SEC. 26.1 OWNERSHIP
Fire hydrants on District lines are the property of Santa Fe Irrigation District (the District). However, installation, and moving expenses are the responsibility of the Fire Protection District or of the affected property owner. Maintenance shall be the responsibility of the Fire Protection District. Repair shall be the responsibility of the District.

SEC. 26.2 LOCATION
Fire hydrants shall be located at such points as shall be determined by the Fire Protection District upon agreement of this District and payment of the charges fixed by Section 26.3 hereof.

SEC. 26.3 CHARGES
A construction deposit will be determined on a case-by-case basis by staff, to be paid prior to construction of all new hydrant connections. The deposit must take into consideration the length of the hydrant run, and other pertinent factors. The customer will be refunded or billed the difference between the deposit and actual costs.

SEC. 26.4 REPAIRS
Repairs of fire hydrants shall be done by the District.

SEC. 26.5 MAINTENANCE
Maintenance such as painting, removal of brush or weeds shall be the responsibility of the Solana Beach Fire Department and the Rancho Santa Fe Fire Protection District.

SEC. 26.6 USE OF FIRE HYDRANTS
No person, other than the District and a fire protection agency, shall use a District hydrant for any purpose without the express written consent of the District. Fire hydrants may be used for construction purposes in the manner provided in Article 15 hereof.

SEC. 26.7 PRIVATE FIRE HYDRANT
The property owner is responsible for the installation of the lateral from the District’s valve or determined termination of District owned lateral to the fire hydrant. The property owner is also responsible for the installation of an appropriate backflow prevention device Reduced Pressure Principle Assembly (RPPA) and the fire hydrant. The District is responsible for the maintenance of the lateral up to the property line. The property owner is responsible for the maintenance of the lateral from the property line to and including the RPPA backflow prevention device and fire hydrant. The RPPA backflow prevention device is tested annually in the manner provided in Article 27, Section 27.3.

SEC. 26.8 FIRE HYDRANT FLOW TESTS
Only the District will may access a public fire hydrant for the purpose of performing a flow test. Upon a customer’s request, the District will perform a flow test and
provide resulting data, provided that the flow test does not have potential to cause property
damage and that the Regional Water Quality Boards discharge requirement can be met. The
customer will be required to pay the District for all fees and costs associated with performance of the flow test including time, material and water used. The District shall not perform flow tests on privately owned fire hydrants.
ARTICLE 27. - BACKFLOW PREVENTION

SEC. 27.1 BACKFLOW PROHIBITED
Cross connections or any type of connection that permits a backflow of water from a supply other than that of the Santa Fe Irrigation District (the District) into the District’s lines are prohibited. A connection creating a potential backflow is not permissible. All installations are subject to inspection and regulation by the District for the purpose of avoiding the possibility of backflow. –Backflow prevention devices shall be installed when required by a state or local health agency or by the District. The cost thereof shall be borne by the customer.

SEC. 27.2 RULES AND REGULATIONS GOVERNING CROSS CONNECTIONS
Pursuant to and in compliance with the provisions of California Code of Regulations, Title 17 related to drinking water, generally accepted engineering practice, recognized health standards and American Water Works Association recommendations, the District has established cross connection rules and regulations. The provisions of the California Administrative Code, Title 17, Public Health, Sections 7583, et seq., as amended from time to time, are hereby adopted by reference as the Rules and Regulations of the Santa Fe Irrigation District and are set forth in District Resolution No. 88-04, and in the Manual for Cross Connection Control published by the Foundation for Cross Connection Control & Hydraulic Research, University of Southern California.

Sec. 27.2.1 Installation and Maintenance of Backflow Preventers.
The District shall determine whether a backflow prevention assembly shall be installed. The customer shall bear all costs of the installation and maintenance. All backflow prevention assemblies must be approved by the District and by the University of Southern California School of Engineering, Foundation for Cross Connection and Hydraulic Research. All new installations and replacements shall be reduced pressure principle assemblies.

A. Water System Survey

1. The District shall review all requests for new services to determine what if backflow protection is needed. Plans and specifications must be submitted to the District upon request for review of possible cross-connection hazards as a condition of service for new service connections. If it is determined that a backflow prevention assembly is necessary to protect the public water system, the required assembly must be installed before service will be granted.

2. The District may require an on premise inspection to further evaluate cross-connection hazards. The District will notify the affected water user for of the need for inspection. If, in the judgment of the District, an approved backflow prevention device is required at any water service connection for the safety of the District system, the District shall give notice in writing to the affected water user to install an approved backflow prevention device
at each of the water user's water service connections. Within the time prescribed by the District, the water user shall install such approved device or devices at the water user's sole expense. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute grounds for discontinuing water service to such water service connections until such device or devices have been properly installed and tested.

3. The District may, at its sole discretion, require a re-inspection for cross-connection hazards of any premise to which it serves water. The District will notify in writing the affected water user of the need for inspection. Any water user who cannot or will not allow an on-premise inspection of his/her piping system may be required to install the backflow prevention assembly the District considers necessary. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute grounds for discontinuing water service to such water service connections until such device or devices have been properly installed and tested.

4. All water user systems shall be open for inspection at all reasonable times to authorized representatives of the District to enable the District to ascertain the existence of cross-connection or other structural or sanitary hazards, including violations of this Code. When such a condition becomes known, the District shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the water user has corrected the condition(s) in conformance with State laws and District Codes relating to plumbing and water supplies, and with regulations adopted pursuant thereto.

B. Water User Notification-Approved Backflow Prevention Assembly Installation

1. If the survey completed identifies corrective action, the District will notify the water user of the survey findings, listing the corrective actions to be taken. A period of thirty (30) days will be given to complete all corrective actions required, including installation and testing of backflow prevention assemblies. Failure, refusal or inability on the part of the water user to install said device or devices shall immediately constitute grounds for discontinuing water service to such water service connections until such device or devices have been properly installed and tested. A 48 hour lock off notice will be given to the customer prior to discontinuing service.

2. The District may provide additional notification and/or time to make the necessary repairs as it deems necessary. This will be addressed on a case-by-case basis.

C. Water User Notification-Annual Backflow Testing and Maintenance
1. The District will notify each affected water user when it is time for the backflow prevention assembly installed on its service connection to be tested.

The notice shall contain the following information:

a) The backflow assembly location and account number (or other appropriate identification numbers).

b) A statement that the water user is responsible for providing for the routine maintenance, repair, and testing.

c) That the testing requirement is made under the authority of the California Code of Regulations, Title 17, and this Article 27.

d) A deadline of 60 days by which the assembly must be tested and repaired if necessary.

e) That if the water user fails to test or repair an assembly within the time period required by the notices, the District may terminate water service to the affected water user.

f) The District contact person, including address and phone number.

g) A report form for the water user to use to submit the test results.

2. A second notice shall be sent to each water user who does not have its backflow prevention assembly tested as prescribed in the initial notice within the required period. The second notice will provides an additional 30 days for compliance.

3. A third notice will give the water user a 15 day period to have its backflow prevention assembly tested. If no action is taken within this time period, the District will terminate water service to the affected water user until the subject backflow assembly is tested without further notice.

4. The District may provide additional notification and/or time to make test and make necessary repairs as it deems necessary. This will be addressed on a case-by-case basis.

D. Water Service Termination

1. When the District encounters water users that represent a clear and immediate hazard to the potable water supply that cannot be immediately abated, the District shall discontinue water service immediately. Such
termination shall be made by the District in its sole discretion. The District will notify the affected water user in writing via door tag and by telephone, if possible.

2. No premises shall not be connected to the District system or receive water service unless the District system is protected as required by State laws and regulations and by this Code. Service of water to any premises shall be discontinued by the District if a backflow prevention assembly required by this Code is not installed, tested, and maintained, or if it is found that a backflow prevention assembly has been removed, bypassed, or if any unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects are corrected.

E. Maintenance of Records

The District shall maintain such records so as to be able to effectively manage a cross-connection control program. These records shall be kept as required by the provisions of the California Code of Regulations, Title 17, related to drinking water.

Section. 27.2.2 Charges

The Board of Directors shall establish, and may from time to time alter, a schedules of fees and charges to offset the District’s costs incurred to disconnect and/or reconnect a service because of noncompliance under this Article 27. It shall be policy of the District that the water user, whose premises caused the need to protect the District water supply, shall be responsible to pay the cost of that protection, including the District’s costs.

SEC. 27.3 ANNUAL TESTING BY CUSTOMER

The customer will own the backflow assembly and will have the full responsibility for annual testing (or more often if required by the District), maintenance, repair and retesting, and for providing the District with proper records and test data.

Sec. 27.3.1 Responsibility of Costs

All cost for installation, test and repair are borne by the customer. Inspection will be the responsibility of the District.

SEC. 27.4 PURPOSES OF CROSS CONNECTION RULES AND REGULATIONS

Sec. 27.4.1

To protect the District system and the customer’s home from the possibility of contamination or pollution, by isolating within customer systems such contaminants or pollutants which could backflow or back-siphon into the District’s system; and
Sec. 27.4.2
To provide for the maintenance and continuing program of cross-connection control which will systematically and effectively prevent the contamination or pollution of the District system.

SEC. 27.5 DEFINITION OF TERMS
Whenever in Resolution No. 88-04, or in any document where they govern, the following terms are used, they shall be defined as follows:

a) Approved. Accepted by the Board as meeting an applicable specification stated or cited in these rules, as suitable for the proposed use.

b) Auxiliary Water Supply. Any water supply, other than the District system, on or available to a customer system. These auxiliary waters may include water from another purveyor’s public potable water supply or any natural source(s) such as well, spring, river, stream, lagoon, estuary, etc., or “used waters” or “industrial fluids.” These waters may be polluted or contaminated, or they may be objectionable, and constitute an unacceptable water source over which the District does not have control.

c) Backflow. The flow of water (or other liquids, mixtures or substances) under pressure into the District system from any source or sources other than its intended source.

d) Back-siphonage. The flow of water (or other liquids, mixtures or substances) into the District system from any source other than its intended source, caused by the sudden reduction of pressure in the District’s system.

e) Backflow Preventer. An assembly or means designed to prevent backflow or back-siphonage.

1. Air Gap. A physical break between the supply line and a receiving vessel.

3. Double Check Valve Assembly (DC). The term "double check valve assembly" shall mean an assembly of two internally loaded, independently acting check valves, including resilient seated shut-off valves on each end of the assembly and test cocks for testing the water tightness of each check valve.

2. Reduced Pressure Principle Assembly (RP). A backflow preventer incorporating not less than two check valve valves, and automatically operated deferential relief valve located between the two check valves, a tightly closing shut-off valve on each side of the check valve assembly, and equipped with necessary test cocks for testing. To be approved, these assemblies must be readily accessible for in-line maintenance and testing and be installed in a location where no part of the assembly will be submerged.
f) **Board.** The Board of Directors of the District.

g) **Contamination.** The impairment of the quality of the potable water by sewage, industrial fluids or waste liquids, compounds, other materials or stagnant water to a degree which creates an actual hazard to the public health through poisoning or through the spread of disease.

h) **Control.** The right and power over the sanitary quality of water.

i) **Cross-Connection.** Any physical connection, or arrangement of piping fixtures, between two otherwise separate piping systems, one of which contains potable water and other of which contains non-potable water or industrial fluids or questionable safety, through which, or because of which, backflow or back-siphonage may occur into the District system. A metered water service connection between the District system and a customer system which is cross-connected to a contaminated fixture, industrial fluid system or with a potentially contaminated supply or auxiliary water system, constitutes one type of cross connection. Other types of cross-connections include connectors such as swing connections, removable sections, four-way plug valves, spools, dummy sections of pipe, swivel or changeover assemblies, sliding multiport tube, solid connections, etc.

j) **Cross-Connection Control by Containment.** The installation of an approved backflow prevention assembly in any customer system at the metered water service connection.

k) **Designee.** An employee of the District designated by the Manager to enforce the provisions of these rules.

l) **District.** The Santa Fe Irrigation District.

m) **Hazard, Degree of.** The term is derived from an evaluation of the potential risk to the public health and the adverse effect of the hazard upon the District system.

1. **Hazard - Health.** Any condition, assembly, or practice in the District system, or its operation, which could create, or in the judgment of the Board may create, a danger to the health and well-being of any water customer.

2. **Hazard - Pollution.** An actual or potential threat to the physical properties, or to the potability of the District system, which would constitute a nuisance or be aesthetically objectionable or could cause damage to the District system, but would not be dangerous to health.

3. **Hazard - System.** An actual or potential threat of severe damage to the physical properties of the water system or of a pollution or contamination which would have a protracted effect on the quality of the potable water in the District system.

n) **Industrial Fluids System.** Any system containing a fluid or solution, which may be chemically, biologically or otherwise contaminated or polluted in a form or concentration such as would constitute a health, system pollution or plumbing hazard if
introduced into the District system. “Industrial fluids systems” include, but are not limited to, polluted or contaminated water; all types of process water and “used waters” originating from the District system which may have deteriorated in sanitary quality; chemicals in fluid form; plating acids and alkalies; circulated cooling waters connected to an open cooling tower and/or cooling towers that are chemically or biologically treated or stabilized with toxic substances; contaminated natural waters such as from wells, springs, streams, rivers, bays, harbors, seas, irrigation canals or systems, etc.; oils, gases, glycerine, paraffins, caustic and acid solutions and other liquid gaseous fluids used for industrial or other purposes or for fire-fighting purposes.

o)  **Manager.**  The General Manager of the District.

p)  **Pollution.**  The presence of any foreign substance (organic or biological) in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness or quality of the water to a degree which does not create an actual hazard to the public health but which does adversely and unreasonably affect such waters for domestic use.

q)  **Reclaimed Water**- Wastewater which as a result of treatment is suitable for uses other than potable use.

r)  **Water - Metered Water Service Connection.**  The terminal end of a service connection from the District system (that is, where the District loses control over the water at its point of delivery to the customer system), being the downstream end of the meter. There should be no unprotected takeoffs from the service line ahead of any backflow prevention assembly. Service connections shall also include metered water service connections from a fire hydrant and all other temporary or emergency water service connections from the District system.

s)  **Water - Unmetered Water Service Connection.**  The terminal end of the District system for unmetered service such as automatic fire sprinkler systems. The District system stops at the property line or check valve.

t)  **Water - Nonpotable.**  Water which is not safe for human consumption or which is of questionable potability.

u)  **Water - Potable.**  Any water which, according to recognized standards, is safe for human consumption.

v)  **Water System.**  The water system is made up of two parts; namely, the District system and the customer’s system.

1.  The District system consists of the source and the distribution system under the complete control of the District, up to the point where the customer’s system begins.

   a.  The source shall include all components of the facilities utilized in the production, treatment, storage, and delivery of water to the distribution system.

   b.  The distribution system shall include the network of conduits used for the
delivery of water from the source to the customer systems.

The customer systems consist of all water components beyond the metered water service connection, or at the property line and/or check valve in the case of a fire sprinkler system.

**x) Water - Used**—Any water supplied by the District from the District system to a customer system after it has passed through the metered water service connection and is no longer under the control of the District.

**x) Water User**—Any person obtaining water from a public water supply.

### SEC. 27.6 RESPONSIBILITY

The District shall be responsible for monitoring the distribution system for prevention of contamination or pollution due to the backflow or back-siphonage of contaminants or pollutants through the metered or unmetered water service connections.

#### Sec. 27.6.1.

Pursuant to and in Compliance with the provisions of California Code of Regulations, Title 17, related to drinking water, the water supplier shall protect the public water supply from contamination. If, in the judgment of the District’s Cross Connection Control Specialist, an approved backflow prevention assembly is required at any water service connection for the safety of the system, the cross control coordinator shall give notice in writing to the affected customer to install an approved backflow prevention assembly at each of such customer’s water service connections. Within the time prescribed by the coordinator, the customer shall install such approved assembly or assemblies at the customer’s expense. Failure, refusal or inability on the part of the customer to install said assembly or assemblies shall immediately constitute a ground for discontinuing water service to such metered water service connections until such assembly or assemblies have been properly installed.

#### Sec. 27.6.2.

If the customer files with the District a written protest of the hazard involved and the protection required to be provided, the matter shall be referred by the District to the appropriate health agency. If the protest involves a new meter installation, the District shall not commence water service until after the health agency has delivered its written decision to the District. The written decision of the health agency shall be final.

### SEC. 27.7 IMPLEMENTATION

#### Sec. 27.7.1

No water service connection to any premises shall be placed in service by the District unless the District system is protected as required by State laws and regulations and by these rules. Service of water to any premises shall be immediately discontinued by the District if a required backflow prevention assembly is not installed, tested and maintained, or if it is found that a backflow prevention assembly has been removed, by-passed, or if an unprotected cross-connection exists on the premises. Service will not be restored until such conditions or defects
Sec. 27.7.2
All customer systems shall be open for inspection at all reasonable times to authorized representatives of the District to enable the District to ascertain the existence of cross-connections or other structural or sanitary hazards, including violations of these rules. When such a condition becomes known, the District shall deny or immediately discontinue service to the premises by providing for a physical break in the service line until the customer has corrected such condition(s) in conformance with State laws and the District resolutions relating to plumbing and water supplies, and with regulations adopted pursuant thereto.

Sec. 27.7.3
An approved backflow prevention assembly shall be installed on each service connection to a customer system at or near the property line or immediately inside the building being served; but, in all cases, such assembly shall be installed before the first branch line leading off the service wherever the following conditions exist:

Sec. 27.7.3.1
In the case of premises having an auxiliary water supply that is not, or may not be, of safe bacteriological or chemical quality and which is not acceptable as an additional source by the District, the District system shall be protected against backflow from the premises by the installation of a backflow prevention assembly in the customer system appropriate to the degree of hazard.

Sec. 27.7.3.2
Whenever backflow protection has been found necessary on a customer system, all water service connections shall be protected by an approved backflow assembly regardless of whether or not any are being used.

Sec. 27.7.3.3
In the case of premises on which any industrial fluid, or any other objectionable substance, is handled in such a fashion as to create an actual or potential hazard to the District system, including the handling or process waters and water originating from the District system which have been subject to deterioration in quality, the District system shall be protected against backflow by the installation of a reduced pressure principle backflow prevention assembly (RP).

Sec. 27.7.3.4.
Whenever the following conditions exist on any premises, the District system shall be protected against backflow by the installation of a reduced pressure principle backflow prevention assembly (RP).

A. a) Internal cross-connections that cannot be permanently corrected or controlled; or
B. b) Intricate plumbing and piping arrangements; or

1. Where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist.

   a. In the case of any premises where there is an auxiliary water supply as stated in Subsection C(1), and such supply is not subject to any of the following rules, the District system shall be protected by approved reduced pressure principle backflow prevention assembly (RP).

   b. In the case of any premises where there is water or substance that would be objectionable, but not hazardous to health, if introduced into the District system, the District system shall be protected by an approved reduced pressure principle backflow prevention assembly (RP).

   c. In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the District system, the District system shall be protected by an approved reduced pressure principle backflow prevention assembly (RP). Examples of premises where these conditions will exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries and plating plants.

   d. In the case of any premises where there are “uncontrollable” cross-connections, either actual or potential, the District system shall be protected by an approved reduced pressure principle backflow prevention assembly (RP).

   e. In the case of any premises where, because of security requirements or other prohibitions or restrictions or size of the premises, it is impossible or impractical to make a complete in-plant cross connections survey, the District system shall be protected against backflow or back-siphonage from the premises by the installation of a backflow prevention assembly. In this case, maximum protection will be required; that is, an approved reduced pressure principle backflow prevention assembly shall be installed in each metered water service connection to the premises.

   f. A reduced pressure principle backflow prevention assembly (RP)--as near to the metered water service connection as possible, will be required on all premises where sewage, toxic wastes, or other injurious materials are pumped, processed or treated. Also, on any premises where because of the size or impracticality of conducting complete in-plant inspections, reduced pressure principle backflow assemblies will be required. In general, a reduced pressure principle backflow prevention assembly (RP) will be required when for any one of the following uses of property or conditions exist:
a) All apartments, condos, or multifamily complexes.

b) All commercial, agricultural, governmental, industrial, institutional or medical properties.

c) All water services dedicated for fire protection.

d) All water service dedicated for potable irrigation.

e) Any premise with a private booster pump, or private lift station.

f) Auxiliary water system (interconnected).

g) Premises where reclaimed or grey water is used.

h) Sewage treatment plant or pump station

Sec. 27.7.4
Any backflow prevention assembly required by Resolution No. 88-04 shall be of a model and size approved by the District. The term “Approved Backflow Prevention Assembly” shall mean an assembly that has been manufactured in full conformance with the standards established under the provisions of California Code of Regulations, Title 17, related to drinking water. Laboratory and field performance specifications are established by the “Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California”.

Final approval shall be evidenced by a “Certificate of Approval” issued by an approved testing laboratory and organization which has demonstrated its competency to perform such tests to the State Water Resources Control Board.

Sec. 27.7.5
The following testing laboratory is hereby approved by the Board to test and certify backflow preventers:

Foundation for Cross-Connection Control and Hydraulic Research
University of Southern California Foundation Office
Research Annex 219
Los Angeles, California 90089-7700

Sec. 27.7.6
It shall be the duty of the customer/user at any premises where backflow prevention assemblies are installed to have certified inspections and operational tests made at least once per year. In those instances where the District deems the hazard to be great enough, it may require certified inspections at more frequent intervals. These inspections and tests shall be at the expense of the customer/user, and shall be performed by a qualified certified tester. It shall be the duty of the
District to see that these timely tests are made. These assemblies shall be repaired, overhauled or replaced at the expense of the customer/user whenever said assemblies are found to be defective. Records of such tests, repairs and overhaul shall be kept and made available to the District.

**Sec. 27.7.7 Fire Detector Checks**

**Sec. 27.7.7.1** Double Check Detector Assemblies (DC) and Reduced Pressure Detector Assemblies (RP) are the only detector check backflow prevention assemblies approved for backflow protection by the District. Single check fire detector assemblies are not an approved backflow prevention assembly and are not approved for use. Requirements for the installation of fire detector checks are listed below:

a) Prior to the installation of any fire protection system, submit plans to the District for approval. Plans submitted to the District shall have the approval of the Fire Marshal who has jurisdiction of the premises. Plans received by the District without Fire Marshal’s approval will be returned without review for re-submittal.

b) All installations of backflow protection assemblies shall be inspected and approved by the District prior to placing the fire system in service.

c) All costs for the installation, inspection, testing, and maintenance of the backflow prevention assemblies shall be the sole responsibility of the water user.

d) The water user shall maintain the physical condition of the fire detector check assemblies and shall be solely responsible for any claims that may arise from injuries or damages caused by the fire detector check assemblies.

**Sec. 27.7.8 Existing Non-Conforming Fire Detector Check Assemblies.**

There are currently a number of fire detector check devices in use at properties within the District which do not meet the standards for backflow protection pursuant to the provisions of California Code of Regulations, Title 17, related to drinking water. These detector checks do not provide an acceptable level of protection for the potable water system from various hazards present in commercial fire protection systems. These hazards include degraded water quality in the sprinkler systems, iron bacterium, as well as lead concentrations above acceptable levels in the detector check devices themselves. It is the finding of the District that these devices may pose a threat to the public water supply and that all non-conforming commercial fire detector checks must be replaced at the sole expense of the property owner and/or water user.

As the replacement of these devices may constitute a significant expense, the District will allow a grace period of five (5) years after notification for water users/owners to replace non-conforming devices with devices that meet the requirements of this Code. The District will notify all water users and property owners affected by this requirement upon discovery of these non-conforming devices by certified mail within 30 days and on an annual basis until such time as the grace period has elapsed. Any water user who fails to comply with this requirement is...
subject to water service termination in accordance with this Code. The District will notify the water users/owner in writing by certified mail of water services termination and will send a copy of such notice to the applicable fire department.
DATE: May 7, 2020

TO: Water Resources Committee

FROM: General Manager

SUBJECT: Consider Authorizing the General Manager to Approve a Contract Extension with Cal-Chem for the Procurement of Aluminum Chlorohydrate

RECOMMENDATION:

It is the Staff recommendation that the Water Resources Committee:

1. Recommend the Board of Directors authorize the General Manager to approve a Contract extension with Cal-Chem for a period of one year.

2. Discuss and take other action as appropriate.

BACKGROUND:

Each fiscal year, the Joint Facilities’ Operating Budget includes funding for the purchase of water treatment chemicals essential to the operation of the treatment facility. The 2020 fiscal year operating budget included $480,486 for purchases of the Joint Facility’s primary coagulant, Aluminum Chlorohydrate (ACH). The primary function of the ACH is to facilitate coagulation of particles in the water which can then be filtered out, reducing the turbidity and increasing the effectiveness of the disinfection process. Regulation requires the treatment process to reduce turbidity in the finished water to less than 0.30 NTU to protect public health. With the potential impacts to the treatment process, and public health, the process by which a primary coagulant is selected involves several rounds of laboratory testing and validating, as well as cost analysis, before being considered for full scale use in the treatment process. In a typical budgeting season, prior to the existing contract ending, testing of primary coagulants begins in March and can continue until May. This process provides the District with public transparency and demonstrates fiduciary responsibility in our purchase of primary coagulants.

In March, County health officials announced new restrictions for the San Diego region to combat the spread of COVID-19. Several Counties within the State issued “stay at home” ordinances as a result, then on March 19, SFID declared a local emergency, and began limiting operations to critical functions only. Testing and validating coagulants through the process described above requires significant interaction with vendors and consultant personnel. With the intention of protecting the health of staff, Operations temporarily eliminated on-site meetings of contractors or consultants until the COVID-19 situation improves. This protective measure requires staff to postpone the bidding and testing process of new primary coagulants for FY21 until after the local emergency is lifted. It is the recommendation of staff that the Board approve an extension of the current ACH contract with Cal-Chem for a period of one year, which will allow staff the opportunity to complete the testing and selection process for FY22. Throughout this extension, Cal-Chem has committed to continuing service and does not foresee any interruptions in availability or deliveries.
FISCAL IMPACT:

The FY20 Operating Budget included $480,486 for the purchase of the Joint Facilities’ primary coagulant, Aluminum Chlorohydrate (ACH). Staff is requesting the authorization of a contract extension with Cal-Chem continuing at the existing price of $0.272/ lb. Coagulant use for treatment with ACH in FY21 is estimated to be 1.77 million pounds for a total projected cost of $481,440. The cost split between the Santa Fe Irrigation District and the San Dieguito Water District for chemical use is dependent on the percentage of treated water delivered to each district. Average annual percentage use between SFID and SDWD is in the range of 60% for SFID and 40% for SDWD which equates to $288,864 for SFID and $192,576 for SDWD.

Prepared by:  Timothy Bailey, Water Treatment Plant Manager
Approved by:  Albert C. Lau, P.E., General Manager
Hodges Reservoir
Post Water Release
April 2020
Background

- Effective August 1, 2019, the Division Of Safety Of Dams (DSOD) imposed a water level restriction for Lake Hodges Dam.
- Water level shall not exceed a maximum elevation of 295 feet.
- DSOD allows infrequent exceedances above the restricted elevation up to a maximum elevation of 297.00 feet for no more than 10 consecutive days.
- The City must immediately operate its low-level outlet system to release water, if the restricted level cannot be achieved within that time or the level exceeds elevation 297.00.
- The blow-off valve shall remain open in conjunction with drafting water (if feasible), until the reservoir is restored back to the restricted elevation of 295.00 feet.
April 2020 - Water Release Event

- On April 7, 2020
  - The Reservoir level is at elevation 294.4
  - CWA started the pumping operation

- On April 11, 2020
  - The gauge reading is at elevation 299.4
  - Continuous pumping
  - Significant amount of runoff
  - The blow-off valve was opened at 100% capacity
Duration of the Release

- The initial estimated amount to be released was 2,832 AF for 6-7 days.
- The blow-off valve was closed on April 27, 2020.
  - The Reservoir level was at elevation 295.04.
  - The valve was opened for 16 consecutive days.
  - The average discharge flow rate was 215 cfs (425 AF/day).
  - Meanwhile, CWA's pumping rate ranged between 260 to 560 cfs (515 to 1,100 AF/day).
    - All generation activities were suspended.
    - The hours and rates of the pumping operation varied due to water hydraulics and system limitations.
Post Water Release

As of April 28, 2020
- Hodges water elevation was **294.6 ft**
- All pumping/generation activities were placed on hold
- CWA initiated the Hydro facility shutdown for maintenance service
- City suspended all pumping requests
- A large number of Grebes nests have been built in Hodges

Next Steps
- City to confirm actual released/pumped water
- Storage pools reconciliation for the Districts
- Obtain credit/access to the Districts’ proportion of the pumped water
- Finalize an agreement with CWA for future pumping and storage at Olivenhain Reservoir

**Estimated Total Pumped Water**
- 6,338 AF

**Estimated Total Released Water**
- 6,800 AF

**Estimated Total Transferred Water to SDR**
- 375 AF
Questions?