BOARD OF DIRECTORS

City of Stockton
Jesús Andrade
Dan Wright
Alt. Sol Jobrack

City of Manteca
Jose Nuño
Gary Singh, Chair

Public Member
Mike Morowit

San Joaquin County
Katherine M. Miller
Chuck Winn, Vice-Chair
Alt. Miguel Villapudua

Executive Director
Chris Elias

City of Lathrop
Paul Akinjo
Diane Lazard

BOARD MEETING

THURSDAY, MAY 21, 2020
9:00 A.M.

AGENDA IN LIGHT OF COVID-19

In Compliance with CA Executive Order N-29-20, members of the Board of Directors will participate in this meeting remotely. Members of the public may also participate in the meeting remotely.

TO CONNECT TO THE MEETING

<table>
<thead>
<tr>
<th>by Phone:</th>
<th>by Smart Phone:</th>
<th>by Computer:</th>
</tr>
</thead>
<tbody>
<tr>
<td>To connect by phone, dial 1.408.419.1715 and enter this Meeting ID: 470 854 979#</td>
<td>If you have downloaded the BlueJeans app on your smart phone, enter this Meeting ID: 470 854 979</td>
<td>To connect by computer, click on this link: <a href="https://bluejeans.com/4708">https://bluejeans.com/4708</a> 54979?src=join_info</td>
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</tbody>
</table>

All callers will initially be muted until unmuted by the moderator. Any member of the public on the telephone may speak during Public Comment once unmuted or may email public comments to SJAFCA@stocktonca.gov and up to two minutes of comments will be read from each member of the public.
1. CALL TO ORDER / ROLL CALL

2. PLEDGE TO FLAG

3. CONSENT ITEMS
   3.1) Approve Minutes of the Special Board Meeting of April 30, 2020

4. PUBLIC HEARINGS
   4.1) Resolution to approve the annual Engineer’s Report for the Operations and Maintenance for the Flood Protection Restoration Assessment District, and order the levy and collection of Operations and Maintenance assessments within the District for fiscal year 2020/2021
   4.2) Resolution to approve the Technical Memorandum and Order the Levy and Collection of Assessments within the Smith Canal Area Assessment District for Fiscal Year 2020/2021

5. ORAL REPORT FROM EXECUTIVE DIRECTOR
   5.1) This is an opportunity to provide timely information to the Board in support of its work

6. PUBLIC COMMENTS

7. BOARD QUESTIONS, COMMENTS, ACTIONS

8. CLOSED SESSION

9. ADJOURNMENT

In compliance with the Americans with Disabilities Act, the meeting room is wheelchair accessible and disabled parking is available. If you have a disability and need disability-related modifications or accommodations to participate in this meeting, please contact the Board's office at (209) 937-7900 or (209) 937-7115 (fax). Requests must be made one full business day before the start of the meeting.
Agenda Item 3.1
In light of COVID-19 and in compliance with CA Executive Order N-29-20, the majority of members of the Board of Directors participated in this meeting remotely by teleconference. Members of the public were also permitted to participate in this meeting remotely by teleconference. An option was also given to email public comments to SJAFCA@stocktonca.gov or to speak via the teleconference during public comment times. In compliance with C.D.C. recommendations, all those who physically attended the meeting sat with six feet of space between them and observed other recommended hygiene practices.

1. CALL TO ORDER / ROLL CALL 10:08 AM

Roll Call
Present:
   Director Akinjo
   Director Andrade
   Director Lazard
   Director Miller
   Director Morowit
   Director Nuño
   Director Winn
   Director Wright
Absent:
   Director Singh

The following participated in this meeting via teleconferencing:
   • Director Akinjo
   • Director Andrade
   • Director Lazard
   • Director Miller
   • Director Morowit
   • Director Nuño
   • Director Winn

The following appeared in person to participate in this meeting:
   • Director Wright

2. PLEDGE TO FLAG 10:09 AM

3. CONSENT ITEMS 10:12 AM

3.1) Approve minutes of the Board meeting of March 19, 2020

3.2) Amend the Conflict of Interest Code for the San Joaquin Area Flood Control Agency

AGENDA ITEM 3.1
PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. **10:14 AM**

Motion: Approve Consent Items 3.1 & 3.2  
Moved by: Director Morowit, seconded by Director Miller  
Vote: Motion carried 8-0  
Yes: Director Akinjo, Director Andrade, Director Lazard, Director Miller, Director Morowit, Director Nuño, Director Winn, and Director Wright  
Absent: Director Singh

4. NEW BUSINESS

4.1) Smith Canal Gate Project – Award of Construction Contract **10:15 AM**

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. **10:25 AM**

Motion: Approve Item 4.1  
Moved by: Director Akinjo, seconded by Director Lazard  
Vote: Motion carried 8-0  
Yes: Director Akinjo, Director Andrade, Director Lazard, Director Miller, Director Morowit, Director Nuño, Director Winn, and Director Wright  
Absent: Director Singh

4.1 SUPPLEMENT) Final Discussion of Award of Smith Canal Gate Project Contract **10:29 AM**

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. **10:37 AM**

_The Board asked that Staff bring this item back at the June 2020 Board Meeting when a more detailed financial picture is available._

4.2) Approve Construction Management Contract with KSN, Inc. for Support Services for the Smith Canal Gate Project

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. **11:11 AM**
Motion: Approve Item 4.2
Moved by: Director Wright, seconded by Director Morowit
Vote: Motion carried 8-0
Yes: Director Akinjo, Director Andrade, Director Lazard, Director Miller, Director Morowit, Director Nuño, Director Winn, and Director Wright
Absent: Director Singh

5. PRESENTATION (Informational Update) 11:35 AM

5.1) Implementation Plan Update and Capital Improvement Plan Funding Approach Discussion 11:36 AM

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. 12:44 PM

6. ORAL REPORT FROM EXECUTIVE DIRECTOR 12:47 PM

6.1) This is an opportunity to provide timely information to the Board in support of its work

The Board received the information presented.

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. 12:57 PM

Director Andrade left the call at 12:50 PM

7. PUBLIC COMMENTS 12:59 PM

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear.

8. BOARD QUESTIONS, COMMENTS, ACTIONS 1:03 pm

- No questions or comments.

9. CLOSED SESSION 1:03 PM

PUBLIC COMMENT

- Dominick Gulli submitted written comments. His comments were read aloud for all participating in the meeting to hear. 1:04 PM
Case No. STK-CV-UWM-2015-0011880

Case No. STK-CV-UWM-2015-60011847

REPORT OF ACTION TAKEN IN CLOSED SESSION 1:13 PM

Counsel updated the Board on the two existing items. No direction was given by the Board. Nothing to report.

10. ADJOURNMENT 1:14 PM

The meeting adjourned at 1:14 PM. The next meeting is scheduled for 9:00 AM on May 21, 2020.

CHRIS ELIAS
EXECUTIVE DIRECTOR
SAN JOAQUIN AREA FLOOD CONTROL AGENCY
Agenda Item 4.1
TO: San Joaquin Area Flood Control Agency  
FROM: Chris Elias, Executive Director  
SUBJECT: PUBLIC HEARING TO APPROVE THE ANNUAL ENGINEER’S REPORT FOR THE OPERATIONS AND MAINTENANCE (O&M) FOR THE FLOOD PROTECTION RESTORATION ASSESSMENT DISTRICT, AND ORDER THE LEVY AND COLLECTION OF O&M ASSESSMENTS WITHIN THE DISTRICT FOR FISCAL YEAR 2020/21

RECOMMENDATION

It is recommended the Board of Directors of the San Joaquin Area Flood Control Agency conduct a public hearing and adopt a resolution to approve the Annual Engineer’s Report for the operations and maintenance for the Flood Protection Restoration Assessment District and order the levy and collection of operations and maintenance assessments within the Flood Protection Restoration Assessment District for fiscal year 2020/21.

DISCUSSION

Background

By approving the formation of the Flood Protection Restoration Assessment District 96-1 (AD 96-1) on February 28, 1996, the Board also approved the levying of annual Operations and Maintenance (O&M) assessments to provide for the maintenance of levee improvements and detention basins constructed by SJAFCA. Each year, the Board must approve the O&M budget for the upcoming fiscal year (FY) and approve the levying of assessments as provided for in the Annual Engineer’s Report for AD 96-1/Reassessment and Refunding of 2002. The annual O&M budget report was filed and available for public review on May 11, 2020. A notice of the public hearing was published in The Record on May 11, 2020.

The maintenance of SJAFCA improvements is performed by the San Joaquin County Flood Control and Water Conservation District (District) under the O&M agreement approved by the SJAFCA Board on April 1, 1998, and the San Joaquin County Board of Supervisors on April 14, 1998. The Aquatic Weed Control Program (AWCP) in Five Mile Slough, a component of the O&M activities, has been contracted out since its implementation with the exception of fiscal years 16/17 and 17/18 when the District performed this work.

The AWCP in Five Mile Slough was implemented in 2002 to remove water hyacinth blooms (invasive species) from the slough because the blooms impede full inspection of the levees making it difficult, or nearly impossible in some cases, to identify burrowing holes and eroded areas. When the AWCP was first adopted, an aquatic spray program was implemented which requires regulatory permits and continuous monitoring and reporting activities to satisfy the permit conditions of the regulatory agencies. The Agency ceased its spray program prior to 2006 and after several recent years of costly mechanical removal, the Agency re-started an aquatic spray program in Fall of 2019. The implementation of aquatic spray will significantly defray the cost of the AWCP in this slough.
Earlier this year on March 19, 2020, staff reported to the Board that because of the timing in obtaining regulatory approvals for the use of aquatic spray to control hyacinth blooms in the slough, dense conditions returned and it was necessary to mechanically remove the nuisance growth. The removal of aquatic vegetation has since been completed and was done so under the approved budget request.

The proposed O&M budget covers expected costs for materials, equipment, consultants, contractors, personnel, and administration. These costs include channel maintenance such as levee inspection, erosion repair, weed and rodent control, herbicide spraying, graffiti removal from floodwalls and other structures, maintenance of detention basin no. 1 pumps, maintenance of levee patrol and access roads, Five Mile Slough AWCP, annual administration, consultant charges to prepare the Engineer’s and Annual Levy reports, and charges by the San Joaquin County Auditor for including the assessment on the annual tax roll. The budget also includes annual allowances for items that are expected to occur over the life of the improvements, but not every year (i.e., floodwall replacement, bridge flood proofing repair, levee patrols, repair levee improvements damaged by floods, etc.).

O&M proceeds are set aside annually as follows:

i) **Floodwall replacement fund**: This fund accumulates the proceeds (without interest) that are set aside annually for the future replacement of the floodwalls. Any interest generated in this fund is accumulated in the O&M surplus fund. As of April 30, 2020, the amount accumulated in this fund is $934,426.

ii) **O&M surplus fund**: This fund is primarily used to replace and repair levee improvements damaged by flooding and to provide patrols during high water events. With the exception of funds set aside for floodwall replacement, all unexpended funds in the O&M budget are accumulated in the surplus fund. As of April 30, 2020, the amount accumulated in the surplus fund is approximately $4.2 million. This includes interest generated by the floodwall replacement fund.

To apportion the costs of the O&M activities to those parcels which benefit, a method of assigning Maintenance Benefit Unit(s) (MBU) was developed. MBU are assigned to each parcel based upon the relative benefits the property receives from the SJAFCA project. For example, a typical single-family residence is rated at 1.25 MBU, while a grocery store on one acre is rated at 12.30 MBU. The cost per MBU is established each year by dividing the annual O&M budget by the total number of MBU in the SJAFCA assessment district.

The annual assessment rate approved each year may not exceed the adjusted theoretical maximum assessment of $3.59 per MBU adjusted for annual inflation equal to the National Consumer Price Index. This base rate of $3.59 was established by dividing the original O&M budget of $450,000 by the total number of MBU in fiscal year 1996 (125,474 MBU).

**Present Situation**

The District submitted their proposed O&M budget to SJAFCA for FY 20/21 (Attachment 1). This proposal does not include aquatic weed removal costs because this work is contracted out. The District’s request of $985,000 reflects the absolute minimum amount of requested
resources to adequately maintain the flood protection facilities. The District’s expenditures for the past few years have been less than budgeted and this is mainly due to dry conditions which has allowed the District to reduce costs associated with high water events. It should also be mentioned that major repair costs which occurred in 2017 were paid for by the Army Corps of Engineers under PL-84-99.

Like prior years, budgeted maintenance costs continue to exceed revenue from the annual O&M assessments. The District and Agency staff plan to continue to work together towards a solution to remedy the shortfall of resources to adequately maintain facilities.

The proposed O&M budget for FY 20/21 is $1,050,000 and covers all of the anticipated materials, equipment, consultants, contractors, personnel, and administration (see detail in the attached Engineer’s Report, pages 6 and 7, Attachment 2). The FY 20/21 budget does not include funds for floodwall replacement. Previous amounts set aside for the floodwall replacement fund averaged $44,000 annually. This capital outlay is omitted in order to reduce the amount appropriated from surplus to cover annual maintenance expenses.

The proposed budget utilizes the maximum assessment rate allowed for FY 20/21. The maximum assessment rate for FY 20/21 is equal to the base rate of $6.01 adjusted for annual inflation equal to the National Consumer Price Index (CPI). The CPI for FY 20/21 is 2.5%, therefore, the maximum assessment rate is $6.16.

Applying the maximum assessment rate of $6.16 to the estimated 153,406.66 MBU, will yield $944,985 in O&M revenue. This revenue falls short of meeting the operating costs in the proposed $1,050,000 O&M budget. Therefore, an appropriation in the amount of $105,015 ($1,050,000 - $944,985) from the O&M surplus fund is needed to cover the proposed expenses in the FY 20/21 budget.

It is also requested that the Board approve a $100,000 appropriation from the O&M surplus fund to authorize the Executive Director to use these funds (up to $100,000) to promptly deal with emergencies, or to authorize additional work needed, but not included in the O&M budget. Any unused portion of appropriations are returned to the O&M surplus fund at the end of each fiscal year.

In summary, the FY 20/21 O&M budget includes two appropriation requests:

1) A one-time $105,015 appropriation from the O&M surplus fund to cover operating costs in the proposed budget;
2) A $100,000 appropriation from the O&M surplus fund authorizing the Executive Director to use these funds (up to $100,000) to promptly deal with emergencies, or to authorize additional work needed, but not included in the O&M budget.

These appropriations will not affect the proposed FY 20/21 assessment rate. There are sufficient funds in the O&M surplus to cover these appropriations (as of April 30, 2020 there is approximately $4.2 million in surplus). The following table displays a partial history of the annual assessment rates (theoretical maximum rate allowed and actual assessed) and some typical annual O&M assessments:
### HISTORY OF THE ANNUAL SJAFCA O&M ASSESSMENTS

<table>
<thead>
<tr>
<th>PROPERTY TYPE</th>
<th>FISCAL YEARS</th>
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<tbody>
<tr>
<td>Theoretical Maximum Base Rate allowed</td>
<td>$3.59</td>
</tr>
<tr>
<td>Actual Base Rate assessed</td>
<td>$3.59</td>
</tr>
<tr>
<td>Single Family Home between 1000 and 2000 sf (1.25 MBU)</td>
<td>$4.49</td>
</tr>
<tr>
<td>Grocery Store on 1 acre parcel (12.30 MBU)</td>
<td>$44.16</td>
</tr>
<tr>
<td>Office Building on 2 acre parcel (18.375 MBU)</td>
<td>$65.97</td>
</tr>
</tbody>
</table>

By adopting the proposed resolution at the conclusion of the public hearing, the Board will approve the Annual Report for the Flood Protection Restoration Assessment District and order the levy and collection of annual O&M assessments for FY 20/21.

PREPARED BY: Marlo Duncan

APPROVED: 
CHRIS ELIAS
EXECUTIVE DIRECTOR
CE:MD
Attachments
RESOLUTION NO. SJAFCA 20-17

SAN JOAQUIN AREA
FLOOD CONTROL AGENCY

==================================================================

RESOLUTION TO APPROVE THE ANNUAL ENGINEER’S REPORT FOR THE
OPERATIONS AND MAINTENANCE (O&M) FOR THE FLOOD PROTECTION
RESTORATION ASSESSMENT DISTRICT, AND ORDER THE LEVY AND
COLLECTION OF OPERATIONS AND MAINTENANCE ASSESSMENTS WITHIN
THE FLOOD PROTECTION RESTORATION ASSESSMENT DISTRICT
FOR FISCAL YEAR 2020-2021

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SAN JOAQUIN AREA
FLOOD CONTROL AGENCY, AS FOLLOWS:

1. That the Annual Engineer’s Report (Report) as presented, is hereby approved,
and is ordered to be filed in the Office of the Secretary of the Board as a permanent record
and to remain open to public inspection.

2. That the following notice duly given, the Board of Directors has held a full and
fair public hearing regarding the San Joaquin Area Flood Control Agency’s Assessment
District (District), the levy and collection of assessments, the Report prepared in connection
therewith, and considered all oral and written statements, protests and communications
made or filed by interested persons regarding these matters.

3. That based upon its review of the Report, a copy of which has been presented
to the Board of Directors and which has been filed with the Secretary of the Board, the Board
of Directors hereby finds and determines that:

   i. The land within the District will be benefited by the operation, maintenance
      and servicing of the improvements located within the boundaries of the
      District;

   ii. The District includes all of the lands so benefited; and,

   iii. The net amount to be assessed upon the lands within the District for the
        fiscal year commencing July 1, 2020, and ending June 30, 2021, is
        apportioned by a formula and method which fairly distributes the net amount
        among all eligible parcels in proportion to the benefits to be received by
        each parcel from the improvements and services.

4. That the maintenance and operation of the improvements shall be performed
pursuant to the Municipal Improvement Act of 1913, being Part 2 Division 12, of the Streets
and Highways Code of the State of California, beginning with Section 10000 (Act) and shall
include costs for personnel, utilities (water, electric, and other), purchase of maintenance equipment, weed abatement (herbicide spraying, mowing, and debris burning), rodent control, Aquatic Weed Control Program on Five Mile Slough, maintenance of levee patrol and access roads, sedimentation removal, erosion control, patrolling and inspecting of facilities, maintenance of detention basin No. 1 pumps, pump station operation and maintenance, flood wall repairs, graffiti removal, providing an “emergency repair fund” and other applicable operation, maintenance and repair costs to be incurred annually as determined by the Board of the San Joaquin Area Flood Control Agency to maintain the level of benefit to the assessed parcels in the District.

5. That the County of San Joaquin Auditor-Controller shall enter on the County Assessment Roll, opposite each eligible parcel of land, the amount of levy so apportioned by the formula and method outlined in the Report, and such levies shall be collected at the same time and in the same manner as the County taxes are collected, pursuant to Chapter 2, Section 10100.8 of the Act.

6. That the County of San Joaquin Auditor-Controller shall deposit all money representing assessments collected by the County for the District to the credit of a fund for the District and such money shall be expended only for the maintenance, operation and servicing of the improvements described in Section 4.

7. That the adoption of this Resolution constitutes the District levy for the fiscal year commencing July 1, 2020 and ending June 30, 2021.

8. That the Secretary of the Board, or their designate, is hereby authorized and directed to file the levy with the County of San Joaquin Auditor-Controller upon adoption of this Resolution.

9. That the adoption of this Resolution approves the following appropriations:

   a. A one-time $105,015 transfer from the O&M surplus fund to cover the additional funding requested by the District in the proposed FY 2020-2020 budget.

   b. A $100,000 appropriation from the O&M surplus fund authorizing the Executive Director to use these funds (up to $100,000) to promptly deal with emergencies, or to authorize additional work needed, but not included in the O&M budget.

These appropriations will not affect the proposed fiscal year 2020-2021 assessment rate and will be funded from the unexpended balance in the O&M surplus fund carried forward from the previous years’ O&M assessments.
PASSED, APPROVED AND ADOPTED this _____ day of __May__, 2020.

____________________________________
GARY SINGH, Chair
of the San Joaquin Area
Flood Control Agency

ATTEST:

____________________________________
CHRIS ELIAS, Secretary
of the San Joaquin Area
Flood Control Agency

APPROVED AS TO FORM:

____________________________________
SCOTT L. SHAPIRO, Legal Counsel
for the San Joaquin Area
Flood Control Agency
March 19, 2020

Mr. Chris Elias, Executive Director  
San Joaquin Area Flood Control Agency  
22 East Weber Avenue, Suite 301  
Stockton, California 95202-2317

SUBJECT: SAN JOAQUIN AREA FLOOD CONTROL AGENCY 2020-21 PROPOSED OPERATIONS AND MAINTENANCE BUDGET

Dear Mr. Elias:

The San Joaquin County Public Works Department (County) is pleased to submit the attached Fiscal Year 2020-21 budget proposal for your consideration. For the second consecutive year, the proposed 2020-21 Operations and Maintenance (O&M) Budget for cost-shared flood protection facilities reflects no change in the total budget request.

As shown on the attached table, total expenditures for the past several years have been significantly less than our budget request because we have avoided having to pay for significant repairs caused by high water. The weather has generally been dry, and the major repair costs from the 2017 storms were paid for by the Corps of Engineers under PL 84-99. We are aware that budgeted maintenance costs continue to exceed the O&M revenue available from annual assessments. Therefore, the County's request for FY 2020-21 does not even include normal increases in actual labor and equipment operating costs.

This request is the absolute minimum amount of resources that allows us to adequately maintain the facilities. Public Works staff looks forward to continuing cooperation with your staff to coordinate our efforts to undertake a Proposition 218 process to increase maintenance assessment revenue.

Please feel free to call me at 468-3031, if you have any questions in this matter.

Sincerely,

JIM STONE  
Deputy Director/Operations

c: Kris Balaji, Director of Public Works  
Matt Zidar, Engineering Services Manager - Flood Management  
Eric Ambriz, Channel Maintenance Superintendent
### COUNTY OF SAN JOAQUIN 2020-21 PROPOSED BUDGET
### Assessment District No. 96-1 Flood Protection System
Fund - 21116
Department - 2910000000

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<td><strong>750,763</strong></td>
<td><strong>985,000</strong></td>
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San Joaquin Area
Flood Control Agency

FLOOD PROTECTION RESTORATION
ASSESSMENT DISTRICT
(REASSESSMENT AND REFUNDING OF 2002)

2020/2021 ENGINEER’S ANNUAL REPORT
FOR THE OPERATION AND MAINTENANCE
AFFIDAVIT FOR ENGINEER’S REPORT

SAN JOAQUIN AREA FLOOD CONTROL AGENCY
FLOOD PROTECTION RESTORATION ASSESSMENT DISTRICT
(Reassessment and Refunding of 2002), FISCAL YEAR 2020/2021

ENGINEER’S ANNUAL LEVY REPORT

The undersigned respectfully submits the enclosed report as directed by Agency's Board of Directors.

Dated: ___________________

Willdan Financial Services

By: ______________________

Stacee Reynolds
Senior Project Manager, District Administration Services

By: ______________________

Richard Kopecky
R. C. E. # 16742
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I. OVERVIEW

A. INTRODUCTION

The San Joaquin Area Flood Control Agency (“Agency”) is authorized to annually levy and collect special assessments in order to provide and maintain the facilities, improvements and services within Flood Protection Restoration Assessment District (Reassessment and Refunding of 2002) (“District”). The District was formed in 1996 and the Agency annually levies and collects assessments to maintain the improvements installed and constructed within the District pursuant to the Municipal Improvement Act of 1913, Division 12 of the California Streets and Highways Code §10000 (the “1913 Act”).

This Engineer’s Annual Report (“Report”) describes the District, any changes to the District, the method of apportionment established at the time of formation, and the proposed assessments for Fiscal Year 2020/2021. The proposed assessments are based on the estimated cost to maintain the improvements that provide a special benefit to properties assessed within the District. Each parcel within the District is assessed proportionately for the special benefits provided to the parcel from the improvements.

The word “parcel” for the purposes of this Report refers to an individual property assigned its own Assessment Number by the San Joaquin County Assessor’s Office. The San Joaquin County Auditor/Controller uses Assessment Numbers and specific Fund Numbers to identify on the tax roll properties assessed for special district benefit assessments.

Following consideration of all public comments and written protests at an annual noticed public hearing, and review of the Engineer’s Annual Report, the Board of Directors for the Agency may order amendments to the Report or confirm the Report as submitted. Following final approval of the Report, and confirmation of the assessments, the Board will order the levy and collection of assessments for Fiscal Year 2020/2021. In such case, the assessment information will be submitted to the San Joaquin County Auditor/Controller, and included on the property tax roll for each parcel in Fiscal Year 2020/2021.

B. COMPLIANCE WITH CURRENT LEGISLATION

The Agency has reviewed the provisions of the California Constitutional Article XIIID (established by the passage of Proposition 218 in November 1996) and has made the following findings and determinations:

Pursuant to Article XIIID Section 5 of the California Constitution, certain property related assessments existing on July 1, 1997 (“the effective date”) are exempt from the substantive and procedural requirements of Article XIIID Section 4 and property owner balloting for the assessments is not required until such time that the assessments are increased. Specifically, Section 5 of Article XIIID reads:

“…the following assessments existing on the effective date of this article shall be exempt from the procedures and approval process set forth in Section 4:

(a) Any assessment imposed exclusively to finance the capital costs or maintenance and operation expenses for sidewalks, streets, sewers, water, flood control, drainage systems or
vector control. Subsequent increases in such assessments shall be subject to the procedures and approval process set forth in Section 4."

Since, the improvements and the annual assessment for maintaining the District improvements are exclusively for flood control purposes, the method of assessment and maximum assessment rate formula, as established by the Agency prior to the effective of the article (July 1, 1997), are exempt from the procedural requirements of Article XIIIID Section 4 of the California Constitution.

The proposed assessment for Fiscal Year 2020/2021 may be less than or equal to the maximum assessment rate previously approved and adopted by the Agency. Future assessments that exceed the previously approved schedule of adjustments, including the clearly defined formula for inflation adjustment that was adopted by the Agency prior to November 6, 1996, will be subject to the substantive and procedural requirements of the California Constitution Article XIIIID Section 4.

II. ANNUAL ASSESSMENT

When the District was formed, pursuant to Section 10100.8 of the Streets and Highways Code, the Board approved the levy of assessments to pay in whole or in part: a.) The costs and expenses of constructing or acquiring the Improvements; b.) The estimated annual costs and expenditures required during the ensuing years for the operation and maintenance of those improvements. The assessments so approved are collected through special assessment levied on the County tax rolls upon all lots, parcels and subdivisions of land within the District that benefit from the improvements.

Since the improvements are to be funded by the levying of assessments, the law requires and the statutes provide that assessments levied pursuant to the “1913 Act”, must be based on the special benefit that the properties receive from the works of improvement. However, the statute does not specify the method or formula that should be used in any special assessment district proceedings. The responsibility for apportioning the costs to properties which special benefit from the improvements rests with the Assessment Engineer, who is appointed to make an analysis of the facts and to determine the apportionment of the assessment obligation to properties proportionate to the special benefit which each will receive from the improvements.

To apportion the assessment to each parcel in direct proportion to the special benefit it will receive from the improvements, an analysis was made to initially identify the special benefit that the public improvements would render to the properties within the boundaries of the District. In making the analysis to levy an assessment on a specific parcel, it is necessary that the parcel receive a special benefit distinguished from a benefit to the general public.

A. DEFINITION OF OPERATION AND MAINTENANCE

The costs and expenses for “Operation and Maintenance” include all applicable operation, maintenance and repair costs incurred annually, or that may not be reasonably collected in a single annual assessment to maintain the level of benefit to the assessed parcels in the District. Operation and Maintenance, as determined by the Board of the San Joaquin Area Flood Control Agency, may include, but is not limited to:

- Personnel costs;
- Utilities (water, electric and other);
• Maintenance equipment (purchase and repair);
• Weed abatement (herbicide spraying, mowing, debris burning);
• Rodent control;
• Road maintenance (Access Roads);
• Stream bed and detention basin clearing;
• Sedimentation removal;
• Erosion control;
• Patrolling and inspecting improvements and facilities;
• Pump station operation (including maintenance and repair);
• Flood wall repairs;
• Graffiti removal;
• Administration expenses; and
• Providing for an “Emergency Repair/Replacement Fund”.

B. OPERATION AND MAINTENANCE BENEFIT

The District assessments were established to provide funding and financing for the design construction, maintenance and operation of flood control facilities (improvements) that benefit parcels within the District. Properties within the District have been designated within the 100-year flood plain by the Federal Emergency Management Agency (FEMA)—according to the preliminary revised Flood Insurance Rate Maps (FIRM’s), dated February 28, 1995. The District’s flood control facilities restore flood protection to properties that are subject to flooding during a storm of 100-year intensity and thereby preserve the ability to use and develop the properties within the District without the requirements placed on parcels located within Special Flood Hazard Areas. Therefore, the improvements and the maintenance and operation of those improvements are a special benefit to the properties within the District.

The following outlines the special benefits properties within the District receive from the construction and maintenance of the flood protection improvements:

• Reduction in the risk of loss that would occur if a flood were to damage the improvements on the property; i.e., structural damage and/or damages affecting the revenue-producing environment.

• Removal of the flood plain disclosure required during the sale of a property.

• Removal of the requirement for properties that are removed from Special Flood Hazard Areas (as designated by FEMA) to adhere to the building and design “flood plain management” criteria required by FEMA for communities participating in the Flood Insurance Program (FIP). These criteria apply to new construction, as well as renovations and additions in most circumstances, and increase the costs of development.

• Removal of the mortgage/lender requirement to purchase flood insurance if a property is within a designated Special Flood Hazard Area shown on the preliminary revised FIRM’s, or providing the ability to purchase flood insurance at a reduced cost.

• Protection of public improvements required to provide access and service to properties.
• Enhanced ability to develop property to its “highest and best use” in accordance with existing zoning and land use regulations.

C. CALCULATION OF ANNUAL MAINTENANCE AND OPERATION ASSESSMENT

The benefit formula used for calculating the annual operation and maintenance benefit to each property within the District is based on the Benefit Units (BU's) used to calculate the original benefits and assessments each parcel received from the construction of the District improvements and facilities. However, when the development or land use of a property changes the special benefits the parcel receives from the operation and maintenance of the District improvements also changes. The Maintenance Benefit Units (MBU's) for each parcel is recalculated each year utilizing the same methodology and formula established in the District's original Engineers Report and outlined in Part III of this report (Method of Apportionment) to accurately reflect each parcel's current special benefit from the improvements. Therefore, if the development status or land use of a particular parcel has changed since the previous year, the MBU's and the resulting operation and maintenance portion of the parcel's assessment will likely change.

The assessment rate per MBU is calculated by dividing the total annual Operation and Maintenance Budget by the total number of MBU's in the District each year. The number of MBU's will vary year to year based upon development and land use changes in the District.

In the year the District was formed (Fiscal Year 1996-97), the maximum annual assessment rate (“maximum rate”) for Operation and Maintenance was established at $3.59 per MBU, plus an annual inflation escalator equal to the National Consumer Price Index (CPI). This maximum rate of $3.59 was established using an estimated annual operation and maintenance cost of $450,000 for the first full year of maintenance, and the total number of Maintenance Benefit Units in Fiscal Year 1996-97 (125,474.396 MBU's).

The first assessments for Operation and Maintenance were collected in Fiscal Year 1996-97 pursuant to resolution of the Agency Board approved after a duly noticed public hearing, as provided in the Act. Annual assessments for Operation and Maintenance are anticipated to be levied and collected each fiscal year and shall be approved by resolution at an annual public hearing on the matter. The annual assessment approved each year may not exceed the CPI adjusted maximum assessment ($3.59 plus the annual inflation escalator) approved, without approval of the property owners subject to the assessment through a property owner protest ballot procedure pursuant to the California Constitution Article XIIID.

Based on the initial Annual Assessment Rate of $3.59 per MBU and the annual CPI inflation factor, the following table summarizes the application of the annual inflation escalator allowed to the assessment rate for the operation and maintenance assessments since Fiscal Year 1996-97. The “Maximum Assessment Rate” reflects the assessment rate per MBU that may be applied for the respective fiscal year without constituting an increased assessment or once again obtaining property owner approval in accordance with the provisions of the California Constitution Article XIIID. The “CPI” applied each year is the National Consumer Price Index (CPI) from January 1st of the previous year to January 1st of the current year (or similar period). (Example—the CPI applied for Fiscal Year 1997-98 is based on the CPI calculated from January 1, 1996 to January 1, 1997 to the first decimal place 0.0).
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Base Year Rate</th>
<th>Calendar Year CPI</th>
<th>CPI Adjustment</th>
<th>Maximum Assessment Rate</th>
<th>Assessment Rate Applied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>$3.5900</td>
<td>$3.59</td>
</tr>
<tr>
<td>1997-98</td>
<td>$3.5900</td>
<td>3.30%</td>
<td>$0.1185</td>
<td>$3.7085</td>
<td>$3.59</td>
</tr>
<tr>
<td>1998-99</td>
<td>$3.7085</td>
<td>1.70%</td>
<td>$0.0630</td>
<td>$3.7715</td>
<td>$3.60</td>
</tr>
<tr>
<td>1999-00</td>
<td>$3.7715</td>
<td>2.95%</td>
<td>$0.1113</td>
<td>$3.8828</td>
<td>$3.56</td>
</tr>
<tr>
<td>2000-01</td>
<td>$3.8826</td>
<td>2.70%</td>
<td>$0.1048</td>
<td>$3.9874</td>
<td>$3.54</td>
</tr>
<tr>
<td>2001-02</td>
<td>$3.9874</td>
<td>3.90%</td>
<td>$0.1555</td>
<td>$4.1429</td>
<td>$3.53</td>
</tr>
<tr>
<td>2002-03</td>
<td>$4.1429</td>
<td>3.50%</td>
<td>$0.1450</td>
<td>$4.2879</td>
<td>$3.51</td>
</tr>
<tr>
<td>2003-04</td>
<td>$4.2879</td>
<td>1.10%</td>
<td>$0.0472</td>
<td>$4.3351</td>
<td>$3.49</td>
</tr>
<tr>
<td>2004-05</td>
<td>$4.3351</td>
<td>1.90%</td>
<td>$0.0824</td>
<td>$4.4174</td>
<td>$3.95</td>
</tr>
<tr>
<td>2005-06</td>
<td>$4.4174</td>
<td>3.00%</td>
<td>$0.1325</td>
<td>$4.5500</td>
<td>$3.95</td>
</tr>
<tr>
<td>2006-07</td>
<td>$4.5500</td>
<td>4.00%</td>
<td>$0.1820</td>
<td>$4.7320</td>
<td>$4.25</td>
</tr>
<tr>
<td>2007-08</td>
<td>$4.7320</td>
<td>2.10%</td>
<td>$0.0994</td>
<td>$4.8314</td>
<td>$4.36</td>
</tr>
<tr>
<td>2008-09</td>
<td>$4.8314</td>
<td>4.30%</td>
<td>$0.2078</td>
<td>$5.0392</td>
<td>$5.03</td>
</tr>
<tr>
<td>2009-10</td>
<td>$5.0392</td>
<td>0.00%</td>
<td>$0.0000</td>
<td>$5.0392</td>
<td>$5.03</td>
</tr>
<tr>
<td>2010-11</td>
<td>$5.0392</td>
<td>2.60%</td>
<td>$0.1310</td>
<td>$5.1702</td>
<td>$5.17</td>
</tr>
<tr>
<td>2011-12</td>
<td>$5.1702</td>
<td>1.60%</td>
<td>$0.0827</td>
<td>$5.2529</td>
<td>$5.25</td>
</tr>
<tr>
<td>2012-13</td>
<td>$5.2529</td>
<td>2.90%</td>
<td>$0.1523</td>
<td>$5.4052</td>
<td>$5.40</td>
</tr>
<tr>
<td>2013-14</td>
<td>$5.4052</td>
<td>1.60%</td>
<td>$0.0865</td>
<td>$5.4917</td>
<td>$5.49</td>
</tr>
<tr>
<td>2014-15</td>
<td>$5.4917</td>
<td>1.60%</td>
<td>$0.0879</td>
<td>$5.5796</td>
<td>$5.57</td>
</tr>
<tr>
<td>2015-16</td>
<td>$5.5796</td>
<td>0.00%</td>
<td>$0.0000</td>
<td>$5.5796</td>
<td>$5.57</td>
</tr>
<tr>
<td>2016-17</td>
<td>$5.5796</td>
<td>1.40%</td>
<td>$0.0781</td>
<td>$5.6577</td>
<td>$5.65</td>
</tr>
<tr>
<td>2017-18</td>
<td>$5.6577</td>
<td>2.50%</td>
<td>$0.1414</td>
<td>$5.7991</td>
<td>$5.79</td>
</tr>
<tr>
<td>2018-19</td>
<td>$5.7991</td>
<td>2.10%</td>
<td>$0.1218</td>
<td>$5.9209</td>
<td>$5.92</td>
</tr>
<tr>
<td>2019-20</td>
<td>$5.9209</td>
<td>1.60%</td>
<td>$0.0947</td>
<td>$6.0156</td>
<td>$6.01</td>
</tr>
<tr>
<td>2020-21</td>
<td>$6.0156</td>
<td>2.50%</td>
<td>$0.1504</td>
<td>$6.1660</td>
<td>$6.16</td>
</tr>
</tbody>
</table>

The Fiscal Year 2020/2021 Maximum Assessment Rate allowed is $6.1660.

The Fiscal Year 2020/2021 Assessment Rate proposed is $6.16.

The "Base Rate" equals the prior year's "Maximum Assessment Rate" allowed.

The "Maximum Assessment Rate" is calculated to four decimal places, however, the actual assessment applied to each parcel is rounded down to the nearest even penny when applied to the tax rolls.
## PROPOSED BUDGET FOR FISCAL YEAR 2020/2021

### San Joaquin County Operation and Maintenance Budget:

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Budget Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rents &amp; Leases – Equipment</strong></td>
<td>$100,000</td>
</tr>
<tr>
<td>Use of San Joaquin County Flood Control and Water Conservation District equipment to perform operation and maintenance activities and provide emergency services, if needed</td>
<td>$100,000</td>
</tr>
<tr>
<td>Equipment Rental County Owned</td>
<td></td>
</tr>
<tr>
<td><strong>Professional Services – County</strong></td>
<td>$0</td>
</tr>
<tr>
<td>Services provided for bridge parapet wall accident repair</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>$110,000</td>
</tr>
<tr>
<td>Includes expenses for vegetation management materials, rodent control materials, and materials and supplies unique to operation and maintenance activities</td>
<td>$110,000</td>
</tr>
<tr>
<td><strong>Labor Costs</strong></td>
<td>$775,000</td>
</tr>
<tr>
<td>Services provided by San Joaquin County Flood Control and Water Conservation District for operation and maintenance activities and to provide emergency activities, if needed</td>
<td>$775,000</td>
</tr>
<tr>
<td><strong>Miscellaneous Expense</strong></td>
<td>$0</td>
</tr>
<tr>
<td><strong>Fixed Asset</strong></td>
<td>$0</td>
</tr>
<tr>
<td>Funds needed to acquire additional equipment for the Agency</td>
<td>$0</td>
</tr>
</tbody>
</table>

**SUB-TOTAL SAN JOAQUIN COUNTY OPERATION AND MAINTENANCE BUDGET**

$985,000

### Aquatic Weed Control Program – Five Mile Slough

This program is conducted in an approximate 5,100 ft lineal section of Five Mile Slough and is managed by SJAFCA; work during FY 20-21 will be carried out by a professional contractor.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Budget Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor – herbicide application; compliance and monitoring and reporting</td>
<td>$40,000</td>
</tr>
</tbody>
</table>

**SUB-TOTAL SJAFCA OPERATION AND MAINTENANCE BUDGET**

$40,000
**Item Descriptions**

**SJAFCA Administration Budget:**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contribution</td>
<td>$0</td>
</tr>
<tr>
<td>To Capital Outlay Reserve (future floodwall replacement)</td>
<td></td>
</tr>
<tr>
<td><strong>Property Tax Administration Charges</strong></td>
<td>$10,000</td>
</tr>
<tr>
<td>Charges by the County Tax Collector for the collection of property assessments.</td>
<td></td>
</tr>
<tr>
<td><strong>Administration Costs</strong></td>
<td>$15,000</td>
</tr>
<tr>
<td>Annual administration and Engineer's Report</td>
<td></td>
</tr>
</tbody>
</table>

**SUB-TOTAL SJAFCA ADMINISTRATION BUDGET** $25,000

**TOTAL OPERATION AND MAINTENANCE BUDGET FY 2020/2021** $1,050,000

For FY 2020/2021, there are $1,050,000 of appropriations available to the district as follows:

- **FY 2020-2021 Assessment to be levied** \(^1\) $944,985
- **FY 2020-2021 Agency Surplus Appropriation for FY 2020/21 Budget** \(^2\) $105,015
- **FY 2020-2021 Agency Surplus Appropriation for Emergencies or Additional Work** \(^3\) $100,000

**TOTAL FY 2020/2021 APPROPRIATION** $1,150,000

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\(^1\) Assessment to be levied may be slightly different from the total amount on preliminary roll due to the rounding of assessment to even pennies as required by San Joaquin County.

\(^2\) The surplus appropriation of $105,015 is needed to cover the difference between the amount collected by the O&M assessments and the additional amount requested by the District in the proposed FY 2020/2021 budget.

\(^3\) The surplus appropriation of $100,000 will allow the Executive Director, without additional Board Authorization, to promptly deal with emergencies, or to authorize additional work not included in the budget.

The appropriations in the budget are funded from the unexpended balance in the O&M reserve, carried forward from previous year's O&M assessments. No increase in the current annual assessment charge is either required or made. The result of this request to the Engineer's Report will not affect the proposed FY 2020/2021 assessment rate of $6.16 per Maintenance Benefit Unit.

**E. CALCULATION OF ASSESSMENT RATE FOR FISCAL YEAR 2020/2021**

The assessment rate per MBU is calculated by dividing the total amount to be funded “O&M Budget” by the total “MBU’s” estimated for the District.

\[ \text{O&M Budget-Surplus Appropriations/Maintenance Benefit Units (MBU's) = Assessment Rate} \]

- The Total Maintenance Benefit Units (MBU's) that are estimated for the District in Fiscal Year 2020/2021 are 153,406.66 MBU's.
Based on the estimated budget and the surplus appropriation for Fiscal Year 2020/2021, the assessment rate for Fiscal Year 2020/2021 is approximately $6.16 per Maintenance Benefit Unit.

III. METHOD AND FORMULA OF ASSESSMENT SPREAD

A. CALCULATION OF BENEFIT UNITS

To apportion the costs of the improvements to parcels that benefit, a method of assigning Benefit Units to each parcel was developed and approved when the District was formed. Benefit Units (BUs) were assigned to each parcel based upon the benefits to real property that the District improvements (levee system and other flood control improvements) provided to each parcel in proportion to the estimated benefit the parcel receives relative to the other parcels in the District from the flood protection facilities.

The specific number of Benefit Units assigned to each parcel was calculated based upon the formula shown below:

\[ \text{Improvement BUs} + \text{Land BUs} = \text{Total BUs} \]

The single-family residence (SFR) was used as a basis of comparison since it represented approximately 70 percent of the assessable parcels of land in the District. BUs assigned to other parcels and land uses were based upon the relative benefit they receive as compared to a single-family residence. The total number of BU’s for all assessable parcels in the District were then divided into the total cost to fund the District to determine the assessment rate per Benefit Unit.

The BUs assigned or calculated for each parcel for construction and installation of the improvements was based on the land use for the parcel as shown on the records of the San Joaquin County Assessor’s office at the time of formation. Recognizing that under the 1913 Act, the assessment on each parcel may not be increased once it has been levied without further public hearings and property owner approval, the District was formed and the assessments approved provided for annual adjustments to the assessments for operation maintenance of the improvements. The annual operation and maintenance assessment rate was established at $3.59 per Maintenance Benefit Unit (MBU) plus an annual escalator equal to the National Consumer Price Index (CPI). However, the assessment formula approved also established that the operation and maintenance assessment applied to each parcel would be recalculated annually based on the current development status or land use of each parcel. Therefore, if the development status or land use of a particular parcel changed from the previous year, the MBUs and the resulting assessment would change to more accurately reflect the parcel’s current proportional benefit from the District improvements.

The methodology used to calculate the original BUs for the construction and installation of the improvements as well as the Maintenance Benefit Units calculated for future operation and maintenance of the improvements are assigned to each parcel based on land use. The method of apportionment for each land use is described in the following sections, with sample calculations provided in Appendix A.
B. IMPROVEMENT BENEFIT

Since the primary benefit to parcels from the construction, operation and maintenance of the flood control improvements is to remove them from the proposed new Special Flood Hazard Areas (new areas of the 100-year flood plain as identified by FEMA), the risk of loss or damage to improvements installed or constructed on developed parcels of land is significantly reduced.

The construction, operation and maintenance of the flood control improvements within the District significantly reduce the risk of damage and loss of real property, particularly to developed parcels of land. The improvements also facilitate the removal of properties from the proposed new Special Flood Hazard Areas (new areas of the 100-year flood plain as identified by FEMA). As a result, the special benefits to be enjoyed by property owners include:

- elimination of the requirements to purchase flood insurance in order to obtain financing;
- ability to purchase flood insurance at a reduced cost in comparison to parcels which are located within a Special Flood Hazard Area as designated by FEMA; and
- reduction of a flood event occurring and the probability of loss or damage to the property and improvements on the property.

The degree to which each developed property will benefit in relationship to any other property is based upon the intensity of development on the parcel (i.e., the percentage of the total parcel area which has or is allowed to have improvements constructed thereon) and the relative risk of loss of those improvements in relation to other land uses. The following describes the benefit relationship rational established in the original Engineer’s Report.

Intenstiy of Development — Based upon an average parcel size of 1/6 acre for single-family development and a typical building footprint of about 1,600 sq. ft., the intensity of development on single-family residential parcels is approximately 20 percent. By comparison, a review of land use data within the Agency’s sphere of influence showed that on retail/service commercial parcels of one acre or less, the average intensity of development is approximately 40 percent of the parcel area. This means that for each acre of land used for single-family residential, on average approximately 20 percent of the area (or about 9600 square feet per acre) is covered by improvements; whereas, on each acre of land used for retail/service commercial, over 40 percent is covered by improvements (or about 19,500 square feet per acre). Since an acre of land developed for retail/service commercial use has a higher intensity of development than an acre of land used for single-family residential, it receives a greater benefit because there is more that would be damaged should a flood occur. Based upon a review of parcel area and intensity of development by land use for over 2,500 parcels, the following represents the average intensity of development per acre relative to single-family residential development within the District. The average intensity of development, by land use category (retail/service commercial, office/professional, personal care/recreational, manufacturing/industrial, institutional), was calculated by computing the average building coverage on the parcels analyzed after excluding those parcels that were significantly underdeveloped. Underdeveloped parcels were defined as those parcels within each land use category, which had the lowest 20th percentile current improvement density.
Unlike non-residential parcels, SFR parcels do not have a strong correlation between parcel size and the area which can be covered by improvements; therefore, they are assessed according to the size of the building footprint based on adjusting the improvement density factor for single-family residential as a function of the area of the structure footprint. A review of the available data showed that approximately 25 percent of the homes have a building footprint that would be 1,000 square feet or less, approximately 50 percent of the homes would fall in the 1-2,000 square foot range and the remainder would be over 2,000 square feet. Considering the number of houses in each category and the relative amount of replacement necessary should flooding occur, the improvement density factor reflects a 20% differentiation in replacement costs for the three categories of SFR, as shown in the table below.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Improvement Density Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family Residential</td>
<td></td>
</tr>
<tr>
<td>Less than 1,000 SF</td>
<td>0.8</td>
</tr>
<tr>
<td>1,000 to 2,000 SF</td>
<td>1.0</td>
</tr>
<tr>
<td>More than 2,000 SF</td>
<td>1.2</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>1.0</td>
</tr>
<tr>
<td>Retail/Service Commercial</td>
<td>2.0</td>
</tr>
<tr>
<td>Office/Professional</td>
<td>2.0</td>
</tr>
<tr>
<td>Personal Care/Recreational</td>
<td>2.0</td>
</tr>
<tr>
<td>Manufacturing/Industrial</td>
<td>2.0</td>
</tr>
<tr>
<td>Institutional</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Risk of Loss** — In determining the benefit that a parcel receives, it was also necessary to look at the relative replacement costs of the improvements constructed on the parcel relative to other land uses since the relative risk of loss in the event of a flood is directly proportional to the relative cost of the improvements at risk. For example, a review of published building construction cost data showed that the average cost range per square foot for single-family residential improvements was $45-60/square foot while the average cost range per square foot for industrial improvements was $25-45/square foot. Therefore, each developed single-family residential parcel receives a greater benefit than developed manufacturing/industrial parcels per unit of improvement since the loss or damage would be significantly higher should a flood occur. Also, since the cost of flood insurance is based on the value of improvements to be insured, it would cost the single-family property owner more to purchase flood insurance per 100 square feet of single-family residential improvements in comparison to 100 square feet of manufacturing/industrial improvements; therefore, the single-family residential property would receive a greater benefit.

Based upon an analysis of the average cost per square foot for structures allowed under existing land use regulations for each land use, the table below shows the relative benefit per unit (i.e., square foot) for improvements by land use relative to single-family residential development within the District:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family Residential</td>
<td>1.0</td>
</tr>
<tr>
<td>Multi-Family Residential</td>
<td>0.9</td>
</tr>
<tr>
<td>Retail/Service Commercial</td>
<td>0.9</td>
</tr>
<tr>
<td>Office/Professional</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Therefore, it was determined that developed properties benefit differently from the flood protection facilities depending on the type of land use on the property and the average intensity of development; the potential damage to the structure, its contents, and/or the financial loss in revenues in the event of a flood would be different for the different types of land use based upon the relative cost per unit of improvement within the different land use categories.

In order to allocate benefit fairly between the land uses, an Equivalent Dwelling Unit (EDU) methodology was established that equated different residential and non-residential land uses to each other, thereby allowing a uniform method of assessment.

Therefore, the improvement benefit formula is summarized as:

\[(\text{EDU}'s) \times (\text{Improvement Density Factor}) \times (\text{Risk Factor}) = \text{Improvement Benefit Units}\]

### C. EQUIVALENT DWELLING UNITS

Land use as shown on the San Joaquin County Assessor’s records is used to assign Equivalent Dwelling Units (EDU’s) to each improved parcel based on the following methodology.

- **Single-family Residential** — Since the single-family residential (SFR) parcel is the most common land use and represents over 70 percent of the assessable parcels within the District, it is used as the standard and is assigned one (1) EDU. Other improved land uses are converted to EDU’s by comparing them to the SFR. Included in the SFR category are condominiums, mobile homes not in mobile home parks and agricultural-residential parcels.

- **Multi-Family Residential** — Multi-family residential improved land uses are equated to the SFR land use based upon the number of dwelling units per parcel. Studies have consistently shown that the average apartment unit’s relative size and population density compared to the typical size and impacts of single-family units is approximately 80 percent as much as a single-family residence. By virtue of their reduced size, each multi-family residential unit receives a lesser benefit or enhancement per unit to property values and therefore benefits less per unit than a single-family residence. Also, a review of parcel data finds that flood protection benefits do not increase proportionately as the number of units increase on a Multi-Family Residential (MFR) parcel, due to the nature of the building layouts and the fact that the value per unit generally decreases as the number of unit’s increases.

EDU’s for Multi-Family Residential parcels are calculated based upon the actual number of dwelling units as shown below:

<table>
<thead>
<tr>
<th>Number of Dwelling Units</th>
<th>Equivalent Dwelling Unit Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four (4) Units or less</td>
<td>0.8 EDU/DU for the first 4 DU’s</td>
</tr>
</tbody>
</table>
### Number of Dwelling Units and Equivalent Dwelling Unit Formula

<table>
<thead>
<tr>
<th>Number of Dwelling Units</th>
<th>Equivalent Dwelling Unit Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than four (4) but less than or equal to twenty (20)</td>
<td>0.6 EDU/DU for each DU over 4 and up to 20</td>
</tr>
<tr>
<td>More than twenty (20)</td>
<td>0.4 EDU/DU for each DU over 20</td>
</tr>
</tbody>
</table>

**Non-Residential** — All Non-Residential improved land uses are equated to the SFR based upon parcel size. A review of the County land use records showed that the average SFR parcel size in the City of Stockton is 1/6 acre. Therefore, the factor of 6 EDU’s per acre is used as the basis of comparison, and each Non-Residential parcel will be assigned 6 EDU’s per acre or fraction thereof.

To more accurately reflect the benefit that some parcels receive from the flood control improvements, an additional adjustment in the EDU’s assigned to the parcel is required. The data used to develop the density factors for each land use indicated that, on the larger parcels of land, the average density of development was significantly lower than on parcels that were less than one (1) acre in size. Even if it is assumed that the owner of land will ultimately develop that land to receive the maximum economic return from the land based upon allowed intensities of development and other land use regulations, there are a number of factors that limit the density of development on larger parcels of land. These include requirements based upon the specific land use which may include the need to provide large areas for the storage of materials or goods, to provide internal circulation roadways, to provide open areas or extensive buffer zones, to provide increased areas for employee/customer parking and other similar requirements.

Therefore, based upon an analysis of data relating the development intensity and parcel size for different types of land uses the number of EDU’s assigned to non-residential parcels is adjusted on parcels which are larger than one (1) acre as shown below:

<table>
<thead>
<tr>
<th>Parcel Size</th>
<th>Equivalent Dwelling Unit Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) Acre or less</td>
<td>6.0 EDU/Acre</td>
</tr>
<tr>
<td>More than one (1) acre but less than or equal to four (4) acres</td>
<td>1.5 EDU/Acre for each acre over one (1) acre up to four (4) acres</td>
</tr>
<tr>
<td>More than four (4) acres</td>
<td>0.5 EDU/Acre for each acre over four (4) acres</td>
</tr>
</tbody>
</table>

Parcel area for non-residential condominiums will be calculated based on the individual parcel size and a proportional share of the common area attributed to the condominium complex.

- **Vacant** — Vacant properties have no improvements constructed on them; therefore, vacant properties are assigned zero (0) Improvement Benefit Units per parcel.

- **Vacant-like Developed Property** — This includes those parcels with land uses that closely resemble vacant property in that they have large land areas comprised of mostly park-like open space or vacant land and only a few buildings. These properties have very low land utilization and almost no potential for additional development; therefore, these land uses are assigned 1.0 BU per parcel for the ancillary structures on the property. These land uses
include radio and television transmission facilities or towers, mineral processing, parcels with only parking lots, airports, mobile home parks, cemeteries, golf courses and other miscellaneous recreational uses.

A list of Land Use Classifications used in this report, with the corresponding County Assessor’s use codes, is provided in Appendix B.

D. LAND BENEFIT

In addition to benefits that improvements on a property will receive, parcels within the District are assigned Land Benefit Units in proportion to the benefits that they receive by virtue of:

- Having the ability to economically use or fully develop a property consistent with zoning and land use regulations.

- Not having to adhere to the “Flood Plain Management” requirements for building and design of new construction, as well as renovations and additions, required for parcels in Special Flood Hazard Areas; and

- Not having to disclose during the sale of a property that it is located in a Special Flood Hazard Area of the 100-year flood plain.

Based on the benefits previously described, the benefit to the land is preserved whether it is improved or not, and the benefit to each parcel is directly related to the size of the land. In addition, if the land were to remain in the flood plain, the cost of elevating the building pad area by filling the land would be proportional to the size of the parcel and the intensity of development allowed upon it based upon current land use and development standards. Therefore, the benefit received by the parcel varies as land varies in size.

For the City of Stockton, the San Joaquin County Assessor’s Roll indicates that over 70 percent of the parcels of land are single-family residences (SFR’s) and that the average land value for an average SFR located on 1/6 acre is between 20 and 30 percent of the total value of property. Therefore, 0.25 BU is assigned to each single-family residential parcel of land. Since the development potential of a SFR parcel is restricted to one house, no matter how big the parcel, the Benefit Units assigned to the land will not vary as parcel size increases for single-family residential parcels of land.

Benefit Units for all other land uses are based upon the size of the parcel at the rate of 0.25 BU for each 1/6 acre (1.5 BU/acre) to estimate the benefit to the land, since the amount of development which could occur is directly related to the size of the parcel. Each parcel of land, both developed and undeveloped and having no development restrictions on it, will be assigned Benefit Units at the rate of 1.5 BU/Acre to reflect the benefit that the land receives. Since the level of development or the potential for development would be similar for developed parcels of a similar size, the BU's assigned to the land for parcels larger than one (1) acre in size will be reduced in the same manner as the EDU's are reduced for the improvements on developed non-residential parcels as shown below:

<table>
<thead>
<tr>
<th>Parcel Size</th>
<th>Land Benefit Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>One (1) Acre or less</td>
<td>1.5 per Acre</td>
</tr>
<tr>
<td>Parcel Size</td>
<td>Land Benefit Unit</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>More than one (1) acre but less than or equal to four (4) acres</td>
<td>0.375 per Acre</td>
</tr>
<tr>
<td>More than four (4) acres</td>
<td>0.125 per Acre</td>
</tr>
</tbody>
</table>

Parcel area for non-residential condominiums will be calculated based on the individual parcel size and a proportional share of the common area attributed to the condominium complex.

E. **EXEMPT**

Several land uses have been determined to be exempt because they would not benefit from the proposed flood control facilities, or they have a supporting use to a land use already being charged. Examples of exempt land uses are as follows:

- Common areas associated with residential condominiums, open spaces and green belts.
- Parcels with total property values of less than one dollar per the San Joaquin County Assessor’s Roll.
- Properties owned by public agencies, such as cities, the County, the State or the Federal government, are exempt except when such property is not devoted to a public use.
- Rights-of-way owned by utilities and railroads.
- Agricultural parcels under the Williamson Act or within a General Plan area designated, as “Agricultural” has no potential for immediate development. By contrast, the Williamson Act parcels remain agricultural to take advantage of special tax treatments. The Williamson Act agricultural parcels and the General Plan Agricultural parcels are not assigned any benefit. If these parcels develop in the future, then the appropriate benefit will be collected under the “Flood Control Facilities Fee” mechanism. (Agricultural parcels that are not within the General Plan designated areas and which do not have Williamson Act contracts are assessed as Vacant.)
- Parcels which are designated as Special Flood Hazard Areas on the Preliminary Revised FIRM’s, dated February 28, 1995, and which were previously designated as Special Flood Hazard Areas on the previous FIRM’s; these parcels are considered to have no benefit and will not be assessed.

F. **ASSESSMENT DISTRICT BOUNDARY FACTOR**

Parcels that are bisected by the flood line, as delineated on the preliminary Revised FIRM’s, would have the total BUs for the property reduced by the percentage of the parcel within the proposed flood plain since they would receive a reduced benefit. The BUs for the parcel are reduced based on the following:

- If a parcel has less than 1/3 its area in the flood plain, the BU’s for that parcel would be multiplied by 0.17.
• If a parcel has more than 1/3 but less than 2/3 its area in the flood plain, the BU’s for that parcel would be multiplied by 0.50.

• If a parcel has more than 2/3 its area in the flood plain, the BU’s for that parcel would be multiplied by 83.

IV. DESCRIPTION OF WORKS OF IMPROVEMENTS

Section 10102 of the Act provides for the legislative body of any agency authorized under the Act to finance certain capital facilities and services. The following is a list of improvements as allowed under the Act to be constructed, installed, maintained, repaired or improved under the provisions of the Act. The facilities diagram, on file in the Office of the Secretary, shows the general location of the improvements. Copies are also on file at the Office of the Clerk of the Board of Supervisors of the County of San Joaquin and at the Office of the City Clerk of the City of Stockton.

The improvements consist of, but are not limited to:

A. Flood protection improvements including the construction, strengthening and/or raising the height of levees, flood walls and wing levees; construction and/or improvements to detention basins and reservoirs; improvements to bridges, roadways and access ways; channel improvements; and related improvements along, but not limited to, the following waterways:

• Bear Creek - confluence with Disappointment Slough to Tully Road.

• Paddy Creek - confluence with Bear Creek to approximately Jack Tone Road.

• Bear Creek - approximately 700 downstream of Interstate 5 to confluence with Paddy Creek.

• Paddy Creek - confluence with Bear Creek to confluence with South Paddy Creek.

• South Paddy Creek - confluence with Paddy Creek to approximately Jack Tone Road.

• Mosher Creek & Mosher Creek Diversion - confluence with Bear Creek to approximately 6300 feet upstream of Highway 88.

• Mosher Slough - 2,000 feet upstream of Interstate 5 to approximately 150 feet upstream of Thornton Road.

• Calaveras River - confluence with the San Joaquin River to approximately Solari Ranch Road.

• Stockton Diverting Canal - confluence with the Calaveras River to Mormon Slough.

• Mormon Slough - confluence Stockton Diverting Canal to approximately 500 upstream of confluence with Potter Creek.

• Potter Creek A - confluence with Mormon Slough to approximately Jack Tone Road.

• Potter Creek B - confluence with Mormon Slough to 1,500 feet east of Fine Avenue.
• Mosher Slough Detention Basins No.1 & 2.

• Little Bear Creek - confluence with Mosher Slough to Davis Road.

• Pixley Slough - confluence with Bear Creek to Lower Sacramento Road.

• Five Mile Slough – confluence with Fourteen Mile Slough to the north/south land levee at the east boundary line of Shima Tract.

B. The acquisition of all interest in real property necessary or useful for the above described improvements or other improvements constructed by the District; and,

C. The acquisition and/or construction of any other work, auxiliary to any of the above and necessary or useful to complete the same and to reduce the risk of flooding within the District.
## Appendix A — SAMPLE BENEFIT UNIT CALCULATIONS

<table>
<thead>
<tr>
<th>Land – Use</th>
<th>Land Benefit</th>
<th>Improvement Benefit (EDU) x (Imp. Density Factor) x (Risk Factor)</th>
<th>Total MBU’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family Res. ftprint &lt; 1000sf</td>
<td>All parcels = .25 BU</td>
<td>(1DU x 1EDU/DU) x .8 x 1 = 0.8 BU</td>
<td>1.05</td>
</tr>
<tr>
<td>Single-family Res. 1000 &gt; ftprint &gt; 2000</td>
<td>All parcels = .25 BU</td>
<td>(1DU x 1EDU/DU) x 1 x 1 = 1.0 BU</td>
<td>1.25</td>
</tr>
<tr>
<td>Single-family Res. ftprint &gt; 2000 sf</td>
<td>All parcels = .25 BU</td>
<td>(1DU x 1EDU/DU) x 1.2 x 1 = 1.2 BU</td>
<td>1.45</td>
</tr>
<tr>
<td>Agricultural Res.</td>
<td>All parcels = .25 BU</td>
<td>(1DU x 1EDU/DU) x 1 x 1 = 1.0 BU</td>
<td>1.25</td>
</tr>
<tr>
<td>3-Unit Apartment 1/2 acre parcel</td>
<td>.5ac x 1.5BU/ac = .75 BU</td>
<td>(4DU .8EDU/DU) x 1 x .9 = 2.16 BU</td>
<td>2.91</td>
</tr>
<tr>
<td>11 Unit Apt. 3/4 acre parcel</td>
<td>.75ac x 1.5BU/ac = 1.125BU</td>
<td>[(4DU x .8EDU/DU) + (7DU x .6EDU/DU)] x 1 x .9 = 6.66 BU</td>
<td>7.785</td>
</tr>
<tr>
<td>41 Unit Apt. 3 acre parcel</td>
<td>3ac x 1.5BU/ac = 4.5 BU</td>
<td>[(4DU x .8EDU/DU) + (16DU x .6EDU/DU) + (21DU x .4EDU/DU)] x 1 x .9 = 19.8 BU</td>
<td>23.58</td>
</tr>
<tr>
<td>Grocery Store 1 acre parcel</td>
<td>1ac x 1.5BU/ac = 1.5 BU</td>
<td>(1ac x 6EDU/ac) x 2 x .9 = 10.8 BU</td>
<td>12.3</td>
</tr>
<tr>
<td>Regional Shopping 5 acre parcel</td>
<td>1ac x 1.5BU/ac + 3ac x .375BU/ac + 1ac x .125BU/ac = 2.75BU</td>
<td>[(1ac x 6EDU/ac) + (3ac x 1.5EDU/ac) + (1ac x 0.5EDU/ac)] x 2 x .9 = 19.8 BU</td>
<td>22.55</td>
</tr>
<tr>
<td>Service Station 1/4 acre parcel</td>
<td>.25ac x 1.5BU/ac = .375BU</td>
<td>(1/4ac x 6EDU/ac) x 2 x .9 = 2.7 BU</td>
<td>3.075</td>
</tr>
<tr>
<td>Office Building 2 acre parcel</td>
<td>1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU</td>
<td>[(1ac x 6EDU/ac) + (1ac x 1.5EDU/ac)] x 2 x 1.1 = 16.5 BU</td>
<td>18.375</td>
</tr>
<tr>
<td>Church 2 acre parcel</td>
<td>1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU</td>
<td>[(1ac x 6EDU/ac) + (1ac x 1.5EDU/ac)] x 1.5 x 1.1 = 12.375 BU</td>
<td>14.25</td>
</tr>
<tr>
<td>Industrial Building 10 acre parcel</td>
<td>1ac x 1.5BU/ac + 3ac x .375BU/ac + 6ac x .125BU/ac = 3.375BU</td>
<td>[(1ac x 6EDU/ac) + (3ac x 1.5EDU/ac) + (6ac x 0.5EDU/ac)] x 2 x .7 = 18.9 BU</td>
<td>22.275</td>
</tr>
<tr>
<td>Vacant SFR</td>
<td>All parcels = .25 BU</td>
<td>No imp. benefit = 0 BU</td>
<td>0.25</td>
</tr>
<tr>
<td>Vacant 1 acre parcel</td>
<td>1ac x 1.5BU/ac = 1.5 BU</td>
<td>No imp. benefit = 0 BU</td>
<td>1.5</td>
</tr>
<tr>
<td>Mobile Home Park 2 acre parcel</td>
<td>1ac x 1.5BU/ac + 1ac x .375BU/ac = 1.875BU</td>
<td>All parcels = 1 BU</td>
<td>2.875</td>
</tr>
<tr>
<td>Golf Course 20 acre parcel</td>
<td>1ac x 1.5BU/ac + 3ac x .375BU/ac + 16ac x .125BU/ac = 6.625 BU</td>
<td>All parcels = 1 BU</td>
<td>5.625</td>
</tr>
<tr>
<td>Vacant 40 acre parcel</td>
<td>1ac x 1.5BU/ac + 3ac x .375BU/ac + 36ac x .125BU/ac = 7.125 BU</td>
<td>No imp. benefit = 0 BU</td>
<td>7.125</td>
</tr>
<tr>
<td>Agricultural (Williamson Act or General Plan)</td>
<td>Not assessed</td>
<td>Not assessed</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Note: For those properties that are bisected by the flood line, the Total BU’s are multiplied by the appropriate Boundary Factor.
### Appendix B — LAND USE CLASSIFICATIONS

<table>
<thead>
<tr>
<th>Assessor’s Use Codes</th>
<th>San Joaquin County Assessor’s Use Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-17, 51, 56, 94, 96, 401, 421, 451, 461, 463, 471, 481, 501, 511, 521</td>
<td><strong>Single-Family Residential</strong> SFR, condominium, Agricultural Residential, Mobile home not in mobile home park</td>
</tr>
<tr>
<td>21, 22, 31-32, 34-35, 41-48, 52</td>
<td><strong>Multi-Family Residential</strong> Duplex, triplex, four-plex Apartments</td>
</tr>
<tr>
<td>170-173, 190-197, 240</td>
<td><strong>Office/Professional</strong> Professional &amp; office buildings, Medical and dental offices, Banks, savings and loans</td>
</tr>
<tr>
<td>55, 59-65, 68, 70-71, 78, 180-184, 189, 204, 230, 231, 610-615, 620, 630-632, 640, 650, 651, 740-742, 750-752, 760</td>
<td><strong>Care/ Personal Recreational</strong> Hospitals &amp; nursing homes, Rooming houses, Homes for the aged, Day care facility, Hotels/motels, Theaters &amp; bowling alleys &amp; skating rinks, Clubs, lodge halls</td>
</tr>
<tr>
<td>710-711, 720-722, 730</td>
<td><strong>Institutional</strong> Institutional &amp; Churches, Private schools &amp; colleges</td>
</tr>
<tr>
<td>1-7, 20, 30, 40, 50, 53-54</td>
<td><strong>Vacant Residential</strong> Vacant Residential Lots</td>
</tr>
<tr>
<td>100-102, 107, 300-302, 307</td>
<td><strong>Vacant</strong> Vacant Lots</td>
</tr>
</tbody>
</table>
Appendix C – DIAGRAM OF ASSESSMENT DISTRICT

Full-sized copies of the Assessment Diagram are on file in the Office of the Secretary, of the San Joaquin Area Flood Control Agency. Copies are also on file at the Office of the Clerk of the Board of Supervisors of the County of San Joaquin and at the Office of the City Clerk of the City of Stockton.

As required by the Act, the Assessment Diagram shows the exterior boundaries of the Assessment District and the assessment number assigned to each parcel of land corresponding to its number as it appears in the Assessment Roll contained in Appendix D. (The assessment number for each parcel is the San Joaquin County Assessor’s Parcel Number.)

The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions shown on the maps of the Assessor of the County of San Joaquin for the year in when this Report is prepared. The Assessor’s maps and records are incorporated by reference herein and made part of this report.
Appendix D — 2020/2021 COLLECTION ROLL

Parcel identification, for each lot or parcel within the District, shall be the parcel as shown on the San Joaquin County Assessor’s map for the year in which this Report is prepared.

The Assessments have been levied in proportion to the estimated benefit that each parcel receives from the improvements in accordance with the method and formula of assessment as presented and approved upon formation of the District.

A listing of parcels of land, and the proposed assessment amount to each parcel for the Operation and Maintenance of the improvements is provided under a separate cover and by reference is made part of this report. For current ownership of each parcel of land, reference is made to the most recent equalized tax roll for the County of San Joaquin, which is by reference also made part of this report. The assessment amount for each parcel pursuant to approval of this report shall be submitted to the San Joaquin County Tax Collector for collection on the property tax bill for Fiscal Year 2020/2021.
Agenda Item 4.2
TO: San Joaquin Area Flood Control Agency
FROM: Chris Elias, Executive Director
SUBJECT: PUBLIC HEARING TO APPROVE THE TECHNICAL MEMORANDUM AND ORDER THE LEVY AND COLLECTION OF ASSESSMENTS WITHIN THE SMITH CANAL AREA ASSESSMENT DISTRICT FOR FISCAL YEAR 2020/21

RECOMMENDATION

Upon conclusion of the public hearing, it is recommended the Board of Directors of the San Joaquin Area Flood Control Agency adopt a resolution to approve the Technical Memorandum for the Smith Canal Area Assessment District and order the levy and collection of assessments within the Smith Canal Area Assessment District for fiscal year 2020/21.

DISCUSSION

Background

On July 10, 2013, after the conclusion of a voter approved Proposition 218 election, the Board adopted SJAFCFA Resolution No. 13-13 approving the Final Engineer's Report and authorizing the formation of the Smith Canal Area Assessment District (District). The District was created to provide the local cost share for constructing and maintaining improvements to remove the Smith Canal area from a Federal Emergency Management Agency Special Flood Hazard Area. Assessments are levied annually on all parcels within the District, commencing fiscal year (FY) 2014/15, through the submittal of an assessment roll to the San Joaquin County Tax Collector.

The District is based on a financing plan that splits costs between SJAFCFA and the State of California Department of Water Resources (DWR). When the assessment district was formed, it was assumed the cost share would be split 55% DWR and 45% District based on cost sharing guidelines in effect at that time. Under DWR’s updated cost sharing guidelines for urban flood control projects, SJAFCFA has an approved cost share of 63%. To date, SJAFCFA has secured funding for both the design and construction of the project from DWR totaling more than $38.283 million.

In compliance with Proposition 218, parcels within the District are assessed for the improvements and services that specially benefit each parcel. The special benefit provided to properties within the District is based on avoidance of flood damage to structures, contents of structures, and land. Project costs are distributed across the properties within the District in proportion to the flood protection benefits (flood damages avoided) provided by the improvements. These flood damage reduction benefits are relative to i) depth of flooding; ii)
type of land use (residential, commercial, industrial, etc.); iii) parcel acreage; and iv) building square footage. Reference is made to the Fiscal Year 2018/19 Engineer’s Report, Addendum 1 to the Fiscal Year 2018/19 Engineer’s Report and the attached Technical Memorandum for the benefit calculation and assessment methodology for the District for fiscal year 2020/21. These documents are available for public inspection in the office of the Secretary of the Board and can also be viewed online at www.sjafca.com.

The assessment is made up of two components – a Capital component and an Operations and Maintenance (O&M) component. The average annual assessment for a single-family residence is approximately $175.

As referenced in the Engineer’s Report, the Capital portion of the assessment is to be collected for 30 years from when bonds are issued, while the O&M portion of the assessment will be collected in perpetuity so long as the flood protection system and services are in place. SJAFCA will be closing on the bond issuance on May 20, 2020. The Capital portion of the assessment will be levied to pay debt service on the Bonds until FY 2049/50 with the final debt service payment being made in October 2050.

It should be noted that the O&M portion of the assessment includes the annual administrative expenses for the District. Administrative expenses include the annual calculation and preparation of the Technical Memorandum and assessment roll as well as the actual cost of collecting the assessments and responding to inquiries, including the review and processing of property owner appeals, if any. Prior to the completion of the project, collection of O&M proceeds for FY 20/21 will be used to project related expenses on a pay-as-you-go basis. Project related expenses include environmental review, design, and construction related expenses as well as the administrative costs described above.

The Board has the authority, pursuant to Government Code Section 53739 (b), to levy the assessment within a designated range on an annual basis. The designated range can be from no assessment, up to and including the authorized maximum assessment, adjusted annually based on changes in the Consumer Price Index (CPI). It should be noted however, that with the issuance of bonds, SJAFCA has made a covenant to levy the assessments in an amount consistent with that covenant. Only the O&M portion of the assessment is subject to an annual adjustment based on CPI. The Board could authorize, in any year, an increase to the authorized maximum assessment which could include cumulative CPI increases that were not implemented in prior years. The CPI escalator during FY 19/20 was 3.29%.

There are 51 parcels within the District that are not included on the County’s annual tax roll. These parcels are hand-billed for their assessment. Willdan Financial Services, the Agency’s Assessment District Administrator, provides invoicing and monitors the progress of payments for parcels not included on the County’s tax roll. Based on previous years’ records, approximately 98% of the total hand-billed assessments are received each year.

Present Situation

The FY 20/21 assessment collection will assess 8,099 parcels and will generate $1,699,893
PUBLIC HEARING TO APPROVE THE TECHNICAL MEMORANDUM AND ORDER THE LEVY AND COLLECTION OF ASSESSMENTS WITHIN THE SMITH CANAL AREA ASSESSMENT DISTRICT FOR FISCAL YEAR 2020/21

Present Situation

The FY 20/21 assessment collection will assess 8,099 parcels and will generate $1,699,893 for the District. This assessment collection includes the current year’s CPI escalator of 2.55% (based on February to February CPI for Urban Wage Earners for the San Francisco Bay Area). The table below provides an example of the range of annual assessment rates (combined Capital and O&M) over the parcels within the District and the number of parcels in each rate range:

<table>
<thead>
<tr>
<th>Assessment Range</th>
<th>$5 - $100</th>
<th>$100 - $200</th>
<th>$200 - $300</th>
<th>$300 - $400</th>
<th>&gt; $400</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Parcels</td>
<td>2,909</td>
<td>2,191</td>
<td>1,826</td>
<td>673</td>
<td>500</td>
</tr>
</tbody>
</table>

By adopting the proposed resolution at the conclusion of the public hearing, the Board will adopt a resolution to approve the Technical Memorandum for the Smith Canal Area Assessment District and order the levy and collection of assessments within the District for FY 20/21.

PREPARED BY: Marlo Duncan

APPROVED:
CHRIS ELIAS
EXECUTIVE DIRECTOR

CE:MD

Attachment – Technical Memorandum prepared by Willdan Financial Services
RESOLUTION NO. SJAFCA 20-18

SAN JOAQUIN AREA
FLOOD CONTROL AGENCY

==================================================================

RESOLUTION TO APPROVE THE TECHNICAL MEMORANDUM FOR THE SMITH CANAL
AREA ASSESSMENT DISTRICT, AND ORDER THE LEVY AND COLLECTION OF
ASSESSMENTS WITHIN THE SMITH CANAL AREA ASSESSMENT DISTRICT FOR
FISCAL YEAR 2020-2021

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SAN JOAQUIN AREA FLOOD
CONTROL AGENCY, AS FOLLOWS:

1. That the Technical Memorandum ("Memorandum") as presented, is hereby
approved, and is ordered to be filed in the Office of the Secretary of the Board as a permanent
record and to remain open to public inspection.

2. That the following notice duly given, the Board of Directors has held a full and fair
public hearing regarding the San Joaquin Area Flood Control Agency’s Assessment District
(District), the levy and collection of assessments, the Report prepared in connection therewith,
and considered all oral and written statements, protests and communications made or filed by
interested persons regarding these matters.

3. That based upon its review of the Memorandum, a copy of which has been
presented to the Board of Directors and which has been filed with the Secretary of the Board,
the Board of Directors hereby finds and determines that:

   i. The land within the District is specially benefited by the improvements and
      operation, maintenance and servicing of the improvements financed by the
      District;

   ii. The District includes all of the lands so specially benefited; and,

   iii. The net amount to be assessed upon the lands within the District for the fiscal
        year commencing July 1, 2020, and ending June 30, 2021, is apportioned by
        a formula and method which fairly distributes the net amount among all eligible
        parcels in proportion to the special benefits received by each parcel from the
        improvements and services.

4. That while the project is being designed and constructed, assessment revenue
collected will be used to;

   i. Directly fund design and construction expenses on a pay-as-you-go basis; and,

   ii. Fund the administrative costs of the District; and,
iii. Pay the cost of all debt service (interest and principal) secured by a pledge of the assessment revenues of the District.

5. That the County of San Joaquin Auditor-Controller shall enter on the County Assessment Roll, opposite each eligible parcel of land, the amount of levy so apportioned by the formula and method outlined in the Memorandum, and such levies shall be collected at the same time and in the same manner as the County taxes are collected, pursuant to Chapter 2, Section 10100.8 of the Act.

6. That the County of San Joaquin Auditor-Controller shall deposit all money representing assessments collected by the County for the District to the credit of a fund for the District and such money shall be expended only for the items described in Section 4.

7. That the adoption of this Resolution constitutes the District levy for the fiscal year commencing July 1, 2020 and ending June 30, 2021.

8. That the Secretary of the Board, or their designate, is hereby authorized and directed to file the levy with the County of San Joaquin Auditor-Controller upon adoption of this Resolution.

PASSED, APPROVED AND ADOPTED this _21_ day of _May__, 2020.

_________________________________
GARY SINGH, Chair
of the San Joaquin Area
Flood Control Agency

ATTEST:

______________________________
Chris Elias, Secretary
of the San Joaquin Area
Flood Control Agency.

APPROVED AS TO FORM:

______________________________
SCOTT L. SHAPIRO, Legal Counsel
for the San Joaquin Area
Flood Control Agency
Technical Memorandum

To: SJAFCA Board of Directors
From: Willdan Financial Services
Date: May 7, 2020
Re: FY 20/21 Smith Canal Area Assessment District Assessment

Assessment District History

The Smith Canal Area Assessment District (the “District”) was formed in 2013 to levy a special benefit assessment to fund a local cost share for the design and construction as well as for long term operations and maintenance (collectively the “Services”).

Since the formation of the District and the initial levy of assessments beginning in Fiscal Year 2014/2015 up to and including the Fiscal Year 2019/20 levy, all assessment revenue has been used to directly fund the design, environmental review, permitting and construction expenses on a pay-as-you go basis as well as the administration of District as authorized by the Smith Canal Area Assessment District Final Engineer’s Report dated July 10, 2013, SJAFCA Resolution No. 13-13 and subsequent Annual Engineer’s Reports. The design of the authorized facility is now complete and ready for the construction phase.

The first year of collecting assessments was Fiscal Year 2014/15. Assessment Revenue collected while the project is being designed and constructed is used to directly fund design and construction expenses on a pay-as-you-go basis, the administration of the district. Commencing Fiscal Year 2020/21, assessment revenue will be used to pay debt service payments for the bonds issued to finance the authorized facilities. After the completion of the facilities and the commencement of O&M, assessment revenues will be collected to first pay the administrative costs of the district and O&M up to the revised estimate of Administration and O&M costs prepared by the Agency and documented in Addendum No. 1 to the Fiscal Year 2018/19 Engineer’s Report. The revised estimate for Administration and O&M will be subject to and be the new basis for annual escalation. The remainder of assessment revenues can and will be used to fund the authorized facilities and services and pay debt service on bonds issued and secured by the assessment revenues.

Improvement and Services

Improvements to be funded by the assessment district will be those improvements that will maintain flood protection services provided by SJAFCA to the Smith Canal Area. A feasible set of improvements has been evaluated by SJAFCA for purposes of processing a CLOMR with FEMA, applying for grant funding from DWR and provisioning for local funding through this proposed assessment district. The feasible improvements include constructing a gate structure at the mouth of Smith Canal.

A gate structure at the mouth of Smith Canal would consist of a fixed sheet pile wall structure with an opening gate structure allowing for navigation into and out of the canal. The concept is for the Smith Canal gate structure to be closed during tide events forecasted to approach or exceed the design operating water surface elevation. The Smith Canal gate structure would be operated as needed during these times to prevent water in the Delta from entering into Smith Canal. The gate would be closed at the lowest tide prior to the forecasted high tide, and remain closed until the high tide begins to recede. The gate would then be opened to allow any interior drainage that accumulated in Smith Canal during the closure period, to flow out.

SJAFCA has had extensive discussions with FEMA on the use of a gate structure to provide flood protection for the Smith Canal area. SJAFCA prepared conceptual engineering design plans and geotechnical evaluation of the gate structure and submitted a request to FEMA for a CLOMR. FEMA completed their review of SJAFCA’s CLOMR request and concurred that the gate structure meets FEMA standards.
The services to be funded by the assessment district will include but are not limited to the routine and annual operation and maintenance of the gate structure to provide flood protection for the Smith Canal Area.

District Budget

Table 1 shows the current cost of the project and the share of project cost currently funded through agreements with the California Department of Water Resources.

Table 2 shows the planned future expenditures and SJAFCA's plan for financing the future stream of costs overtime.

Table 3 shows the budget for the District for FY 2020/21.
<table>
<thead>
<tr>
<th>Item</th>
<th>Total Costs</th>
<th>Local</th>
<th>State</th>
<th>Effective Cost Share for Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design Phase Costs (Updated per Actuals)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Program Management (Design Phase)</td>
<td>$1,902,639</td>
<td>$1,284,698</td>
<td>$617,941</td>
<td>64%</td>
</tr>
<tr>
<td>2. Engineering Design</td>
<td>$3,090,438</td>
<td>$2,097,255</td>
<td>$993,183</td>
<td>64%</td>
</tr>
<tr>
<td>3. Independent Review</td>
<td>$143,668</td>
<td>$49,385</td>
<td>$94,283</td>
<td>64%</td>
</tr>
<tr>
<td>4. Environmental Review &amp; Permitting</td>
<td>$1,270,975</td>
<td>$621,325</td>
<td>$649,650</td>
<td>64%</td>
</tr>
<tr>
<td>5. Real Estate Planning &amp; Acquisition</td>
<td>$125,806</td>
<td>$96,158</td>
<td>$29,648</td>
<td>64%</td>
</tr>
<tr>
<td>6. Public Outreach</td>
<td>$81,705</td>
<td>$53,910</td>
<td>$27,795</td>
<td>64%</td>
</tr>
<tr>
<td>7. Financing/Funding Costs (Application)</td>
<td>$57,128</td>
<td>$57,128</td>
<td>$0</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Total Design Phase</strong></td>
<td>$6,672,358</td>
<td>$4,259,858</td>
<td>$2,412,500</td>
<td></td>
</tr>
<tr>
<td><strong>Construction Phase Costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Credit for Design Phase Work</td>
<td>$0</td>
<td>-$1,633,697</td>
<td>$1,633,697</td>
<td>37%</td>
</tr>
<tr>
<td>2. Supplemental Engineering</td>
<td>$2,851,431</td>
<td>$1,055,029</td>
<td>$1,796,402</td>
<td>37%</td>
</tr>
<tr>
<td>3. Program Management</td>
<td>$2,068,766</td>
<td>$765,443</td>
<td>$1,303,323</td>
<td>37%</td>
</tr>
<tr>
<td>4. Construction</td>
<td>$50,159,208</td>
<td>$18,558,907</td>
<td>$31,600,301</td>
<td>37%</td>
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<tr>
<td>5. Construction Management</td>
<td>$7,288,088</td>
<td>$2,696,593</td>
<td>$4,591,495</td>
<td>37%</td>
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<td>6. Real Estate Acquisition</td>
<td>$360,000</td>
<td>$133,200</td>
<td>$226,800</td>
<td>37%</td>
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<tr>
<td>7. Real Estate Contingency</td>
<td>$240,000</td>
<td>$88,800</td>
<td>$151,200</td>
<td>37%</td>
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<tr>
<td>8. Public Outreach</td>
<td>$50,000</td>
<td>$18,500</td>
<td>$31,500</td>
<td>37%</td>
</tr>
<tr>
<td>9. Environmental Mitigation</td>
<td>$2,351,550</td>
<td>$870,074</td>
<td>$1,481,477</td>
<td>37%</td>
</tr>
<tr>
<td>A1. Recreational Enhancements</td>
<td>$487,500</td>
<td>$487,500</td>
<td>$0</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Total Construction Phase</strong></td>
<td>$65,856,543</td>
<td>$23,040,349</td>
<td>$42,816,194</td>
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<tr>
<td><strong>Total Project</strong></td>
<td>$72,528,901</td>
<td>$27,300,208</td>
<td>$45,228,694</td>
<td></td>
</tr>
<tr>
<td><strong>DWR Funding Limit (EIP &amp; UFRR)</strong></td>
<td></td>
<td></td>
<td>$38,283,428</td>
<td></td>
</tr>
<tr>
<td><strong>Additional Local Funding (reduced State Funding)</strong></td>
<td></td>
<td></td>
<td>$6,945,266</td>
<td></td>
</tr>
<tr>
<td><strong>Resulting Cost Share Split</strong></td>
<td>$72,528,901</td>
<td>$34,245,473</td>
<td>$38,283,428</td>
<td></td>
</tr>
</tbody>
</table>

Source: KSN, PBI, LWA & SJAFCA

[1] The Design Phase costs were funded at a 53/53 Cost Share under the EIP Program (DWR Contract No. 4600009799) up to the funding agreement limit of $2,412,530. The effective cost share is shown based on the agreement limit.


[3] Construction Phase costs are cost shared at the Recommended Cost Share for the UFRR Program up to the funding agreement limit. State Cost sharing is 53%, plus 5% for one State Facility, plus 1% for Recreation Objective, plus 7% for DAC (63% total).

[4] Includes credit for Design Phase costs at the increment between 53% and 63% of the funded costs, plus all unfunded costs due to the agreement limit. Updated based on revised request.

[5] Based upon the limit of the State funding agreements fully executed and currently effective.
### Table 2
SJAFCA Smith Canal Gate Project
Remaining Capital Financing Plan Cash Flow Analysis

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter</td>
<td>Jul-Sep</td>
<td>Oct-Dec</td>
<td>Jan-Mar</td>
<td>Apr-Jun</td>
<td>Oct-Dec</td>
<td>Jan-Mar</td>
<td>Apr-Jun</td>
<td>Jul-Sep</td>
<td>Oct-Dec</td>
<td>Jan-Mar</td>
<td>Apr-Jun</td>
</tr>
<tr>
<td>REVENUES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>State EIP Funding</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>State UFRR Funding</td>
<td>2,294,606</td>
<td>0</td>
<td>9,264,591</td>
<td>0</td>
<td>2,945,007</td>
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<td>1,435,167</td>
<td>0</td>
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<td>0</td>
<td>3,423,723</td>
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<td>Local Assessment Revenue</td>
<td>0</td>
<td>849,947</td>
<td>0</td>
<td>849,947</td>
<td>0</td>
<td>854,328</td>
<td>0</td>
<td>854,328</td>
<td>0</td>
<td>858,709</td>
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<tr>
<td>SJAFCA Internal Funding</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2,161,073</td>
<td>347,127</td>
<td>(2,508,200)</td>
<td>233,260</td>
<td></td>
</tr>
<tr>
<td>TOTAL REVENUES</td>
<td>2,294,606</td>
<td>849,947</td>
<td>9,264,591</td>
<td>849,947</td>
<td>2,945,007</td>
<td>854,328</td>
<td>1,435,167</td>
<td>854,328</td>
<td>0</td>
<td>3,019,782</td>
<td>347,127</td>
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<tr>
<td>EXPENDITURES</td>
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</tr>
<tr>
<td>Prior In-Eligible Expenses</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program Management (Design Phase)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Engineering Design</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Independent Review</td>
<td>143,668</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Environmental Review &amp; Permitting</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<td>Real Estate Planning</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Public Outreach (Design Phase)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Financing / Funding (Application)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</tr>
<tr>
<td>TOTAL EXPENDITURES</td>
<td>10,510,176</td>
<td>3,285,295</td>
<td>1,992,318</td>
<td>4,128,688</td>
<td>9,548,908</td>
<td>5,863,770</td>
<td>1,992,318</td>
<td>1,992,318</td>
<td>7,146,095</td>
<td>4,791,573</td>
<td>0</td>
</tr>
<tr>
<td>FINANCING</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Financing Activities</td>
<td>(1,220,418)</td>
<td>(408,328)</td>
<td>(808,328)</td>
<td>(400,328)</td>
<td>(820,328)</td>
<td>(1,917,938)</td>
<td>(1,917,938)</td>
<td>(143,706)</td>
<td>(1)</td>
<td>(143,706)</td>
<td>(1)</td>
</tr>
<tr>
<td>Net Change in Fund Balance</td>
<td>(1,220,418)</td>
<td>(408,328)</td>
<td>(808,328)</td>
<td>(400,328)</td>
<td>(820,328)</td>
<td>(1,917,938)</td>
<td>(1,917,938)</td>
<td>(143,706)</td>
<td>(1)</td>
<td>(143,706)</td>
<td>(1)</td>
</tr>
</tbody>
</table>

**ATTACHMENT**
Table 3  
SJAFCA Smith Canal Gate Project  
Smith Canal Area Assessment District Budget  
Fiscal Year 2020/2021

<table>
<thead>
<tr>
<th><strong>REVENUES</strong></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State UFFR Funding</td>
<td>$11,559,198</td>
<td></td>
</tr>
<tr>
<td>Local Assessment Revenue</td>
<td>$1,699,893</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL REVENUES</strong></td>
<td>$13,259,091</td>
<td></td>
</tr>
</tbody>
</table>

| **ADMINISTRATION** |         |         |
| Assessment Administration | $20,000 |         |

| **CAPITAL EXPENDITURES [1]** |         |         |
| Supplemental Engineering | $186,868 |         |
| Project Management (Construction Phase) | $289,412 |         |
| Construction | $16,722,445 |         |
| Construction Management | $2,706,889 |         |
| Real Estate Acquisition | $- |         |
| Real Estate Contingency | $- |         |
| Public Outreach | $10,862 |         |
| Environmental Mitigation | $- |         |
| Recreational Enhancements | $- |         |
| **TOTAL EXPENDITURES** | $19,936,477 |         |

| **FINANCING** |         |         |
| Debt Service | $(1,628,746) |         |
| Net Financing Activities | $(1,628,746) |         |

| Net Change in Fund Balance | $$(8,306,132) |         |

| Estimated Starting Fund Balance | $33,163,524 |         |
| Projected Ending Balance | $24,877,392 |         |

[1] All prior unexpended budgeted expenses for capital projects carries over to the following fiscal year.
Annual Assessment

Assessment Methodology

The special benefit conferred to the property in the proposed assessment district is the combined benefit of flood damage avoidance and/or reduction to (1) structures and their contents, and (2) land. The benefit calculation derived by the engineer considers these two factors independently. The benefit calculation can be summarized as follows:

\[
\text{Benefits} = \text{Damages Avoided} \\
\text{Damages Avoided} = \text{Structure and Content Damage} + \text{Land Damage}
\]

The damage avoided to structures and their contents is derived by determining the amount of flood depth reduction experienced by each particular parcel in the benefit area as a result of the Smith Canal Area improvements and associated O&M.

Determining the avoided damages to structures and their contents requires considering the following factors:

- Relative Structure and Content Value
- Flood Depth Reduction
- Percentage of Flood Damage Reduction
- Structure Size

Several factors contribute to the flood damage reduction benefit to land, both vacant and improved. These include avoidance of physical damage to the land during a flood, reduced cost of improvements, the ability to secure financing for building projects, reduced cost of flood insurance, changes in highest and best land use for the parcel, preservation of land values, and the ability to maintain access to property.

The factors that impact the land damage calculation include these:

- Relative Land Damage Factor
- Parcel Size

Reference is made to the Fiscal Year 2018/19 Engineer’s Report for the tables depicting structures and content damage factors and land damage factors.

Assessment Rate

The maximum proportional assessment rate for parcels within the District is shown below.

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Initial Annual Assessment District Budget</td>
<td>$1,699,893</td>
<td>($'s)</td>
</tr>
<tr>
<td>Total Benefit Amount in SJAFCA Smith Canal Benefit Area</td>
<td>$435,370,321</td>
<td>Benefit $'s</td>
</tr>
<tr>
<td>Initial Maximum Proportional Assessment Rate (1)</td>
<td>$0.00390</td>
<td>Assessment $/ Benefit $</td>
</tr>
</tbody>
</table>
Assessment Calculation

To determine the maximum proportional assessment rate for an individual parcel, the flood damage reduction benefits for the parcel are calculated as described in the procedures above and then multiplied by the assessment rate shown in Table 4 above. The following example is based on the single-family residential example used previously.

**General Formula**

Maximum Proportional Assessment = Total Flood Damage Reduction Benefit x Assessment Rate

**Example:**

Single Story Single-Family Residence

Parcel Acreage: 0.18 acres
Building Square Feet: 1,500
Flood Depth 5 Feet

Total Flood Damage Reduction Benefit = $73,530 + $1,350 = $74,880

Assessment Rate = $0.00390

Maximum Not-To-Exceed Assessment = $74,880 x $0.00390 = $292.03

In future years, as land use changes occur and the benefits to parcels change, parcels may be reclassified and their assessments modified accordingly.

**Summary of Assessments**

The average assessment for all parcels in the District by general land use category is shown in table 5 below.

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Number of Parcels</th>
<th>Average Rate</th>
<th>Minimum Rate</th>
<th>Maximum Rate</th>
<th>Share of Total Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family</td>
<td>7,290</td>
<td>$175.31</td>
<td>$5.00</td>
<td>$1,305.98</td>
<td>75.17%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>335</td>
<td>$206.95</td>
<td>$5.00</td>
<td>$7,808.40</td>
<td>4.08%</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>3</td>
<td>$89.19</td>
<td>$12.68</td>
<td>$145.04</td>
<td>0.02%</td>
</tr>
<tr>
<td>Commercial</td>
<td>80</td>
<td>$1,918.30</td>
<td>$5.00</td>
<td>$18,904.54</td>
<td>9.03%</td>
</tr>
<tr>
<td>Industrial</td>
<td>32</td>
<td>$2,889.21</td>
<td>$20.48</td>
<td>$17,261.56</td>
<td>5.44%</td>
</tr>
<tr>
<td>Government and Utilities</td>
<td>61</td>
<td>$1,647.14</td>
<td>$5.00</td>
<td>$29,239.56</td>
<td>5.91%</td>
</tr>
<tr>
<td>Vacant</td>
<td>298</td>
<td>$19.87</td>
<td>$5.00</td>
<td>$1,404.48</td>
<td>0.35%</td>
</tr>
<tr>
<td><strong>All Parcels</strong></td>
<td><strong>8,099</strong></td>
<td><strong>$209.89</strong></td>
<td><strong>5.00</strong></td>
<td><strong>$29,239.56</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

**Annual Escalation**

The maximum proportional assessment rate, as shown in Table 4 is made up of two distinct components. These components, as described above are the Capital Component and Administration/O&M Component. The Administration/O&M component is comprised primarily of labor costs that are subject to rising costs beyond the control of SJAFCA. In order to ensure that SJAFCA can provide the needed services over time, it is important to increase this component of the assessment overtime subject to the rising costs of labor over time. The engineer has determined that an appropriate escalation factor is a factor that is reflective of labor (not consumption) in the locale the services are provided. The February to February CPI-W for San Francisco-Oakland-San Jose-Hayward, All Items with base year 1982-84-100 has been chosen as the escalation factor.
Table 6
SJAFCA Smith Canal Area Assessment District
Assessment Rate Escalation

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Maximum Proportional Assessment Rate FY 2013/14</td>
<td>0.00373</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2014/15</td>
<td>0.00375</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2015/16</td>
<td>0.00376</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2016/17</td>
<td>0.00378</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2017/18</td>
<td>0.00381</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2018/19</td>
<td>0.00384</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2019/20</td>
<td>0.00388</td>
</tr>
<tr>
<td>Maximum Proportional Assessment Rate FY 2019/20</td>
<td>0.00390</td>
</tr>
</tbody>
</table>

**Minimum Assessment**

The minimum annual assessment will be $5.00 to reflect SJAFCA's direct cost to collect the assessment. All annual assessments calculated to be less than $5.00 will be raised to the $5.00 minimum.

**Duration of the Assessment**

The Capital Component of the assessment will be collected for 30 years from point in time when a permanent takeout financing is completed. The Administrative/O&M Component of the assessment will be collected in perpetuity so long as the flood protection service is provided by the authorized facilities, and may be adjusted each year to reflect the authorized annual escalation for inflation described herein. The assessment may be periodically adjusted within the authorized range of assessment based on annual budgeting needs as determined by the SJAFCA Board.

**Appeal Process**

Any property owner who believes his or her property should be reclassified and the assessment adjusted may file a written appeal with the Executive Director of SJAFCA or his or her designee. The appeal must include a statement of reasons why the property should be reclassified, and may include supporting evidence. Any such appeal is limited to correction of an assessment during the then-current fiscal year. On the filing of any such appeal, the Executive Director or his or her designee will promptly review the appeal and any information provided by the property owner, and may investigate and assemble additional evidence necessary to evaluate the appeal. If the Executive Director or his or her designee finds that the assessment should be modified, the appropriate changes will be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the respective county for collection, the Executive Director or his or her designee is authorized to refund the property owner the amount of any approved reduction to the assessment. If a landowner disputes the decision of the Executive Director or his or her designee, a secondary appeal may be made to the SJAFCA Board. Any decision made by the Board shall be final. In order to administer an effective appeals process, from time to time, the Executive Director and/or SJAFCA Board may adopt certain policies and procedures related to the administration of the assessment.

**District Boundary**

The Assessment District Boundary will encompass all property that receives benefit from the avoided floodplain of a 100-Year flood event, i.e. that area generally bound by the 9.4 feet NAVD-88 elevation. This Boundary is on file at SJAFCA's office.
Assessment Roll

The Assessments have been levied in proportion to the estimated benefit that each parcel receives from the improvements in accordance with the method and formula of assessment as presented and approved upon formation of the District.

A listing of parcels of land, and the proposed assessment amount to each parcel is provided under a separate cover and by reference is made part of this Memorandum. For current ownership of each parcel of land, reference is made to the most recent equalized tax roll for the County of San Joaquin. The assessment amount for each parcel pursuant to approval of this Memorandum shall be submitted to the San Joaquin County Tax Collector for collection on the property tax bill for Fiscal Year 2020/21.
End of Agenda Packet