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BOARD OF DIRECTORS

<u>City of Stockton</u> Kimberly Warmesley Dan Wright, Vice-Chair Alt. Susan Lenz	<u>Public Member</u> Mike Morowit	<u>San Joaquin County</u> Katherine M. Miller Chuck Winn, Chair Alt. Tom Patti
<u>City of Manteca</u> Jose Nuño Gary Singh	<u>Executive Director</u> Chris Elias	<u>City of Lathrop</u> Paul Akinjo Diane Lazard

BOARD MEETING – Teleconference

THURSDAY, October 14, 2021

9:00 A.M.

AGENDA IN LIGHT OF COVID-19

TO JOIN MEETING:		
By Phone:	By Computer:	By App:
(213) 338 8477 Meeting ID: 811 6032 9751 Passcode: 776791	https://downeybrand.zoom.us/j/81160329751?pwd=bmY3MjBZMm5BWWRyWGNpZVkzb05tUT09	Meeting ID: 811 6032 9751 Passcode: 776791

1. CALL TO ORDER / ROLL CALL

2. PLEDGE TO FLAG

3. DECLARATION OF STATE OF EMERGENCY

4. PROCLAMATION

- a. Proclamation recognizing Assemblymember Carlos Villapudua
- b. Remarks by Assemblymember Carlos Villapudua

5. CONSENT ITEMS

5.1) Approve Minutes from the September 30, 2021, Board Meeting

6. NEW BUSINESS

6.1) Information Briefing on the 2022 Central Valley Flood Protection Plan Update

6.2) Consultant Service Agreements with Environmental Science Associates and Peterson Brustad Inc for Mossdale Tract Area Urban Flood Risk Reduction Study CEQA Support

7. ORAL REPORT FROM EXECUTIVE DIRECTOR

A.) Update on Paradise Cut Expansion and South Delta Restoration Project

8. PUBLIC COMMENTS

9. BOARD QUESTIONS, COMMENTS, ACTIONS

10. CLOSED SESSION

10.1) San Joaquin Area Flood Control Agency v. Stockton Golf and Country Club
Case No. STK-CV-UED-2019-11392

11. ADJOURNMENT

IMPORTANT NOTICE

This meeting is being held in accordance with the Brown Act as currently in effect under the State Emergency Services Act, the Governor's Emergency Declaration related to COVID-19, and the Governor's Executive Order N-29-20 issued on March 17, 2020, that allows attendance by members of the Board of Directors, District staff, and the public to participate and conduct the meeting by teleconference, videoconference, or both.

Members of the public wishing to address the Board during a video conferenced meeting on an item not listed on the agenda, or any item listed on the agenda, should use the "Raise Hand" tool located in Zoom meeting link listed on the agenda. Speakers will be acknowledged by the Board Chair in the order requests are received and granted speaking access to address the Board.

The San Joaquin Area Flood Control Agency, in complying with the Americans with Disabilities Act (ADA), requests individuals who require special accommodations to access and/or participate in SJAFCA's Board meetings to please contact staff at (209) 937-8211, at least one day before the scheduled the SJAFCA Board meeting to ensure that the Agency may assist you.

6. NEW BUSINESS

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6.2) Consultant Service Agreements with Environmental Science Associates and Peterson Brustad Inc for Mossdale Tract Area Urban Flood Risk Reduction Study CEQA Support

7. ORAL REPORT FROM EXECUTIVE DIRECTOR

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Agenda Item 3

October 14, 2021

TO: Board of Directors of the San Joaquin Area Flood Control Agency

FROM: Scott Shapiro, General Counsel

RECOMMENDATION: APPROVE A RESOLUTION AUTHORIZING REMOTE TELECONFERENCE MEETINGS PURSUANT TO ASSEMBLY BILL 361 (AB 361) TO ALLOW THIS MEETING TO CONTINUE AND THEN DECIDE WHETHER TO SCHEDULE FUTURE BOARD MEETINGS AS IN PERSON OR VIRTUAL.

SUMMARY

During its meeting on September 30, 2021, the Board of Directors directed staff to bring back an item for discussion on whether to schedule in person or virtual meetings going forward. This staff report provides an analysis of the Board's options under AB 361 and a recommendation regarding its implementation in the conduct of its legislative duties, including holding public meetings.

BACKGROUND

On March 4, 2020, Governor Gavin Newsom declared a State of Emergency to make additional resources available, formalize emergency actions already underway across multiple state agencies and departments, and help the State prepare for a broader spread of the novel coronavirus disease 2019 ("COVID-19").

On February 17, 2021, the San Joaquin County Public Health Officer issued an order requiring all individuals and businesses within San Joaquin County to comply with all applicable State of California Covid-19 orders issued by the Governor of California or the California State Public Health Officer.

On March 17, 2020, in response to the COVID-19 pandemic, Governor Newsom issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow local legislative bodies to conduct meetings telephonically or by other means in order to slow the spread of COVID-19. As a result of Executive Order N-29-20, staff set up virtual meetings for all meetings of the Board of Directors of the San Joaquin Area Flood Control Agency.

On July 20, 2021, the San Joaquin County Public Health Officer also recommended individuals to wear face coverings in indoor settings like grocery stores, retail shops, and theaters. Additionally, the Centers for Disease Control and Prevention continues to recommend physical distancing of at least 6 feet from others outside of the household.

On June 11, 2021, Governor Newsom issued Executive Order N-08-21, which, effective September 30, 2021, ends the provisions of Executive Order N-29-20 that allows local legislative bodies to conduct meetings telephonically or by other means.

DISCUSSION

On September 16, 2021, Governor Newsom signed Assembly Bill (AB) 361 of 2021 which allows for local legislative bodies to continue to conduct meetings via teleconferencing under specified conditions and includes a requirement that the Board of Directors make specified findings. AB

361 took effect immediately. In addition to other circumstances, the Board of Directors will be allowed to continue to meet remotely during a declared state of emergency when state or local health officials have imposed or recommended measures to promote social distancing, or when the Board of Directors finds that meeting in person would present imminent risks to the health or safety of attendees.

In order to continue to hold remote meetings, the Board of Directors must declare every 30 days that either:

- (i) the state of emergency continues to directly impact the ability of the members to meet safely in person, or
- (ii) State or local officials continue to impose or recommend measures to promote social distancing.

The state of emergency, as declared by the Governor continues in existence. Health officials continue to recommend measures to slow the spread of COVID-19.

On July 20, 2021, the San Joaquin County Public Health Officer recommended individuals to wear face coverings in indoor settings like grocery stores, retail shops, and theaters. Additionally, the Centers for Disease Control and Prevention continues to recommend physical distancing of at least 6 feet from others outside of the household.

The Board must now make an election to continue virtual meetings or must instead decide to return to in person meetings. Staff notes the following pros and cons for virtual meetings:

- Pros: Reduced risk of COVID infection; reduced travel time; the public may participate without physical attendance.
- Cons: a reduced sense of connection between and among Board Members and staff; members of the public without computers or smart phones cannot participate.

The proposed resolution includes the necessary findings in order for the Board of Directors of the San Joaquin Area Flood Control Agency to make this meeting a virtual meeting and also creates the flexibility for the Board to continue to hold remote teleconference meetings pursuant to AB 361. The proposed resolution includes the necessary findings.

NEXT STEPS

Staff recommends the Board of Directors approve the resolution authorizing remote teleconference meetings pursuant to Assembly Bill 361 to allow this meeting to continue and then also decide whether to continue to hold virtual versus in person meetings.

FISCAL IMPACT

There is no cost associated with this item.

SUBMITTED BY:



Scott L. Shapiro, Legal Counsel

RESOLUTION NO. SJAFCA 21-15

**SAN JOAQUIN AREA
FLOOD CONTROL AGENCY**

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**RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN JOAQUIN AREA
FLOOD CONTROL AGENCY TO PROCLAIM A LOCAL EMERGENCY IN
RESPONSE TO THE CORONAVIRUS (COVID-19)**

WHEREAS, on March 4, 2020, Governor Newsom issued a Proclamation of a State of Emergency for the State of California due to COVID-19; and

WHEREAS, on March 12, 2020, Dr. Maggie Park, San Joaquin County's Interim Public Health Officer declared a local public health emergency regarding COVID-19, an action ratified on same day by the San Joaquin Board of Supervisors; and

WHEREAS, on March 13, 2020, the President of the United States issued a proclamation declaring the COVID-19 outbreak in the United States as a national emergency, beginning March 1, 2020; and

WHEREAS, as of March 17, 2020, the County of San Joaquin reported a total of 13 confirmed cases of COVID-19; and

WHEREAS, the Board of Directors does hereby find that the COVID-19 pandemic has caused, and will continue to cause, conditions of extreme peril to the safety of persons within the boundary of the San Joaquin Area Flood Control Agency, a local Joint Powers Agency, that are likely to be beyond the control of services, personnel, equipment, and facilities of the Agency, requiring the combined forces of other political subdivisions to combat; and

WHEREAS, the Board of Directors does hereby find that the aforesaid conditions of extreme peril arising from COVID-19 warrant and necessitate the proclamation of the existence of a local emergency; and

WHEREAS, the Board of Directors has considered all information related to this matter, as presented at the public meetings of the Board of Directors identified herein, including any supporting reports by the Agency Staff and consultants, and any information provided during public meetings.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the San Joaquin Area Flood Control Agency, as follows:

1. The Board of Directors hereby finds that the facts set forth in the recitals to this Resolution are true and correct and, establish the factual basis for the Board of Directors' adoption of this Resolution.

2. The Board of Directors hereby finds that conditions of extreme peril to the safety of persons and property do warrant and necessitate the proclamation of a local emergency throughout the boundary of the San Joaquin Area Flood Agency.

3. That the Board of Directors hereby continues the Proclamation of the existence of a Local Emergency.

4. That during the existence of said local emergency the powers, functions, and duties of the emergency organization of this Agency shall be those prescribed by state law, by ordinances, and resolutions of this Board of Directors.

5. The Board of Directors shall review the need for continuing this emergency proclamation within thirty (30) days.

6. This Resolution shall take effect immediately upon its adoption.

PASSED, APPROVED AND ADOPTED this 14TH day of October 2021.

CHUCK WINN, 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

Agenda Item 5.1

MINUTES
SAN JOAQUIN AREA FLOOD CONTROL AGENCY
BOARD MEETING OF SEPTEMBER 30, 2021

STOCKTON, CALIFORNIA

1. CALL TO ORDER / ROLL CALL 9:03 AM

Roll Call

Present:

Director Akinjo
Director Lazard
Director Miller
Director Morowit
Director Singh
Director Winn
Director Wright

Absent:

Director Nuño
Director Warmesley

Director Wright was not present during Roll Call. He arrived in the meeting at 9:13AM.

2. PLEDGE TO FLAG 9:04 AM

3. CONSENT ITEMS 9:04 AM

PUBLIC COMMENT

- Dominick Gulli submitted written comments.

3.1) Approve minutes from the July 22, 2021, Board Meeting and the last September 9, 2021 Special Board Meeting

Motion: To approve minutes from the July 22, 2021 Board Meeting and September 9, 2021 Special Board Meeting

Moved by: Director Singh, Seconded by Director Miller

Vote: Motion carried 7-0

Yes: Director Akinjo, Director Lazard, Director Morowit,
Director Singh, Director Winn, Director Wright

Absent: Director Nuño, Director Warmesley

4. STRATEGIC PLANNING 09:06 AM

4.1) Status update on the Combined Paradise Cut Expansion and South Delta Restoration Project

PUBLIC COMMENT

- Dominick Gulli submitted written comments and spoke aloud for all participating in the meeting to hear.

4.2) Flood Protection Policy Discussion for Greater Stockton Metropolitan Area.

- Dominick Gulli submitted written comments and spoke aloud for all participating in the meeting to hear.

5. **NEW BUSINESS 11:00 AM**

5.1) Contract Term Extension for Assessment District Feasibility Study and Formation Services within the Lower San Joaquin River Project Service Area with Willdan

Motion: To approve Contract Term Extension for Assessment District Feasibility Study and Formation within the Lower San Joaquin River Project Service Area with Willdan.
Moved by: Director Wright, Seconded by Director Singh
Vote: Motion carried 7-0
Yes: Director Akinjo, Director Lazard, Director Miller, Director Morowit, Director Singh, Director Winn, Director Wright
Absent: Director Nuño, Director Warmsley

PUBLIC COMMENT

- Dominick Gulli submitted written comments.

6. **ORAL REPORT FROM EXECUTIVE DIRECTOR 11:12 AM**

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

- a. Status Report and next Steps on the Enhanced Infrastructure Finance District (EFID)
- b. Update on the Smith Canal Gate Construction Project

PUBLIC COMMENT

- Dominick Gulli submitted written comments and spoke aloud for all participating in the meeting to hear.

Board discussed future virtual board meetings while encouraging maximum participation of the public and the Directors.

7. **PUBLIC COMMENTS 11:46 AM**

- Dominick Gulli submitted written comments and spoke aloud for all participating in the meeting to hear.

8. **BOARD QUESTIONS, COMMENTS, ACTIONS 11:24AM**

- None

9. **CLOSED SESSION 11:44 AM**

9.1) San Joaquin Area Flood Control Agency v. Stockton Golf and Country Club Case
no. STK-CV-UED-2019-11392

- Report Out from Closed Session: Counsel updated the Board, and no direction was given. Nothing further to report.

10. **ADJOURNMENT 12:16 PM**

The meeting adjourned at 12:16PM. The next meeting is scheduled for September 23, 2021, at 9:00 AM.

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.



CHRIS ELIAS
EXECUTIVE DIRECTOR
SAN JOAQUIN AREA FLOOD
CONTROL AGENCY

Agenda Item 6.1

October 14, 2021

TO: Board of Directors of San Joaquin Area Flood Control Agency

FROM: Chris Elias, Executive Director

SUBJECT: Informational Briefing on the 2022 Central Valley Flood Protection Plan Update

RECOMMENDATION

It is recommended that the Board of Directors of the San Joaquin Area Flood Control Agency (SJAFCA):

- (1) Receive information from the Department of Water Resources (DWR) and the Central Valley Flood Protection Board (CVFPB) on the 2022 Central Valley Flood Protection Plan (CVFPP) Update; and
- (2) Discuss and provide feedback to the State representatives on the alignment of SJAFCA policies with the 2022 CVFPP Update

SUMMARY

Representatives of DWR and the CVFPB will provide an overview of the 2022 CVFPP Update Working Draft and invite review and feedback by SJAFCA and closely involved partners and stakeholders for input. Specifically, this will include: an overview of CVFPP background; chapters of the working draft document with highlighted contents; and next steps for continued development of the 2022 CVFPP Update. State representatives will also invite discussion of local flood protection projects, priorities, interests, and concerns, so that these can inform the 2022 CVFPP Update. The Working Draft is a work in progress with many details remaining to be filled in. Feedback at this early Working Draft stage will help inform the Public Draft of the CVFPP, scheduled for release in the first quarter of 2022.

BACKGROUND

The 2022 CVFPP Update is being prepared as the next in a series pursuant to the Central Valley Flood Protection Act of 2008. As such, it is consistent with, and builds upon significant foundational work from previous iterations of the Plan. The 2022 CVFPP Update is focused around foundational themes of climate resilience, reporting on project implementation accomplishments and outcomes (e.g. performance tracking), and strengthening alignment with other State efforts. The Update is including content from multiple component efforts underway in parallel; including Regional Flood Management Planning, Conservation Strategy Update, climate change and technical analyses, and updates to the Investment Strategy (not in a stand-alone document).

The effort will result in updated investment needs and recommendations to continue implementation of the State Systemwide Investment Approach (SSIA) over the next 30 years. While the broad strategies and concepts of the SSIA have not changed, refinements to the plan are being made as changes occur in the flood system and complex variables such as climate change are better understood.

DISCUSSION

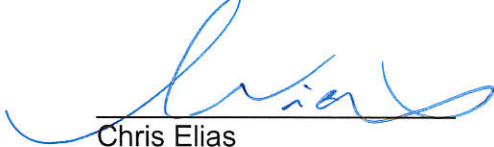
The Working Draft 2022 CVFPP Update will include the following four chapters:

- Chapter 1 - Updating the CVFPP
- Chapter 2 - CVFPP Implementation Progress
- Chapter 3 - Updated, Risks, Priorities, Portfolios, and Outcomes
- Chapter 4 - Moving Forward

The Working Draft of the 2022 CVFPP Update was released to actively involved State, federal, and local agency partners, Native American Tribal representatives, and others on October 1, 2021, for early input into plan development.

DWR will be accepting comments on the Working Draft through November 1, 2021. In addition to this review process, DWR is providing additional briefings on the Working Draft to RFMPs, elected officials, and others to seek input. Comments provided on the working draft and input received during these briefings will be addressed as well as possible in the Public Draft, which scheduled for release in first quarter 2022. Any outstanding comments or issues may continue to be addressed through public process led by CVFPB in 2022.

SUBMITTED BY:


Chris Elias
Executive Director

Attachment

Agenda Item 6.2

October 14, 2021

TO: San Joaquin Area Flood Control Agency

FROM: Chris Elias, Executive Director

SUBJECT: **CONSULTANT SERVICE AGREEMENTS WITH ENVIRONMENTAL SCIENCE ASSOCIATES AND PETERSON BRUSTAD INC FOR MOSSDALE TRACT AREA URBAN FLOOD RISK REDUCTION STUDY CEQA SUPPORT**

RECOMMENDATION

It is recommended the Board of Directors of the San Joaquin Area Flood Control Agency (SJAFCA or Agency) adopt two resolutions authorizing the Executive Director to respectively:

1. Negotiate and execute consultant service agreement with Environmental Science Associates (ESA) to prepare the Environmental Impact Report in accordance with the California Environmental Quality Act (CEQA) for the preferred alternative and two variants identified in the Mossdale Tract Area Urban Flood Risk Reduction Study (Mossdale UFRR Study). The consultant service agreement shall have a not-to-exceed budget of \$1,179,365; and
2. Negotiate and execute an amendment to existing consultant service agreement with Peterson Brustad Inc. (PBI) to provide engineering support to the San Joaquin Area Flood Control Agency (SJAFCA) during preparation of the Environmental Impact Report (EIR) for the preferred alternative and two variants identified in the Mossdale UFRR Study. The proposed amendment to the existing consultant service agreements shall have a not-to-exceed budget of \$818,637 for PBI.

DISCUSSION

Background

SJAFCA and the Department of Water Resources (DWR) have worked in partnership over the past four years on the Mossdale UFRR Study. Through extensive analysis and close coordination during the study, SJAFCA and DWR arrived at a range of alternatives, including a preferred alternative, presented in the final Mossdale UFRR Study report.

As of April 1, 2021, the UFRR funding agreement between SJAFCA and DWR has approximately \$3.8 million in remaining State funds following completion of the study report. These additional funds are provided at a 50% cost share match. A large portion of the local cost share match has already been provided as work-in-kind by the locals through work completed by the Cities of Lathrop and Manteca to advance the required engineering analyses identifying levee deficiencies.

Based on this progress, SJAFCA sent a letter to DWR dated May 24, 2021, requesting release of the remaining funds in the UFRR agreement. The letter cited the importance of continuing recent momentum by working toward the environmental analysis, design, and implementation of the critical projects that make up the preferred alternative. It recommended as a next step

AGENDA ITEM 6.2

advancing the analysis required to conduct the environmental analyses and further develop the multi-objective features identified in the UFRR study

DWR responded with a letter to SJAFCA dated July 8, 2021, approval to release the remaining funds for the preparation of project level CEQA documents, contingent on State and SJAFCA approvals of a revised scope, budget, and schedule for these activities. An amendment to the Funding Agreement will be processed to include the detailed scope, budget and schedule for the project level CEQA documents.

Present Situation

SJAFCA and DWR are currently coordinating on the detailed scope, budget, and schedule for use of the remaining funds to complete a CEQA analysis on the preferred alternative identified in the Mossdale UFRR Study, as well as to complete additional planning and design analyses needed to advance the project towards implementation.

Initial CEQA efforts for the Manteca Dryland Levee have already been advanced by SJAFCA ahead of the UFRR study completion and are currently in progress. The dryland levee efforts will be coordinated with the overall planning under the UFRR grant to ensure consistency. SJAFCA will also work to obtain reimbursement from the UFRR grant for the work already completed on the dryland levee analyses.

The schedule for this remaining effort is aggressive as the term of the grant agreement and the requirements on expenditure of Proposition 1E bonds funds requires all billing on the UFRR Study project to be completed by December 2022. To meet this December 2022 deadline, DWR provided interim approval on September 29, 2021, to advance up to \$1.5 million in "no regrets" activities while continuing to negotiate a detailed scope for the remaining effort under the UFRR grant with SJAFCA.

SJAFCA initiated discussions with ESA and PBI to develop the detailed scope, schedule and budget necessary to facilitate coordination with DWR. Now, with interim approval from DWR, SJAFCA proposes to immediately initiate a CEQA analysis on the preferred alternative identified in the Mossdale UFRR Study as well as to complete additional planning and design analyses needed to advance the project towards implementation.

PBI submitted a proposal dated October 5, 2021, to (1) develop the civil engineering data and analysis necessary to support the CEQA process for the Mossdale UFRR Study, and, (2) complete any additional planning and design analyses needed to advance the project towards implementation. The tasks identified in the PBI proposal has a not-to-exceed budget of \$818,637 and are expected to extend to the end of 2023.

The existing Agreement with PBI on the Mossdale UFRR Study was initiated on January 1, 2020, to provide engineering services for completion of the Phase 1, Element 4 feasibility study. This Agreement has a not-to-exceed limit of \$531,668 and was originally set to expire on July 31, 2020. Amendment 1 to this agreement was issued on August 1, 2020, which extended the term of the Agreement to December 31, 2021. The proposed Amendment 2 would authorize staff to augment the existing Agreement for PBI to develop the necessary civil engineering data and to provide engineering support to ESA and SJAFCA for the preparation of the EIR at a not-to exceed cost of \$818,637. This brings the total not-to-exceed contract amount to \$1,350,305. Amendment 2 would also extend the contract term to June 30, 2023, which aligns with the term of the DWR

grant.

ESA submitted a proposal dated October 6, 2021, to (1) facilitate the CEQA process for the Mossdale UFRR Study including developing the project description, conducting the effects analysis, and drafting the EIR. This scope of work assumes that the preferred alternative flood risk reduction components (tie back levee extension, RM-52 setback levee, and fix in place improvements [freeboard and cutoff wall/seepage berm]) will be evaluated at a project-specific level. It is also proposed that multi-benefit components (bike paths, habitat restoration areas, regrading and revegetation areas, and parks) will be reviewed at a program-level. Finally, up to two variants to preferred alternative will be evaluated at an equal level.

The tasks identified in the ESA proposal has a not-to-exceed budget of \$1,179,365 and are expected to extend to the end of 2023.

Next Steps

As a next step, staff recommends the Board of Directors authorize the Executive Director to:

1. Negotiate and execute consultant service agreement with Environmental Science Associates (ESA) to prepare the EIR in accordance with the CEQA for the preferred alternative and two variants identified in the Mossdale UFRR Study. The consultant service agreement shall have not-to-exceed budget of \$1,179,365; and
2. Negotiate and execute an amendment to existing consultant service agreement with PBI to provide engineering support to SJAFCA during preparation of the EIR for the preferred alternative and two variants identified in the Mossdale UFRR Study. The proposed amendment to the existing consultant service agreements shall have not-to-exceed budget of \$818,637 for PBI.

FISCAL IMPACT

The cumulative not-to-exceed budget of the ESA and PBI contracts is \$1,998,002. SJAFCA proposes to limit the notice-to-proceed under each Agreement to the activities and budget approved at that time by DWR to limit any financial risk to the Agency.

These proposals for CEQA compliance fall within the current fiscal year 2021/2022 budget for the Agreements to advance California Environmental Quality Act (CEQA) compliance for the preferred alternative and two variants identified in the Mossdale UFRR Study.

Strategic Plan Consistency Analysis

The material found in this report is consistent with the Mission and Goals of the Board-adopted Strategic Plan, specifically Goal 1 to Plan for and Implement System Resiliency.



CHRIS ELIAS
EXECUTIVE DIRECTOR

Attachments

1. Proposal from Environmental Science Associates dated October 6, 2021, with the subject, Proposal to Provide California Environmental Quality Act Support for the Mossdale Tract Area Urban Flood Risk Reduction Project
2. Proposal from Peterson Brustad Inc, dated October 5, 2021, with the subject, Proposal to Provide Engineering Support for the Mossdale Project EIR
3. Attachment C – Resolution 21-16
4. Attachment D – Resolution 21-17



2600 Capitol Avenue
Suite 200
Sacramento, CA 95816
916.564.4500 **phone**
916.564.4501 **fax**

esassoc.com

October 6, 2021

Mr. Chris Elias
Executive Director
San Joaquin Area Flood Control Agency
22 E. Weber Avenue, Room 301
Stockton, CA 95202-2317

Subject: Proposal to Provide California Environmental Quality Act Support for the Mossdale Tract Area Urban Flood Risk Reduction Project

Dear Chris:

Environmental Science Associates (ESA) is pleased to submit our proposal to provide California Environmental Quality Act (CEQA) support for the Mossdale Tract Area Urban Flood Risk Reduction (UFRR) project. Our services, as described in our scope of work, include preparation of an Environmental Impact Report (EIR) and conceptual restoration and recreation plans (multi-benefit components of the UFRR) in support of development of the project to be evaluated in the EIR. The engineering design of flood risk reduction components to be evaluated in the EIR will be developed by Peterson Brustad, Inc. (PBI) under a separate contract. In addition to our scope of work, our submittal also includes our budget and rate schedule.

ESA appreciates this opportunity to support the San Joaquin Area Flood Control Agency (SJAFCA) with this important project, and we look forward to working with the team. If you have any questions or need additional information, please feel free to e-mail Cathy at cmcefee@esassoc.com or call her at (916)802-1060.

Sincerely,

A handwritten signature in blue ink that reads 'Catherine C. McEfee' in a cursive script.

Catherine C. McEfee
Project Manager
Vice President

A handwritten signature in blue ink that reads 'Elizabeth S. Andrews' in a cursive script.

Elizabeth (Betty) Andrews, PE
Project Director
Vice President

Scope of Work for Mossdale Tract Area Urban Flood Risk Reduction Project Environmental Impact Report

The San Joaquin Area Flood Control Agency (SJAFCOA) prepared the Draft Mossdale Tract Area Urban Flood Risk Reduction Study Report, dated June 11, 2021 (UFRR Study). The Mossdale Tract area includes urban portions of Stockton, Lathrop, Manteca, and areas of unincorporated San Joaquin County that are protected by the Reclamation District 17 (RD 17) levee system. The area covered by the UFRR Study totals 22,400 acres and is characterized as urban and urbanizing, with a largely rural subarea not planned for any development. The Cities of Stockton, Lathrop, and Manteca, and San Joaquin County control all land use decisions within this area.

The UFRR Study identified Alternative 4a as the preferred alternative. Alternative 4a includes the following components: levee improvements (flood risk reduction components), multi-benefit components (including ecosystem improvements), limitations on development for wise use of the floodplain, and residual risk management actions. Residual risk management actions include: limitations on residential construction; relief cut plan for French Camp Slough left levee; requirement for all future critical facilities to be outside or elevated above the 500-year floodplain; development of a mitigation plan for existing critical facilities in the Mossdale Tract area; enhancement of a flood warning and evacuation plan; and, greater forecast/warning time, designation of dry evacuation routes, and shelter in place plans for multi-story residences.

ESA has prepared this scope of work to prepare an Environmental Impact Report (EIR), in accordance with the California Environmental Quality Act (CEQA) Guidelines, for the proposed UFRR project (proposed project). This scope of work assumes that the proposed project to be evaluated in the EIR includes the flood risk reduction (tie back levee extension, RM-52 setback levee, and fix in place improvements [freeboard and cutoff wall/seepage berm]), and multi-benefit components (bike paths, habitat restoration areas, regrading and revegetation areas, and parks) described for Alternative 4a. This scope of work also assumes that up to two variants, which include the same general types of flood risk reduction and multi-benefit components as those proposed under the proposed project, will be evaluated at an equal level.

The flood risk reduction components will be developed with enough detail to evaluate at a project-level in this EIR. For restoration or recreation sites identified in the UFRR (as part of the multi-benefit component) that have already been approved as part of other local planning processes, the environmental analysis will be incorporated into this EIR. For restoration and recreation elements that have not been previously approved or for which no or insufficient design detail exists, they will be developed at a conceptual level as described under subtask 2.1. The conceptual restoration and recreation elements will be evaluated at a program-level in this EIR. The program-level analysis will capture a range of potential construction and operation effects. As specific elements (projects) are identified for implementation and are designed in more detail, subsequent CEQA documentation can be focused and address only those potential effects not covered in this EIR. Further development of the multi-benefit components can be completed after the Conceptual Restoration and Recreation Plan is completed and submitted to SJAFCOA for consideration. The scope and budget for development of more detailed design of the multi-benefit components would be negotiated separately.

Assumptions used in preparing this scope of work are describe in each task/subtask. In addition, unless otherwise noted, all deliverables will be submitted electronically.

The following presents the tasks to be completed to prepare the EIR for the proposed project.

Task 1: Project Initiation

ESA's project management team and key technical staff will participate in a meeting to initiate preparation of the CEQA documentation for the proposed Mossdale Tract Area Urban Flood Risk Reduction project (proposed project). During the meeting, ESA, the engineering team, and SJAFCA staff will review the data needs spreadsheet and identify any additional data needed for preparing the project description to be used in preparing the project description (Task 2) that will be used in the Notice of Preparation (NOP) (Task 5) and preparing the Administrative Draft EIR (Subtask 6.1). This meeting will also be used to discuss dates/times for project progress meetings; communication protocols and administrative record format; confirmation of level of review (program vs project, and equal level) of project elements; and project schedule, including key project deliverable milestones.

Task 1 Deliverables:

- Agenda
- Revised data gaps memorandum for project description, if needed
- Action Items
- Refined project schedule
- Administrative record protocols

Task 2: Project Description

Following receipt of the project description information requested as part of Task 1, ESA will prepare a draft project description that will describe the project components for use in the NOP (Task 5) and the Administrative Draft EIR (Subtask 6.1). The project description will include a description of not only the proposed project but the two project variants to be analyzed in the Draft EIR at an equal level based on information provided by the engineering team. The project description will also describe construction and operation and maintenance (O&M) activities associated with the proposed flood risk reduction components. Details provided by the engineering team under Task 1 will be incorporated including footprints, staging areas, equipment use (e.g., hours/day or hours/phase), construction schedule/phasing, material quantities, number of haul-truck trips, workforce data, and other specific construction. It is assumed that SJAFCA will provide descriptions of anticipated routine O&M activities for incorporation into the project description. The description of the multi-benefit components will incorporate information developed and included in the Conceptual Restoration and Recreation Plan (see subtask 2.1).

A draft project description will be submitted to SJAFCA for review and based on one consolidated round of comments, ESA will revise the project description for use in the preparation of the NOP and Administrative Draft EIR. Subsequent changes to the project design after preparation of the project description could require revision to the project description and possibly the analysis, depending on timing. If such changes are proposed, ESA will review the scope and budget and will discuss with SJAFCA any scope or budget changes, if needed.

Subtask 2.1: Reconnaissance-level Restoration and Recreation Planning

This subtask describes the tasks for development of conceptual restoration and recreation elements to be included in the multi-benefit component of the proposed project.. Based on our current understanding of the UFRR, these restoration and recreation elements would include:

- 18 restoration sites (UFRR Alternative 4a plus five alternative sites)
- 8 parks, 2 bike trail systems

The overall schedule to complete the scope outlined below is assumed to be 7 months from Notice to Proceed.

Further development of the multi-benefit components can be completed after the Conceptual Restoration and Recreation Plan is completed (subtask 2.1.6) and submitted to SJAFCA for consideration. The scope and budget for development of more detailed design of the multi-benefit components would be negotiated separately.

Subtask 2.1.1: Review Existing Conditions and Background Documents

For purposes of supporting environmental compliance and reconnaissance-level restoration and recreation planning, ESA will review and synthesize readily-available existing conditions data for the project sites relative to the following aspects of site conditions: topographic/bathymetric data, ecologically relevant hydrologic and hydraulic data (stream gage records, site-specific stage-flow relationships, etc.), geologic data, land-ownership and easements (based on the California Protected Areas Database), wetlands and waterways, and data related to biological resources (terrestrial and aquatic).

Existing biological resources will be described based on review of the following sources and will be coordinated with information collected as part of Task 4: California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDDB), the U.S. Fish and Wildlife Service's (USFWS's) Information for Planning and Consultation (IPaC), and the California Native Plant Society's Electronic Inventory of Rare and Endangered Plants of California. In addition, the most recent available vegetation data including CDFW's Sacramento-San Joaquin Delta Natural Communities Map, and the California Department of Water Resources' (DWR's) Fine-Scale Riparian Vegetation Map. Current and historic aerial imagery (e.g., using Google Earth) and information from recent regional and local environmental documents will be used to supplement and update this information on biological resources.

ESA will compile data from the biological and cultural surveys with relevant other data, (LiDAR, aerial imagery, soils, wetlands and waterways, land uses, zoning, etc.) in GIS with to create preliminary existing conditions base maps for each of the 18 restoration and 8 recreation sites, and the trail corridor as the basis for development of the future figures.

The recreation design team will conduct a one-day site visit with up to three staff in the field to confirm existing conditions, site context and connectivity for the park and trail sites.

Additional relevant background documents that will be reviewed and synthesized to inform recreation planning include review of the City of Lathrop Bicycle Transportation Plan, General Plan and applicable Specific Area Plans and prior EIR's associated with the Mossdale Tract, and the recently completed Park System Master Plan.

Assumptions

- ESA will conduct one 2-hour meeting and other correspondence (e.g., email and data sharing) with SJAFCA and the engineering team to compile and review relevant documents, for each focus area (restoration and recreation).
- SJAFCA and the engineering team will deliver any relevant existing conditions data, information, and/or analyses relative to the planned restoration sites to ESA within four weeks of the Notice to Proceed
- ESA will coordinate with City of Lathrop Parks and Recreation Department via phone and email to gather any additional supporting documents.
- Documentation of technical work to characterize existing conditions will be prepared as part of subtask 2.1.6.
- Site characterization will be based on best available data and includes 1 day for field visits.

Subtask 2.1.2: Identify Restoration and Recreation Opportunities and Constraints

ESA will draw on data compiled in subtask 2.1.1, including results from available hydraulic modeling prepared by SJAFCA under the Program's UFRR Study, the Resource Surveys and Reports prepared under Task 4, and other sources, to inform the identification and articulation of opportunities, as well as constraints, for both the proposed restoration and recreation sites. At a reconnaissance-level, this evaluation will consider opportunities and constraints related to topography, land use and infrastructure (including relevant ownership), and potential impacts to existing biological resources such as riparian vegetation, jurisdictional wetlands and waters, and associated special-status species habitat, based on information compiled in subtask 2.1.1.

It will also evaluate opportunities for utilizing programmatic permits for restoration, namely the National Oceanic and Atmospheric Administration (NOAA) Restoration Center's Program to Facilitate Implementation of Restoration Projects in the Central Valley of California (NOAA Restoration Center's Central Valley BiOp) and will identify relevant design considerations based on the covered actions and conservation measures in the NOAA Restoration Center's Central Valley BiOp.

As part of this Subtask, ESA will evaluate the hydrologic and hydraulic conditions relevant to restoration project design and identify restoration target flow or flow ranges and associated stage(s) for each site. ESA will identify and recommend any refinements of the existing hydrologic and hydraulic models that may be required for future restoration design activities.

We will assess opportunities to improve habitat conditions at the 18 restoration sites, considering current land cover, land use and easements, potential connectivity of the sites to existing special-status terrestrial species habitat and occurrences, and topographic, hydrologic and hydraulic conditions. Based on these considerations the potential to increase ecological functions (i.e., functional lift) through habitat establishment, enhancement, and/or preservation at the 18 sites will be established. As part of this effort, we will also review topographic data and existing hydraulic conditions data and analyses to identify opportunities to create, expand, connect, or enhance floodplain rearing habitat for target aquatic species (e.g., Chinook salmon). Constraints to creating habitat such as infrastructure, vegetation, and designation as critical habitat will be explored as well. This context will directly inform Conceptual Restoration Planning (subtask 2.1.4). ESA will prepare opportunities and constraints figures for each of the 8 parks and the trail corridor to graphically convey the existing conditions, opportunities and constraints that will inform recreation planning at each site.

Assumptions

- ESA will conduct four 2-hour meetings and other correspondence (e.g., email and data sharing) with SJAFCA and the engineering team to review goals and objectives for the program and projects.
- Existing appropriate hydraulic models and data will be available for review on this task in a timely fashion.
- Stage-discharge relationships derived from existing hydraulic models will be used in conjunction with long term stream gage records and statistical software packages (HEC-SSP, R, etc.) to identify restoration target flows that meet ideal frequency, timing, and duration criteria for habitat suitability.

Documentation of project opportunities and constraints will be prepared as part of Task 6.

Subtask 2.1.3: Define Restoration and Recreation Goals

Using information developed in subtasks 2.1.1 and 2.1.2, ESA will work with SJAFCA and internal stakeholders to identify restoration and recreation goals at a program-wide level (e.g., mitigation requirements, recreation needs, trail connections, etc.) as well as at a site-specific level (e.g., target species, habitat types, recreation needs, etc.). Recreation goals will be developed from background document guidance and goals established in the Park System Master Plan evaluated against the development potential for each park as determined by the opportunities and constraints analysis. A table of potential recreation elements, development size, and construction materials and methods will be included.

Assumptions

- ESA will present the findings of subtasks 2.1.1 through 2.1.3 in a briefing meeting to SJAFCA and solicit comments prior to advancing to subtasks 2.1.4 and 2.1.5.
- Documentation of program and project restoration and recreation goals will be prepared as part of subtask 2.1.6.

Subtask 2.1.4: Conceptual Restoration Planning

ESA, in collaboration the SJAFCA, will develop a site-specific conceptual restoration plan for each of the respective restoration sites. ESA will develop one conceptual restoration option at each of the floodplain restoration sites, that will be qualitatively and quantitatively assessed for potential to deliver identified project objectives related to restoration of ecosystem function, increased benefit to focal fish and wildlife species, and multi-benefit flood risk reduction, where appropriate.

ESA will rely on the data compiled in subtasks 2.1.1 through 2.1.3 to perform this assessment in order to provide necessary levels of detail to support CEQA analysis (construction quantities, methods, operations and maintenance considerations, etc.). To support the planning process, ESA will develop graphics, tables, and GIS maps representing the conceptual plan at each site.

Assumptions

- ESA will develop one restoration concept per site (18 total).
- ESA will present the findings of subtask 2.1.4 in a briefing meeting to SJAFCA and solicit comments prior to advancing to preparing the project documentation in subtask 2.1.6.

Subtask 2.1.5: Conceptual Recreation Planning

ESA, in collaboration with SJAFCA, will develop a site-specific conceptual recreation plan for each of the respective recreation sites.

ESA will rely on the existing conditions data, opportunities and constraints analysis, and recreation goals compiled in subtasks 2.1.1 through 2.1.3 to perform conceptual design planning. The conceptual recreation planning will include a table with analysis of the buildable areas and identify potential recreation elements that could be included in each park, with the goal to provide a variety of recreation opportunities across the different parcels, with increased trail circulation and connectivity between them. ESA will develop one preliminary conceptual bubble diagram for each of the 8 park sites, identifying potential recreational amenities that could be included at the site in a schematic layout. Conceptual design elements for recreation sites include pedestrian paths, picnic shelters, gathering areas, playgrounds, and multi-use fields along with other active and other recreation facilities traditionally found in parks or identified in the Lathrop Park System Master Plan. To support the planning process, ESA will provide approximate material quantities.

Assumptions

- ESA will present the findings of subtask 2.1.5 in a briefing meeting to SJAFCA and solicit comments prior to advancing to preparing the project documentation in subtask 2.1.6.
- Recreation Parks Site identified for design are included in the City of Lathrop General Plan and include 7 Neighborhood Parks, 1 Community Park, and 2 Public Space parcels

Subtask 2.1.6: Prepare Conceptual Restoration and Recreation Plan Report

ESA will prepare a Conceptual Restoration and Recreation Plan for the program, summarizing the overall program and individual site-specific information needed for developing the CEQA project and program descriptions. The final document will describe and summarize all of the background, existing conditions, opportunities and constraints information that has been collected throughout the process, and present preliminary graphic restoration and recreation concepts with a description of the development potential for each site. The Plan documentation will include location of program features, conceptual-level estimates of construction quantities, identification of anticipated construction activities and methods, estimates of construction timing and phasing, anticipated construction equipment, worker information, and other information related to how the program features would be operated and maintained over the long term.

Assumptions

- All documents will be submitted in electronic format (MS Office, Adobe pdf, etc.).
- SJAFCA will review and provide comments on the Draft and Draft-Final documents within 2 weeks of delivery by ESA.

Schedule

- Draft will be submitted to SJAFCA for review 8 weeks following completion of subtask 2.1.5.
- Draft-Final will be submitted to SJAFCA within 4 weeks following receipt of comments on the Draft.
- Final will be submitted to SJAFCA within 2 weeks following receipt of comments on the Draft-Final.

Task 2 Deliverables:

- Draft and final Conceptual Restoration and Recreation Plan Report
- Draft project description

Task 3: Assembly Bill 52 Tribal Consultation

Consultation with Native American representatives, as required under California Public Resources Code Sections 21074(a)/21080.3.1 (Assembly Bill 52 [AB 52]) will be conducted by the CEQA lead agency (SJAFCA). However, ESA will assist with this consultation to support the requirements of AB 52 as well as the California Natural Resources Agency's *Final Tribal Consultation Policy* and the California Department of Water Resources' *Tribal Engagement Policy*. ESA will draft letters, advise, and attend or organize meetings, though formal government-to-government contact will remain the purview of SJAFCA. Prior to publication of the NOP (see Task 5), ESA will contact the California Native American Heritage Commission (NAHC) to request a search of their Sacred Lands File for the project area and a list of contacts for California Native American Tribes who may have an interest in the proposed project. ESA will draft project AB 52 notification letters for SJAFCA to send to those Tribes that have previously requested from SJAFCA to be notified of any SJAFCA projects, pursuant to AB 52.

ESA will also draft project non-AB 52 notification letters, in accordance with the California Natural Resources Agency's *Final Tribal Consultation Policy* and the California Department of Water Resources' *Tribal Engagement Policy*, for SJAFCA to send to those Tribes included in the NAHC contacts list that have not previously requested from SJAFCA to be notified of any SJAFCA projects, pursuant to AB 52. ESA will assist SJAFCA with Tribal consultation, for both AB 52 and non-AB 52 purposes, including helping draft responses to Tribal comments and meeting with the Tribes, as well as maintaining a record of all Tribal consultation. ESA recommends that SJAFCA conclude AB 52 consultation prior to circulation of the EIR; CEQA requires that AB 52 consultation be concluded prior to the certification of the EIR. ESA assumes that no more than two site visits, with two ESA cultural resources specialists present, with Tribal representatives will be required, and that no more than two rounds of consolidated comment/review between SJAFCA and ESA will be required for the Tribal outreach letters. Because the scope of Tribal consultation is heavily dependent on the interest of Tribes, the scope of this task is limited by time budgeted herein; ESA can provide additional AB 52 and general Tribal consultation support under an amended budget, if needed. Due to the project's location, along the San Joaquin River, there is the possibility that a Tribe will identify potential tribal cultural resources that may be impacted by the project, thereby requiring significance evaluations of potential tribal cultural resources; in such a case, ESA can provide SJAFCA with the support services to assist in tribal cultural resource identification and significance evaluations.

Task 3 Deliverables:

- Draft AB 52 project notification letters
- Draft general CEQA (non-AB 52) project notification letters

Task 4: Resource Surveys and Reports

ESA will conduct biological and cultural resource surveys of the footprints of proposed project and two project variants, as defined by the final project description. Results of the surveys will

be used to prepare reports that can support the preparation of future permit applications. In addition, results of the surveys will be used to describe existing conditions and analyze potential impacts in the Administrative Draft EIR. Details of the scope of work for the surveys are provided below.

Subtask 4.1: Biological Resources

To comply with the requirements of CEQA and to support likely future permit applications and NEPA compliance involving biological resources, ESA will conduct a biological resources study for the project. ESA will prepare a Biological Resources Study Report based on the biological resources survey. The biological resources study will be based on data base searches, field surveys, and aerial imagery interpretation. The study will focus on the areas where ground disturbance will occur. Data base searches will include the U.S. Fish and Wildlife Service's *Information for Planning and Consultation* (IPaC) data base, the *California Natural Diversity Data Base* (CNDDB), and the California Native Plant Society's *Inventory of Rare and Endangered Plants of California*.

Habitats in the area with ground disturbance and a 150-foot-wide buffer will be mapped based on aerial imagery (e.g., Google Earth or NAIP imagery) and field verified through surveys. The San Joaquin River shoreline will be surveyed from a boat to characterize fish habitat, including bank substrate, riparian vegetation cover, and instream woody material cover, to map riparian vegetation types and elderberry shrubs, and to survey for special-status plants, including California hibiscus, mason's lilaeopsis, Delta tule pea, and other special-status plant species with potential to occur. This scope of work assumes that SJAFCA will obtain access for field surveys on land (e.g., on levees). For areas where no access can be obtained, habitats will be mapped based on aerial photograph interpretation. Limited field verification will be conducted in areas where habitat will be visible from public roads, bridges, levees, public parks, or other accessible facilities.

The biological resources study report will include an introduction describing the objectives of the study, a methods section describing the methods used, a results section including a description of the habitats occurring in the study area (including agricultural habitats), map book of habitats in the study area, and a table providing the potential to occur of special-status species. Wetlands and other waters will be mapped and classified as habitat types based on aerial imagery interpretation, with limited field verification where access is available. A draft biological resources study report will be produced for review by SJAFCA. Based on SJAFCA's comments a final biological resources study report will be prepared.

Subtask 4.1 Deliverables:

- Draft Biological Resource Study Report
- Final Biological Resources Study Report
- GIS data of biological resources

Subtask 4.1 Assumptions:

- No field surveys were included in this scope of work for ecosystem restoration project components.
- The boat survey will cover 13 miles of the right-bank of the San Joaquin River. It will take 3 biologists 3 10-hour days, and will include a fisheries biologist/licensed boat operator, botanist, and wildlife biologist.

- The land field survey will be mainly conducted from an approximately 16-mile top of levee maintenance road. In addition, field verification for habitat mapping will be conducted for areas where levee widening, seepage berms, or dryland levee construction from limited publicly accessible locations such as roads, bridges, parks and other facilities. The total land survey effort is assumed to take 2 biologists 5 10-hour days.
 - No surveys are assumed necessary for installation or extending of cutoff walls, pipe penetration fixes, or encroachment remediation.
 - One conference call of up to 2 hours is assumed for discussion of comments on the draft report.
 - SJAFCA will arrange for access to survey areas.
 - SJAFCA will provide files with footprint of project areas in Autocad or ArcGIS formats, if available.
 - SJAFCA will provide the average 2-year flood shoreline for the San Joaquin River
- Protocol-level surveys for listed species will not be necessary.

Subtask 4.2: Cultural Resources

To comply with the requirements of CEQA and to support likely future compliance with Section 106 of the National Historic Preservation Act and NEPA, ESA will conduct a cultural resources technical study for the proposed project. The study will consist of a full analysis of the following Alternative 4a project components: tie back levee extension, RM-52 setback levee, and fix in place improvements (freeboard and cutoff wall/seepage berm). ESA assumes that these components consist of approximately 21 miles of levees. A constraints-level analysis for the remaining components of the project that will be analyzed at a program-level in the EIR will be included. ESA assumes that the program-level components consist of approximately 3 miles of bike paths, approximately 188 acres of restoration activities, approximately 150 acres of regrading and revegetation, and approximately 165 acres of parks.

A records search of the California Historical Resources Information System (CHRIS) will be conducted for the both the project-level and program-level components and areas within 0.25 mile. ESA will perform additional background research through digital repositories to provide context on the project area. ESA will send outreach letters and emails to local interest groups (e.g., historical societies, museums) that are determined as possibly being interested in the cultural resources analysis for the project.

ESA archaeologists will conduct an intensive-level archaeological pedestrian survey of all accessible portions of the project-level components. ESA architectural historians will conduct a reconnaissance-level architectural survey of any architectural features older than 45 years that were identified by ESA in through background research and the archaeological survey. It is assumed that no more than three archaeological resources will be identified during the survey, and that no archaeological material will be collected. ESA assumes that no more than five architectural resources, three of which are levees, will be identified during the survey. Cultural resources identified during the survey will be documented on appropriate California Department of Parks and Recreation (DPR) 523 forms (site records). If archaeological resources are encountered that have not been previously evaluated for eligibility for listing in the California Register of Historical Resources (California Register), additional fieldwork (e.g., subsurface survey and/or testing) may be required to do so which will be negotiated separately and is not included in this scope and budget.

ESA will prepare a Cultural Resources Inventory Report (CRIR) documenting the methods and findings of the background research, CHRIS records search results, communication with Native American representatives (see Task 3) and historical societies, maps, results of the field surveys, significance evaluation (California Register) for up to five architectural resources and, if no additional fieldwork is required, up to three archaeological resources, impacts assessment, and recommendations. The CRIR will be prepared according to the documentation requirements of California Office of Historic Preservation and CEQA. ESA will submit to SJAFCA a copy of the draft CRIR, in electronic format, and will respond to no more than two round of consolidated comment/response. ESA will submit the final CRIR to SJAFCA and also to the CHRIS after approval of the document by SJAFCA.

Task 4.2 Deliverables:

- Draft CRIR
- Final CRIR

Task 4.2 Assumptions:

- Up to two rounds of consolidated comment/review between SJAFCA and ESA on CRIR
- No archaeological subsurface survey or evaluative testing will be required
- Up to three archaeological resources will be identified
- California Register-eligibility evaluation for any identified archaeological resources requiring archaeological subsurface survey or evaluative testing is not included; if such work is not required, California Register-eligibility evaluation for up to three archaeological resources is included
- Up to five architectural resources, including three levees, will be identified and evaluated for California Register-eligibility.
- CRIR will consist of a full analysis of Alternative 4a tie back levee extension, RM-52 setback levee, and fix in place improvements, and that these components consist of approximately 21 miles of levees
- CRIR will consist of a constraints-level analysis for the program-level components, and that these consist of approximately 3 miles of bike paths, approximately 188 acres of restoration activities, approximately 150 acres of regrading and revegetation, and approximately 165 acres of parks

Task 5: Notice of Preparation

ESA will collaborate with the engineering team and SJAFCA staff to develop the preliminary project description for inclusion in the NOP. The NOP will be prepared consistent with CEQA Guidelines section 15082 and will include: (1) project location; (2) project objectives; (3) description of the proposed project and two project variants to be evaluated at an equal level; (4) environmental resource topics to be evaluated in the EIR; (5) anticipated project schedule; and (6) anticipated regulatory requirements and approvals.

ESA will prepare a draft NOP for SJFCA to review. ESA will revise the draft and submit it to DWR for review. Based on one consolidated set of comments from DWR, and after receiving direction from SJAFCA, ESA will revise the NOP provide a screencheck version to SJAFCA and DWR to confirm the resolution of comments prior to ESA finalizing the draft for publication. ESA will prepare the Notice of Completion (NOC) and will work with SJAFCA to electronically submit the NOP and NOC to the State Clearinghouse CEQAnet Portal. ESA will submit electronic files of the NOP to the newspaper and San Joaquin County clerk's office. SJAFCA will be

responsible for any publication or noticing fees. ESA will work with SJAFCA to prepare the distribution list and it is assumed that SJAFCA will e-mail and mail out copies of the NOP to the distribution list. ESA will provide a web-ready version of the NOP for SJAFCA to post on its website.

Task 5 Deliverables:

- 2 Draft versions of the NOP
- 1 Screencheck NOP
- NOP
- NOC
- Draft and final notice for newspaper

Task 6: Draft EIR

ESA will prepare a Draft EIR in accordance with Public Resources Code sections 21000-21177, and the CEQA Guidelines. It is assumed that the Draft EIR will evaluate the flood risk reduction components of the proposed project at a project-specific level and evaluate the proposed multi-benefit components at a program level. Two project variants will be evaluated at an equal level with the proposed project.

Based on ESA's current understanding of the project, it is anticipated that the resource topics to be evaluated in the EIR will include: aesthetics; agricultural resources; air quality; biological resources, including fisheries and terrestrial resources; cultural resources; energy; geology and soils (including paleontological resources); greenhouse gas (GHG) emissions; hazards and hazardous materials; hydrology and water quality; land use; noise; recreation; transportation; tribal cultural resources; and, utilities and service systems (potential relocation of existing facilities). The EIR will also evaluate growth inducing impacts associated with reducing urban flood risk. It is anticipated that all other resource topics (mineral resources; population and housing (except for growth inducement); public services; utilities and service systems (except for relocation of existing facilities); and wildfire will not result in significant impacts and; therefore, will be discussed in the Draft EIR in a section of the Approach to the Analysis section of the Environmental Analysis Chapter. The assumption of resource topics to be evaluated in the Draft EIR will be confirmed following the close of the public comment period on the NOP. If additional resource topics are identified as requiring full analysis in the EIR, ESA will notify SJAFCA and discuss if additional scope and budget is needed.

The following outlines the subtasks that will be completed to prepare and publish the Draft EIR. More detailed on the tasks to be completed for each of the technical resource topics to be included in the Draft EIR are included at the end of Subtask 6.1.

Subtask 6.1: Administrative Draft EIR

ESA will prepare an Administrative Draft EIR that will include the following:

Executive Summary. The Executive Summary will summarize: the project's objectives; project description; discussion of alternatives considered and environmentally superior alternative; key findings; and areas of controversy as relevant. This chapter will also include a table summarizing the impacts and associated mitigation measures along with the level of significance both before and after mitigation.

Introduction. The introduction chapter will contain an overview of the project background; describe the environmental review and approval process; scope of the EIR analysis; and organization of the EIR.

Project Description. Based on the project description developed in Task 3, as expanded for the EIR analysis, this chapter will describe the location and elements of the proposed project and two project variants being evaluated at an equal level.

Environmental Analysis. This chapter of the EIR will include individual sections for the environmental resource areas to be evaluated, as described previously. The analysis will evaluate the project-specific and cumulative impacts associated with implementation of the proposed project flood risk reduction components and evaluate the multi-benefit components at a program level. The analysis will also include an equal level analysis of two project variants. It is assumed that all data, reports, and engineering designs for the proposed project and two project variants available will be provided by SJAFCA or the engineering team will be provided to ESA for incorporation into the EIR analysis. The information will be used to provide substantial support of the analysis of impacts in the EIR. Biological and cultural resource field surveys will be conducted to support the CEQA analysis (see Task 4). The results of the AB52 consultation (Task 3) will be incorporated into the cultural resources and tribal cultural resources sections of the EIR. ESA will also use, to the maximum extent appropriate, information developed for the UFRR Study and LSJRFS FR/EIS/EIR.

Each section will include the following:

Environmental and Regulatory Setting. The setting discussion will provide sufficient background information to characterize existing environmental conditions associated with the project area to provide context for the impact analysis. The setting will also include a discussion of relevant regulatory conditions that shape the assumptions and the policy environment for implementation of the project.

Significance Criteria. The standards of significance will be based on Appendix G of the CEQA Guidelines and will be used to determine the significance of identified impacts.

Impacts and Mitigation Measures. The impacts and mitigation measures section will include the analysis of project-specific, program level and cumulative impacts associated with implementation of the proposed project and two project variants at an equal level. Findings of significance will be made based on standards of significance identified above. The impact discussions will provide information necessary to support the findings. For any identified significant impacts, ESA will develop feasible mitigation measures to reduce the magnitude of the impact. The mitigation measures will identify the action, responsible party and timing of implementation to facilitate development of the Mitigation Monitoring and Reporting Program (MMRP). Discussion will also be provided describing the effectiveness of proposed mitigation measures. The impact analysis will assume compliance with relevant existing laws (including ordinances) when making a finding of significance.

Alternatives Analysis. The EIR will include an analysis of alternatives to the project that will be developed in consultation with the SJAFCA and will draw on information developed for UFRR Study. In addition to the No Project Alternative, ESA will evaluate up to two additional alternatives identified in the UFRR Study. The analysis will include a discussion of proposed project impacts compared to each alternative, including any project impacts that would be avoided, and any new impacts attributed to the alternative not attributed to the proposed project.

A discussion of each of the alternative's ability to achieve proposed project objectives will be provided along with identification of the Environmentally Superior Alternative. A summary matrix comparing project impacts compared to each alternative will also be included. The Alternatives chapter will also include a discussion of alternatives considered but eliminated from further consideration, if appropriate.

Other Statutory Required Sections. In addition to the sections described above, ESA will prepare all other statutory required sections (summary of cumulative impacts, summary of significant unavoidable impacts, and significant irreversible changes).

Growth-Inducing Impacts. The growth-inducing analysis will include an evaluation of the proposed project's direct or indirect growth inducement potential associated with reducing flood risk in the urban areas.

Cumulative Impacts. Each environmental resource section will include: a description of the cumulative context; and an evaluation of the proposed project's contribution to identified cumulative impacts. Mitigation measures will be incorporated by reference, as necessary. Identified cumulative impacts will be summarized in this section but the analysis will be in the individual resource topic sections.

Summary of Significant and Unavoidable Impacts. This section will present a summary of any significant and unavoidable impacts identified for the proposed project in the individual environmental resource area sections.

Significant and Irreversible Environmental Changes. This section will provide an evaluation of the significant and irreversible changes to the environment that could result if the proposed project were to be implemented consistent with CEQA Guidelines section 15126.2 (c).

Technical Resource Areas to be Evaluated in the EIR

As described above, each technical resource section in the Environmental Analysis chapter will include descriptions of the existing environmental settings, applicable regulatory frameworks, description of methods and approaches to analyses, evaluation of potential impacts, and evaluation of applicable mitigation measures for impacts. The following presents the scope for the key resource topics to be evaluated in the EIR.

Aesthetics

The aesthetics section of the EIR will describe the existing visual character in the vicinity of the proposed project components. The analysis will define the existing environment in terms of visual character and quality as well as viewer sensitivity and exposure; assess the degree of resource change and viewer response; and determine the significance of the visual impact. The analysis will also assess whether the proposed project would create new sources of light and/or glare in such a way as to cause public hazard or annoyance for a sustained period of time.

Air Quality

The project site is located within the San Joaquin Valley Air Basin (SJVAB) under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The air quality section for the EIR, will include a brief setting section summarizing the environmental setting, regulatory context, and significance thresholds used for impact evaluation. The air quality

impact discussion will include an analysis of both construction and operational impacts based on the SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts.

Construction emissions associated with levee improvements will be quantified using the most recent version of California Emissions Estimator Model (CalEEMod, version 2020.4.0) and project-specific data including construction schedule and phasing, off-road construction equipment used under each phase, and the number of construction vehicle trips. ESA will rely on project-specific construction data provided by the engineering team developed as part of Task 1. Estimated emissions will be compared to the SJVAPCD's significance thresholds for construction to determine impacts. In addition, emissions from the use of barges during construction of the project will be calculated using approved California Air Resources Board and/or U.S. EPA factors. Mitigation measures will be identified, if necessary. Because the proposed project involves improvements to an existing levee system, operational impacts are expected to be primarily maintenance related and will be assessed qualitatively. The project will also be evaluated for consistency with the SJVAPCD's air quality plans for particulate matter, ozone and carbon monoxide.

ESA will prepare a qualitative analysis and discussion for the multi-benefit components that will be evaluated at a program level. The programmatic analysis will be a description of the types of impacts to air quality that would occur and the potential mitigation measures that would reduce these impacts. Both the project-level and programmatic-level analyses will be included in the impacts discussion of the EIR.

Potential odor impacts from construction emissions will also be assessed qualitatively by considering the location of sensitive receptors and the duration of construction odors.

Diesel Particulate Matter (DPM) emitted in the exhaust of diesel-fueled construction equipment and heavy-duty trucks could pose an increased health risk to sensitive receptors in the vicinity of the project construction sites. DPM has been identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB). The Office of Environmental Health and Hazard Assessment (OEHHA) requires that health risks be analyzed if sensitive receptors are located within a 1,000-foot radius of the construction site and if construction activities are expected to last longer than two continuous months. In this case, sensitive receptors are located adjacent to several sections of the levee improvements and within 1,000 feet of construction activities. ESA will analyze the health risk associated with construction activities associated with the flood risk reduction components of the proposed project in accordance with guidance from the SJVAPCD, OEHHA and CARB. The Health Risk Assessment (HRA) will use U.S. EPA's AERMOD dispersion model and health risk parameters specified by OEHHA. AERMOD will use local meteorological and terrain data to calculate pollutant concentrations for the HRA. It is assumed that one model setup configuration will represent the proposed project and two project variants.

ESA will qualitatively analyze the Project's contribution to the cumulative air quality impacts, both localized and regional based on other existing and planned project emissions in the area.

Biological Resources

Based on ESA's experience with other similar projects and projects in the vicinity of the proposed project the key biological issues related to project construction, operation and maintenance are the presence of riverine habitat for federally listed fish species (e.g., salmonids, delta smelt), riparian habitat for elderberry longhorn beetle, riparian brush rabbit, and special-status plants, and agricultural habitat for Swainson's hawk and tricolored blackbird, among other species and

habitats. ESA biologists will use the results of the biological resources study, including special-status species data base searches, habitat mapping and survey results, and the project description to assess the impacts of project construction, operation, and maintenance.

With the information and data gathered from the above tasks, ESA will prepare an environmental setting for the EIR that describes resource conditions and the regulatory framework. The environmental setting will contain (1) a vegetation/habitat map of the project area; (2) description of special-status plant and animal species that potentially could be found in the proposed project area, and (3) a description of any potentially jurisdictional wetlands and other waters found in the proposed project area.

The analysis of biological resources will address direct, indirect, and cumulative impacts to natural communities/habitats, wetlands and riparian habitat, and special-status species potentially affected by the proposed project. If significant impacts are identified, appropriate mitigation measures will be proposed.

Cultural Resources and Tribal Cultural Resources

The EIR will include separate sections addressing cultural resources and tribal cultural resources. Based on the findings of the Cultural Resources Inventory Report (Task 4.2), AB 52 consultation (Task 3), ESA will prepare the CEQA EIR cultural resources and tribal cultural resources sections for the proposed project. This will include summarizing the background and regulatory setting, the impact analysis methodology, and detail recommended mitigation measures in order to minimize impacts to cultural resources and tribal cultural resources.

Energy

Equipment and vehicles used in construction activities consume energy resources such as diesel and gasoline fuels. Once operational, energy usage would be primarily from the few vehicle trips to the sites to conduct O&M activities. This energy section will include a discussion of applicable state and local plans related to energy use and conservation. The project's energy use will be evaluated against policies and standards established by these plans, and according to CEQA significance criteria for energy impacts. The report will examine existing usage and assess the project's potential effects on consumption of energy resources during construction and any possible changes in energy demand over the long term.

Greenhouse Gases

The Greenhouse Gases (GHGs) section will include a brief setting explaining the various GHGs emitted, the regulatory context including applicable plans and policies and the significance thresholds applicable to the Project. Levee improvement activities at the Project site would primarily result in short-term GHG emissions due to construction. ESA will estimate GHG emissions associated with the project for the construction phase using CalEEMod and other tools as appropriate. The impact analysis will be conducted using the criteria in the Appendix G CEQA checklist and the SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA, as there is no qualified Climate Action Plan for San Joaquin County. This guidance relies on the use of performance-based standards, otherwise known as Best Performance Standards (BPS) to assess significance of project specific GHG emissions on global climate change.

The project will also be assessed for consistency with the SJVAPCD's Climate Change Action Plan, the state's 2017 Climate Change Scoping Plan Update for achieving the statewide GHG

target mandated by SB 32, and Executive Order No. S-3-05 that established a goal of reducing the State's GHG emissions to 80 percent below the 1990 level by the year 2050.

Similar to air quality, the discussion on operational GHG emissions will be qualitative. Mitigation measures will be developed if impacts are identified to be significant.

Hydrology and Water Quality

The hydrology and water quality section of the EIR will include a description of existing surface and groundwater hydrological conditions in the project area and applicable state, federal, and local regulations that pertain to surface and groundwater resources. The existing hydrologic setting of the region and project area will be presented, including major waterways, drainages, the extent of floodplains and flood zones, status of regional flood management, and description of water quality. The EIR will include an assessment of potential effects associated with any dewatering needed to accommodate project construction.

The discussion of potential construction impacts on water quality associated with surface drainage will focus on documenting the project's compliance with the State's National Pollutant Discharge Elimination Permit (NPDES) requirements including the construction general permit.

Noise and Vibration

Noise impacts associated with the proposed project are primarily associated with construction-related activities.

ESA describe the existing noise environment within the project area by collecting up to three long-term (24-hour) and up to 10 short-term noise measurements. These measurements will focus on sensitive receptors west the work areas. The EIR will summarize state and local noise policies, regulations, and standards, as they would pertain to the proposed project (Cities of Stockton, Lathrop, and Manteca and San Joaquin County) and discuss applicable noise ordinances and existing General Plan policies. Specific restrictions or limitations on noise generating activities related to construction and vehicular movement (e.g. truck routes and unloading) that could occur due to the proposed project will be discussed.

The EIR will also discuss the noise levels at the nearest sensitive receptors based on the long-term and short-term noise measurements. In addition, the analysis will:

- Calculate and discuss the noise levels likely to be generated during demolition and construction activities based on the fleet of construction equipment proposed to be used and evaluate the potential for construction to adversely affect adjacent land uses or violate noise control ordinances. Noise from construction-related haul trucks will be estimated based on either truck trips or cut and fill quantities to be provided by the project sponsor.
- Assess construction-related vibration levels from standard construction equipment based on proximity to structures (both historic, if any, and non-historic) and vibration exposure standards developed by the Federal Transit Administration in the absence of any existing policies in general plans.
- ESA will calculate the change in noise levels along key roadway segments most affected by truck traffic or barges transporting materials to and from the project work areas. ESA will use the noise prediction model of the Federal Highway Administration (FHWA) to

determine whether there would be significant project effects on noise levels along streets used to access the project site where existing noise-sensitive land uses exist.

- Identify practical, feasible mitigation measures including the use of performance standards to address identified significant impacts. Evaluate whether mitigation measures would reduce the impacts below a level of significance.

Recreation

The recreation section of the EIR will characterize existing recreational uses in the vicinity of the proposed project components. The analysis will assess potential short-term (construction phase) and long-term interference of accessibility to recreational uses along the San Joaquin River will also be addressed.

Transportation

The transportation section will describe the various highways, roads, and alternative transportation routes that could be affected by construction activities. Operation and maintenance activities are assumed to be the same or similar and will be analyzed as such in the section. Documentation provided by SJAFCA and the project engineers will be used to analyze impacts related to hauling and operation of construction equipment and worker transportation and parking in the project area. The section will describe the various methods used to prevent interference with local and emergency transportation routes. Mitigation measure will be prepared to ensure construction contractors implement a traffic control and safety plan to ensure impacts on transportation, including safety of pedestrians, are reduced to less than significant. The Administrative Draft EIR will be submitted to SJAFCA to review. Based on comments received, ESA will revise the administrative draft and submit it to DWR for review.

Subtask 6.2: Screencheck Draft EIR

Following receipt of a consolidated set of comments from SJAFCA and DWR reviews, a meeting will be scheduled to discuss comments and resolve approach to revisions (see Task 11). Following that meeting, ESA will revise the Administrative Draft EIR and prepare a Screencheck Draft EIR for final review and approval prior to publication of the Draft EIR. It is assumed that the any edits provided will be editorial and will not result in any new technical analysis.

Subtask 6.3: Draft EIR

Based on any corrections or revisions to the Screencheck Draft EIR, ESA will prepare the Draft EIR. ESA will prepare the Notice of Availability (NOA) and NOC. ESA will submit electronic files of the NOA, NOC, Office of Planning and Research Summary Form, and the Draft EIR to the State Clearinghouse CEQAnet Portal. ESA will submit electronic files of the NOA to the newspaper and San Joaquin County clerk's office. A cd with the Draft EIR will be sent to up to three libraries. SJAFCA will be responsible for any publication or noticing fees. It is assumed that SJAFCA will e-mail and mail out copies of the NOA to the distribution list. ESA will provide a web-ready version of the NOA and Draft EIR for SJAFCA to post on its websites. ESA will also print 5 paper copies of the Draft EIR for SJAFCA to have at their offices.

If the documents are required to be remediated to meet Americans with Disabilities Act (ADA) requirements, ESA will provide a separate scope and cost for this task.

Task 6 Deliverables:

- 2 versions of the Administrative Draft EIR

- 1 Screencheck Draft EIR
- Draft EIR (electronic version; web-ready version; 5 paper copies of the Draft EIR for SJAFCA)
- Draft and final NOA
- Draft and final NOC

Task 7: Final EIR

Subtask 7.1: Administrative Final EIR

Following completion of the 45-day public review period, ESA will compile all written and oral comments received on the Draft EIR. ESA will meet with SJAFCA and DWR to discuss approach to addressing comments received and to make assignments for responding to comments (see Task 11). At the meeting, potential development of Master Responses will be discussed. Following the meeting and response assignments, ESA will prepare responses to comments. The responses to comments will be incorporated into the Final EIR which will be prepared in accordance with CEQA Guidelines section 15132. In addition to the responses to comments, the Final EIR will include: a list of agencies and persons commenting; bracketed comment letters; and a summary of any text changes (in response to comments or staff initiated). The Administrative Final EIR will also include a draft Mitigation Monitoring and Reporting Program (MMRP) for any mitigation measures identified in the Draft EIR.

The Administrative Final EIR will be submitted to SJFCA to review. Based on comments received, ESA will revise the administrative draft and submit it to DWR for review.

Subtask 7.2: Screencheck Final EIR

Following receipt of a consolidated set of comments from SJAFCA and DWR, a meeting will be scheduled to discuss comments and resolve approach to revisions (see Task 9). Following that meeting, ESA will revise the Administrative Final EIR and prepare a Screencheck Final EIR, including the MMRP, for final review and approval prior to publication of the Final EIR. It is assumed that the edits provided will be editorial and will not result in any new technical analysis.

Subtask 7.3: Final EIR

Based on any corrections or revisions to the Screencheck Final EIR, ESA prepare the Final EIR, including the MMRP. ESA will provide SJAFCA with the responses to agency comments for SJAFCA to distribute 10 days prior to the certification hearing.

Task 5 Deliverables:

- 2 versions of the Administrative Final EIR
- 1 Screencheck Final EIR
- Final EIR (electronic version; web-ready version)

Task 8: Draft Findings of Fact and Statement of Overriding Considerations Document

ESA will draft the Findings of Fact and Statement of Overriding Considerations, if needed, in a format provided by SJAFCA. SJAFCA will finalize the documents for use at the CEQA certification and project approval process.

Task 8 Deliverables:

- Draft Findings of Fact and Statement of Overriding Considerations (electronic format)

Task 9: Post-Certification and Project Approval Support

Following certification and project approval, ESA will prepare a draft Notice of Determination (NOD) for SJAFCA review and will revise based on SJAFCA comments. ESA will work with SJAFCA to electronically submit the NOD to the State Clearinghouse CEQAnet Portal. ESA will submit electronic files of the NOD to the San Joaquin County clerk's office. ESA will provide a web-ready version of the NOD and Final EIR for SJAFCA to post on its website. SJAFCA will be responsible for the NOD and California Department of Fish and Wildlife fees. As part of this task, ESA will also submit an electronic file folder (e.g., DropBox or similar) or USB-C storage device, that includes the references incorporated in the EIR for the administrative record to SJAFCA.

If the documents are required to be remediated to meet Americans with Disabilities Act (ADA) requirements, ESA will provide a separate scope and cost for this task.

Task 9 Deliverables:

- Draft and final NOD
- Electronic file folder with EIR references

Task 10: CEQA Public Meetings and Stakeholder Outreach Support

Subtask 10.1: CEQA Public Meetings

ESA's Project Manager and Project Director will attend a total of 4 CEQA public meetings at 4 hours each (inclusive of preparation time): 1 public scoping meeting; 2 public meetings during the Draft EIR circulation period; and 1 EIR certification meeting to answer any questions. It is assumed that all meetings will be held virtually, and ESA will work with SJAFCA to prepare scoping meeting materials, including a power point presentation, sign in sheet, comment cards and fact sheet. SJAFCA will be responsible for meeting logistics and court reporter, if needed.

Subtask 10.2: Stakeholder Meeting Support

ESA's Project Manager and up to two technical staff will participate in up to four 4-hour (inclusive of preparation time), stakeholder outreach meetings to be organized by SJAFCA and held virtually. ESA will work with SJAFCA to prepare meeting materials related to the environmental review process, if needed.

Task 10 Deliverables:

- Public meeting materials, including power point presentation, sign in sheet, comment card and fact sheet
- Stakeholder outreach meeting materials

Task 11: Project Management and Team Meetings

Ongoing project management efforts will include internal coordination and check-ins with ESA staff and coordination with SJAFCA and the engineering team throughout development of the

EIR and the CEQA process. ESA's Project Director and Project Manager will participate in 24-1.5 hour (inclusive of preparation time) bi-weekly virtual calls/meetings through development of the Draft EIR (12 months), and 18-1.5 hour (inclusive of preparation time) bi-weekly virtual calls/meetings during development of the Final EIR (9 months).

ESA will also participate in a total of 3 virtual calls/meetings to review comments on the CEQA document. It is assumed that ESA's Project Director and Project Manager and key technical staff will participate in these meetings. It is assumed each of these meetings would approximately 4 hours and would occur as part of the following tasks/subtask:

- Subtask 6.2 – discuss SJAFCA comments on the Administrative Draft EIR
- Subtask 7.1 – review comments received on the Draft EIR
- Subtask 7.2 – discuss SJAFCA comments on the Administrative Final EIR

This task also includes 4 hours per month of project manage time for ESA's Project Director and 8 hours per month of ESA's Project Manager to track budget and schedule, prepare progress reports and coordination tasks.

Cost Proposal: Mossdale Tract Area Urban Flood Risk Reduction Project EIR
ESA Labor Detail and Expense Summary

Labor Category		Senior Director III	Director III	Director II	Managing Associate III	Managing Associate II	Managing Associate II	Senior Associate III	Senior Associate II	Senior Associate I	Associate II	Associate II	Associate I	Subtotal	Project Technician III	Subtotal	Total Hours	Labor Price	Labor Total by Task
Task #	Task Name/Description	\$ 325	\$ 260	\$ 245	\$ 220	\$ 205	\$ 205	\$ 185	\$ 170	\$ 160	\$ 135	\$ 135	\$ 115		\$ 130				
1.0	Project Initiation	8	3	1		13	3		3	1		5	8	\$ 9,170		\$ -	45.00	\$ 9,170	\$ 9,170
2.0	Project Description	8				40			8					\$ 12,160	8	\$ 1,040	64.00	\$ 13,200	\$ 13,200
2.1	Reconnaissance-level Restoration and Rec Planning													\$ -		\$ -	-	\$ -	\$ 272,990
2.1.1	Review Existing Cond and Background Docs	4	4	44	40		8		12	240		16	64	\$ 73,520		\$ -	432.00	\$ 73,520	
2.1.2	Identify Restoration and Rec Opportunities and Constraints	4		10	20		8		8	76		12	56	\$ 31,370		\$ -	194.00	\$ 31,370	
2.1.3	Define Restoration and Rec Goals	4		4	8					40				\$ 10,440		\$ -	56.00	\$ 10,440	
2.1.4	Conceptual Restoration Planning	24	4	66	8		16		16	265		8	8	\$ 77,170		\$ -	415.00	\$ 77,170	
2.1.5	Conceptual Rec Planning	8	2		32		4		4	150			40	\$ 40,260		\$ -	240.00	\$ 40,260	
2.1.6	Conceptual Restoration and Rec Plan Report	8	4	26	28		24		24	75		6	6	\$ 38,670	12	\$ 1,560	213.00	\$ 40,230	
3.0	AB52 Tribal Consultation	2	16		24									\$ 10,090		\$ -	42.00	\$ 10,090	\$ 10,090
4.0	Resource Surveys and Reports													\$ -		\$ -	-	\$ -	\$ 103,690
4.1	Biological Resources	8	6				40		86		80	136		\$ 56,140	16	\$ 2,080	372.00	\$ 58,220	
4.2	Cultural Resources		4		36		62		64			88		\$ 44,430	8	\$ 1,040	262.00	\$ 45,470	
5.0	Notice of Preparation	4				12								\$ 3,760	4	\$ 520	20.00	\$ 4,280	\$ 4,280
6.0	Draft EIR													\$ -		\$ -	-	\$ -	\$ 805,745
6.1	Administrative Draft EIR	80				120			40				80	\$ 66,600	100	\$ 13,000	420.00	\$ 79,600	
	Aesthetics						48							\$ 9,840		\$ -	48.00	\$ 9,840	
	Agriculture and Forestry												36	\$ 4,140		\$ -	36.00	\$ 4,140	
	Air Quality		6			26	116	9			56			\$ 39,895		\$ -	213.00	\$ 39,895	
	Biological Resources	8	8				80		72		32			\$ 37,640		\$ -	200.00	\$ 37,640	
	Cultural Resources/Tribal Cultural Resources		2	2	24		50							\$ 16,540		\$ -	78.00	\$ 16,540	
	Energy						8						32	\$ 5,580		\$ -	41.00	\$ 5,580	
	GHG		4				8				56			\$ 10,240		\$ -	68.00	\$ 10,240	
	Geo/Soils									60				\$ 9,600		\$ -	60.00	\$ 9,600	
	Hazards									60				\$ 9,600		\$ -	60.00	\$ 9,600	
	Hydro + WQ									80				\$ 12,800		\$ -	80.00	\$ 12,800	
	Land Use						48							\$ 9,840		\$ -	48.00	\$ 9,840	
	Noise		3			72		20						\$ 19,240		\$ -	95.00	\$ 19,240	
	Pop Housing										40			\$ 5,400		\$ -	40.00	\$ 5,400	
	Public Services										40			\$ 5,400		\$ -	40.00	\$ 5,400	
	Rec						36							\$ 7,380		\$ -	36.00	\$ 7,380	
	Transportation						40							\$ 8,200		\$ -	40.00	\$ 8,200	
	Utilities												50	\$ 5,750		\$ -	50.00	\$ 5,750	
	Wildfire												32	\$ 3,680		\$ -	32.00	\$ 3,680	
6.2	Screencheck Draft EIR	30	10	2		40	24		40	24	24	60	40	\$ 52,540	40	\$ 5,200	334.00	\$ 57,740	
6.3	Draft EIR	24				80							60	\$ 31,100	24	\$ 3,120	188.00	\$ 34,220	
7.0	Final EIR													\$ -		\$ -	-	\$ -	\$ 133,670
7.1	Administrative Final EIR	50	8	8		96	24	8	32	60	24		60	\$ 71,550	60	\$ 7,800	430.00	\$ 79,350	
7.2	Screencheck Final EIR	20				40						40	60	\$ 27,000	24	\$ 3,120	184.00	\$ 30,120	
7.3	Final EIR	20				40							60	\$ 21,600	20	\$ 2,600	140.00	\$ 24,200	
8.0	Findings and SOC	4				32								\$ 7,860	4	\$ 520	40.00	\$ 8,380	\$ 8,380
9.0	Post-certification and approval support	12				24							24	\$ 11,580	4	\$ 520	64.00	\$ 12,100	\$ 12,100
10.0	CEQA Public Meetings and Stakeholder Outreach Support													\$ -		\$ -	-	\$ -	\$ 36,260
10.1	CEQA Public Meetings and Stakeholder Outreach Support	16				16							24	\$ 11,240	12	\$ 1,560	68.00	\$ 12,800	
10.2	Stakeholder Meeting Support	16	32			16							24	\$ 19,560	30	\$ 3,900	118.00	\$ 23,460	
11.0	Project Management and Team Meetings	180	12	12		270							48	\$ 125,430		\$ -	522.00	\$ 125,430	\$ 125,430
Total Hours		542	129	175	220	937	647	37	409	1,131	352	371	812	5762	366		6,128		
Total Labor Costs		\$ 176,150	\$ 33,540	\$ 42,875	\$ 48,400	\$ 192,085	\$ 132,635	\$ 6,845	\$ 69,530	\$ 180,960	\$ 47,520	\$ 50,085	\$ 93,380	\$ 1,074,005	\$ 47,580	\$ 47,580		\$ 1,121,585	
Percent of Effort - Labor Hours Only		8.8%	2.1%	2.9%	3.6%	15.3%	10.6%	0.6%	6.7%	18.5%	5.7%	6.1%	13.3%	94.0%	6.0%	6.0%	100.0%		
Percent of Effort - Total Project Cost		14.9%	2.8%	3.6%	4.1%	16.3%	11.2%	0.6%	5.9%	15.3%	4.0%	4.2%	7.9%		4.0%			95.1%	

ESA Labor Cost	\$ 1,121,585
Labor Cost Communication Fee	\$ 33,648
ESA Non-Labor Expenses	
Reimbursable Expenses	\$ 23,633
ESA Equipment Usage	\$ 500
Subtotal ESA Non-Labor Expenses	\$ 24,133

PROJECT TOTAL \$ 1,179,365



Environmental Science Associates & Subsidiaries 2021 Schedule of Fees

I. Personnel Category Rates

Charges will be made at the Category hourly rates set forth below for time spent on project management, consultation or meetings related to the project, field work, report preparation and review, travel time, etc. Time spent on projects in litigation, in depositions and providing expert testimony will be charged at the Category rate times 1.5.

Labor Category	Level I	Level II	Level III
Senior Director	275	300	325
Director	225	245	260
Managing Associate	190	205	220
Senior Associate	160	170	185
Associate	115	135	145
Project Technicians	90	110	130

- (a) The range of rates shown for each staff category reflects ESA staff qualifications, expertise and experience levels. These rate ranges allow our project managers to assemble the best project teams to meet the unique project requirements and client expectations for each opportunity.
- (b) From time to time, ESA retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor may be charged at regular Employee Category rates.
- (c) ESA reserves the right to revise the Personnel Category Rates annually to reflect changes in its operating costs.

II. ESA Expenses

A. Travel Expenses

- 1. Transportation
 - a. Company vehicle – IRS mileage reimbursement rate
 - b. Common carrier or car rental – actual multiplied by 1.15
- 2. Lodging, meals and related travel expenses – direct expenses multiplied by 1.15

B. Communications and Project Support Fee

Non-travel expenses incurred for the duration of the agreement for project support but not itemized below, including document retention, delivery and communications. Project labor charges multiplied by 3%.

C. Printing/Reproduction Rates

Item	Rate/Page	Sample Pricing
Black & White – 8.5 x 11	\$0.10	
Black & White – 11 x 17	\$0.20	
Color – 8.5 x 11	\$0.40	
Color – 11 x 17	\$0.70	
B&W – Plotter (Toner – ECO Quality)	\$0.40/sf	24x36 B/W CAD drawing would cost \$2.40 per sheet
B&W – Plotter (Toner – Presentation Quality)	\$1.00/sf	24x36 B/W CAD drawing would cost \$6.00 per sheet
Color – Plotter (Inkjet – ECO Quality)	\$2.00/sf	24x36 Color Drawing would cost \$12 per sheet
Color – Plotter (Inkjet – Presentation Quality)	\$4.00/sf	24x36 Color Drawing would cost \$24 per sheet
CD	\$10.00	
Digital Photography	\$20.00 (up to 50 images)	
All Other Items (including bindings and covers)	At cost plus 10%	

D. Equipment Rates

Item	Rate/Day	Rate/Week	Rate/Month
Project Specific Equipment:			
Vehicles – Standard size	\$ 40 ^a	\$ 180	
Vehicles – 4x4 /Truck	85		
Vehicles – ATV	125		
Noise Meter	100		
Hydroacoustic Noise Monitoring Equipment	150		
Electrofischer	300	1,200	
Sample Pump	25		
Field Traps	40		
Digital Hypsometer (Nikon)	20		
Stilling Well / Coring Pipe (3 inch aluminum)	3/ft		
Backpack Sprayer	25		
360-Degree 4k Camera	30	120	
Cam-Do Time-Lapse Camera	15	50	180
Beach Seine	50		
Otter Trawl	100		
Wildlife Acoustics Bat Detector	125	400	
Wildlife Trail Camera	30	100	
Fiber Optic Endoscope	125	500	
Spot Light	30		
Spotting Scope	50	200	
Topographic/Bathymetric Survey Equipment:			
Auto Level	40		
Total Station	200	600	
DJI Quad Drone	300	1,200	
RTK-GPS	300	1,200	
RTK-GPS Smartnet Subscription	50	200	
Single-Beam Echoshounder	150	600	
Trimble GPS GeoXT	75	350	900
iPad/Android Tablet + 1m GNSS External Sensor (Trimble R1, Bad Elf)	75	350	900
iPad/Android Tablet + sub-meter Arrow 100/TDC 150	100	400	1,100
iPad/Android Tablet + sub-foot Arrow Gold	200	800	2,800
iPad/Android Tablet only (includes Garmin Glo external sensor)	50	225	600
Laser Level	60		

Item	Rate/Day	Rate/Week	Rate/Month
Garmin GPS or equivalent	25		250
Hydrologic Data Collection, Water Current, Level and Wave Measurement Equipment:			
ISCO 2150 Area Velocity Flow Logger	\$ 25	\$ 100	\$ 350
SonTek IQ-Plus Area Velocity Flow Logger	180	500	1600
Logging Rain Gage	10	40	125
Marsh-McBirney Hand-Held Current Meter	50	200	
FloWav Surface Velocity Radar	50	200	
RBR Virtuoso Wave Pressure Sensor		100	350
SO FAR Ocean Spotter Wave Buoy	30	120	450
Ocean Sensor Systems Sonic Wave Sensor	30	120	450
Logging Water Level - Pressure Transducer	10	30	100
Logging Barometric Pressure Logger	5	15	50
Well Probe / Water Level Meter	20	80	
Bottom-Mounted Tripod / Mooring	25	100	400
Handheld Suspended Sediment Sampler	20		250
Water Quality Equipment:			
Logging Turbidimeter/Water Level Recorder	\$ 25	\$ 100	\$ 400
Logging Conductivity/Water Level Recorder	20	60	200
In-Situ Troll 9500 logging water quality multiprobe		200	800
Logging Temperature Probe	3	10	40
Hach Hand-Held Turbidimeter Recording Conductivity Meter w/Datalogger	50	200	
Refractometer	20	80	
YSI Hand-Held Salinity Meter or pH meter	30	120	
Hand-Held Conductivity/Dissolved Oxygen Probe (YSI 85)	40	160	
HOBO Salinity Gauge			125
HOBO DO/Temp Probe			125
In-Situ Aqua Troll 600 Water Quality Sonde			800
In-Situ VuSitu Telemetry System Hardware			40
YSI 650 with 6920 Multi Probe	180	500	1500
YSI ProDSS Multi Probe	180	500	1500
ISCO 6712 Portable Sampler w/ISCO 2105 Module	40	250	900
Sedimentation / Geotechnical Equipment:			
Peat Corer	\$ 75	\$ 300	
60lb Helly-Smith Bedload Sampler with Bridge Crane	175	700	
Suspended Sediment Sampler with Bridge Crane	75	300	
Guelph Permeameter	50	200	
Vibra-core	100	400	
Muck Corer	50	200	
Shear Strength Vane	50	200	
Auger (brass core @ \$ 5/each)	20	80	
Boats:			
14' Aluminum Boats with 15 HP Outboard Motor	\$ 100	\$ 400	
Single or Double Person Canoe/Kayak	30	120	
Small Watercraft Motor	20	100	
20' Lowe Boat w/115 HP Outboard	300	1,500	
[North River Boat – Ask Matt Silva for Specs and Price]			
17' Boston Whaler w/ 90 HP Outboard	300	1,500	

^a Actual project charges will be either the IRS mileage reimbursement rate or the daily rate, whichever is higher.

E. Cloud-based Services

Item	Rate/Hour	Rate/Day	Rate/Week	Rate/Month
Cloud-based Services				
Nearmap High Resolution Images		\$50/image		
ArcGIS Online Hosting (Web Maps/Apps)				\$200
Website Hosting				\$200
Custom Application & Services Hosting*				\$300*
Modeling (GeoHECRAS, TUFLOW, Delft3D) + Drone Processing	\$7	\$160	\$950	\$3,900
Aviation Environmental Design Tool (AEDT) Processing	\$13	\$190	\$1,120	\$4,600
*includes support for database, SSL, IT support – costs vary by project. Contact software development services for firm pricing.				

III. Subcontracts

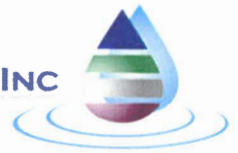
Subcontract services will be invoiced at cost multiplied by 1.15.

IV. Other

The fees above do not include sales tax. Any applicable or potential sales tax will be charged when appropriate.

V. Payment Terms

Unless otherwise agreed in writing, ESA will submit invoices on a monthly basis. Any unpaid balances shall draw interest at one and one half percent (1.5%) per month or the highest rate allowed by law, whichever is lower, commencing thirty (30) days after date of invoice. All invoices not contested in writing within fifteen (15) business days of receipt are deemed accepted by Client as true and accurate and Client thereafter waives any objection to Clients invoices, which are payable in full.



October 5, 2021

Mr. Chris Elias
San Joaquin Area Flood Control Agency
Executive Director
22 E. Weber Avenue, Room 301
Stockton, CA 95202-2317

Subject: Proposal to Provide Engineering Support for the Mossdale Project EIR

Dear Chris,

Thank you for considering Peterson Brustad, Inc. (PBI) to provide engineering support to the San Joaquin Area Flood Control Agency (SJAFCA) during preparation of the Mossdale Environmental Impact Report (EIR). It is understood that, under separate contract with SJAFCA, Environmental Science Associates (ESA) will work to prepare the Mossdale EIR, in accordance with the California Environmental Quality Act (CEQA) Guidelines. PBI's role will be to develop the necessary civil engineering data and to provide engineering support to ESA for the preparation of the EIR.

The PBI Team includes Kjeldsen, Sinnock, and Neudeck (KSN) as a subconsultant. Mike Rossiter, PE (PBI) will serve as the overall Project Manager for the team and will be involved in all aspects of project delivery.

We anticipate that, to develop the engineering data at a sufficient level of detail for ESA's CEQA analyses, the PBI Team will need to conduct preliminary design analyses (roughly 30% level) for Alternative 4a of the UFRR Study. The scope of work does not include the development of a typical, comprehensive design deliverable consisting of construction documents (ie- plans, specifications, etc.), rather it includes conducting the technical analyses at a level that is necessary to inform the required CEQA analyses.

Attached to this letter are our proposed (a) scope of services, (b) budget, and (c) rate schedules.

We appreciate this opportunity to submit this proposal and we look forward to working with you on this important effort. If you have any questions or need any additional information, please do not hesitate to contact me at (916) 416-6599.

Sincerely,

Mike Rossiter, P.E.
Peterson Brustad, Inc.
(916) 416-6599
mrossiter@pbieng.com

Karl Brustad, P.E., M.B.A.
President/CEO
Peterson Brustad, Inc.

80 Blue Ravine Rd, Suite 280, Folsom, CA 95630
916-608-2212
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ATTACHMENT A
SCOPE OF SERVICES

Peterson Brustad, Inc.**Scope of Services for
Engineering Support for Mossdale Environmental Impact Report (EIR)****Introduction and Approach**

Peterson Brustad, Inc. (PBI), along with Kjeldsen, Sinnock, and Neudeck (KSN) as a subconsultant (“PBI Team”), proposes the following scope of work to provide engineering support to the San Joaquin Area Flood Control Agency (SJAFCA) during preparation of the Mossdale Environmental Impact Report (EIR). Mike Rossiter, PE (PBI) will serve as Project Manager for the PBI Team.

Under separate contract with SJAFCA, Environmental Science Associates (ESA) developed a scope of work to prepare the Mossdale EIR, in accordance with the California Environmental Quality Act (CEQA) Guidelines. The PBI Team has used the framework from the ESA scope, including the same task numbers, to identify engineering efforts needed to support SJAFCA and ESA.

This scope of work assumes that the Alternative 4a flood risk reduction components from the Mossdale Urban Flood Risk Reduction (UFRR) study will be evaluated at a project-specific level. In addition, it is assumed that up to two variants to Alternative 4a will be evaluated at an equal level.

For scoping and budgeting purposes, it’s assumed that the CEQA process will be completed through the Final Draft EIR under this effort, with a total project duration of 24 months.

The PBI Team is proposing to conduct baseline analyses on Alternative 4a to develop the engineering data at a sufficient level of detail needed for ESA’s CEQA analyses.

The following scope of work is anticipated to provide civil engineering support during the Mossdale CEQA/EIR process.

Task 1. Project Initiation

Key technical staff from the PBI Team will participate in one (1) meeting to initiate preparation of the CEQA documentation for the proposed Mossdale Tract Area Urban Flood Risk Reduction project (proposed project). The meeting will include review of the data needs spreadsheet and identification of any additional data needed. Budget is also included for minor follow-up action items that come out of this meeting to aid in project initiation.

Task 2. Project Description*2.1. Review and Development of Project Description*

The PBI Team will assist in preparation of the project description and will feed information and narratives of Alternative 4a to ESA. The work that the PBI team completed during the Mossdale UFRR study will be leveraged, and additional information will be developed for ESA as requested.

2.2. Identification of Project Limits and Features

Initially, the PBI Team will prepare a preliminary project footprint based on conservative assumptions made in the prior analyses to date that were performed for the 2016 ULDC Engineer's Report and the subsequent 2021 Climate Change Update. The intent is to provide the preliminary project footprint as early as possible in order to allow ESA to kick off its essential survey work.

Subsequently, a final project footprint will be established and fine-tuned based on the preliminary design that is developed in Task 6.1. From that point, the following features of work will be identified: clearing and grubbing limits; staging areas; and temporary access and haul routes.

Task 3. Assembly Bill 52 Tribal Consultation

Consultation with Native American representatives, as required under California Public Resources Code Sections 21074(a)/21080.3.1 (Assembly Bill 52 [AB 52]) will be conducted by the CEQA lead agency (SJAFCA). The PBI Team will assist with these consultations by providing engineering summaries and/or engineering-related materials as requested for meetings and notification letters. Up to 20 labor hours are included for miscellaneous engineering support on this task. PBI Team attendance at meetings is not included for this task.

Task 4. Resource Surveys and Reports

ESA will be conducting resource surveys and preparing reports including for biological resources and cultural resources. The PBI Team scope assumes minimal engineering input will be needed for these tasks. Up to 20 labor hours are included for miscellaneous engineering support on this task.

Task 5. Notice of Preparation

The PBI Team will work with ESA and SJAFCA to provide engineering information needed for the Notice of Preparation (NOP). It is assumed that the Project Description has already been developed under Task 2, but additional components of the NOP include descriptions of: (1) project location; (2) project objectives; (3) environmental resource topics to be evaluated in the EIR; (4) anticipated project schedule; and (5) anticipated regulatory requirements and approvals. The PBI Team will provide input to ESA and SJAFCA for these components.

Task 6. Draft EIR

The PBI Team will provide engineering support to ESA and SJAFCA as they prepare the Draft EIR.

ESA provided the PBI Team with the anticipated engineering data needed to conduct their EIR analyses. The table on the following page identifies the list of data needs.

The PBI Team added a column to this table to indicate the items that will be provided under this scope (marked with a "✓") and the items that are deemed not applicable based on our knowledge of the project (marked with "n/a"). The "n/a" items were excluded from the PBI Team scope of work.

Table 1. Engineering data to be developed by the PBI Team.

Engineering Data Requested by ESA		PBI Team Notes
Location of Features (Where construction or operations will occur)		
	Location of main project features - footprint	✓
	Location of staging areas	✓
	Location of In-water work	n/a
	Location of cofferdams	n/a
	Location of clearing and grubbing	✓
	Location of crushers or other material processing	n/a
	Location of soil borrow areas, if needed	✓
	Location of hazardous material disposal, if needed	n/a
	Location of waste areas/landfills	✓
	Location of pile driving	n/a
	Location of blasting	n/a
	Location of temporary access/haul roads	✓
	Location of worker parking	✓
	Location of relocated utilities, sewage and other infrastructure, if needed	✓
	Location of storage to contain/treat water from de-watering activities, if needed	n/a
Construction Quantities/Volumes (How much)		
	Volume of Imported fill material by type (cubic yards), includes pilings, rip rap, etc..	✓
	Volume of excavation waste material by type (cubic yards)	✓
	Estimated maximum depth of excavation	✓
	Clearing/grubbing/stripping - soil/excavation waste (cubic yards)	✓
	Clearing/grubbing/stripping - vegetation waste (cubic yards)	✓
	Quantity and type of demolished material - non-hazardous (cubic yards)	✓
	Quantity and type of demolished material - hazardous (cubic yards), if any	n/a
	Type, size, and number of pilings to be installed or removed, if in water, ID vibratory or impact hammer	n/a
Borrow Sites		
	Volume of excavated material at each borrow site to be moved to project site, if needed	✓
Utility structures		
	Number of water, power lines, etc. to be relocated, if any	✓

Table 1 continued on the following page...

Con't Table 1. Engineering data to be developed by the PBI Team.

Engineering Data Requested by ESA		PBI Team Notes
Construction Activities/Methods (How the work will be performed)		
	Clearing and grubbing methods	✓
	Dust control measures	✓
	Traffic control measures	✓
	Other BMPs	✓
	Pile driving method	n/a
	Blasting method, if needed	n/a
	In-water work isolation plan show temporary flow diversion and bypass measures (e.g. cofferdams, etc..)	n/a
	Hydraulic/hydrology modeling/reports	✓
	Revegetation plan	✓
	Fish rescue plan for construction activities	n/a
	Fencing requirements	✓
	Stormwater Management Approach, describing planned approach for addressing regulatory requirements	✓
Timing and Phasing (When construction will occur)		
	Expected start and end dates of overall project construction as well as for each phase/component	✓
	Maximum area disturbed per day	✓
	Construction sequence description	✓
	Daily truck trips for materials (trips/day)	✓
	Daily truck trips for waste (trips/day)	✓
	Daily truck trips for vendors (water, equipment deliveries)	✓
	Total daily truck trips (trips/day)	✓
	Days per week (e.g., 5 vs 7) / hours per day (off-peak?)	✓
	Would nighttime construction be required? For what phase/ component/ equipment?	✓
	Truck trips by haul location (on-site and off-site, origin and destination). Will there be multiple locations?	✓
Construction Equipment (Type, number and activity level)		
	List of heavy equipment to be used, including engine size, fuel use (gallons), and hours of day of use	✓
	List of boats to be used	n/a
	List of diesel fueled construction equipment used for the construction of each project phase/component	✓
	Number, size (hp), number of hours of use per day and number of days of use for each type of equipment	✓
	Will lighting be needed during construction?	✓
	Truck trips per day to transport equipment, materials and soil to be off-hauled	✓
Worker Information (Who is completing the work)		
	Number of workers per construction phase and their general arrival and departure times	✓
	Number of one-way worker trips per day, anticipated routes, miles per day and workers trips	✓
Other Information		
<i>Operations and Maintenance</i>		
	How will flood reduction features be maintained	✓

As discussed in the *Introduction and Approach* section of this proposal, to develop the engineering data listed in Table 1 at a sufficient level of detail that's needed for the CEQA analyses, the PBI Team is proposing to conduct baseline engineering analyses for Alternative 4a from the UFRR Study. The PBI Team will use the conceptual data that was developed as part of the UFRR Study and Mossdale ULDC analyses as a starting point and will advance these analyses to deliver the needed CEQA data. The engineering analyses will be conducted using AutoCAD/Civil3D, HEC-RAS hydraulic models, and other available software, and will follow accepted methodology that would be used for preliminary design efforts.

The following subtasks describe anticipated PBI Team activities needed for development of data listed in Table 1.

6.1 Preliminary Design Development

In order to develop the necessary data to support ESA's preparation of the EIR, the PBI Team will develop and refine a preliminary design for the proposed levee improvements that will incorporate the levee reaches and geotechnical design recommendations from the 2016 ULDC Engineer's Report and the subsequent 2021 Climate Change Update. The design will incorporate the identification and verification of existing encroachments and utilities that will need to be removed and/or relocated. The PBI Team will also identify and refine the needs of rock slope protection, fencing, revegetation, etc.

6.2 Calculation of Construction Quantities

Construction quantities will be calculated based on the preliminary design that was developed in Task 6.1 for materials such as imported levee fill, aggregate base, drain rock, filter sand, bentonite, concrete, riprap, etc. Also, the PBI Team will calculate the estimated waste materials for the project such as excavated soil waste; clearing, grubbing, and stripping waste; and demolished material.

6.3 Identification of Borrow and Waste Sites

The PBI Team will identify potential soil borrow sites and material sources, based on the quantities determined in Task 6.2. Furthermore, potential waste sites and landfills will also be identified.

6.4 Description of Construction Methods and Measures

The PBI Team will provide a description of potential construction methods for the various types of construction such as clearing and grubbing, earthwork, slurry cutoff walls, etc. The PBI Team will also describe potential measures for dust control, traffic control, other best management practices (BMPs), etc.

6.5 Evaluation of Construction Schedule

Based on the preliminary design, the PBI Team will develop a potential construction schedule for the project including overall duration, phasing, and possible working days and hours. Maximum area footprints that will be disturbed per day as well as potential construction sequencing will be evaluated. The PBI Team will also provide an estimate of the number of daily truck trips for various construction materials, off haul of waste, vendor deliveries, and transportation of equipment.

6.6 Description of Construction Equipment

The PBI Team will provide a list of the potential types of heavy equipment and their usage on the project including a description of diesel-fueled equipment and numbers. Worker information will also be

provided including the potential number of workers per construction phase and their working hours and daily trips.

6.7 Hydraulic Impact Analysis

During the Mossdale UFRR Study, DWR was particularly interested in reviewing the hydraulic impacts of the project. As part of the UFRR Study, PBI completed a comprehensive hydraulic impact analysis including a HEC-FDA assessment of without-project vs. with-project damages and life loss for areas south of the dryland levee and west of the San Joaquin River. It is anticipated that DWR, and other stakeholders, will have additional questions during the CEQA process that will include investigation and/or augmentation of the UFRR Study's hydraulic impact analysis. The PBI Team has included a placeholder for this anticipated effort which would potentially involve running additional scenarios in the HEC-FDA models and further analysis of hydraulic impacts.

6.8 Climate Resilience Assessment

During the Mossdale UFRR study, climate resilience of the proposed project was an important topic with DWR. It is anticipated that additional questions on this topic may come up during the CEQA process that would necessitate further analyses of the project's climate resilience. The PBI Team has included a placeholder for this anticipated effort which would potentially involve using the hydraulic model from the UFRR study to assess climate change flow scenarios in and around the proposed project.

6.9 Hydraulic Assessments for Restoration Components

The Mossdale UFRR study identified several options of restoration components that could be incorporated into the Mossdale project. The UFRR study only identified the possible locations of the restoration lands and did not analyze them further. Engineering analyses of these restoration components may be necessary during the CEQA process to evaluate the various options.

The PBI Team has included a placeholder for this anticipated effort which would potentially involve, for example, hydraulic modeling to identify frequency of inundation for the proposed restoration sites and to further define other engineering-related features of the restoration sites. The PBI Team scope of work does not include biological or other environmental assessments of the restoration sites. The focus of the PBI Team's scope will primarily be to conduct any hydraulic analyses needed to assist ESA in concept development of the restoration sites.

6.10 Review of Draft EIR

The PBI Team will review the engineering elements of the Draft EIR document and will provide comments on these elements to SJAFCA and ESA.

Task 7. Final EIR

Following completion of the 45-day public review period, ESA will compile all written and oral comments received on the Draft EIR. The PBI Team will provide assistance in addressing comments related to engineering elements of the project.

Task 8. Draft Findings of Fact and Statement of Overriding Considerations Document

ESA will draft the Findings of Fact and Statement of Overriding Considerations. It is not anticipated that any assistance from the PBI Team will be required for this task.

Task 9. Post-Certification and Project Approval Support

Following certification and project approval, ESA will prepare a draft Notice of Determination (NOD) and will conduct other activities to close-out the CEQA process. It is not anticipated that any assistance from the PBI Team will be required for this task.

Task 10. CEQA Public Meetings and Stakeholder Outreach Support

Subtask 10.1. CEQA Public Meetings

It is assumed that the PBI Team will need to be present at a total of 4 CEQA public meetings at 4 hours each (inclusive of preparation time): 1 public scoping meeting; 2 public meetings during the Draft EIR circulation period; and 1 EIR certification meeting to answer any questions. It is assumed that all meetings will be held virtually.

Subtask 10.2. Stakeholder Meeting Support

The PBI Team will provide engineering support and assistance with meeting materials for up to four (4) miscellaneous stakeholder outreach meetings, including assistance with developing meeting materials related to engineering elements of the proposed project. Attendance at the stakeholder meetings is not included in the scope for this subtask.

Task 11. Project Management and Team Meetings

11.1. Project Management

Project management activities include coordination and communications between PBI, KSN, SJAFCA, and ESA, as well as preparing invoicing, and general management and oversight of the PBI Team's scope of work. With an assumed 24-month project duration, a total of 8 hours/month was included for PBI PM activities. KSN also includes their own internal PM activities and communications needed to manage their portion of the scope of work.

11.2. Team Meetings

Members from the PBI Team will participate in 24-1.5 hour (inclusive of preparation time) bi-weekly virtual calls/meetings through development of the Draft EIR (12 months), and 18-1.5 hour (inclusive of preparation time) bi-weekly virtual calls/meetings during development of the Final EIR (9 months). For scoping purposes, it is assumed that 1 member from PBI will participate in all 42 of these meetings, and 1-2 members from KSN will participate in 21 (half of the 42 meetings) of these meetings.

Assumptions and Understandings

- Project duration for this scope of work is approximately 21 months.
- The topographic surveying data obtained for the 2016 ULDC Engineer's Report will be used as the basis for this scope of work. No further surveying work is anticipated or included.
- The proposed levee improvements and levee reaches described in the 2016 ULDC Engineer's Report and the subsequent 2021 Climate Change Update will be used as the basis for this scope of work.
- The geotechnical design recommendations from the 2016 ULDC Engineer's Report and the subsequent 2021 Climate Change Update will be used as the basis for this scope of work.
- Other than the development of a project footprint, no other preliminary boundary or right-of-way work is included.
- The incorporation of the extension of the Reclamation District No. 17 Dryland Levee is included.

ATTACHMENT B

ESTIMATED COST TABLE

Estimated Work Effort and Cost
Engineering Support for Mossdale Environmental Impact Report (EIR)

Task No.	Task Description	Principal	Project Manager 3 (Mike Rossiter)	Staff Engineer 2	Administrative 4	PBI Labor	Total PBI Labor (\$)	Kjeldsen, Sinnock, and Neudeck (KSN) Effort	PBI Mark-Up on Subconsultant Labor (10%)	PBI In-House Expenses (5% of PBI Labor)	Total Cost (\$)
	2021 Rates	\$ 255.00	\$ 234.00	\$ 146.00	\$ 103.00						
Task 1 - Project Initiation											
			12	8		20	\$3,976		\$0	\$199	\$4,175
	Subtotal Task 1	0	12	8	0	20	\$3,976	\$0	\$0	\$199	\$4,175
Task 2 - Project Description											
2.1	Review and Development of Project Description	1	20	24		45	\$8,439	\$7,880	\$788	\$422	\$17,529
2.2	Identification of Project Limits and Features		20	24		44	\$8,184	\$63,530	\$6,353	\$409	\$78,476
	Subtotal Task 2	1	40	48	0	89	\$16,623	\$71,410	\$7,141	\$831	\$96,005
Task 3 - Assembly Bill 52 Tribal Consultation											
			8	12		20	\$3,624		\$0	\$181	\$3,805
	Subtotal Task 3	0	8	12	0	20	\$3,624	\$0	\$0	\$181	\$3,805
Task 4 - Resource Surveys and Reports											
			8	12		20	\$3,624		\$0	\$181	\$3,805
	Subtotal Task 4	0	8	12	0	20	\$3,624	\$0	\$0	\$181	\$3,805
Task 5 - Notice of Preparation											
			16	16		32	\$6,080		\$0	\$608	\$6,688
	Subtotal Task 5	0	16	16	0	32	\$6,080	\$0	\$0	\$608	\$6,688
Task 6 - Draft EIR											
6.1	Preliminary Design Development	2	80	80		162	\$30,910	\$248,700	\$24,870	\$1,546	\$306,026
6.2	Calculation of Construction Quantities		20	20		40	\$7,600	\$70,070	\$7,007	\$380	\$85,057
6.3	Identification of Borrow and Waste Sites		2			2	\$468	\$6,820	\$682	\$23	\$7,993
6.4	Description of Construction Methods and Measures		2			2	\$468	\$4,800	\$480	\$23	\$5,771
6.5	Evaluation of Construction Schedule		12			12	\$2,808	\$22,184	\$2,218	\$140	\$27,351
6.6	Description of Construction Equipment		2			2	\$468	\$12,796	\$1,280	\$23	\$14,567
6.7	Hydraulic Impact Analysis	1	80	120		201	\$36,495		\$0	\$1,825	\$38,320
6.8	Climate Resilience Assessment	1	24	40		65	\$11,711		\$0	\$586	\$12,297
6.9	Hydraulic Assessments for Restoration Components	1	24	100		125	\$20,471		\$0	\$1,024	\$21,495
6.10	Review of Draft EIR		20			20	\$4,680	\$6,820	\$682	\$234	\$12,416
	Subtotal Task 6	5	266	360	0	631	\$116,079	\$372,190	\$37,219	\$5,804	\$531,292
Task 7 - Final EIR											
			24	40		64	\$11,456	\$4,900	\$490	\$573	\$17,419
	Subtotal Task 7	0	24	40	0	64	\$11,456	\$4,900	\$490	\$573	\$17,419
Task 8 - Draft Findings of Fact and Statement of Overriding Considerations Document											
						0	\$0		\$0	\$0	\$0
	Subtotal Task 8	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
Task 9 - Post-Certification and Project Approval Support											
						0	\$0		\$0	\$0	\$0
	Subtotal Task 9	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
Task 10 - CEQA Public Meetings and Stakeholder Outreach Support											
10.1	CEQA Public Meetings		16			16	\$3,744	\$4,900	\$490	\$187	\$9,321
10.2	Stakeholder Meeting Support		8	8		16	\$3,040	\$7,600	\$760	\$152	\$11,552
	Subtotal Task 10	0	24	8	0	32	\$6,784	\$12,500	\$1,250	\$339	\$20,873
Task 11 - Project Management and Team Meetings											
11.1	Project Management (24 months)		192		48	240	\$49,872	\$42,784	\$4,278	\$2,494	\$99,428
11.2	Team Meetings		63			63	\$14,742	\$17,880	\$1,788	\$737	\$35,147
	Subtotal Task 11	0	255	0	48	303	\$64,614	\$60,664	\$6,066	\$3,231	\$134,575
	COLUMN TOTALS	6	653	504	48	1,211	\$232,860	\$521,664	\$52,166	\$11,947	\$818,637

TOTAL COST	\$818,637
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ATTACHMENT C

STANDARD RATE TABLES FOR PBI & KSN



2021 STANDARD RATE SCHEDULE *

Position	Description	Hourly Billing Rate
E9	Principal Engineer	\$255
E8	Senior Engineer 3 Project Manager 3	\$234
E7	Senior Engineer 2 Project Manager 2	\$212
E6	Senior Engineer 1 Project Manager 1	\$195
E5	Project Engineer 3	\$192
E4	Project Engineer 2	\$179
E3	Project Engineer 1	\$168
E2	Staff Engineer 2	\$146
E1	Staff Engineer 1	\$128
T4	Technician 4	\$141
T3	Technician 3	\$128
T2	Technician 2	\$108
T1	Technician 1	\$96
A4	Administrative 4	\$103
A3	Administrative 3	\$90
A2	Administrative 2	\$77
A1	Administrative 1	\$64

Expenses

- At cost plus 10% for outside printing, plotting, copying, travel, subconsultants, and outside services and charges
- At 5% of Labor for in-house expenses including telephone, computer, and incidental copying and printing
- Auto mileage per current Federal Rates

* Rates will be modified January 1 of each year.

**2021 / 2022 FEE SCHEDULE
PREVAILING WAGE PROJECTS
Effective July 1, 2021**

Position	Rate
Principal Engineer	\$ 265.00
Associate Engineer	\$ 240.00
Senior Engineer	\$ 210.00
Engineer II	\$ 190.00
Engineer I	\$ 180.00
Junior Engineer	\$ 147.00
Senior Surveyor	\$ 215.00
Surveyor	\$ 185.00
Assistant Surveyor	\$ 155.00
Field Crew-One Man & Vehicle	\$ 210.00
Field Crew-Two Man & Vehicle	\$ 320.00
Inspector	\$ 165.00
Inspector & Vehicle	\$ 195.00
Senior Project Manager	\$ 235.00
Project Manager	\$ 200.00
Assistant Project Manager	\$ 180.00
Grant Manager	\$ 155.00
GIS Specialist	\$ 150.00
GIS/CAD Technician III	\$ 147.00
GIS/CAD Technician II	\$ 130.00
GIS/CAD Technician I	\$ 100.00
Project Accountant	\$ 141.00
Administrative III	\$ 110.00
Administrative II	\$ 95.00
Administrative I	\$ 80.00

Equipment	Hourly Rate
3D Print Cloud Work Station	\$ 25.00
GPS Receivers-Per Receiver Per Hour	\$ 25.00
Robotic Total Station	\$ 35.00
HDS Scanner	\$ 150.00
Boat	\$ 55.00

Expenses	
Auto Mileage per current Federal Rates	
Special Consultants	Cost Plus 10%
Reimbursable Expenses	Cost Plus 10%
(Printing, Photos, Copies, Travel, Telephone, Fax, Survey Materials, etc.)	

Additional charges may apply for overtime services.

Fees are due and payable within 30 days from the date of billing. Fees past due may be subject to a finance charge computed on the basis of 1 1/2% of the unpaid balance per month.

Hourly rates are subject to review and adjustment July 1st of each year.

RESOLUTION NO. SJAFCA 21-16

**SAN JOAQUIN AREA
FLOOD CONTROL AGENCY**

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**AUTHORIZATION TO ENTER INTO AGREEMENT WITH ENVIRONMENTAL SCIENCE AND
ASSOCIATES TO PREPARE ENVIRONMENTAL IMPACT REPORT IN ACCORDANCE WITH
THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR THE MOSSDALE TRACT
URBAN FLOOD RISK REDUCTION STUDY**

BE IT RESOLVED, by the Board of Directors of the San Joaquin Area Flood Control Agency, as follows:

Authorize the Executive Director to:

1. Negotiate and execute consultant service agreement with Environmental Science Associates (ESA) to prepare the Environmental Impact Report in accordance with the California Environmental Quality Act (CEQA) for the preferred alternative and two variants identified in the Mossdale Tract Area Urban Flood Risk Reduction Study (Mossdale UFRR Study) in an amount not-to-exceed \$1,179,365.
2. Appropriate \$1, 179,365 to fund the tasks covered in the Proposal by ESA to provide CEQA Support for the Mossdale Tract Area Urban Flood Risk Reduction Project.

PASSED, APPROVED AND ADOPTED this 14TH day of October 2021.

CHUCK WINN, 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

RESOLUTION NO. SJAFCA 21-17

**SAN JOAQUIN AREA
FLOOD CONTROL AGENCY**

=====

**AUTHORIZATION TO EXECUTE AMENDMENT NUMBER 2 TO AGREEMENT WITH
PETERSON BRUSTAD INC ON THE MOSSDALE TRACT URBAN FLOOD RISK
REDUCTION STUDY FOR THE NECESSARY CIVIL ENGINEERING DATA AND
ENGINEERING SUPPORT TO ENVIRONMENTAL SCIENCE ASSOCIATES FOR
PREPARATION OF ENVIRONMENTAL IMPACT REPORT**

BE IT RESOLVED, by the Board of Directors of the San Joaquin Area Flood Control Agency, as follows:

Authorize the Executive Director to:

1. Negotiate and execute an amendment to existing consultant service agreement with Peterson Brustad Inc. (PBI) to provide engineering support to the San Joaquin Area Flood Control Agency (SJAFCA) during preparation of the Environmental Impact Report (EIR) for the preferred alternative and two variants identified in the Mossdale Tract Area Urban Flood Risk Reduction Study at a not-to-exceed cost of \$818,637; and
2. Appropriate \$818,637 to fund the tasks covered in Amendment Number 2 as provided in the Proposal to Provide Engineering Support for the Mossdale Tract Project EIR

PASSED, APPROVED AND ADOPTED this 14TH day of October 2021.

CHUCK WINN, 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

**End of
Agenda Packet**