



# Sutter Butte Flood Control Agency

Board of Directors Agenda – Regular Meeting, December 11, 2019, 1 p.m.  
City of Yuba City Council Chambers - 1201 Civic Center Blvd., Yuba City, CA

The agenda is posted in the building of the Sutter Butte Flood Control Agency at 1445 Butte House Road, Suite B, Yuba City, and at the Sutter County Library, 750 Forbes Avenue, Yuba City. The agenda summary, backup materials, and approved minutes are also posted on the Sutter Butte Flood Control Agency website at [sutterbutteflood.org](http://sutterbutteflood.org). Materials related to an item on this agenda and submitted to the Board of Directors after distribution of the agenda packet are available for public inspection in the office of the Board Clerk at 1445 Butte House Road, Suite B, Yuba City, during normal business hours. In compliance with the American 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 SBFCA office at 530-755-9859 or [admin@sutterbutteflood.org](mailto:admin@sutterbutteflood.org). Requests must be made one full business day before the start of the meeting.

## County of Sutter

Mat Conant  
Mike Ziegenmeyer  
Alt. Ron Sullenger  
Alt. Jim Whiteaker

## County of Butte

Bill Connelly  
Steve Lambert

## City of Yuba City

Shon Harris  
Marc Boomgaarden  
Alt. Manny Cardoza  
Alt. Grace Espindola

## City of Live Oak

Lakhvir Ghag  
Alt. Luis Hernandez

## City of Gridley

Bruce Johnson

## City of Biggs

Bo Sheppard  
Alt. Roger Firth

## Levee District 1

Francis Silva  
Charlie Hoppin  
Alt. Sally Serger  
Alt. Drew Stresser

## Levee District 9

Mike Morris  
Chris Schmidl

Persons wishing to address the Board during consideration of matters listed on the agenda will be allowed to do so. Testimony should always begin with the speaker giving his or her name and place of residence. Requests for assistive listening devices or other accommodations, such as interpretive services, should be made through the Sutter Butte Flood Control Agency office at 530-755-9859. Requests should be made at least 72 hours prior to the meeting. Later requests will be accommodated to the extent feasible.

## AGENDA SUMMARY

### **REGULAR MEETING/CALL TO ORDER**

- Roll Call
- Pledge of Allegiance

### **CONSENT CALENDAR**

The Consent Calendar groups together those items which are considered noncontroversial or for which prior policy direction has been given to staff and that require only routine action by the Board. The Chair will advise the audience that the matters may be adopted in total by one motion; however, the Board may, at its option or upon request of a member of the public, consider any matter separately.

1. Approval of the Minutes for the November 13, 2019 Board Meeting

2. Approval of the 2020 schedule for regular SBFCA Board meetings
3. Approval of task orders with HDR and ECORP Consulting to provide design, permitting, and environmental services for the Irrigation Canal Rock Slope Protection Project

#### **PRESENTATION, DISCUSSION & ACTION ITEMS**

4. Presentation and File Monthly Financial Report

#### **INFORMATIONAL AND POSSIBLE APPROVAL ITEMS**

5. Presentation and File Program/Project Update
6. Other Reports from Agency Staff and Consultants
7. Report by Member and Partner Agencies

#### **CORRESPONDENCE**

8. Report on Correspondence Sent by and Received by the Board

#### **PUBLIC COMMENT**

Members of the public will be allowed to address the Sutter Butte Flood Control Agency's Board of Directors on items of interest to the public that are within the subject matter jurisdiction of the Board. Any member of the audience who may wish to bring a matter before the Board that has not been placed on the agenda may do so at this time; however, State law provides that no action may be taken on any item not appearing on the posted Agenda.

#### **ADJOURNMENT**

The next regularly scheduled Board of Directors meeting will be held on Wednesday February 13, 2020 at 1 p.m., Yuba City Council Chambers – 1201 Civic Center Blvd., Yuba City, CA 95993



## Sutter Butte Flood Control Agency

Board of Directors Minutes Regular Meeting, November 13, 2019, 1 p.m.  
City of Yuba City Council Chambers - 1201 Civic Center Blvd., Yuba City, CA

The Sutter Butte Flood Control Agency (Agency) Board of Directors (Board), State of California, met on the above date at 1 p.m. at the City of Yuba City Council Chambers - 1201 Civic Center Boulevard, Yuba City, CA.

These minutes do not represent a transcript of the meeting and are intended to be a summary of the most important points. For a complete record, please refer to the video recording of the meeting, which is posted on SBFCA's website: <http://sutterbutteflood.org/board/meetings-agendas/>

### MEMBERS PRESENT

County of Sutter:	Mat Conant, Mike Ziegenmeyer
County of Butte:	Steve Lambert
City of Yuba City:	Shon Harris, Grace Espindola
City of Biggs:	Bo Sheppard
City of Gridley:	Bruce Johnson
City of Live Oak:	Lakhvir Ghag
Levee District 9:	Mike Morris, Chris Schmidl
Levee District 1:	Francis Silva, Charlie Hoppin

**MEMBERS ABSENT:** Marc Boomgaarden (replaced by alternate Grace Espindola), Bill Connelly

**STAFF PRESENT:** Michael Bessette, Executive Director; Andrea Clark, Agency Counsel; Seth Wurzel, Budget Manager, and Terra Yaney, Board Clerk

### MEETING/CALL TO ORDER

At 1p.m., Director Shon Harris opened the meeting and led the group in the pledge of allegiance.

### CONSENT CALENDAR

- 1. Approval of the Minutes for the October 9, 2019 Board Meeting**
- 2. Approval of a Resolution Amending and Restarting SBFCA's Defined Benefit Retirement Plan Document**
- 3. Approval of a Resolution Delegating Authority to the Executive Director to Carry Out Certain Administrative Functions with Respect to the Assignment of Utility Easements**

### Public Comment

Yuba City resident Pat Miller provided public comment.

**A motion to approve the Consent Calendar was made by Director Chris Schmidl and seconded by Director Mat Conant. The motion passed with no objection. The Consent Calendar was approved as follows:**

- **Mat Conant– yes**
- **Grace Espindola – yes**
- **Lakhvir Ghag– yes**
- **Shon Harris- Yes**
- **Charlie Hoppin- yes**
- **Bruce Johnson - yes**
- **Steve Lambert - yes**
- **Mike Morris– yes**
- **Chris Schmidl - yes**
- **Bo Sheppard - yes**
- **Francis Silva - yes**
- **Mike Ziegenmeyer**

## No public Comment

The entire discussion is available on the SBFCA website at: <http://sutterbutterflood.org/board/meetings-agendas/>

## PRESENTATION, DISCUSSION & ACTION ITEMS

### **4. Presentation and File Monthly Financial Report**

Budget Manager Seth Wurzel presented the monthly financial reports for September and answered questions regarding operating revenue of advanced funding. Mr. Wurzel announced that the audit will be complete in December and will be presented at the next meeting. The entire report, along with a PowerPoint presentation is available on the SBFCA website at: <http://sutterbutterflood.org/board/meetings-agendas/>

Director Charlie Hoppin inquired on the grant funding for OWA.

## INFORMATIONAL AND POSSIBLE APPROVAL ITEMS

### **5. Program/Project Update**

Executive Director Michael Bessette gave a presentation outlining the recent and ongoing activities of the agency. He reported that the physical construction of the UPRR Closure Structure has been completed. The structure installation was tested by the contractor; they will provide an installation training for Levee District One in the near future. He reported that the construction management team is managing the project closeout activities for the Reach 25 Pipe abandonment project. He went on to report that the right-of-way team continues to work on closing out all acquisitions needed for the FRWLP including the easements needed from the affected public agencies and several outstanding property owners.

It was reported that staff continues to coordinate closely with the Sacramento Valley Conservancy and LD1 on the Star Bend and Mathews mitigation sites. Monthly coordination meetings are being held to advance progress towards the completion of the required conservation easement and management plan. Our current schedule is for the framework agreement and associated documents to be presented at the next board meeting.

It was reported that staff submitted an amendment request to DWR for an amendment to the funding agreement. DWR is now processing Amendment #6 for time only, we will be requesting a 7<sup>th</sup> amendment to address additional funding.

Mr. Bessette continued his report by presenting slides with photographs of the installed UPRR Closure Structure project. He finalized his presentation by introducing OWA Project Manager, Kevin Barker with WSP.

Chris Fritz with Peterson Brustad, Inc. provided an overview on the construction of the OWA Project. He presented slides showing the before and after photographs of the project area.

The entire report, along with a PowerPoint presentation is available on the SBFCA website at: <http://sutterbutterflood.org/board/meetings-agendas/>

### **6. Other Reports from Agency Staff and Consultants** Nothing to report.

### **7. Report by Member and Partner Agencies** Nothing to report.

## CORRESPONDENCE

**8. Report on Correspondence Sent by and Received by the Board**  
**Nothing to report.**

**PUBLIC COMMENT**

None

**ADJOURNMENT**

With no further business coming before the Board, the meeting was adjourned at 1:46 p.m.

ATTEST BY: \_\_\_\_\_

**Terra Yaney, Board Clerk**

\_\_\_\_\_  
**Board Chair**



# Sutter Butte Flood Control Agency

*A Partnership for Flood Safety*

December 11, 2019

**TO:** Board of Directors

**FROM:** Michael Bessette, Executive Director

**SUBJECT:** Approval of the 2020 schedule for regular SBFCA Board meetings

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## **Recommendation**

Notwithstanding the January 2020 meeting, it is recommended that the Board meet regularly on the second Wednesday of each month at 1:00 p.m. until further notice. The January 2020 Board meeting is cancelled.

## **Background**

The SBFCA Board of Directors conducts regular meetings regarding Agency business. Meetings will be held at 1:00 p.m. at the City of Yuba City Council Chamber, 1201 Civic Center Blvd., Yuba City, CA.

## **Fiscal Impact**

There is no fiscal impact.



# Sutter Butte Flood Control Agency

*A Partnership for Flood Safety*

December 11, 2019

**TO:** Board of Directors

**FROM:** Michael Bessette, Executive Director

**SUBJECT:** Approval of task orders with HDR and ECORP Consulting to provide design, permitting, and environmental services for the Irrigation Canal Rock Slope Protection Project

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## Recommendation

It is recommended that the Board of Directors approve and authorize the Executive Director to execute the following Task Orders for the Irrigation Canal Rock Slope Protection Project:

1. Task Order 24 with HDR for \$277,999 for engineering design services.
2. Task Order 10 with ECORP Consulting, Inc. for \$309,963 for permitting and environmental services.

## Background

Through discussions with DWR staff, SBFCA staff and DWR have identified the need to install rock in order to stabilize and further prevent erosion along the Sutter Butte Canal at locations where the east slope of canal is coincident with the Feather River West Levee embankment. At DWR's request, SBFCA has evaluated the project and developed a scope of work and budget for this effort. Through this work, SBFCA expects that there will be resolution to the maintenance responsibility concerns between LMA's (specifically DWR's Maintenance Areas 16 and 7) and the water districts. Further, and most importantly, the project will help to ensure that 200-Year level of flood protection is maintained into the future. Through discussions with DWR, SBFCA staff proposes to do the following:

- Design and permit the installation of the rock;
- Contract for and manage installation;
- Facilitate discussions regarding temporary access to the site for installation;
- Fund up to 15% of the costs of the scope of work; and,
- Further support DWR's continued discussions with the Canal owners regarding long term access rights for continued maintenance.

DWR's 85% project funding would be provided to SBFCA as part of a 7<sup>th</sup> Amendment to SBFCA's Construction Funding Agreement with DWR.

The Joint Water District owns and operates the Sutter Butte Main Canal located along the landside of the Feather River West Levee (FRWL). The project will place erosion protection along the landside slope of the canal and levee along approximately 3.2 miles of the canal (FRWL project stations 1610+00 to 1623+00, 1674+50 to 1769+00, and 1903+00 to 1957+00).

In order to implement the scope of work, engineering and environmental support services will be required. The following discussion provides an overview of the respective task orders.

HDR Task Order 24 – Sutter Butte Main Canal Erosion Protection Project:

HDR’s scope of work includes the following tasks for providing engineering support services:

- Project Management
- Erosion Assessment and Design Recommendations
- Design Engineering (Basis of Design Report, 60%, 90%, 100%, Final Designs, and Bid Support)
- SBFCA Program Team and Agency Coordination

ECORP Task Order 10 – Irrigation Canal Rock Slope Protection Environmental Support:

ECORP’s scope of work includes the following tasks for providing cultural and biological permitting and environmental support:

- Cultural Resources – Updated Inventory and Report, Updated Archaeological Monitoring Plan and Report, Tribal Monitoring and Agency Liaison services
- Biological Resources and Regulatory Documentation and Permits
- CEQA/NEPA Compliance
- Technical Support and Project Management

**Fiscal Impact**

As part of the most recent Budget Amendment adopted by the Board on June 12, 2019, the Board incorporated two new projects into the budget. The first was the Sediment Removal project and the second is subject Rock Slope Protection Project. At the time the Board approved the Rock Slope Protection Project in June 2019, the rough estimated budget was \$5,000,000. The Project is currently under development and a revised budget is currently being prepared. Staff proposes to bring forward a budget amendment as part of the approval of a 7<sup>th</sup> Amendment to the Construction Funding Agreement that will provide the additional funding from DWR to cost share in this effort. However, in the meantime, in order to finalize the development of the budget and start advancing the Project toward construction next year, staff recommends that the Board approve the recommended action.

Because the current budget has approved up to \$5,000,000 for the project (731-7002 – Rock Slope), there is no net budgetary impact from the Board’s approval of the recommended action. Approval of Task Order 24 with HDR will obligate SBFCA to pay for the associated services delivered up to the task order budget limitation of \$277,999. Approval of the Amendment to Task Order 11 with ECORP will obligate SBFCA to pay for the services associated with the Amendment’s additional increase of \$309,963. This authorization is within the appropriated expenditure limits of the approved Final 3-Year Capital Budget.

**Attachments:**

1. HDR Task Order 24
2. ECORP Task Order 10

**HDR Engineering Inc.**

**Task Order 24**

**Sutter Butte Main Canal Erosion Protection Project**

This Task Order is associated with the Master Agreement between the Sutter Butte Flood Control Agency and HDR Engineering Inc., dated July 14, 2010.

**Scope of Work**

See attached scope dated November 19, 2019.

**Schedule**

The schedule is included in the scope referenced above.

**Budget**

The budget for this amendment is not-to-exceed \$277,999 based on the provisions of the Master Agreement. An assumed breakdown of work effort is provided in the attached Fee Summary table dated November 19, 2019.

**Special Provisions**

None

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first written above.

SUTTER BUTTE FLOOD CONTROL AGENCY

HDR ENGINEERING INC.

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

DATED: \_\_\_\_\_

DATED: \_\_\_\_\_

# **SCOPE AND FEE ESTIMATE FOR ENGINEERING DESIGN SERVICES**

## **TASK ORDER 24**

**Sutter Butte Main Canal Erosion Protection Project**

**Sutter Butte Flood Control Agency  
Yuba City, California**



November 19, 2019



2365 Iron Point Road, Suite 300  
Folsom, CA 95630



## Contents

Introduction.....	1
Scope of Work.....	1
1 Project Management .....	1
1.1 Project Management .....	1
1.2 Invoicing and Progress Reports .....	2
2 Erosion Assessment and Design Recommendations .....	2
2.1 Model Review .....	2
2.2 Erosion Protection Sizing Analysis.....	2
2.3 Erosion Site Assessment and Design Recommendations TM.....	3
3 Design Engineering .....	3
3.1 Prepare 60% PS&E and BODR .....	3
3.2 Prepare 90% PS&E and BODR .....	4
3.3 Prepare 100% PS&E and BODR .....	5
3.4 Prepare Final PS&E .....	5
3.5 Bidding Support.....	5
3.5.1 Bidding Support (Addenda and Clarifications) .....	5
3.5.2 Pre-Bid Meetings.....	6
4 SBFCA Program Team and Agency Coordination.....	6
4.1 SBFCA Team Coordination.....	6
4.2 Agency Coordination .....	6
5 Fee Estimate .....	7
6 Schedule.....	7

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# Introduction

The HDR team, working under the direction of the Sutter Butte Flood Control Agency (SBFCA), prepared surveys, field explorations, analyses, right-of-way support and mapping, reports, designs, and construction packages for various projects along the Feather River West Levee (FRWL) that span Project Areas A, B, C, and D and the Oroville Wild Life area. Services previously provided by the HDR team are detailed under Task Order 1 to 23.

The Joint Water Districts own and operate the Sutter Butte Main Canal located along the landside of the FRWL. Approximately 3.2 miles of the canal (FRWL project stations 1610+00 to 1623+00, 1674+50 to 1769+00, and 1903+00 to 1957+00) directly abuts the landside slope of the FRWL. To mitigate the potential for levee slope erosion, SBFCA, working with the Department of Water Resources (DWR), is implementing the Sutter Butte Main Canal Erosion Protection Project. The project will place erosion protection along the landside slope of the canal and levee for the above indicated stations.

## Scope of Work

The work outlined in this scope has been divided into tasks in accordance with the following work break down structure (WBS):

- Project Management
- Erosion Assessment and Design Recommendations
- Design Engineering (BODR, 60%, 90%, 100%, Final Designs, and Bid Support)
- SBFCA Program Team and Agency Coordination

## 1 Project Management

### 1.1 Project Management

HDR's project manager will manage the contract scope, schedule, and budget for HDR team project activities outlined for this Task Order. Project management will also occur at the activity level for each team member as shown on the attached breakdown of hours. In addition, the project manager will coordinate with SBFCA, agencies, and stakeholders throughout the duration of the task.

HDR's project manager will update the Project Guide prepared as a part of previous task orders, which includes descriptions of the project team, contact information, communication protocols, scopes of work and task assignments, technical requirements, a detailed schedule, budgets, project administration, and documentation protocols. The Project Guide will be distributed to HDR team members and SBFCA, and updated as needed.

### Assumptions:

- This subtask includes project management activities from July 15, 2019 to April 30, 2020.

## 1.2 Invoicing and Progress Reports

HDR will prepare monthly progress reports that document project activities and update the project schedule and budget status. Items that the progress report will include are:

- Financial status summary.
- Project schedule and deliverables.
- Current activities list.
- Issues list (design, schedule, and QA/QC issues).
- QA/QC review status.
- Decision log.

HDR will provide design schedule updates to the Director of Engineering for the overall program schedule.

### Deliverables:

- Monthly progress reports.
- Monthly schedule updates (as needed).

## 2 Erosion Assessment and Design Recommendations

### 2.1 Model Review

HDR will utilize the HEC-RAS model(s), prepared and provided by others, to review and obtain critical design parameters, such as overbank/channel velocities and shear stresses, for erosion protection sizing computations.

### 2.2 Erosion Protection Sizing Analysis

Based on the parameters obtained from Task 2.1, HDR will develop up to three levee slope erosion protection alternatives. Depending on the hydraulic and geotechnical characteristics along the Sutter Butte Main Canal levee slope, various alternatives may be feasible for erosion protection. HDR will evaluate and develop the alternatives for feasibility level design. The evaluation will consider cost and constructability. Alternatives may include riprap, rock mats, geosynthetic liners, or concrete block mats. Each alternative would include considerations regarding other features that would be required for the alternative to work, such as granular filters, toe keys, transitions into existing slope, and/or hydroseeding. Riprap considerations will be developed using NCHRP

Report 568 and HEC-23 methodology guidance for the rock slope protection sizing analyses.

## 2.3 Erosion Site Assessment and Design Recommendations TM

HDR will develop a Technical Memorandum (TM) summarizing the erosion assessment, alternatives, and design recommendations. The TM will summarize each alternative including feasibility level costs, constructability considerations, quantities, schedules, advantages, and disadvantages for each alternative. A recommended alternative will be identified in the TM and placement instructions will be provided for the preferred alternative for inclusion into the specifications. A Draft and Final Report will be developed.

### Assumptions:

- Hydraulic HEC-RAS model(s) will be provided by others. HDR will coordinate with the modeler as needed for additional simulations.
- FEMA and hydraulic water surface elevation impacts resulting from this erosion repair will be analyzed by others.
- Erosion protection will be sized based on the provided hydraulic model results.
- One-day site visit during design.
- Boring data and/or grain size distribution curve information within the project area is readily available and will be provided. No new geotechnical explorations or analyses are planned as a part of this task order.

### Deliverables:

- One Draft and one Final TM summarizing the analyses and results.

## 3 Design Engineering

### 3.1 Prepare 60% PS&E and BODR

Construction drawings, specifications, and estimate of probable construction cost (PS&E) will be prepared to the 60% level as a part of this task. The 60% PS&E will be submitted to SBFCA for review.

The 60% drawings will be prepared using AutoCAD software and will include general, plan and profile, and typical detail sheets appropriate for a 60% design submittal. The 60% specifications will include the general provisions and technical specifications only. Special provisions, bid forms, and a bid schedule will be developed for the 90% submittal.

A Basis of Design Report (BODR) will be prepared as a part of this task. The BODR will provide the project background, project purpose, describe the criteria and parameters

applicable to the design, and will summarize approaches, design decisions, and quantity calculations leading up to the 60% submittal.

#### Assumptions:

- The 60% opinion of probable construction cost will include a 25% contingency.
- Erosion protection will be added along the existing canal slope and to the limits identified in the introduction above.
- Submittals will be provided to SBFCA for review and coordination through other agencies.
- Improvements to existing structures, roadways, utilities (wet and dry), are not included. It is assumed that erosion protection will be design to avoid impacting these facilities.

#### Deliverables:

- 60% Plans and Specifications; one PDF and two sets of 11x17 hard copies.
- 60% opinion of probable construction cost.
- 60% BODR.
- Topography will be provided by others.

## 3.2 Prepare 90% PS&E and BODR

The design will proceed to the 90% level and comments received from the 60% submittal will be incorporated. The 90% PS&E and BODR will be submitted to SBFCA for review and back-check of comments received on the 60% submittal.

The 90% submittal will include a full set of drawings and specifications and an updated cost estimate. The BODR will be updated and include relevant design information, design decision log, analyses, design calculations, quantity take-offs and geometric calculations, quality control reviews, and meeting notes.

#### Assumptions:

- The 90% specifications will include the general and special provisions, technical specifications, a bid schedule and appropriate SBFCA forms.
- The 90% opinion of probable construction cost will include a 20% contingency.

#### Deliverables:

- 90% Plans and Specifications; one PDF and two sets of 11x17 hard copies.
- 90% opinion of probable construction cost.
- 90% BODR.

### 3.3 Prepare 100% PS&E and BODR

The design will proceed to the 100% level and comments received from the 90% submittal will be incorporated. The 100% PS&E and BODR will be submitted to SBFCA for review and back-check of comments received on the 90% submittal. Any final comments received on the 100% submittal will be incorporated into the final PS&E.

The 100% design will include a full set of drawings and specifications, an updated opinion of probable construction cost, and an updated BODR.

Comments/Assumptions:

- The 100% specifications will include the general and special provisions, technical specifications, a bid schedule, and appropriate SBFCA forms.
- The 100% opinion of probable construction cost will include a 15% contingency.

Deliverables:

- 100% Plans and Specifications; one PDF and two sets of 11x17 hard copies.
- 100% opinion of probable construction cost.
- 100% BODR.

### 3.4 Prepare Final PS&E

HDR will prepare the final designs and associated PS&E. The final PS&E will generally incorporate any final comments received during back-check of the 100% plans and specifications.

Assumptions:

- Final Plans and Specifications will serve as the bid set.

Deliverables:

- Final Plans and Specifications; one PDF and two sets of 11x17 hard copies.
- Final opinion of probable construction cost.

### 3.5 Bidding Support

HDR will assist SBFCA during the bidding phase of the project. Services will generally consist of the following tasks.

#### 3.5.1 Bidding Support (Addenda and Clarifications)

HDR will assist SBFCA with the bidding, including responding to technical questions submitted by potential bidders and providing clarifying addenda when appropriate.

Assumptions:

- One addendum will be required.

Deliverables:

- One addendum to the bid documents.

### 3.5.2 Pre-Bid Meetings

HDR will attend a pre-bid meeting as requested by SBFCA. In addition, one meeting is assumed for coordination with SBFCA.

Assumptions:

- One pre-bid meeting and one coordination meeting are assumed.

Deliverables:

- Meeting notes.

## 4 SBFCA Program Team and Agency Coordination

### 4.1 SBFCA Team Coordination

HDR will coordinate with other members of the SBFCA team (including environmental and other SBFCA consultants) as needed and as directed by SBFCA to discuss design issues, meet program needs, and to help facilitate project approvals.

Assumptions:

- A project description is not needed or included in this effort.
- Four meetings up to four hours have been assumed for this effort.

### 4.2 Agency Coordination

HDR will coordinate with agencies (USACE, DWR, and the Joint Water Districts) as needed and as directed by SBFCA to discuss design issues, meet program needs, and to help facilitate project approvals.

Assumptions:

- A Central Valley Flood Protection Board permit application is not needed or included in this effort.
- Four meetings up to four hours have been assumed for this effort.

## 5 Fee Estimate

Attached please find HDR's detailed fee estimate for the scope of work described herein for Task Order 24. Note that this is for a budgetary estimate only and that actual rates will be used.

## 6 Schedule

The schedule of Task Order 24 assumes the following general schedule milestones when preparing this scope of work and fee estimate:

- Erosion Assessment and Design Recommendations – Four weeks after NTP.
- 60% PS&E and BODR – Three weeks after acceptance of erosion assessment recommendations.
- 90% PS&E and BODR – Four weeks after receiving review comments.
- 100% PS&E and BODR – Four weeks after receiving review comments.
- Final Design – Three weeks after receiving review comments.

**HDR Geotechnical, Surveying, and Engineering Design Services  
SUTTER BUTTE MAIN CANAL EROSION PROTECTION PROJECT  
TOTAL FEE SUMMARY - TASK ORDER 24**

No.	Task Description	Labor											Acct	Clerical	Total Hours	Total Labor (\$)	Expenses	Total	
		E7	E6	E5	E4	E3	E2	E1	T4	T3	T2	T1							
	Rates	290.25	239.81	216.45	191.87	151.28	129.14	109.47	142.67	124.22	114.37	87.32	129.14	109.47				5%	
<b>GEOTECHNICAL, SURVEYING, AND ENGINEERING DESIGN SERVICES - FEATHER RIVER WEST LEVEE REHABILITATION EARLY IMPLEMENTATION PROJECT</b>																			
<b>1</b>	<b>Project Management</b>																		
1.1	Project Management	42												12		54	\$ 13,504	\$ 675	\$ 14,179
1.2	Invoicing and Progress Reports	20											20			40	\$ 8,388	\$ 419	\$ 8,807
	Subtotal Project Management	62	0	0	0	0	0	0	0	0	0	0	20	12	94	\$ 21,892	\$ 1,095	\$ 22,987	
<b>2</b>	<b>Erosion Assessment and Design Recommendations</b>																		
2.1	Hydraulic Model Review		2	8		20	40			8					78	\$ 11,396	\$ 570	\$ 11,966	
2.2	Erosion Protection Sizing Analysis		16	32		120	40			24					232	\$ 37,064	\$ 1,853	\$ 38,917	
2.3	Erosion Site Assessment and Design Recommendations TM		16	40		80	40			60				8	244	\$ 38,092	\$ 1,905	\$ 39,997	
	Subtotal Erosion Assessment and Design Recommendations	0	34	80	0	220	120	0	0	92	0	0	0	8	554	\$ 86,552	\$ 4,328	\$ 90,880	
<b>3</b>	<b>Design Engineering</b>																		
3.1	60% PS&E and BODR	30			80		20			120				20	270	\$ 45,950	\$ 2,297	\$ 48,247	
3.2	90% PS&E and BODR	28			60	4				100				20	212	\$ 36,701	\$ 1,835	\$ 38,536	
3.3	100% PS&E and BODR	20			68	2	20			80				16	206	\$ 34,903	\$ 1,745	\$ 36,648	
3.4	Final PS&E	10			20	2				24				8	64	\$ 11,342	\$ 567	\$ 11,909	
3.5	Bid Support	10			30					24				8	72	\$ 12,958	\$ 648	\$ 13,606	
	Subtotal Design Engineering	98	0	0	258	8	40	0	348	0	0	0	0	72	824	\$ 141,854	\$ 7,093	\$ 148,946	
<b>4</b>	<b>SBFCA Team and Agency Coordination</b>																		
4.1	SBFCA Team Coordination	8		16						4					28	\$ 6,356	\$ 318	\$ 6,674	
4.2	Agency Coordination	16		16											32	\$ 8,107	\$ 405	\$ 8,513	
	Subtotal SBFCA Team Coordination	24	0	32	0	0	0	0	4	0	0	0	0	0	60	\$ 14,463	\$ 723	\$ 15,186	
<b>TOTAL EFFORT</b>		<b>184</b>	<b>34</b>	<b>112</b>	<b>258</b>	<b>228</b>	<b>160</b>	<b>0</b>	<b>352</b>	<b>92</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>92</b>	<b>1,532</b>	<b>\$ 264,761</b>	<b>\$ 13,238</b>	<b>\$ 277,999</b>	

# **ECORP Consulting, Inc.**

## **Task Order 10**

### **SCOPE OF WORK**

#### **Irrigation Canal Rock Slope Protection Environmental Support**

This task order amendment is associated with the Master Agreement between the Sutter-Butte Flood Control Agency (SBFCA) and ECORP Consulting, Inc. (Consultant). This amendment was developed to accommodate the cultural and biological permitting and environmental review tasks associated with the rock slope protection activities along the Sutter Butte Main Canal where it is located within 10 feet of the Feather River West Levee. This work is described as occurring in Sutter County between Stations 1610+00 and 1623+00 (Segment A; Reach 24), and in Butte County between Stations 1674+50 and 1769+50 (Segment B; Reaches 26 to 28) and between Stations 1903+00 and 1957+00 (Segment C; Reach 31). This work will be carried out in accordance with the Master Agreement rate schedule in Exhibit A.

#### **ASSUMPTIONS AND UNCERTAINTIES**

The Consultant has made the following assumptions in developing the scope of work.

- The project is subject to the existing Feather River West Levee Project (FRWLP) EIR/EIS.
- Portions of the project area were previously rebuilt in 2014 as part of the FRWLP, and that SBFCA will provide as-builts to document such.
- Construction activity will occur for five weeks (25 10-hour days) between March 1 and April 30 in one construction season only.
- SBFCA will be able to engineer/construct the project with no adverse effect to historic properties.
- This budget does not include costs for mitigation for impacts to wetlands/waters of the U.S., riparian habitat, giant garter snake, elderberries, or historic properties, if mitigation is required (to be determined after impacts are calculated).
- This scope addresses natural and cultural resources only. Compliance with other environmental mitigation measures (e.g., air quality, noise, hydrology, hazardous materials) will be carried out by the construction management firm or contractor.
- Additional task-specific assumptions are provided below.

#### **SCOPE OF WORK**

##### **TASK 1.0 CULTURAL RESOURCES**

The work areas designated as Segments A, B, and C were included in the Area of Potential Effects for the FRWLP and its implementing documents, the Programmatic Agreement (and its tiering documents, such as Historic Property Treatment Plans and Archaeological Monitoring Plan) and the EIR/EIS, which previously concluded a significant, unavoidable, and cumulative effect to cultural resources. The Consultant proposes to extract the relevant requirements from these documents and provide a "phase-specific" compliance approach to this work. Consultant also assumes that this activity is not considered part of FRWLP Contract Areas A, B, or C and, as such, is not subject to the Settlement Agreement between SBFCA and United Auburn Indian Community.

### **Task 1.1 Updated Inventory and Report with Updated Archaeological Monitoring Plan**

Using baseline information collected by ICF during the planning for the FRWLP and supplemented by updates only where needed, the Consultant will prepare an updated and project-specific Area of Potential Effects map, inventory of cultural resources for the project area, a finding of effect, and an update to the FRWLP Archaeological Monitoring Plan in accordance with the Programmatic Agreement for the FRWLP. This scope includes an updated records search and literature review with the California Historical Resources Information System at Sacramento State for Segment A and at Chico State for Segments B and C. This scope also includes a search of the Sacred Lands File with the Native American Heritage Commission, pedestrian field visit only for: 1) any segments that either were not previously surveyed by ICF; 2) for which there exists uncertainty as to the current ground conditions; or 3) locations of previously recorded site locations. Consultant will not unnecessarily duplicate any effort that was previously expended as part of the FRWLP and will not carry out subsurface testing or trenching as part of this scope.

Consultant shall invite a tribal monitor from UAIC to participate in the field visit for Segment A and shall invite a tribal monitor from Enterprise Rancheria to participate in the field visits for Segments B and C, under Consultant's contract with Spherion Employment Agency. Should either or both of the tribes choose not to send a monitor, the survey will proceed.

Consultant will prepare a brief report that extracts all existing baseline data and supplements as needed. Following approval by SBFCA, Consultant shall submit the report to the USACE, which will circulate the draft to the SHPO and tribes for 30 days. If comments are received, Consultant shall revise the report as directed by the USACE and resubmit. The USACE will circulate the revised report for a 15-day backcheck. Consultant assumes that SBFCA can design and construct the project with no adverse effect to historic properties. In the event that the project is found to have an adverse effect, then a contract amendment will be needed to address impacts and develop/implement mitigation.

### **Task 1.2 Archaeological Monitoring and Report**

The Consultant will provide one archaeological monitor throughout the duration of the ground disturbing activity for any segments previously determined to require monitoring by the FRWLP, or for any portions of the project area that were previously determined to be no work areas and will require monitoring as part of the update under Task 1.1. The archaeological monitor shall disseminate contractor awareness training to all equipment operators that have the potential to disturb ground. The Consultant will prepare a brief monitoring report after the conclusion of all ground-disturbing activity associated with the project (only one monitoring report for the project). Because not all work will involve ground disturbance, this budget assumes 3 weeks of monitoring in one construction season. Consultant assumes that no unanticipated discoveries of cultural resources will occur during construction.

### **Task 1.3 Tribal Monitoring**

Consultant shall invite a tribal monitor from UAIC to monitor construction activity in Segment A and shall invite a tribal monitor from Enterprise Rancheria to monitor construction activity in Segments B and C, under Consultant's contract with Spherion Employment Agency. Should either or both of the tribes choose not to send a monitor, work will proceed. Because not all work will involve ground disturbance, this budget assumes 3 weeks of monitoring in one construction season. Consultant assumes that no

unanticipated discoveries of cultural resources will occur during construction.

#### **Task 1.4 Agency Liaison**

The Consultant shall provide agency liaison services on a time and materials basis to assist SBFCA in any required consultation with the USACE, DWR, or SHPO that may be required. In the event that federal permits and approvals are required that were not known at the time of scoping, a contract amendment would be necessary to comply with applicable law.

### **TASK 2.0 BIOLOGICAL RESOURCES AND REGULATORY DOCUMENTATION AND PERMITS**

#### **Task 2.1 Baseline Biological Resource Surveys**

The Consultant shall conduct the following baseline biological resources surveys to support preparation of permit applications and/or consultation with regulatory agencies:

- Aquatic Resource Delineation
- Giant Garter Snake Habitat Assessment
- Valley Elderberry Longhorn Beetle (VELB) Habitat Assessment
- Swainson's Hawk Habitat Assessment
- Tricolored Blackbird Habitat Assessment
- Yellow-billed Cuckoo Habitat Assessment
- Bat Habitat Assessment

**Aquatic Resource Delineation:** An aquatic resources delineation will be conducted for the Project area in accordance with the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, Version 2.0 (U.S. Army Corps of Engineers 2008), U.S. Army Corps of Engineers Sacramento District's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (U.S. Army Corps of Engineers 2016). Potential Waters of the U.S., including wetlands, will be mapped in the field using a global positioning system (GPS) unit capable of submeter accuracy (e.g., Trimble GeoXT) and/or georectified aerial photography.

The aquatic resources delineation will be conducted under current field conditions. This cost estimate is based upon the assumption that the "routine" aquatic resources delineation methods are utilized and that site conditions are of relatively unaltered terrain that has not been recently farmed, tilled, irrigated, leveled, denuded, treated with herbicide, or other significant land alteration. If the site has been altered to the extent that "routine" methodology is no longer applicable, a change order agreement will be prepared.

The aquatic resources delineation does not evaluate onsite aquatic features pursuant to guidance provided by USACE and the Environmental Protection Agency (EPA) following the Supreme Court's decision in the consolidated cases of Rapanos v. United States and Carabell v. United States. If the client requests a Rapanos Evaluation, an additional cost estimate will be prepared. A Rapanos Evaluation is conducted by the USACE whenever the applicant requests an Approved Jurisdictional Determination. Approved Jurisdictional Determinations are typically requested only when features not subject to USACE jurisdiction ("isolated") are identified on-site. Although the Rapanos Evaluation is conducted by the USACE, the applicant (or the applicant's agent) is frequently asked to provide information for this evaluation to expedite the review.

**Giant Garter Snake Habitat Assessment:** A habitat assessment for giant garter snake (*Thamnophis gigas*) will be conducted for the Project area and a 200-ft buffer.

**VELB Habitat Assessment:** A survey for the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*, VELB) and its exclusive host plant, elderberry (*Sambucus* sp.) will be conducted in accordance with the U.S. Fish and Wildlife Service's Conservation Guidelines for the Valley Elderberry Longhorn Beetle (2017). The survey will include the Project area plus a 165-foot buffer. Survey methods include mapping the location of each elderberry plant encountered on-site using a global positioning system (GPS) unit capable of submeter accuracy (Trimble GeoXT). Each elderberry shrub of suitable size will be examined for the presence (i.e. adult beetles or exit holes) of VELB. A letter report including a description of existing site conditions, field methods, a map of elderberry plants observed on site (if any), and evidence of VELB occurrence (if any) will be prepared.

**Swainson's Hawk Habitat Assessment:** A habitat assessment for Swainson's hawk (*Buteo swainsonii*) will be conducted to determine if any trees within

**Tricolored Blackbird Habitat Assessment:** A habitat assessment for tricolored blackbird (*Agelaius tricolor*) will be conducted to determine the presence or absence of tricolored blackbird breeding habitat within the Project area.

**Yellow-billed Cuckoo Habitat Assessment:** A habitat assessment for yellow-billed (*Coccyzus americanus*) will be conducted to determine the presence or absence of suitable yellow-billed cuckoo habitat within the Project area and a 500-foot buffer

**Bat Habitat Assessment:** A bat habitat assessment will be conducted to identify potentially suitable bat roosting habitat prior to commencing any vegetation removal activities. The bat habitat assessment will identify high quality habitat features (large tree cavities, basal hollows, loose or peeling bark, larger snags etc.) and the area around these features searched for bats and bat sign (guano, culled insect parts, staining etc.). Riparian woodland, orchards, and stands of mature broadleaf trees will be considered potential habitat for solitary foliage-roosting bat species.

Assumptions:

- Only maps of survey results will be proposed. Reporting results will be included in the applicable permit applications/reports for tasks below (i.e., USACE 404 permit, USFWS Biological Assessment, CDFW Incidental Take Permit, CDFW Streambed Alteration Agreement Notification).
- This scope of work does not include requests for additional information, revisions to the report or map nor a site visit with regulatory agencies, if requested.

## **Task 2.2 U.S. Army Corps of Engineers Clean Water Act Section 404 Permit**

If the Sutter-Butte Main Canal is determined to be jurisdictional by the USACE, a Section 404 permit will be required. Until details of the project are available, it is uncertain as to whether the project can be processed under Nationwide 3 (Maintenance) or if an Individual Permit (IP) will be required. As such, this scope assumes an individual permit is necessary. If a NWP3 can be utilized, some costs savings would be possible.

An Individual Permit application will be prepared and a draft submitted to client for review. As required by an Individual Permit, this task includes preparation of information to support Section 404(b)(1) Alternatives Analysis to be included in the application. After comments have been received and incorporated into the document, a submittal copy will be generated, and with client approval, submitted the USACE.

Assumptions:

- The scope assumes one hard copy of the draft application for client review and one pdf copy of the final application.
- The scope assumes that there will be no changes to the original project boundary or land use components provided in AutoCAD format to Consultant at the start of preparation and includes one round of compiled edits to the draft application.

**Task 2.3 Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification and/or Porter-Cologne Water Quality Control Act Waste Discharge Requirement (WDR)**

A Request for Water Quality Certification and/or WDR (if only waters of the state) will be prepared. After comments have been received and incorporated into the document, a submittal copy will be generated, and with client approval, submitted to the Regional Water Quality Control Board (RWQCB).

Assumptions:

- The scope of work assumes one hard copy of the draft application for client review and one pdf copy of the final application.
- The scope assumes no changes to the original project boundary or land use components provided in AutoCAD format to Consultant at the start of preparation, and one round of compiled edits to the Draft application.
- This scope assumes that the application will be submitted before the new State Wetland Definition and Procedures for Discharge of Dredged or Fill Material to Waters of the State is put into effect (anticipated March 2020).
- The RWQCB fee will be provided by the client prior to submittal.

**Task 2.4 California Department of Fish and Wildlife 1602 Streambed Alteration Agreement Notifications**

A Streambed Alteration Notification (i.e., application) will be prepared for the Project. After comments have been received and incorporated into the document, a submittal copy will be generated, and with client approval, submitted to the California Department of Fish and Wildlife (CDFW).

Assumptions:

- The scope of work assumes one hard copy of the draft application for client review and one hard copy and one pdf copy of the final application.
- The scope assumes no changes to the original project boundary or land use components provided in AutoCAD format to Consultant at the start of preparation, and one round of compiled edits to the Draft application.
- The CDFW fee will be provided by client prior to submittal.

**Task 2.5 US Fish and Wildlife Service ESA Section 7 Consultation**

Consultant will prepare a biological assessment (BA) in support of formal ESA Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS). Consultant will prepare a BA per USFWS guidelines to support an informal ESA Section 7 consultation process regarding potential project-related effects to federally listed or candidate species under the jurisdiction of the USFWS. Federally listed species that may be affected by the Project include the federally threatened giant garter snake, federally threatened VELB, and federally threatened yellow-billed cuckoo. The BA will include an evaluation of the potential effects to federally listed threatened, endangered, or petitioned species and critical habitat that are known to or may occur within the action area.

A list of potentially affected federally listed species and the nearest location(s) of critical habitat will be acquired via the USFWS species list website (<http://ecos.fws.gov/ecp/report/table/critical-habitat.html>) for the appropriate United States Geological Service (USGS) quadrangle map(s) on which the project occurs; CDFW's CNDDDB; and additional relevant occurrence data. Detailed species accounts and status summaries will be provided for those federally listed species that have the potential to be affected by the proposed project.

The BA will include a description of the project location, purpose of the project, the action area (i.e., adjacent habitat outside the project boundary that may be directly or indirectly affected by the proposed project), existing site conditions, project impacts and mitigation measures, project-related effects (i.e., direct, indirect, and cumulative effects to federally listed species), and a discussion of project alternatives.

**Assumptions:**

- The scope of work assumes one electronic copy of the draft BA for client and USACE review and one electronic copy of the final BA to be submitted to the USACE.
- Consultant will address one round of comments from the client and USACE on the draft BA.
- This scope assumes that, given the limited extent of anticipated impacts on terrestrial and riparian biological resources and the absence of any ESA-listed fish or designated critical habitat under USFWS' jurisdiction in the lower Feather River, an informal ESA Section 7 consultation process will be required with USFWS. Should the USACE or USFWS determine that formal ESA Section 7 consultation is appropriate, thereby resulting in a broader scope of work and budget than provided herein, a contract change order may be necessary.
- The scope assumes no changes to the original project boundary or land use components provided in AutoCAD format to Consultant at the start of preparation, and one round of compiled edits to the Draft application.
- This task will utilize existing available information and data, and does not include focused surveys (e.g., protocol-level presence/absence surveys).

## **Task 2.6 California Department of Fish and Wildlife Incidental Take Permit**

The Consultant will prepare an application for an Incidental Take Permit (ITP) for take authorization of state listed species. Depending on the results of the habitat assessments conducted under tasks 2.1, the Project may have potential for take of state-threatened giant garter snake, state-threatened tricolored blackbird, and state-endangered Swainson's hawk. The project may also have an impact to other CESA-listed species subject to Section 2081 of the California Fish and Game Code, which governs incidental take associated with such projects. In accordance with CDFW's ITP application guidelines, Consultant will prepare a draft and final ITP application detailing the applicant's contact information, a complete description of the dredging project, location (including maps) of the proposed dredging locations, an analysis of the potential take and adverse impacts state-listed species, including a jeopardy analysis for the population, proposed mitigation and monitoring measures, applicant certification, and documentation of CEQA compliance.

**Assumptions:**

- This scope assumes that all CDFW application fees for the ITP will be paid by the client
- The scope of work assumes one hard copy of the draft ITP application for client review and two hard copies and one pdf copy of the final application.

- The task budget does not include the preparation of engineering plans or CEQA documentation.
- The scope assumes no changes to the original project boundary or land use components provided in AutoCAD format to Consultant at the start of preparation, and one round of compiled edits to the Draft application.
- This task will utilize existing available information and data, and does not include focused surveys (e.g., protocol-level presence/absence surveys).

**Task 2.7 USACE Section 408 Permission and Central Valley Flood Protection Board Encroachment Permit Support**

The Consultant will provide environmental support to the Project team for preparation of the USACE Section 408 permission and Central Valley Flood Protection Board Encroachment Permit applications, if necessary. This task is limited to technical support and does not include preparation of the applications.

**Task 2.8 Preconstruction Nesting Bird Survey**

Consultant will conduct a preconstruction nesting bird survey for the Project area within 14 days of the initiation of construction activity. This survey will be conducted via visual observations and will include all potential bird nesting habitat within the proposed project footprint, all accessible areas within a 0.5-mile radius for Swainson’s hawk nests, a 500-foot radius for other raptors, and a 100-foot radius for other birds protected under the Migratory Bird Treaty Act. These surveys will be conducted during one field visit per boat ramp location (total of five surveys). A brief letter report summarizing survey methods and findings, including a map showing the location of active nest(s) will be prepared for each survey.

Assumptions:

- This task includes one site visit to be scheduled based on the construction schedule provided by the Client.
- This survey does not include presence/absence surveys for State-threatened Bank Swallow, as it is anticipated that no suitable Bank Swallow nesting habitat exists within the Project footprint or within 500-feet of the Project.
- This Task assumes that no active nests will be found, and does not include construction monitoring, nest monitoring, or CDFW consultation.
- Potentially suitable nesting habitats within inaccessible areas in the surrounding buffers (e.g. private property) will be visually assessed where feasible from public roads or from within the Project via binoculars and/or a spotting scope.

**Task 2.9 Preconstruction Giant Garter Snake and Northwestern Pond Turtle Survey**

A pre-construction giant garter snake and northwestern pond turtle survey (*Actinemys marmorata*) survey will be conducted within 24 hours prior to the start of construction activities. A total of one on-site visit is included in this cost estimate to assess the presence of giant garter snake and northwestern pond turtle. A letter report summarizing the results of the survey will be submitted to the client.

**Task 2.10 Biological Monitoring**

Consultant will conduct biological monitoring during construction activities to ensure compliance with the anticipated terms and conditions of the permits and environmental documentation for the project. Consultant will provide one permitted biologist or biological monitor (collectively, biomonitors) to monitor daily construction activities and ensure compliance with the anticipated terms and conditions regulatory permits and

approvals. Biomonitoring will be provided at a daily rate for all days for which monitoring is required by the permits.

Assumptions:

- The budget assumes a total of 25 work days.
- The daily rate for this task assumes a 12-hour work day (including mobilization and travel time) for biomonitoring, daily vehicle rental, and daily equipment (e.g., iPad/GPS) rental.

### **Task 2.11 Biological Compliance Verification and Reporting**

Consultant will comply with all reporting requirements of the environmental documents and permits by compiling post-project compliance documentation regarding biological resource issues. Reports will be suitable for submittal to: USACE, USFWS, NMFS, RWQCB, and CDFW.

Assumptions:

- This task assumes up to one year of construction for reporting requirements.

## **TASK 3.0 CEQA/NEPA COMPLIANCE**

### **Task 3.1 Compliance Documentation**

Consultant will document coverage by the existing EIR/EIS for this project activity, subject to review and concurrence by SBFCA's legal counsel. If the project cannot reasonably fall under the existing CEQA/NEPA documentation, then a contract amendment would be necessary to prepare supplemental environmental review.

### **Task 3.2 Project-specific MMRP**

Consultant will review the project plans and the Final EIR/EIS and determine which mitigation measures apply to the project. Consultant will extract all relevant mitigation measures from the EIR-EIS and create a project-specific Mitigation Measure Reporting Program (MMRP).

### **Task 3.3 Environmental Compliance Monitoring**

Consultant will review the construction specifications to ensure the MMRP is accurately reflected. Consultant will periodically track compliance throughout the project to ensure compliance with applicable mitigation measures from the project-specific MMRP. Any deficiencies or violations by construction personnel will be communicated to SBFCA immediately. Consultant assumes that proof of compliance with non-natural or non-cultural resources mitigation measures (e.g., air quality, noise) will be provided by the construction management firm or contractor.

### **Task 3.4 Project Closeout Memo**

After construction has been completed, Consultant will assemble proof of compliance of all mitigation measures in the project-specific MMRP and prepare a memo to SBFCA that documents compliance.

**TASK 4.0 TECHNICAL SUPPORT/PROJECT MANAGEMENT**

This task will allow the Consultant to participate in project meetings, conference calls, and field visits with SBFCA and its Construction Management team, to assist and coordinate with the USACE as the Applicant, to coordinate with other Agencies (i.e., USFWS, NMFS, CDFW, RWQCB), to coordinate with engineers and construction personnel, generally manage the project, and provide services as requested. This task will also allow the Consultant to complete the mitigation monitoring and reporting program compliance verifications. This is a time and materials, best efforts task, that will be used as needed throughout the remainder of this task order. Amendments may be necessary if additional effort is required (particularly with respect to agency liaison).

**BUDGET**

The budget for this Task Order Amendment is based on the provisions of the Master Agreement. A breakdown of work effort is provided on Table 1.

<b>Table 1. Budget Breakdown</b>	
<b>Task</b>	<b>Budget</b>
<b>1 – Cultural Resources</b>	
1.1 Updated Inventory and Report with Updated Archaeological Monitoring Plan	\$23,595
1.2 Archaeological Monitoring and Report	\$33,158
1.3 Tribal Monitoring	\$15,773
1.4 Agency Liaison	\$6,262
<b>2 – Biological Resources</b>	
2.1 Baseline Biological Resource Surveys	\$22,000
2.2 USACE Clean Water Act Section 404 Permit	\$17,500
2.3 RWQCB Clean Water Act Section 401 Water Quality Certification	\$8,500
2.4 CDFW 1602 Streambed Alteration Agreement	\$10,000
2.5 USFWS Biological Assessment	\$18,000
2.6 CDFW Incidental Take Permit Application	\$16,000
2.7 Section 408/CVFPB Encroachment Permit Support	\$7,500
2.8 Preconstruction Nesting Bird Survey	\$4,500
2.9 Preconstruction Giant Garter Snake and Northwestern Pond Turtle Survey	\$4,000
2.10 Biological Monitoring	\$50,000
2.11 Biological Reporting	\$10,000
<b>3 – CEQA/NEPA Compliance</b>	
3.1 Compliance Documentation	\$6,695
3.2 Project-Specific MMRP	\$6,480
3.3 Compliance Monitoring	\$4,000
3.4 Project Close-out Memo	\$6,000
<b>4 – Technical Support/Project Management</b>	<b>\$40,000</b>
<b>Total</b>	<b>\$309,963</b>

**CONTACTS**

All deliverables discussed in this SOW shall be provided to as described above.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the day and year first written above.

SUTTER BUTTE FLOOD CONTROL AGENCY

CONSULTANT

By: \_\_\_\_\_

By: \_\_\_\_\_

MICHAEL BESSETTE  
Executive Director, SBFCA

BJORN GREGERSEN  
President, ECORP Consulting, Inc.



# Sutter Butte Flood Control Agency

*A Partnership for Flood Safety*

December 11, 2019

**TO:** Board of Directors

**FROM:** Michael Bessette, Executive Director  
Seth Wurzel, Budget Manager

**SUBJECT:** Presentation and File Monthly Financial Reports (October 2019)

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## **Recommendation**

Staff recommends that the Board receive and file the October 2019 Financial Report and receive staff's monthly financial report update.

## **Background**

Staff will provide a brief presentation of SBFCA's current financial position and financial activities at the Board meeting and will be prepared to answer any questions. For this report, staff is presenting financial information for October 2019. Staff's oral presentation will cover the financial activities of the Agency through October 2019.

The monthly financial reports include the following information:

- Current Working Capital Position: The reports provide an update as to the liquidity of the Agency and ability to cover current obligations. This information is presented within the monthly financial reports prepared in coordination with Yuba City finance staff. The current month financial report reflects the financial information as of October 2019. The information presented is compared to the Final Amended Final Budgets for FY 2018/19 and 2019/20.

## **Fiscal Impact**

This is an informational item with no fiscal impact.

## **Attachments**

Yuba City Finance Department Memorandum, December 11, 2019 re: Monthly Financial Report: October 2019  
*(As materials were not available prior to the preparation of the Board Packet, the materials will be provided at the Board Meeting)*



# Sutter Butte Flood Control Agency

*A Partnership for Flood Safety*

December 11, 2019

**TO:** Board of Directors  
**FROM:** Michael Bessette – Executive Director  
**SUBJECT:** Receive and File Program/Project Update Report

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## **Recommendation**

Receive and file the December 2019 Program/Project update report and receive staff's monthly Program/Project presentation.

## **Background**

The purpose of this report is to provide a regular, monthly update on SBFCA program and project activities:

### *Engineering Design*

The design team is providing engineering cost estimates for the irrigation canal rock slope protection project which will be factored into a construction funding agreement amendment. The team is also providing assistance during construction on the UPRR Closure Structure project. This project is close to completion with only the owner (Levee District 1) installation training left to complete.

The design team continues to assist on encroachment compliance items such as tree removals, structure demolitions, and irrigation well relocations, which are an important component in the levee certification process. A draft set of bid documents for a structures demolition project was submitted for agency review at the end of September. This project has been delayed due to property owner negotiations for site access needed for hazardous materials testing. We now hope to complete the bid documents in December and go out to bid in January. The team also continues to process encroachment permit amendments through the Central Valley Flood Protection Board. A new series of encroachment permits was delivered to the CVFPB in October and should go before their board for approval at their December board meeting.

### *Construction Management (Project Areas B, C & D, and Completion Projects)*

The CM team is managing the UPRR Closure Structure project in the City of Yuba City and the project closeout activities for the Reach 25 Pipe abandonment project. The CM team is assisting Odin Construction on the completion of the UPRR Closure Structure project. As noted above all physical construction has been completed and only the owner training of the closure structure installation remains to be completed. Project closeout activities including Operation and Maintenance manuals and Construction Completion reports will take another couple of months to complete.

The CM team continues to manage season-two construction of the Oroville Wildlife Area Flood Stage Reduction Project. Construction activities on the Nordic Industries contract including final cleanup, punch list job walk, and demobilization have now concluded. The CM team is also managing the construction of the OWA Interior Channel Bridges Project. The project was awarded to Viking Construction in August, began construction in mid-September, and will be closing down for the winter in either November or December depending on the pedestrian bridge fabrication work. The two pedestrian bridges are being fabricated at an offsite facility and are scheduled to be completed in December. Actual delivery and installation of the pedestrian bridges have not yet been scheduled.

### *Environmental Documentation/Permitting/Monitoring/Mitigation*

ECORP Consulting continues to provide environmental and cultural permit compliance monitoring and documentation for all active projects (UPRR Closure Structure, both OWA construction contracts, FRWLP closeout activities, and the USACE Cypress to Tudor levee improvement project as needed).

SBFCA staff continues to coordinate closely with the Sacramento Valley Conservancy (SVC) on the Star Bend and Mathews Property environmental mitigation sites. Monthly coordination meetings are being held to advance progress toward the completion of the required conservation easement and management plan. A draft plan was completed by SVC along with the associated funding plan, both of which have been reviewed by agency staff. All associated agreements, management plans, and conservations easements are being finalized. Coordination with Levee District 1 is taking place since they are the landowner of the Star Bend property. Staff provided an overview of this process at the October SBFCA board meeting. Our current schedule is for the framework agreement and associated documents be presented to the SBFCA board for approval at the February 2020 Board meeting.

### *Right of Way*

The right-of-way team continues to finalize the administrative work for the land acquisitions required for the federal project (between Tudor Road and Cypress Avenue), and the associated federal credit package. The team is also working on closing out all acquisitions needed for the FRWLP including the easements needed from the affected public agencies and several outstanding privately owned parcels. The right-of-way team is also working on documenting the land rights held adjacent to the irrigation canal which will be improved with a rock slope protection project. The Department of Water Resources (DWR) has directed SBFCA to acquire the permanent real estate rights from the Laurel Avenue project limits needed in order to incorporate that levee improvement project into the federal crediting package. DWR will cost share in these property easement acquisitions through SBFCA's UFRF Funding Agreement. Staff is working with DWR to process a 7th amendment to cover these costs. The SBFCA right-of-way team and DWR continue to conduct monthly coordination meetings to streamline the real estate acquisition reimbursement process and ultimate transfer of property to the State.

### *State & Local Funding and Coordination*

#### *EIP / UFRF Agreement*

SBFCA staff continues to work with DWR to process additional payments and reimbursement requests for various items of work. The last payment received and reported to the Board was in the amount of \$862,562 and was received on June 14, 2019. SBFCA is currently processing three payments totaling \$3.84 million in payments with DWR. This is an additional \$2.37 million more than what was reported to the Board last month.

In May 2019, SBFCA Staff submitted an amendment request to DWR for an Amendment to the funding agreement. This amendment requested five specific items from DWR as summarized below. DWR and SBFCA staff have been reviewing this request and updating the costs associated with Item No. 3 below. The following reflects the latest update to amount of funding requested, however, these amounts are still undergoing additional engineering review. Once the budgets are finalized, SBFCA will be submitting a revised funding request to DWR.

<b>No.</b>	<b>Impacted Term</b>	<b>Description</b>	<b>Request</b>	<b>Amount</b>
1	Expiration Date	Extend Date	December 31, 2021 <i>(or later dependent on scope of work of amendment.)</i>	N/A
2	Funding Limit	OWA Project	Increase Funding	\$3.74 Million
3	Funding Limit	Canal Slope	Increase Funding	\$7.01 Million
4	Funding Limit	ROW in Fee @ Laurel for Federal Credit	Increase Funding	\$342,000
5	Funding Limit	Additional Cost for FRLIP	Increase Funding	\$452,178
<b>Total Additional State Funding Request</b>				<b>\$11.546 Million</b>

The items listed above are being processed as two amendments. DWR is processing a 6<sup>th</sup> Amendment that will extend the time only (Item No. 1 above). This amendment has been fully executed and is pending Department of General Services (DGS) approval. The second amendment (Amendment No. 7), as noted above, is still undergoing engineering review to finalize the budget for the Rock Slope Protection work.

The table below presents the funding status of the Agency's UFRR Grant.

**FRWLP DWR EIP/UFRR Funding**

	<u>Agreement</u>		
	<u>Design</u>	<u>Construction</u>	<u>Total</u>
Agreement No.	#4600009480	#4600010296	
Capital Outlay Amount	\$9,000,000	\$56,780,000	\$65,780,000
Amendment 1	\$0 [1]	\$0 [2]	\$0
Amendment 2	\$14,869,280 [3]	\$57,803,791 [4]	\$72,673,071
Amendment 3	\$0	\$43,861,587	\$43,861,587
Amendment 4	\$0	\$40,828,931	\$40,828,931
Amendment 5	-\$2,529,451 [5]	\$31,730,451 [5]	\$29,201,000
Amendment 6	\$0	\$0 [1]	\$0
<i>Pending CFA 7 Budget (for original scope of work)</i>	\$0	\$452,178 [6]	\$452,178
<b>TOTAL FUNDING</b>	<b>\$21,339,829</b>	<b>\$231,456,938</b>	<b>\$252,796,767</b>
Receipts			
Payments to Date	\$21,339,829	\$210,757,396	\$232,097,226
Pending [7]	\$0	\$3,837,943	\$3,837,943
<b>TOTAL PAYMENTS</b>	<b>\$21,339,829</b>	<b>\$214,595,339</b>	<b>\$235,935,169</b>
<b>GRANT BALANCE</b>	<b>\$0</b>	<b>\$16,861,599</b>	<b>\$16,861,599</b>

- [1] Amendment 1 to the Design Agreement and Amendment 6 to the Construction Agreement amended the terms of the agreements (time extensions only).
- [2] Amendment 1 to the Construction Agreement amended the scope agreement to include the closure of gaps (at reaches 13 and 24) in Area C.
- [3] Amendment 2 to the Design Agreement increased the cost share from 50% to 76% State Cost Share and increased the State funding limit.
- [4] Amendment 2 to the Construction Agreement increased the scope to include Areas B & D2A and increased the State funding limit. It also incorporated many of the guideline provisions of the UFRR Program.
- [5] Reflects pending transfer of remaining design funding to the CFA and additional funding from DWR for emergency work (\$25,000,000 for R 14 – 16 and \$4,201,000 for emergency storm response).
- [6] The proposed CFA Amendment 7 has been requested with additional for the FRWLP in the amount of \$452,178. Additional funding for other scope items to be included in Amendment 7 has not been included in the above analysis.
- [7] Pending payments for 21<sup>st</sup>, 22<sup>nd</sup>, and 23<sup>rd</sup> Quarters (through the period ending September 30, 2019)

***OWA (CDFW & WCB) Grant Agreements***

SBFCA staff is working with the WCB and CFDW to process payments for the ongoing OWA work. Recent payments were received for the WCB 2018 grant in the amount of \$2,362,367. SBFCA currently has \$3,303,287 in pending payments due from CDFW. The table(s) below presents the funding status of the Agency's WCB Grant and CDFW Grant, respectively.

**OWA WCB 2018 Funding**

**Agreement**

Grant Agreement No.	WC-1736BC
Grant Amount	\$5,070,900
<b>TOTAL FUNDING</b>	<b>\$5,070,900</b>
Receipts [1]	
PMT 1	\$768,687
PMT 2	\$1,593,679
<b>TOTAL PAYMENTS</b>	<b>\$2,362,367</b>
<b>GRANT BALANCE</b>	<b>\$2,708,533</b>

[1] Payments received as of 9/26/19

**OWA CDFW 2017 Funding**

**Agreement**

Grant Agreement No.	P1796010
Grant Amount	\$5,648,836
<b>TOTAL FUNDING</b>	<b>\$5,648,836</b>
Receipts [1]	
PMT 1	\$22,457
PMT 2	\$29,825
<i>Pending</i>	
PMT 3	\$3,253,250
<b>TOTAL PAYMENTS</b>	<b>\$3,305,532</b>
<b>GRANT BALANCE</b>	<b>\$2,343,304</b>

[1] Payments received as of 12/2/2019

*Oroville Wildlife Area (OWA) Flood Stage Reduction Project*

As mentioned previously, the contractor has completed the construction of the new box culvert, the interior channel grading, fish berm, and the parking and site access improvements. The project team is coordinating closely with both DWR and CDFW on closing out this work. The project team also continues with processing contractor submittals and conducting environmental surveys for the ongoing construction of the bridges. Due to the dry weather, the team has processed time variance requests with the CVFPB in order to continue construction during winter and it is anticipated that the construction work will continue into January as long as the weather allows. In regards to funding, SBFCA staff continues to coordinate with both American Rivers and River Partners to implement the recent grants SBFCA received from the Wildlife Conservation Board (WCB) and CDFW. SBFCA executed an agreement with River Partners in October for the installation of the new vegetation plantings and the planting work is scheduled to begin next spring. SBFCA staff also submitted a grant application to CDFW on November 21 requesting \$2.1M to help advance a new project in the OWA called the Robinson's Riffle Restoration Project. Similar to what was done for the OWA FSR project, the new grant would fund a feasibility phase to engage stakeholders and define a preferred alternative. The grant would also fund the design and initial permitting for the preferred alternative.

### *Sutter Basin Flood Risk Management Project (federal project)*

USACE's contractor, Great Lakes E&I, will complete levee regrade activities by the end of November and conclude all levee reconstruction work including levee crown aggregate base installation and applying erosion control measures on all exposed ground by middle of December. Coordination work for the 2020 construction season pipe installations is ongoing and includes key representatives from USACE, the irrigation facility owners, Great Lakes E&I, SBFCA staff and other stakeholders. SBFCA staff and consultants are providing engineering (including cost engineering), economics, right-of-way, and cultural and environmental permitting support. SBFCA staff continues to participate in frequent USACE project management team and construction coordination meetings in order to advance the project and look out for community concerns.

### *Small Community Studies-Sutter and Tudor*

The project team has completed its evaluation of the various proposed alternatives and has finished preparing the financial analysis and draft study reports. The draft Feasibility Study reports were submitted to DWR on November 1 for their review and comments were received on November 22 for the Sutter report. The project team is currently working on addressing the comments and finalizing the report. The team is still awaiting comments from DWR on the Tudor report. DWR has indicated that they have up to \$29M in Proposition 1E funds to award in Phase 2 and it is anticipated that the final PSP will be released this early winter.

### *Proposition 68 Sediment Management*

Staff continues to scope work with the California Natural Resources Agency (CNRA) and local stakeholders for \$5 million of direct funding for SBFCA-led projects. Currently, the draft scope of work includes sediment removal at both the Yuba City and Star Bend boat launch locations, and removal of aquatic invasive species at the Live Oak boat launch location. A Resolution authorizing the application of grant funds was approved by the Board at the August 14<sup>th</sup> meeting. SBFCA staff is currently working with CNRA to process some proposed changes to the draft funding agreement language. SBFCA staff also submitted a grant application to CDFW on November 25 requesting \$1.2M in funding to help supplement and expand upon the work that will be done as part of the CNRA grant.

### *Butte County FEMA Accreditation*

SBFCA staff submitted the Butte County FEMA accreditation package to FEMA on July 12<sup>th</sup> and formal confirmation of receipt of the package was received on July 18<sup>th</sup>. Following submittal, it is projected that the review and processing period with FEMA will take approximately 2 to 3 years before the proposed mapping changes become effective. FEMA requested additional information on September 27<sup>th</sup> and the SBFCA team is currently working on compiling the additional information in response to this request. The team is planning to submit the additional information to FEMA in early December.

### **Fiscal Impact**

This is an informational item only with no fiscal impact to SBFCA.



# Sutter Butte Flood Control Agency

*A Partnership for Flood Safety*

December 11, 2019

## **Item 5**

**TO:** Board of Directors  
**FROM:** Michael Bessette, Executive Director  
**SUBJECT:** Program/Project Update

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This time has been set aside on the agenda for a report and discussion (if necessary) by member and partner agency representatives.

## **Item 6**

**TO:** Board of Directors  
**FROM:** Michael Bessette, Executive Director  
**SUBJECT:** Other Reports by Agency Staff and Consultants

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This time has been set aside on the agenda for Board discussion and staff response regarding correspondence received by the Agency.

## **Item 7**

**TO:** Board of Directors  
**FROM:** Michael Bessette, Executive Director  
**SUBJECT:** Report by Member Partner Agencies

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This time has been set aside on the agenda for Board discussion and staff response regarding correspondence received by the Agency.

## **Item 8**

**TO:** Board of Directors  
**FROM:** Michael Bessette, Executive Director  
**SUBJECT:** Report on Correspondence Sent by and Received by the Board

## **Fiscal Impact**

The above items are informational only with no fiscal impact to the Agency.