SCOPE OF WORK

WORK TO BE PERFORMED BY GRANTEE

The purpose of this project is to develop a decision support tool that assists land use planners in determining ecologically significant and scientifically-based riparian buffer widths (RBW). The Project will assist local and regional governments in areas within the Bay-Delta and its tributaries, which are experiencing the largest population growth.

1. CEQA Documents

1.1 Obtain California Environmental Protection Act (CEQA) or the National Environmental Protection Act (NEPA) approval, as applicable. No work that is subject to CEQA/NEPA shall proceed under this agreement until documents that satisfy the CEQA/NEPA process are received by the Grantee, and the CEQA/NEPA environmental act requirements are satisfied, as applicable.

Work Item Submittals / Items for Review: 1.1 CEQA

2. Project Design

2.1 Project Assessment and Evaluation Plan

This item will include the preparation of a Project Assessment and Evaluation Plan (PAEP) to include the following:

2.1.1 Describe the baseline water quality of the impacted waterbody, or the specific issue the Project is intended to address.

2.1.2 Identify the methods that will be used to quantify benefits to the CALFED Bay-Delta Program.

2.1.3 Identify ways to track success toward meeting the Project's desired outcomes.

2.1.4 Describe proposed methods to assess the effectiveness of the project.

2.2 Obtain Permits

This work will include obtaining necessary permits, including but not necessarily limited to encroachment permits for work on public land, as required by law and applicable to the Project.

2.2.1 Secure all required permits for the project. No work that is subject to permitting shall proceed under this agreement until all necessary permits are obtained by the Grantee.

2.2.2 Provide liaison to coordinate site visits, secure permits and incorporate mitigation measures outlined in permit conditions.

2.3 Literature Review

This item will include brief review of existing studies and selection of methods applicable to the selected Bay Delta region.

2.3.1 Define the problem the project is proposing to solve and the desired outcomes.

2.3.2 Research existing literature on Functional Riparian Buffer Width.

2.3.3 Identify scientifically sound methods for Riparian Buffer Width determination. Methods may be combined to create the best method or suite of methods for the selected Bay-Delta region. The method or suite of methods must address one or more of the following:

a. Allow for Flood Hazard Management and Geomorphic Processes

b. Preserve Water Quality

c. Protect Riparian Species Habitat

d. Increase a Community's Quality and Value

2.3.4 Assess the list of methods, merits and applicability to the selected Bay-Delta region.

2.3.5 Report on selected methods for on-the-ground testing and assessment

2.4 Technical Advisory Committee (TAC)

2.4.1 Develop a Technical Advisory Committee (TAC) consisting of at least the following seven (7) mandatory members: CALFED Science Program Representative, Dr. Josh Collins, (SFEI), Eric Stein (SCCWRP), Chris Bowles (Chris Bowles Environmental Consulting), Eric Berntsen (State Water Board), one agreement representative and one local planning commissioner. Solicit additional scientists, land use planners, resource managers, and representatives from local / regional/state community and non-governmental organizations and the private sector to serve on the TAC, as necessary.

2.4.2 Establish roles and responsibilities for members of the TAC

a. The seven mandatory members of the TAC will be core representatives. Additional representatives may lend support, but do not need to attend the meetings.

2.4.3 Develop and Implement a meeting schedule for the TAC

a. Hold up to two (2) TAC meetings during the Literature Review (Task 2.3) to gain input. All core representatives must participate in at least one (1) of these meetings.

b. Hold at least one (1) TAC meeting in which all core members participate to discuss the study (Task 2.5) and results from Task 2.5.3. The TAC will provide input on the field research and "Documentation of Selected Methodology Report" to determine the best methods to incorporate into the Decision Support Tool (DST).

c. Hold one (1) to three (3) TAC meetings to discuss the DST and supporting documentation in Task 3 before it is finalized. All core representatives must attend at least one (1) of these meetings. At a minimum, the TAC should evaluate the design of the DST to facilitate ease of use. Upon the final TAC meeting, the TAC will provide a list of changes needed to the tool and supporting information. These recommendations will be documented and provided to the Grantee.

2.5 Conduct Field Research

2.5.1 Select at least two (2) project site test locations based on the items listed below.: (Map your selected sites using Geographic Information Systems)

a. Availability of information such as aerial photographs and regional curves for bankfull discharge,

b. Ease of access to site test locations,

c. Appropriate variability in stream size,

d. Hydro-geomorphic characteristics,

e. Habitat type, and

f. Level of Disturbance

2.5.2 Develop Regional Hydraulic Curves to support at least two of the proposed methods: the "streamway" approach and hydro-geomorphic method.

2.5.3 Prepare a "Documentation of Selected Methodology Report") that includes for each methodology:

a. Ease of use,

b. Lessons learned in assessment and testing,

c. Advantages and limitations, and

d. Cost and efficiency to produce a functional buffer.

Work Item Submittals / Items for Review: 2.1 PAEP, 2.2.1 Applicable permits, 2.2.2 Liaison Contact Information, 2.3.1 Definition of the problem and a list of the desired outcomes, *2.3.2 A list of literature sources reviewed in "Work Cited" form 2.3.3* A list of scientifically sound methods, *2.3.4 Summary of assessment process & decisions made, 2.3.5 Report on selected methods for determining riparian buffer widths, 2.4.1 TAC Membership List, 2.4.2 A list of Roles and Responsibilities of Core Taskforce Members, 2.4.3a. TAC Meeting Schedule and Meeting Notes, 2.4.3b. TAC input on the Field Research and "Documentation of Selected Methodology Report", 2.4.3c A summary of major discussion comments, a list of changes needed to the tool, and supporting information (including ease of use), 2.5.1 A map of selected site locations and Landowner access agreements-as needed,2.5.2 Hydraulic Curves, and 2.5.3 Documentation of Selected methodology Report as outlined above.*

3. Decision Support Tool (DST) Development

3.1 Develop a user-friendly DST based on input received from TAC meetings, consisting of:

3.1.1 An interactive spreadsheet and/or web-based interface to guide the user to a recommended buffer width,

3.1.2 Instructions to the spreadsheet computer and/or web-based program and background on each method, written for a non-scientific audience,

3.1.3 RBW sizing formulas included within the tool,

3.1.4 Technical notes on the assumptions, limitations and advantages / disadvantages of each method for various scenarios, and

3.1.5 References for additional information on the methods.

3.2 Incorporate the changes from the documented change list recommended from the TAC in the final development of the DST.

Work Item Submittals / Items for Review: 3.1.1/3.2 DST, 3.1.2 Instructions to use the DST, 3.1.3 Sizing Formulas, 3.14, Metadata, and 3.1.5 Method References,

4. Outreach and Technology Transfer

4.1 Create outreach media guidance (Examples may include, but are not limited, to fact sheets, cds, etc.).

4.2 Conduct up to five (5) broadly publicized workshops to review and distribute the DST and guidance.

4.3. Target attendance of at least five (5) local governmental staff to attend each workshop.

4.4 Work with one (1) local governmental organization or watershed entity to demonstrate the DST and use it to help determine an appropriate buffer width for a local watershed project.

4.5 Use the DST to map the appropriate riparian width upstream and downstream of selected plots (within and outside the study area).

4.6 Present the findings at one or more California conferences where those making riparian landuse decisions will be in attendance. At a minimum the findings must be presented at the CALFED Science Conference. Payment for this task will be limited to organizing the presentation and travel expenses. Conferences must be within the Bay Delta Region in California and all speaker registration outside of the Cal-Fed Science Conference must be waived.

4.7 Create and maintain at least one website to make the tool and information available to others during the project

Work Item Submittals / Items for Review: 4.1 Media Guidance, 4.2 Workshop Notice, 4.3 A sign up sheet of attendees and association(each sheet should have at least 5 government staff) 4.4 A summary of the local project, the application of the tool, and the decisions made as a result of its application. 4.5 Map of appropriate buffer widths within & outside of the project area. 4.6 Copy of presentation & conference agenda. 4.7 The hyperlink to the website.

5. Reporting

5.1 Provide Quarterly Progress Reports

5.2 Provide a Draft Project Report
Prepare and submit to the Grant Manager a draft Project Report for review and comment that includes and addresses all of the work items / Items for Review outlined in the Scope of Work

5.2 Provide a Final Project Report

Prepare a final Project Report that addresses, to the extent feasible, comments made by the Grant Manager on the draft Project Report. Submit one (1) reproducible master, two (2) copies, and an electronic copy of the final Project Report to the Grant Manager for review and acceptance.

Work Item Submittals / Items for Review: 5.1 Quarterly Progress Reports, 5.2 Draft Project Report, 5.3 Final Project Report