Project Information

2005 Proposal Number: 0054

Proposal Title: **Riparian Sanctuary (Phase II) – Bringing Agricultural and Ecological Interests Together for Pumping Plant Protection and Riparian Restoration (Sacramento River Mile 178) – Design Development and Environmental Compliance**

Applicant Organization Name: **River Partners**

Total Amount Requested: $**660,665**

ERP Region: Sacramento Region

Short Description

Project seeks funding for planning and design efforts to develop Second phase of multi−phase process to protect PCGID−PID's pumping plant and fish screen facility. This phase is focused on completion of enviromental compliance, obtaining permits, advanced planning, and completion of construction plans.

Executive Summary

River Partners requests approximately $660,665 from CALFED to initiate next phase planning and design efforts on the Riparian Sanctuary.

In 2004, River Partners and an interdisciplinary team began studies to explore measures to protect the Princeton, Cordora, Glenn and Provident Irrigation Districts' (PCGID−PID) pumping plant and fish screen facility and develop management options for the Riparian Sanctuary, a component of the Sacramento River National Wildlife Refuge (SRNWR).

To address the complex and potentially controversial issues associated with restoration and facility protection options, the project employed an open, science−based process to educate stakeholders and foster consensus for solutions. The project has successfully yielded promising solutions that meet

multiple objectives and has garnered support to further investigate these solutions. As feasibility level studies, this first phase only allowed for the screening of solutions, and more detailed analyses are needed before implementation could proceed. The project has support from a diverse coalition of agricultural and environmental interests.

Phase II provides an opportunity to fully develop a joint project that meets agricultural and ecological needs. The primary goal is to develop the technical information to fully evaluate recommended alternatives, complete the design information and satisfy environmental and permit compliance to allow for implementation of measures to protect the PCGID–PID facility and to meet SRNWR habitat goals for the Riparian Sanctuary. Phase II will clear many of the hurdles for implementation, and once completed, the project proponents intend to seek funding for a joint project.

Riparian Sanctuary (Phase II): Bringing Agricultural and Ecological Interests Together - Design Development and Environmental Compliance for Facilities Protection and Habitat Restoration.

Sacramento River Mile 176 -178.5
Butte and Glenn County, California

December 15, 2005

Prepared for:

Ecosystem Restoration Program
2005 Solicitation: Projects that assist farmers in integrating agricultural activities with ecosystem Restoration

CALIFORNIA BAY-DELTA AUTHORITY

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EXECUTIVE SUMMARY

River Partners requests approximately $660,665 from CALFED to initiate next phase planning and design efforts on the Riparian Sanctuary. In 2004, River Partners and an interdisciplinary team began studies to explore measures to protect the Princeton, Cordora, Glenn and Provident Irrigation Districts' (PCGID-PID) pumping plant and fish screen facility and develop management options for the Riparian Sanctuary, a component of the Sacramento River National Wildlife Refuge (SRNWR).

To address the complex and potentially controversial issues associated with restoration and facility protection options, the project employed an open, science-based process to educate stakeholders and foster consensus for solutions. The project has successfully yielded promising solutions that meet multiple objectives and has garnered support to further investigate these solutions. As feasibility level studies, this first phase only allowed for the screening of solutions, and more detailed analyses are needed before implementation could proceed. The project has support from a diverse coalition of agricultural and environmental interests, and exemplifies the progress possible when sound partnerships and science come together to evaluate options to meet multiple goals.

Phase II provides an opportunity to fully develop a joint project that meets agricultural and ecological needs. The primary goal of Phase II is to develop the technical information to fully evaluate recommended alternatives, to complete the design information and satisfy environmental and permit compliance to allow for implementation of measures to protect the PCGID-PID facility and to meet SRNWR habitat goals for the Riparian Sanctuary. Phase II will clear many of the hurdles for implementation, and once completed, the project proponents intend to seek funding for a joint project.

RIPARIAN SANCTUARY (PHASE II): BRINGING AGRICULTURAL AND ECOLOGICAL INTERESTS TOGETHER - DESIGN DEVELOPMENT AND ENVIRONMENTAL COMPLIANCE FOR FACILITIES PROTECTION AND HABITAT RESTORATION.

A. Project Description

1. Problem

a) Introduction

In 2004, River Partners and an interdisciplinary team began studies to explore measures to protect the Princeton, Cordora, Glenn and Provident Irrigation Districts' (PCGID-PID) pumping plant and fish screen facility and develop management options for the Riparian Sanctuary, a component of the Sacramento River National Wildlife Refuge (SRNWR) managed by the US Fish and Wildlife Service (USFWS). The project was funded through a CALFED grant (ERP-02-P39).

In many respects, the pre-project situation demonstrated some of the complicated problems and opportunities facing floodplain managers. The problems (potentially conflicting goals, poor information, scientific uncertainty, poor public input, etc) can often produce single purpose solutions that ultimately fail because of the lack of consideration of other goals. The project illustrates the opportunity of bringing people with different interests together to use good science and cooperative spirit to solve complex problems. The sections below provide some background into the issues that surround the project and place the request and effort into context.

b) Riparian Sanctuary Issues

In 1991, the 950-acre Riparian Sanctuary became part of the Llano Seco Unit of the SRNWR. The Riparian Sanctuary resides 15 miles southwest of Chico in the southwest corner of Butte County, on the east bank of the Sacramento River between River Mile 176.5 and 178 (Figure 1). The USFWS acquired the Llano Seco Unit (Figure 1) "to protect, enhance, and restore critical habitat and natural communities of native, resident, and migratory wildlife species" (FWS, 1992). Approximately 450 acres of the site is in existing (or recently recruited) riparian habitat.

Despite the cessation of agriculture a decade ago, approximately 500 acres of the Riparian Sanctuary is nearly devoid of native vegetation and dominated by non-native plants (River Partners 2005) (Figure 2). Oswald and Ahart (1996) describe the area as "weedy" and "impenetrable," and dominated by non-native plant species; such as yellow star thistle (*Centaurea solstitialis*), bull thistle (*Cirsium vulga*re), black mustard (*Brassica nigra*), and Johnson grass (*Sorghum halepense*) (Figure 3). These conditions are likely to persist even with a historic record of riparian habitat on site, continued seasonal floods, and proximity to native seed sources (Figure 4 and River Partners 2005).

Current site condition in this area, contribute little to endangered species recovery, migratory bird habitat, and overall riparian health (Figures 3 and 4). Without

Figure 1. Location Map, Riparian Sanctuary, Butte County, California

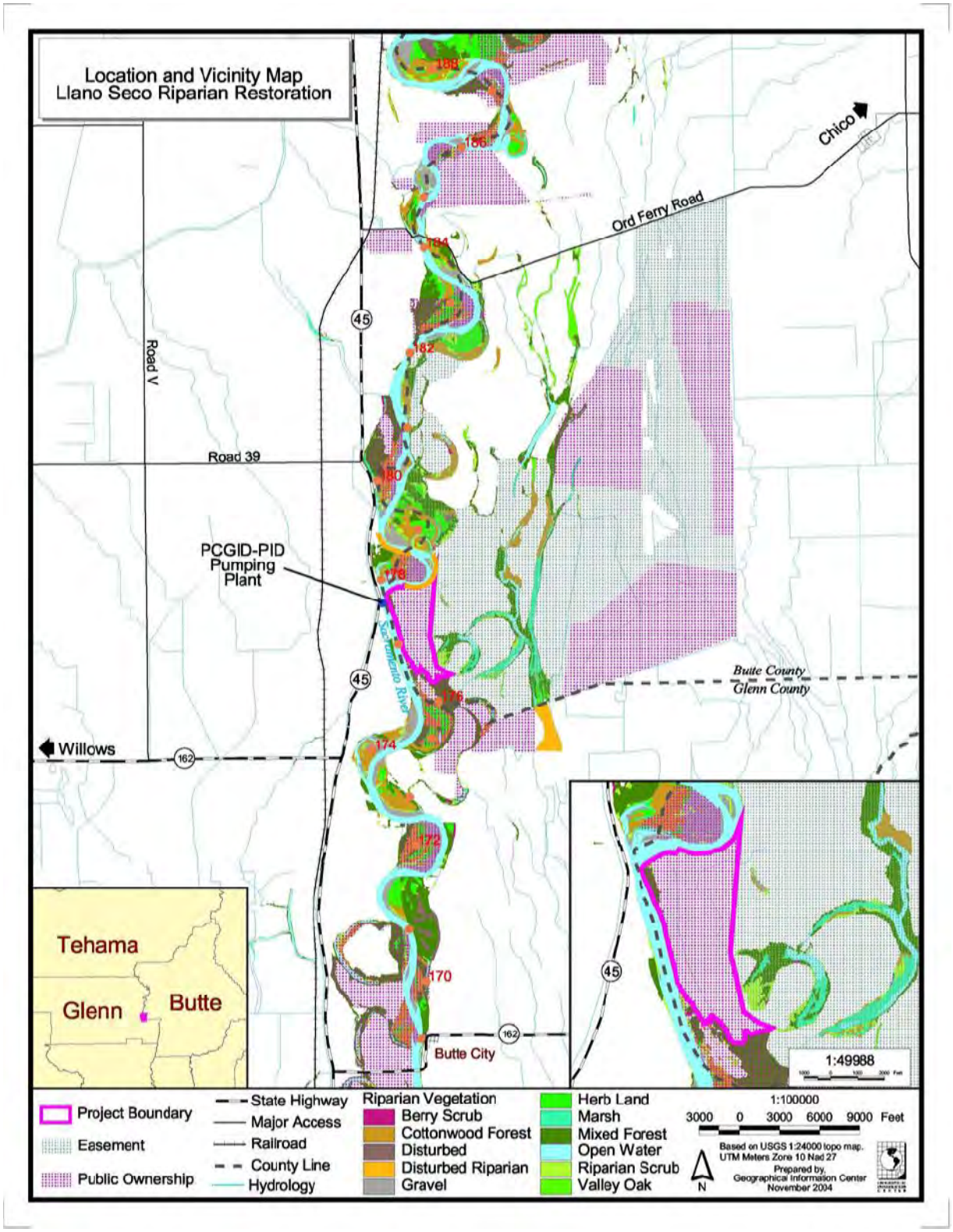


Figure 2. Aerial Photograph of PCGID-PID Facility and Riparian Sanctuary, Butte County, California.

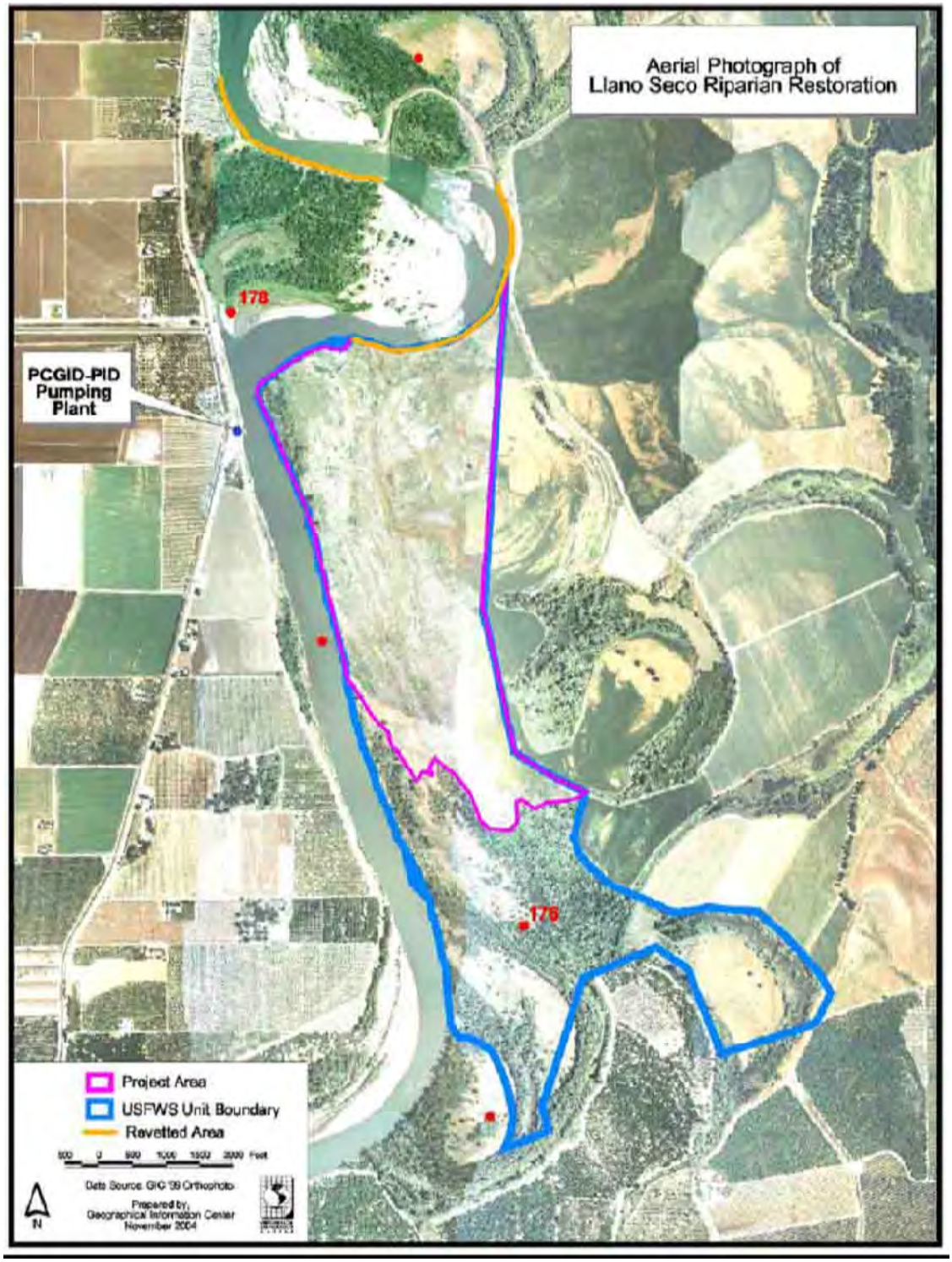
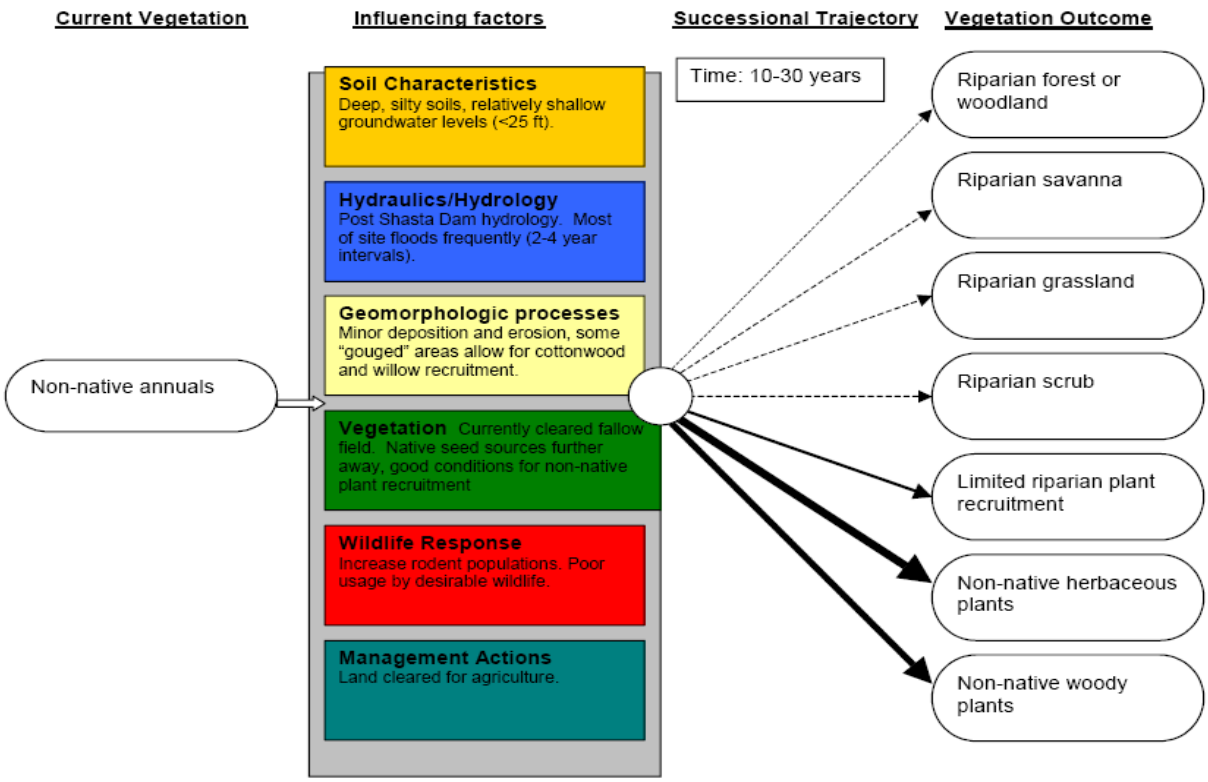


Figure 3. Current Site Vegetation at the Riparian Sanctuary, Butte County, California (River Partners 2005).

Figure 4. Example of Successional Model for the Riparian Sanctuary Feasibility Study (River Partners 2005).



intervention, the site does not meet the mission of the USFWS (River Partners 2005). However, once restored, the Riparian Sanctuary will greatly contribute to ecological processes and species recovery.

c) PCGID-PID Fish Screen and Pumping Plant

In the mid-1990's the PCGID-PID consolidated three existing unscreened pumping plants on the Sacramento River into a single pumping plant with a state-of-the-art fish screen (Figure 2). The $11 million project was funded by the Department of Interior's Anadromous Fish Screen Program (AFSP), California Department of Fish and Game (CALFED Bay-Delta Category III program), PCGID-PID, and the Metropolitan Water District. The consolidation and fish screen were intended to protect endangered fish species such as juvenile Chinook salmon and steelhead. With a 605 cubic foot per second capacity, the pumping plant is the fourth largest on the Sacramento River (Figure 5). The PCGID-PID serves nearly 30,000 acres of orchard, row crops, rice, and wetlands. In addition to agricultural crops, the water sustains habitat for waterfowl, giant garter snake, and other wildlife species.

The Feasibility Study (MBK 2005), identified bank retreat as a serious threat to the operation of the pumping plant (Figure 6). For example, if the east bank erodes, the angle of flow and velocity of the water passing the screens will change, altering the fish screen efficiency of the PCGID-PID facility. Rather than flowing across the screens, the river will begin to flow toward the screens, trapping fish against the screens rather than sweeping them past. This sweeping velocity is an important requirement of the facility's operation. Without meeting the flow standards, regulations would force the pumping plant to shut down, causing severe economic impacts in this region. Traditional remedies to similar problems would consider ecological impacts only in the context of satisfying mitigation requirements.

d) The birth of a joint project (Phase I)

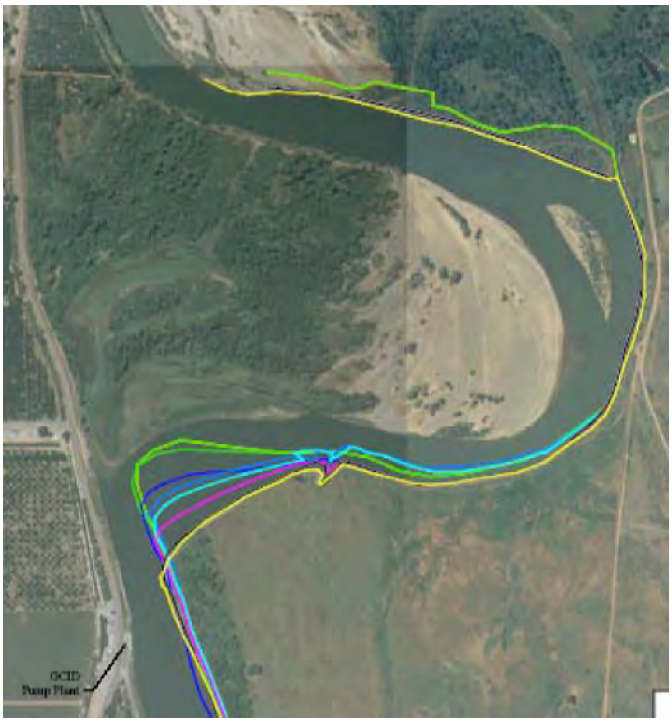
It's easy to imagine the conflicts that would arise from separate, single purpose approaches to solving these problems. The project was conceived with an optimistic notion: that a joint effort between the USFWS, River Partners, and the PCGID-PID could result in consensus based solutions that meet a variety of important goals such as habitat restoration, flood control, and facility protection. Integrating these ecological and agricultural goals will provide a durable solution that meets multiple goals.

The project is comprised of three phases (Figure 7). Phase I would screen options and investigate the potential for a joint project (nearing completion). If science-supported consensus options arose, then the other phases would be investigated. The Feasibility Studies provide recommended designs for further study, but the project identified questions that need to be addressed before project implementation. Phase II (this proposal) will allow the completion of environmental compliance, obtaining permits, advanced planning, and the completion of construction plans and specifications. Phase II is a comprehensive effort that prepares the project for implementation (Phase III). Implementation through this process would allow the joint project to meet its ecological potential, contribute to species recovery, and protect the pumping facility.

Figure 5. PCGID-PID Pumping Plant and Fish Screen Facility.

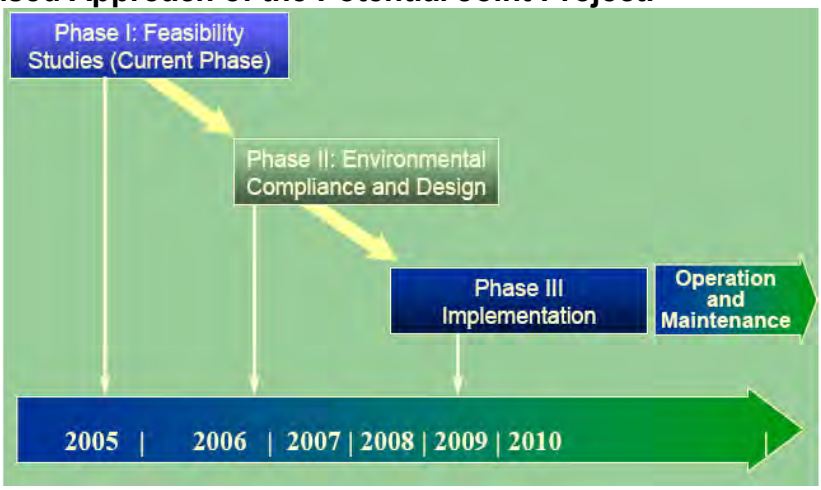
The pumping plant is located on an erosion resistant formation that straddles the levee and Highway 45. The facility consolidated three pumping plants and was equipped with state of the art fish screens. Construction was completed in 1999.

Figure 6. Bankline Changes (1986-2003) in the Vicinity of the PCGID-PID Facility (MBK 2005).



The east bank has shown considerable erosion, but recently, a gravel bar has formed. The geomorphology and meander patterns in this area have been evaluated (Larson 2005, Mussetter 2005) but it is unclear if the gravel bar formation represents a long-term trend.

Figure 7. Phased Approach of the Potential Joint Project.



To address the complex and potentially controversial issues associated with restoration and facility protection options, River Partners employed an open, science-based process to educate stakeholders and foster consensus for solutions. A strong technical team and advisory committee helped examine the complex issues surrounding the site. The project developed a series of feasibility studies to screen viable options. The main goals of phase I was to:

- Identify ecological sound measures that protect the PCGID-PID pumping plant and fish screen,
- Examine management options to aid species recovery and meet USFWS goals on the Riparian Sanctuary, and
- Develop a scientific framework (experimental design) within the restoration design to monitor river and biological processes.

The process has yielded promising solutions that meet both PCGID-PID (protect fish screen and pumping plant) and USFWS (enhance wildlife habitat of the Riparian Sanctuary) objectives (MBK 2005, River Partners 2005). And the project has generated credible, scientifically based information that has successfully garnered support to further investigate these solutions. Next phase funding would ensure that the project partners can continue to work toward a joint project that maximizes benefits to agriculture and the ecosystem. Separate projects undoubtedly would have to mitigate for potential environmental or third party impacts, but they are unlikely to provide benefits on the scale that the project promises. Project partners feel strongly that continuation of a joint project provide the greatest benefits and fit into CALFED objectives.

2. Goals and Objectives

The primary goal of Phase II is to develop the technical information to fully evaluate recommended alternatives, complete and integrate designs, and satisfies environmental compliance (and permitting) to support a joint project that meets habitat restoration, flood control, and pumping plant protection objectives. Phase II clears many of the

hurdles for implementation of a joint project, reduces uncertainty, and maintains the cooperative process.

3. Conceptual Model

a) Process framework

Conceptual Models have provided an important framework for Phase I. For example, a Conceptual Site Model was developed in the restoration plan (River Partners 2005) that included a description of our understanding of the physical and biological factors that influence site ecology and identified important ecological targets and likely successional patterns (Figure 6).

Likewise, a conceptual process has guided the overall process for Phase I. The interactive process intended to:

- Educate and gather input from a wide group of stakeholders (Figure 8),
- Build trust and consensus among a wide diversity of interests (please see letters of support), and
- Develop information based on the best available science (Figure 9).

Science has been an important part of the project, and the project has benefited from strong partners. We have proceeded in a flexible manner and have responded to changes (i.e. the districts brought on a technical consultant, and met regularly with partners and the CBDA regional representative). The project succeeded in bringing together the interested parties to endorse solutions that appear to meet ecological, economic (agricultural), and flood management goals. The process has produced a unique collaboration to further investigate these problems.

b) Hypotheses of the proposed planning effort

For Phase II, we plan a continuation of this process based model. The project will be guided by the following hypotheses:

1) Continuation of the open, science based, collaborative planning process that includes the PCGID-PID, the USFWS, and interested stakeholders will result in the development of solutions that have local support and address third-party concerns.
2) The thorough investigation of alternatives based on the best available science, good site data, and regulatory options will yield technically, ecologically, and economically superior solutions with few regulatory obstacles and uncertainties (a “ready to implement project”).
3) The interdisciplinary approach will result in specific, innovative, cost effective measures that are built into the future project that meet agricultural and ecological objectives.

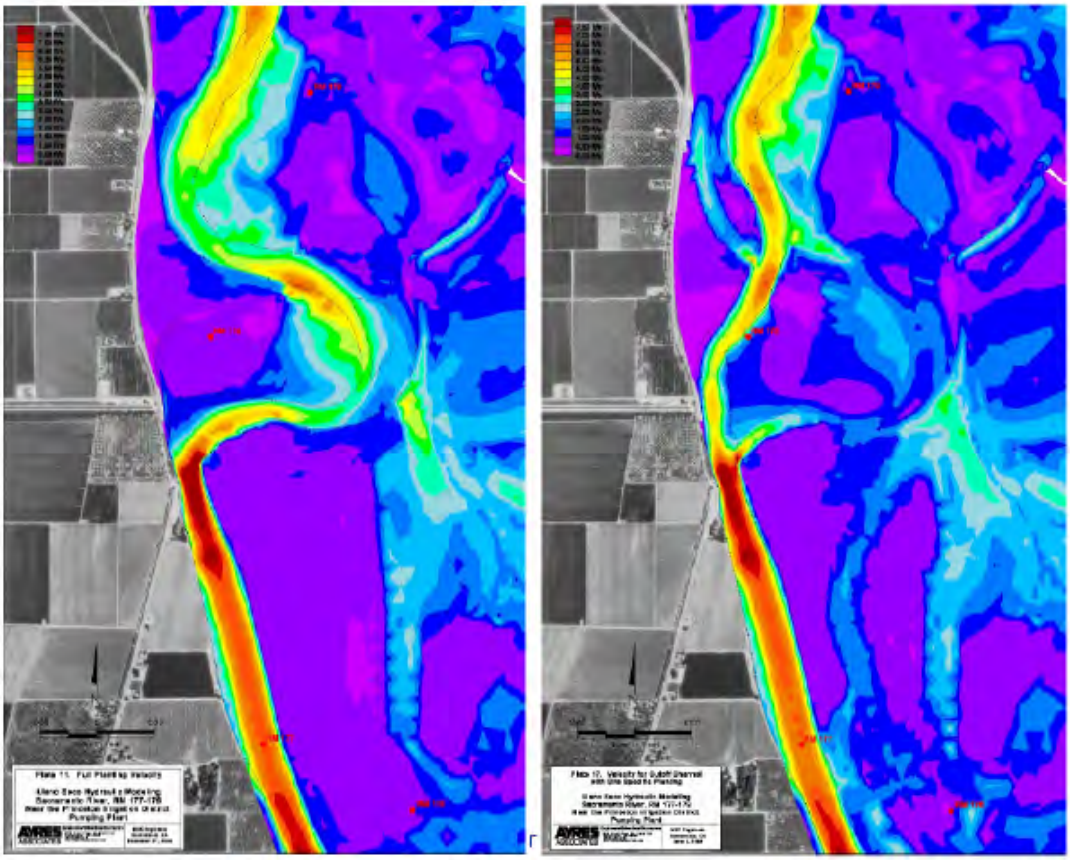
1. The Potential

Several potential solutions were identified as part of the Feasibility Studies and will be considered as part of the next phase. Although much work needs to be done, an example from Phase I may provide an illustration of how efforts may be combined to provide multiple benefits.

Figure 8. Project Stakeholders for the Riparian Sanctuary Planning Effort.

The decision makers (center) are supported by the technical team (River Partners and other consultants). The process has sought input and provided information to other stakeholders (outside rings).

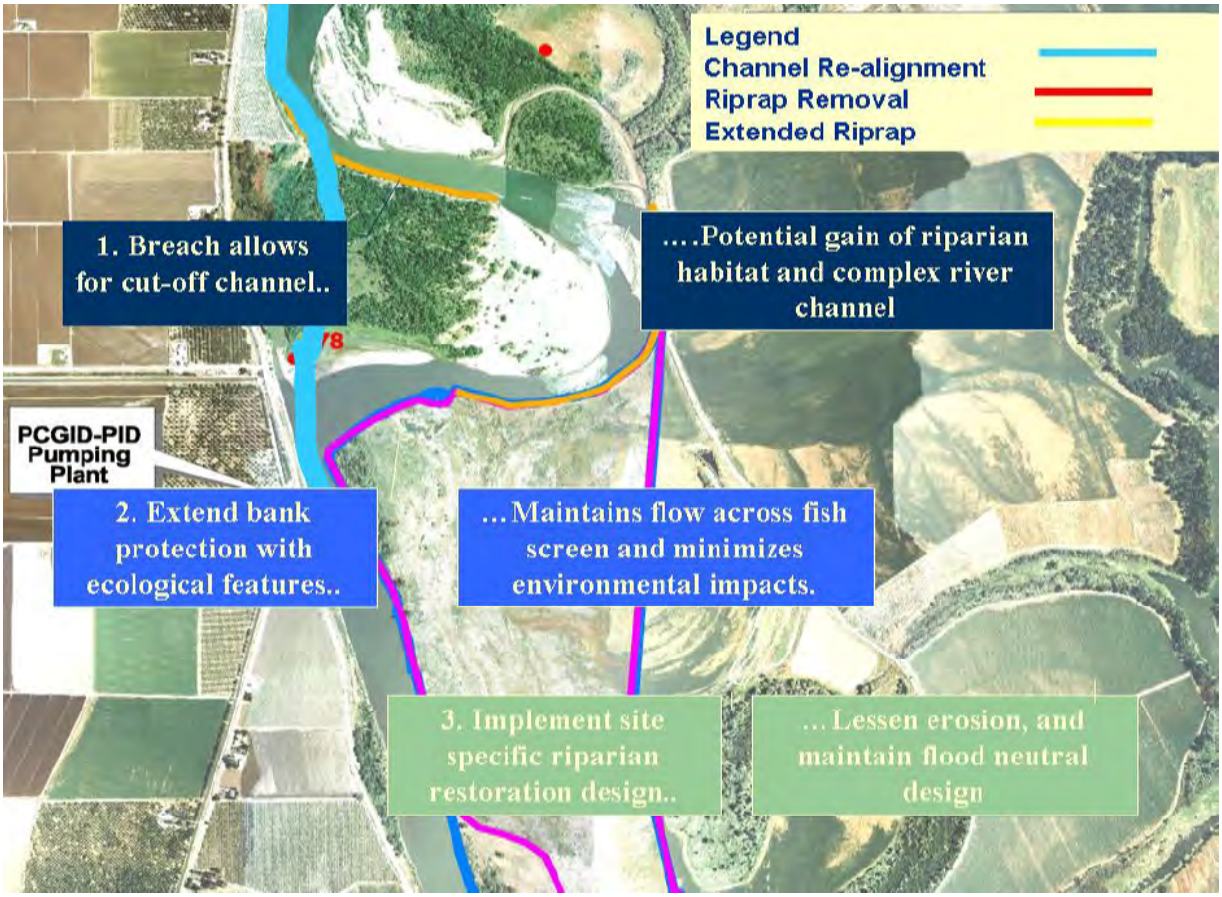
Figure 9. Integration of Facility Protection and Restoration Scenarios.



Modeling examined current channel configurations with restoration (left) as well as hypothetical channel configurations with a site-specific restoration design with flood corridors (right). Integration of information is an important component of Phase I and will be continued. Several options, from stakeholder input, were screened in MBK (2005). This option above was combined with potential restoration options (River Partners 2005) and modeled from a meander (Larsen 2005) and hydraulic standpoint (using 2-D modeling, Ayres 2005).

One potential solution (MBK 2005) is to extend the rip-rap on the downstream bend to maintain a stable configuration for the pumping plant and remove rip-rap on the upstream bend to allow meander and encourage ecological processes (Figure 10). This solution would be combined with a site specific restoration approach on the Riparian Sanctuary. This solution would allow meander on the upstream bend, allowing a now rare event – the creation of a cutoff channel and a complex of new riparian and oxbow habitat adjacent to the restoration area. Once restored, the Riparian Sanctuary would fit into one of the largest blocks of contiguous riparian habitat on the Sacramento River, a corridor of over 2,000 acres stretching over 10 miles (river mile 174 to 184). This project in conjunction with other efforts on Llano Seco would create a unique mosaic of habitat (including aquatic, slough, wetland, grassland, forest, woodland, and savanna) found nowhere else in California.

Figure 10. Example of integration of goals for potential joint project .



Other alternatives will be evaluated as part of the next Phase, but this example shows the potential for integrating measures to protect the pumping plant with ecological goals. The cutoff channel (1) extended bank protection (2) provides an appropriate configuration for the operation of the PCGID-PID facility, while providing a more complex channel and creating dynamic, complex riparian habitat in the oxbow. Restoration (3) and will further reduce the erosion potential and provide ESA habitat. Bank protection with vegetation or biotechnical features may minimize ecological damage to aquatic organisms. These features are a fundamental improvement over the rocked bank and weedy habitat under current conditions.

4. Approach and Scope of Work

We will maintain the communication and review process that contributed to the success of the first phase and outlined in the conceptual model section. Phase II is comprised of the following tasks:

- Project management,
- Project coordination and review,
- Site data collection,
- Develop hydraulic and meander evaluations,
- Environmental compliance and permitting,
- Project design, and
- Develop an action plan.

Additional details are provided below, on the on-line task form, and in scopes of work from subcontractors (i.e. Ayres, PRBO, Larsen, etc., which are available upon request). The PCGID-PID and USFWS have indicated interest in pursuing a joint project (Phase III) once the planning effort is successfully completed

Task 1.0 Administer Project Management

River Partners will take the lead to administer project funding, monitor project progress, manage subcontractors, schedule deliverables, and provide progress reports, invoices, and schedule deliverables. This task includes scheduling and coordinating meetings to review the work product, preparing budget and work status reports, processing invoices, and participating in overall project and task coordination meetings.

Task 2.0 Project Coordination and Review

Communicate the project to stakeholders, regulatory agencies, the public, and gather comments from a Technical Advisory Committee.

Subtask 2.1 Partner Communication

Phase I clearly demonstrated the importance of regular communication on complicated projects with multiple interests. River Partners will host several stakeholder and partner meetings, as well as provide information to participants of the Sacramento River Conservation Area Forum (SRCAF). Formal NEPA related public meetings would be handled under Task 5.0. This task also includes consultation with regulatory and permitting agencies

Subtask 2.2 Technical Advisory Committee (TAC)

The TAC will be predominantly composed of current members of the TAC; other individuals may be added to provide specific areas of expertise. TAC members will review the documents related to this effort and provide comments on the project process. Costs include TAC member time, preparation of handouts and other presentation materials, meeting facilitator, working lunches, transportation, and other costs to aid participation in the process. Current key participants during Phase I (i.e. MBK, Ayres, Eric Larsen, etc.) and the principal partners (PCGID-PID and USFWS) will serve important advisory roles in reviewing key documents and making adjustments to the project.

Task 3 Collect Site Data and Develop Hydraulic and Meander Evaluation
Collect site data to follow-up on the recommendations found in the Pumping Plant Protection Feasibility Study that is necessary for the development of the project. Date collection includes: monitoring of current river meander trends, substrate analysis, elderberry shrub and wildlife surveys, and other related studies. This information provides the basis for sound engineering designs.

Subtask 3.1 Obtain Bathymetry and Topographic Mapping
Detailed surveys of the river bottom and bank to be protected will be required for design purposes. Ground control and benchmarks would be set for use during construction. The area will be mapped with a contour interval of one foot.

Subtask 3.2 Perform Geotechnical Investigation
A focused geotechnical investigation will be performed to determine the foundation conditions and other important conditions for the design of facility protection measures. The investigation will also examine the northern border for any soil features that may account for the relative stability in this section.

Subtask 3.3 Conduct Biological Surveys and Monitoring
This task compiles some of the previous surveys (such as the annual bank swallow colony surveys) on the Riparian Sanctuary and provides current data on target species and resources. This task includes continuation of sampling efforts from the first phase (permanent plots for vegetation and bird monitoring). PRBO will continue the bird monitoring (2 seasons) and annual reporting. PRBO representatives will also participate on the TAC. River Partners will coordinate a survey of sensitive terrestrial biological resources and an evaluation of potential aquatic habitat. Surveys will include an inventory of elderberry shrubs (and exit holes, etc.) for the Valley Elderberry Longhorn Beetle (VELB), bank swallow colonies, and also for other state or federally listed threatened or endangered species.

Task 4 Develop Hydraulic and Meander Evaluations
In addition, hydraulic and geomorphologic analysis of alternatives is an important component of assessing the longevity, effectiveness, and potential impacts. The technical team will use an interactive process during the development of the project to anticipate and minimize negative effects. We anticipate that the hydraulic model runs will be appropriate to confirm the final configuration and alignment of the bank protection feature.

Subtask 4.1 Hydraulic Modeling
The Riparian Sanctuary is downstream of the Goose Lake Flood Relief Structure, which is within the Butte Basin overflow area. The Butte Basin overflow area is an essential element of the flood management system for the Sacramento River, and reduces discharge in the main stem of the river during high flows to prevent the overtopping and subsequent failure of the flood control project levees.

The 2-Dimensional model used for the hydraulic evaluation (Ayres 2005) was an important component of Phase I and an integral part of the evaluation of alternatives. More refined assessments of alternatives and updated information will help answer some of the questions raised during the process. Information from the new bathymetry and topographic mapping will be incorporated into the model, as well as updated land-use information (especially for restoration sites). The evaluation will also address impacts to the larger flood control system and to better characterize effects on the upper Butte Basin in terms of flow, volume, and duration (to somewhat mimic a flood event). These questions were raised during Phase I.

This Scope of Work assumes that two model runs will be conducted. This task includes time to make presentations of findings at Public Meetings, and for the production of draft and final hydrologic/hydraulic assessment reports. Electronic versions of data and reports will also be made available. The Draft Hydrologic/Hydraulic Assessment will be reviewed and responses to comments will be incorporated into the Final Hydrologic/Hydraulic Assessment Report.

Subtask 4.2 Meander Evaluation of Alternatives

This task will build on the information developed in the first phase (Larsen 2004, MBK 2005). Provided that the preferred alternative incorporates some form of control, alteration, or need to consider meander migration patterns, an evaluation of meander migration and bend cutoff dynamics will be used to consider the planform configuration of the river (both its stability of form and its dynamic changes over time) and to assess an appropriate placement of controls in relation to the meander migration dynamics. The evaluation may include assessment of the of the bend cutoff dynamics and proposed designs and resultant changes. This task may include meander migration and bend cutoff modeling performed using detailed calibration with new data collected since the preliminary work done in Phase I. To place this information into context, a summary of this information will be provided.

Task 5 Complete Environmental Compliance and Permitting

The project will likely require an Environmental Assessment (EA) to meet federal requirements (NEPA) and an Initial Study (IS) to meet state requirements (CEQA). We propose a combined document to meet these requirements. This task also includes completing permit applications or consultations with regulatory agencies on mitigation and regulatory requirements. Subtasks include:

- Public scoping and issues identification,
- Purpose and need development,
- Alternatives evaluation and analysis,
- Affected environment description,
- Environmental effects analysis,
- Mitigation plans,
- Public comment review and synthesis,
- Final Environmental Documents

No consultant has been identified for the environmental compliance tasks and will be put out to bid. Costs are estimated from recent similar efforts on USFWS projects. The

screening level effort in the Feasibility Studies should provide a shorter list of reasonable alternatives. This task also includes consultation with regulatory agencies, an analysis of mitigation requirements, and preparation of identified permits (see tasks).

Task 6 Project Design

The project design will provide detailed information for facility protection and riparian restoration. This task will provide design, cost, feasibility, and specifications to implement the preferred alternative developed as part of the environmental compliance process. The design will be based on the evaluation of current conditions and environmental compliance documents. Input from TAC members will also be considered in the design. The report will develop project specifications and costs, and include a list of options that can be incorporated into the project to minimize ecological impacts.

Subtask 6.1 Identify and Evaluate Alternatives

Alternative measures for protecting the bank will be identified and evaluated from the standpoint of structural integrity, environmental considerations, and overall compatibility with the restoration plan. Criteria may be modified from the Phase I Feasibility Study to fully evaluate the alternatives. Alternatives for consideration will also include ecological measures to minimize environmental impacts and maximize ecological benefits. Conceptual layouts of the alternatives will be prepared with comparative costs for review and discussion with the TAC and stakeholders. The evaluation will also include a preliminary Operations and Maintenance manual. Based upon the results of this evaluation, a preferred alternative will be selected. A technical memorandum will be prepared to document the alternatives evaluated, the process and review of the alternatives, and the selection of the preferred alternative.

Subtask 6.2 Prepare Construction Plans, Specifications, and Cost Estimates

Submittals for review of construction drawings will be made at 50 percent, 90 percent, and 100 percent of completion. Technical specifications will be prepared using CSI Format. The bid forms and general conditions will be those of the contracting agency. This task also includes an opinion of probable cost, which will be a part of the respective submittal packages. This task will be put out to bid, but the cost estimate represents

Subtask 5.3 Prepare Final Restoration Design and Cost Estimate for Implementation

This task provides for a final restoration design that integrates the preferred alternative to protect the pumping plant into a restoration design for the Riparian Sanctuary. The design will be based on River Partners (2005) and will include revegetation techniques called for under the preferred alternative (for example, planting the rock bank with certain species may be appropriate).

Task 7 Develop Action Plan for Implementation

This project is a complex endeavor requiring a high level of coordination between multiple parties. River Partners anticipates using the information gathered during the outreach task and during the project to fold into an Action Plan for Implementation. The Action Plan will identify project relationship with CALFED goals, define short-term and

long-term responsibilities of the principal parties, layout a project timeline, and lay out the blueprint for future coordination and communication during the implementation of the joint project.

a) Timeline and relationship of tasks

We propose an aggressive schedule to capitalize on the momentum and information developed during the first phase (Table 1). Assuming the project is initiated in Fall 2006, we anticipate to complete most of the work in Spring 2008. Aspects of the project may be separable, but the complete project will be the most efficient and provide opportunities for feedback between the various efforts to select a preferred alternative.

b) Expected Products/Outcomes

We anticipate the following products from this project:

- Quarterly progress reports.
- Project closure report.
- An active outreach process that engages stakeholders and scientists (TAC members) and informs SRCAF members. Stakeholders will be surveyed as to the effectiveness of the process.
- Documents and information on topography and bathymetry, the geotechnical investigation, and biological surveys (the separate investigations will be combined) that support the other efforts.
- Evaluations of the preferred alternatives for hydraulic effects and meander patterns.
- Environmental Assessment and Initial Study for the project.
- Initiation of the permit process.
- A Project Design that provides sufficient detail and cost estimates to implement the protection measures for the PCGID-PID facility and riparian restoration on the Riparian Sanctuary.
- A preliminary operations and maintenance manual.
- Develop an Action Plan to assist with the management of implementation.

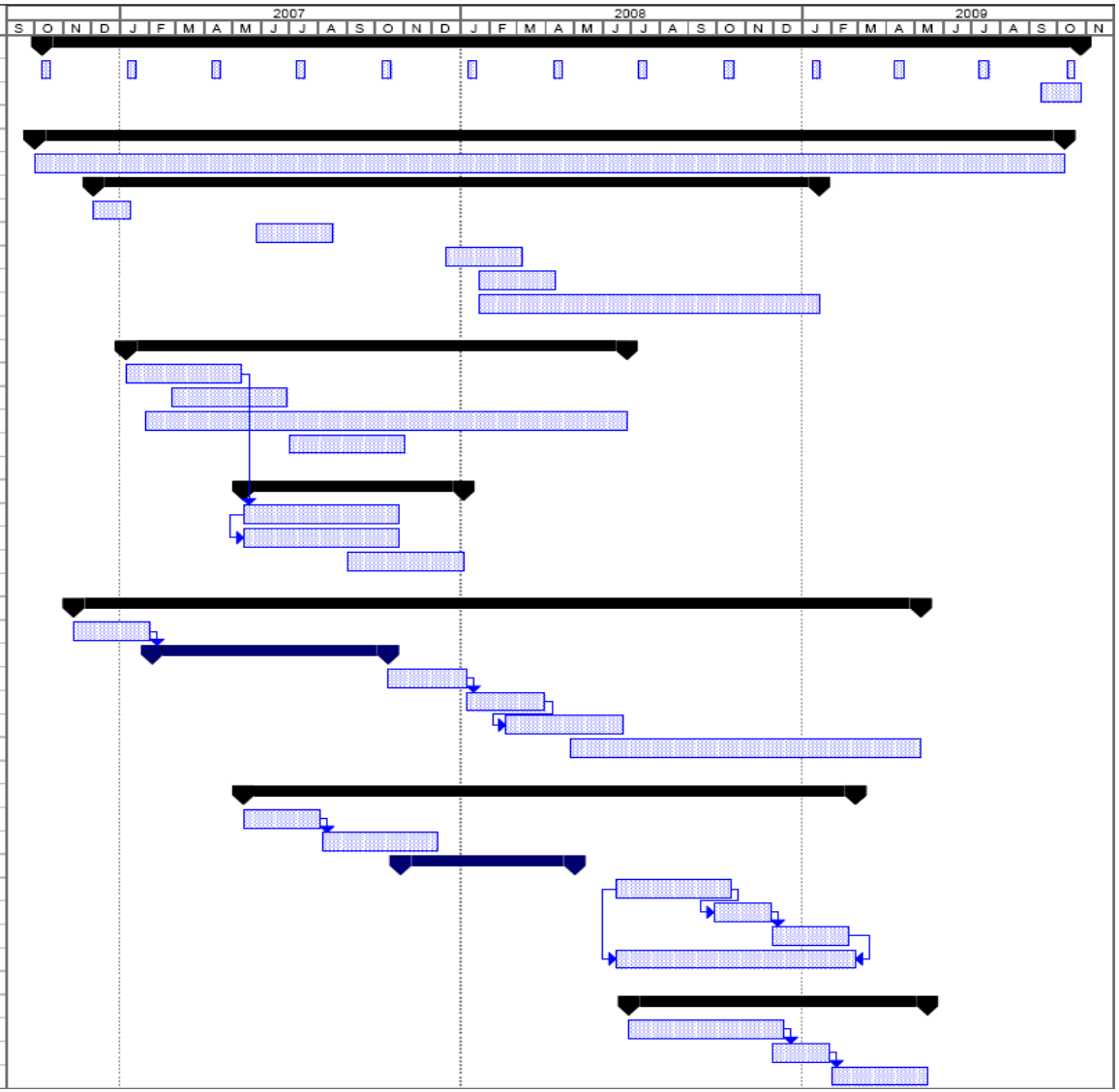
5. Performance Evaluation

Keeping in mind that this is a restoration planning effort, the following performance measures can be used to assess the project:

- Products adhere to timeline.
- Participation of local interests in planning process.
- Publication and release of all planning documents.
- Review of significant products by TAC members and stakeholders.
- Development of alternatives that address significant concerns and do not significantly alter flood flows or patterns.
- Integrate ecologically acceptable measures into a design that protects the pumping plant and fish screens.
- Support of the USFWS and the PCGID-PID to implement a joint project (Phase III).

Table 1. Schedule of Tasks and Deliverables for Phase II efforts on the Riparian Sanctuary.

Task Name
1. Project management
Quarterly Reports
Project closure
2. Project coordination and review
Partner communication
Technical Advisory Committee
Introductory meeting (review, input)
Provide input on compliance documents
Review compliance documents
Provide input for project designs
Review project designs
3. Data collection
Bathymetry and topographic mapping
Geotechnical investigation
Biological surveys and monitoring
Review products
4. Hydraulic and Meander Evaluations
Hydraulic modeling
Meander modeling
Review of products
5. Environmental compliance and permitting
Selection of compliance contractor
Scoping, data collection, and analyses
Draft EA
Public and TAC review
Final EA
Permit preparation and completion
6. Project design
Selection of design contractor
Analysis of data, designs, ecological features
Design plans (50, 90, 100% completion)
Draft Project Design
Project Design Review
Final Project Design
Preliminary O and M Manual
7. Action plan
Draft Action Plan
Review Action Plan
Final Action Plan



6. Feasibility

The following factors make Phase II feasible for successful completion:

- The project builds on a successful process to work with local stakeholders.
- The PCGID-PID and the USFWS continue to support the joint effort to find appropriate solutions.
- The capable technical team will build on the knowledge, tools (models), and relationships developed during Phase I. This familiarity allows for a minimal startup time for the project.
- The project partners (PCGID-PID, USFWS, and River Partners) have complementary experience with managing similar design, compliance, and permitting projects.
- TAC members have indicated an interest in continued participation.
- The project has a reasonable timeline to complete tasks.

7. Data Handling and Storage

Data collection for field tasks during this phase will be collected on already existing forms developed by the USFWS or Sacramento River Partners. Any data and information collected for this project will be summarized in the unit plan, pumping plant protection plan, or the interdisciplinary monitoring plan. These plans will be made available online and during informational meetings. All reports will be archived at the Sacramento National Wildlife Refuge Complex, Sacramento River Partners, and at Merriam Library at CSU Chico. The handling and storage of data for of the future restoration project are included as tasks for this planning project.

8. Information Value

The project has brought divergent interests together to provide solutions. The level of collaboration, public input and education, and use of science to support decisions helped build an environment of cooperation for the restoration project and offers a model for similar restoration planning efforts. We intend to maintain the techniques used (presentations, public and informal meetings, cooperation with the SRCAF, a dedicated webpage, and dissemination of documents) to keep stakeholders informed. In addition, the products from this effort will be useful for other activities in this reach. For example, the hydraulic modeling of the cumulative impacts of restoration between river miles 174 to 194 may assist restoration planning on other sites.

9. Public Involvement and Outreach

Outreach and stakeholder input has been an important component of Phase I. One of the first tasks completed, was a public meeting to to anticipate concerns, gather input, and help guide the technical approach. Over 70 people attended this first meeting. During the project, we hosted three public meetings, two TAC meetings, numerous coordination meetings with the principal partners (USFWS and PCGID-PID), regular presentations to the Sacramento River Conservation Area Forum (SRCAF), presentations at three conferences, and several informal meetings with stakeholders or TAC members. We intend to maintain the goodwill and ideas generated during Phase I, for the future phases.

B. Applicability to CALFED Bay-Delta Program and ERP Goals

1. ERP Priorities

Phase I identified feasible management options to address four of the ERP Goals (CALFED 2000): Goal 1 (At Risk Species), Goal 2 (Ecosystem Processes and Biotic Communities), Goal 4 (Habitats), and Goal 5 (Non-native Invasive Species). This project falls under the PSP priority for projects that facilitate permitting or regulatory assurances that support agricultural activities benefiting MSCS-covered species.

The PCGID-PID pumping plant is a critical part of the agricultural landscape for over 30,000 acres. Past approaches to protect the facility would have had to consider mitigation for detrimental environmental effects. However, Phase I suggests some alternatives that push past minimal mitigation and potentially provide real environmental benefits (vegetated banks, habitat on 500 acres, and increased river meander) as an integral part of the project.

Phase I brought agricultural and environmental interests together to lay the groundwork for trust and the exploration of alternatives. We anticipate the Phase II will build on that trust and knowledge and bring critical details into view, but this is an intermediate step. The real success of the process will be the implementation of a joint project that meets stakeholder and CALFED goals.

2. Relationship to Other Ecosystem Restoration Actions or Program Investments

The project builds on numerous activities in the area. Thousands of acres representing a wide variety of habitat types have been acquired (easements and fee title) for conservation purposes within a few miles of the project area. Restoration efforts involving the California Department of Fish and Game, Department of Water Resources, the Nature Conservancy, River Partners, the U.S. Army Corp of Engineers, USFWS, the Wildlife Conservation Board and others have made this one of the most significant conservation areas in the state.

The project has the most direct benefit for the $11 million-dollar PCGID-PID fish screen, funded by the Department of Interior's Anadromous Fish Screen Program, California Department of Fish and Game, PCGID-PID, and the Metropolitan Water District to protect endangered fish species and the existing habitat adjacent to the project area, and the Riparian Sanctuary and the thousands of acres of existing and restored habitat adjacent to the property.

3. Additional Information for Land or Easement Acquisitions

Not applicable.

C. Qualifications and Organization

The project will continue the strong partnerships that have developed between the USFWS, PCGID-PID, and the technical team during Phase I. River Partners will take the lead on managing the project. River Partners is a California non-profit corporation founded in 1998 under current Federal 501 (c) (3) regulations dedicated to the mission of creating wildlife habitat for the benefit of people and the environment. River Partners its

staff and directors has unique experience that bridges both agricultural and conservation. Six out of our nine board of directors currently depend on agriculture for their businesses, and three quarters of our staff either have worked in agriculture or own farms in the area.

In the last 7 years River Partners has secured $19,000,000 in public and private funding, built a staff of 25 full time employees and developed the organizational capacity to carry out this mission. We work cooperatively with a variety of agency and private landowner partners and engage agribusiness in much of the restoration work. We are in the process of restoring over 3891 acres on 18 separate projects along the Sacramento, Feather, Bear, Stanislaus, Tuolumne, Merced and San Joaquin Rivers. We recently acquired three riverside properties. River Partners' science team has completed fish entrapment studies, floodplain management plans, Valley Elderberry Long-horn Beetle surveys, and pre-restoration plans. River Partners has the experience, expertise and resources to solve problems and develop meaningful solutions.

1. Biographical sketches of key River Partner staff

Dan Efseaff – Restoration Ecologist
Mr. Efseaff received a B.S. in Biology from U.C. Davis and a M.S. in Biology from C.S.U. Chico, where he researched the interaction of riparian tree roots with soil types. Mr. Efseaff grew up on a family farm in the San Joaquin Valley and worked in agriculture as a farm foreman as well as summer employment with the Cooperative Extension. Mr. Efseaff has 14 years of broad experience working for natural resource agencies, consulting firms, and research institutions. He has developed sampling programs, prepared ecological risk assessments, conducted botanical surveys and constructed plant designs based on soil types. Mr Efseaff will be the project manager for the project.

John Carlon – President
Mr. Carlon obtained a B.S. in agronomy and horticulture from C.S.U., Chico and a M.S. in International Agriculture Development from C.S.U. San Luis Obispo. Mr. Carlon has been engaged in land protection and riparian restoration on the Sacramento River for the last 12 years. He has direct involvement in the acquisition and restoration of over 3,000-acres.

Tom Griggs – Senior Restoration Ecologist
Dr. Griggs has 24 years of experience in riparian restoration. He developed the original riparian restoration efforts on the Sacramento River and has been published extensively in professional journals on riparian restoration. He obtained a B.S. in Biology from California Polytechnic University, Pomona, a M.S. in Botany from C.S.U. Chico and a Ph.D. in ecology from U.C. Davis.

Tamara Sperber – Restoration Ecologist
Ms. Sperber received a B.S. in ecology from Idaho State University and a M.S. in Land Rehabilitation from Montana State University, where she researched soil properties and soil water dynamics under spotted knapweed and native grasses. Ms. Sperber has 5 years of broad experience working for consulting firms, and research institutions. She is experienced in ecological research and monitoring. She has been with River Partners for two years.

Helen Swagerty – Restoration Biologist
Mrs. Swagerty received a B.S. in Environmental Science from Oregon State University, where her emphasis was in Environmental Geosciences. Mrs. Swagerty has 5 years of experience working for natural resource agencies, consulting firms, and research institutions. She has collected native plant materials for propagation, developed monitoring program protocols, and facilitated activities related to restoration for elementary students.

2. Identified subcontractors

We will work with an interdisciplinary team to complete this project. Principal partners include MBK Engineers (coordination and review of key technical tasks), Ayres Associates (bathymetry, topography, and hydraulic evaluation), Eric Larson (meander modeling, UC Davis), the Geographical Information Center (GIC) at CSU Chico (mapping), PRBO (avian surveys and consultation), and Coralium Consultants (meeting facilitation). Several key aspects of the project Environmental Compliance and design will be put out to bid. We are also excited about the potential of continuing the effort with the outstanding TAC committee that was assembled for Phase I (Table 2). Other key individuals with expertise in selected areas may be added later.

Table 2. Identified TAC members for Phase II (Riparian Sanctuary).

Name	Affiliation	Area of expertise or interest
Borcalli, Fran	Wood Rodgers, Inc.	Water Resources
Boyd, Lance	PCGID-PID	Pumping plant operation, agricultural
Brown, Dave	CSU Chico	Riparian hydrology and soils
Buer, Koll	Department of Water Resources	Geomorphologic processes, Sacramento River
Carlon, John	River Partners	Riparian restoration
Cepello, Stacy	Department of Water Resources	Sacramento River processes and history
Countryman, Joe	MBK Engineers	Hydrology, engineering
Cranfill, Sol	Congressman Herger's office	Congressional field representative
Efseaff, Dan	River Partners	Riparian restoration
Fremier, Alex	UC Davis	Restoration ecology
Garner, John	PCGID-PID	Pumping plant operation, agricultural
Geupel, Geoff	PRBO	Avian science
Greco, Steve	UC Davis	Ecology
Griggs, Tom	River Partners	Ecology
Harvey, Mike	Mussetter Engineering	Geomorphology
Larsen, Eric	UC Davis	River processes and meander
Marchetti, Michael	CSU Chico	Native fish ecology and invasion ecology
Matthews, Graham	GMA Hydrology	Hydrology
Merz, John	Sacramento River Preservation Trust	Co founder of SRPT
Moroney, Kelly	USFWS, SRNWR	USFWS operations, wildlife
Newlin, Vicki	California Bay Delta Authority	CBDA area representative
Pushnik, Jim	CSU Chico	Plant physiology, nutrient cycling
Reed, Brendan	California Bay Delta Authority	CBDA representative
Rogner, Michael	PRBO Conservation Science	Terrestrial ecology, habitat restoration

Name	Affiliation	Area of expertise or interest
Schierenbeck, Kristina	CSU Chico	Invasive species, hybridization between natives and non-natives
Sieperda, David	Parrot Investment. Llano Seco	Agricultural, Llano Seco operation
Silveira, Joe	USFWS, Sacramento River National Wildlife Refuge	Wildlife & vegetation surveys, restoration management
Singer, Mike	USGS	Geomorphology
Smith, Tom	Ayers Associates	Hydraulic modeling
Thompson, Tami	MBK Engineers	Civil engineering
Vaughn, Morgan	Ayers Associates	Hydraulic modeling
Werner, Gregg	The Nature Conservancy	Planning, Habitat restoration
White, Greg	CSU Chico	Anthropology, archeology
Williamson, Jack	USFWS	Fisheries
Wolfe, Gordon	CSU Chico	Microbial ecology
Wood, David	CSU Chico	Ecology

D. Cost

1. Budget

The total cost of this project is approximately $660,665 (please see the budget forms for details). The budget is calculated with River Partners' average annual overhead rate of 21% (based on last year's actual totals). This is the existing rate used on current CALFED contracts. We averaged our benefit rate on the provided template, the expenses will be charged based on each employees actual benefit rate, which ranges between 15.24% and 32.13%. Because the goal of the project is to clear the way for a joint project, few project components are separable. A reduced budget may be possible with funding from additional sources to complete the scope of work.

2. Cost share and matching funds

No other funding sources are proposed for this project. However, we anticipate a similar level of support for the next phase. USFWS staff provided many hours of time to review documents and meet with the project team. Likewise, the PCGID-PID provided substantial contribution to the project with time and information. The PCGID-PID also paid for a consultant to review the process and documents.

E. Compliance with Standard Terms and Conditions

We can comply with the standard clauses.

F. Section F

Section F was omitted from the PSP.

G. Literature Cited

The feasibility studies (MBK 2005 and River Partners 2005) provide an extensive list of documents related to the site.

[Ayres] Ayres Associates. 2005. Two Dimensional Hydraulic Modeling Llano Seco Riparian Sanctuary Restoration and Potential Cutoff Channel, Sacramento River, RM 173-194. June 10, 2005. Sacramento, California.

CALFED Bay-Delta Program. 1999. Ecosystem Restoration Program Plan. Volume I: Ecological Attributes of the San Francisco Bay-Delta Watershed. Revised Draft. February 1999. Sacramento, California.

Department of Water Resources (DWR). 1998. Sacramento River Conservation Area Handbook. Draft. Sacramento River Advisory Council under the SB 1086 program. Sacramento, California.

Larsen, E.W. E. Girvetz, A. Fremier, and A. Young. 2004 Meander Bend Migration near River Mile 178 of the Sacramento River. Prepared for River Partners. UC Davis. Davis, California.

Oswald, V.H., and L. Ahart. 1996. Vascular Plants of the Llano Seco Unit, Sacramento River National Wildlife Refuge. US Fish and Wildlife Service. Willows, California.

[MBK] MBK Engineers. 2005 Llano Seco Unit Sacramento River Mile 179 Pumping Plant Protection Feasibility Study. August 2005. Sacramento, California.

River Partners. 2005. Riparian Restoration Feasibility Study for the Riparian Sanctuary, Llano Seco Unit, Sacramento River National Wildlife Refuge Sacramento River Mile 176—178.5 L, Butte County, California. Final report. Dan Efseaff, Michelle Cederborg, and Helen Swagerty. Chico, California.

Silveira, J.G. 1992. Environmental Assessment: Proposed Habitat Management Plan. Sacramento River National Wildlife Refuge, Llano Seco Unit, US Fish and Wildlife Service. Willows, California.

USFWS. 2005 Draft Comprehensive Conservation Plan and Environmental Assessment. Sacramento River National Wildlife Refuge. Final June 2005. Willows, California.

Tasks And Deliverables

Task ID	Task Name	Start Month	End Month	Personnel Involved	Deliverables
1	Project management	1	36	Efseaff, Daniel	Quarterly progress reports, invoices, preparing budgets, and processing subcontractor invoices and progress reports.
2	Project coordination and review	1	36	Efseaff, Daniel Countryman, P.E., Joseph Smith, P.E., G.E., Tom Larsen, Eric Coral, Cavanaugh Rogner, Micheal TBD, Geotechnical TBD, Fish TBD, TAC members TBD, Compliance consultant TBD, Design Nelson, Charles Borcalli, P.E., Francis E.	Meeting summaries, peer review of methodology and approach, review comments on documents, supporting material for meetings.
3	Site data collection	4	22	Efseaff, Daniel	Draft and Final Technical Reports for Subtasks

				Countryman, P.E., Joseph Smith, P.E., G.E., Tom Larsen, Eric Rogner, Micheal TBD, Geotechnical TBD, Fish	1)Bathymetry and Topographical mapping, 2) Geotechnical Investigation, 3) Biological Survey (terrestrial: birds, VELB, vegetation, and a brief aquatic evaluation) most information may be included in documentation associated with Task 4 and 5.
4	Hydraulic and Meander Evaluation	2	32	Efseaff, Daniel Countryman, P.E., Joseph Smith, P.E., G.E., Tom Larsen, Eric	1) Hydraulic evaluation of alternatives (with summary) and 2) Meander migration modeling evaluation
5	Environmental Compliance and Permitting	8	32	Efseaff, Daniel TBD, Compliance consultant	A draft and final Environmental Assessment/Initial Study for NEPA and CEQA compliance. Public scoping and review meetings. Permits or coordination: ESA Section 7 consultation with NMFS and USFWS, a CDFG Streambed Alteration Permit, ACOE 404/Section 10 permit, and Water Quality Clearance

					402. Analysis of mitigation requirements of preferred alternative(s).
6	**Project Design**	**8**	**29**	**Efseaff, Daniel Countryman, P.E., Joseph TBD, Design**	**50%, 90%, and 100% complete design renderings, Draft and Final Project Design Reports which will include a preliminary Operations and Maintenance manual, participation and presentations at public meetings. The project design will provide detailed information for facility protection and riparian restoration.**
7	**Action Plan**	**21**	**32**	**Efseaff, Daniel Countryman, P.E., Joseph**	**Draft and Final Action Plan**

Total Project Budget Summary by Task and by Fiscal Year

Note: This budget summary **automatically links** to the costs and totals on the **"Budget Detail"** worksheet.
DO NOT CHANGE FORMULAS OR ENTER NUMBERS INTO ANY CELLS EXCEPT THE SHADED CELLS for "Cost Share" and "Other Matching Funds"

BUDGET SUMMARY	Total Amount for Year 1	Total Amount for Year 2	Total Amount for Year 3	Total Amount for All Years
Total Costs for Task One	$ 17,560.45	$ 22,910.78	$ 7,975.72	$ 48,446.96
Total Costs for Task Two	$ 45,795.04	$ 31,422.32	$ 5,189.28	$ 82,406.64
Total Costs for Task Three	$ 77,189.21	$ 13,256.46	$ -	$ 90,445.67
Total Costs for Task Four	$ 76,335.42	$ 10,464.72	$ 968.00	$ 87,768.15
Total Costs for Task Five	$ 125,144.02	$ 68,129.76	$ 20,123.55	$ 213,397.34
Total Costs for Task Six	$ 9,196.00	$ 66,443.76	$ 49,961.63	$ 125,601.40
Total Costs for Task Seven	$ -	$ 4,461.33	$ 8,137.56	$ 12,598.90
Total Costs for Task Eight	$ -	$ -	$ -	$ -
Total Costs for Task Nine	$ -	$ -	$ -	$ -
Total Costs for Task Ten	$ -	$ -	$ -	$ -
Total Costs for Task Eleven	$ -	$ -	$ -	$ -
Total Costs for Task Twelve	$ -	$ -	$ -	$ -
Total Costs for Task Thirteen	$ -	$ -	$ -	$ -
Total Costs for Task Fourteen	$ -	$ -	$ -	$ -
Total Costs for Task Fifteen	$ -	$ -	$ -	$ -
Total Costs for Project Tasks	$ 351,220.14	$ 217,089.14	$ 92,355.75	$ 660,665.04
1/Cost Share	$ -	$ -	$ -	$ -
2/ Other Matching Funds	$ -	$ -	$ -	$ -

1/ *Cost share funds* are specifically dedicated to your project and can include private and other State and Federal grants. Any funds listed in this line must be further described in the text of your proposal (see Chapter 3, Section D, of the PSP document)

2/ *Other matching funds* include other funds invested consistent with your project in your project area for which the ERP grant applicant is not eligible. Any funds listed in this line must be further described in the text of your proposal (see Chapter 3, Section D, of the PSP document)

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK ONE (Administrative)	TOTAL AMOUNT TASK 1 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Project Manager	$ 14,708.00	$ 48.50	108	$ 5,238.00	$ 50.50	140	$ 7,070.00	$ 50.00	48	$ 2,400.00
Chief Operating Officer	$ 5,680.00	$ 38.00	64	$ 2,432.00	$ 40.00	56	$ 2,240.00	$ 42.00	24	$ 1,008.00
Office Administrator	$ 2,604.00	$ 26.00	36	$ 936.00	$ 27.50	48	$ 1,320.00	$ 29.00	12	$ 348.00
Restoration Ecologist	$ 8,250.00	$ 29.00	96	$ 2,784.00	$ 30.00	136	$ 4,080.00	$ 31.50	44	$ 1,386.00
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
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	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 31,242.00**			**$ 11,390.00**			**$ 14,710.00**			**$ 5,142.00**
[1/] Benefits as percent of salary	24%			$2,767.77			$3,574.53			$1,249.51
Personnel Total (salary + benefits)	**$38,833.81**			**$14,157.77**			**$18,284.53**			**$6,391.51**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 805.00			$ 205.00			$ 500.00			$ 100.00
2/ Travel and Per Diem	$ 400.00			$ 150.00			$ 150.00			$ 100.00
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 1,205.00**			**$ 355.00**			**$ 650.00**			**$ 200.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 3,047.68			$ 3,976.25			$ 1,384.22
Total Costs for Task One	**$ 48,446.96**			**$ 17,560.45**			**$ 22,910.78**			**$ 7,975.72**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK TWO	TOTAL AMOUNT TASK 2 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 9,192.00	$ 29.00	120	$ 3,480.00	$ 30.00	140	$ 4,200.00	$ 31.50	48	$ 1,512.00
Senior Restoration Ecologist	$ 3,364.00	$ 34.00	40	$ 1,360.00	$ 35.50	40	$ 1,420.00	$ 36.50	16	$ 584.00
Biologist	$ 2,320.00	$ 20.00	48	$ 960.00	$ 21.00	48	$ 1,008.00	$ 22.00	16	$ 352.00
Biological Technician	$ 3,672.00	$ 14.00	120	$ 1,680.00	$ 14.50	96	$ 1,392.00	$ 15.00	40	$ 600.00
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
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	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 18,548.00**			**$ 7,480.00**			**$ 8,020.00**			**$ 3,048.00**
[1/] Benefits as percent of salary	24%			$1,817.64			$1,948.86			$740.66
Personnel Total (salary + benefits)	**$23,055.16**			**$9,297.64**			**$9,968.86**			**$3,788.66**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 2,249.50			$ 1,249.50			$ 700.00			$ 300.00
[2/] Travel and Per Diem	$ 1,800.00			$ 1,300.00			$ 300.00			$ 200.00
[3/] Equipment	$ -			$ -			$ -			$ -
[4/] Coralium Consultants	$ 1,000.00			$ 1,000.00			$ -			$ -
[4/] MBK	$ 25,000.00			$ 15,000.00			$ 10,000.00			$ -
[4/] TAC sub-contractors (honoraria and consultant fees)	$ 15,000.00			$ 10,000.00			$ 5,000.00			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 45,049.50**			**$ 28,549.50**			**$ 16,000.00**			**$ 500.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 7,947.90			$ 5,453.46			$ 900.62
Total Costs for Task Two	**$ 82,406.64**			**$ 45,795.04**			**$ 31,422.32**			**$ 5,189.28**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK THREE	TOTAL AMOUNT TASK 3 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 4,584.00	$ 29.00	96	$ 2,784.00	$ 30.00	60	$ 1,800.00	$ 31.50		$ -
Biologist	$ 1,784.00	$ 20.00	64	$ 1,280.00	$ 21.00	24	$ 504.00	$ 22.00		$ -
Biological Technician	$ 3,848.00	$ 14.00	192	$ 2,688.00	$ 14.50	80	$ 1,160.00	$ 15.00		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
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	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 10,216.00**			**$ 6,752.00**			**$ 3,464.00**			**$ -**
[1/] Benefits as percent of salary	24%			$1,640.74			$841.75			$0.00
Personnel Total (salary + benefits)	**$12,698.49**			**$8,392.74**			**$4,305.75**			**$0.00**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 2,100.00			$ 1,600.00			$ 500.00			$ -
[2/] Travel and Per Diem	$ 450.00			$ 300.00			$ 150.00			$ -
[3/] Equipment	$ -			$ -			$ -			$ -
[4/] Geotechnical investigation	$ 15,000.00			$ 15,000.00			$ -			$ -
[4/] Fisheries consultant	$ 4,500.00			$ 2,000.00			$ 2,500.00			$ -
[4/] PRBO	$ 8,000.00			$ 5,000.00			$ 3,000.00			$ -
[4/] GIC CSUC	$ 2,000.00			$ 1,500.00			$ 500.00			$ -
[4/] MBK/Ayres Associates	$ 30,000.00			$ 30,000.00			$ -			$ -
Other Costs Subtotal	**$ 62,050.00**			**$ 55,400.00**			**$ 6,650.00**			**$ -**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 13,396.47			$ 2,300.71			$ -
Total Costs for Task Three	**$ 90,445.67**			**$ 77,189.21**			**$ 13,256.46**			**$ -**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK FOUR	TOTAL AMOUNT TASK 4 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 2,560.00	$ 29.00	80	$ 2,320.00	$ 30.00	8	$ 240.00	$ 31.50		$ -
Senior Restoration Ecologist	$ 1,508.00	$ 34.00	36	$ 1,224.00	$ 35.50	8	$ 284.00	$ 36.50		$ -
Biologist	$ 648.00	$ 20.00	24	$ 480.00	$ 21.00	8	$ 168.00	$ 22.00		$ -
Biological Technician	$ 904.00	$ 14.00	48	$ 672.00	$ 14.50	16	$ 232.00	$ 15.00		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 5,620.00**			**$ 4,696.00**			**$ 924.00**			**$ -**
[1/] Benefits as percent of salary	24%			$1,141.13			$224.53			$0.00
Personnel Total (salary + benefits)	**$6,985.66**			**$5,837.13**			**$1,148.53**			**$0.00**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 1,400.00			$ 550.00			$ 350.00			$ 500.00
[2/] Travel and Per Diem	$ 650.00			$ 200.00			$ 150.00			$ 300.00
[3/] Equipment	$ -			$ -			$ -			$ -
[4/] MBK/Ayres Associates	$ 47,500.00			$ 43,000.00			$ 4,500.00			$ -
[4/] Eric Larson - UCD	$ 16,000.00			$ 13,500.00			$ 2,500.00			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 65,550.00**			**$ 57,250.00**			**$ 7,500.00**			**$ 800.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 13,248.30			$ 1,816.19			$ 168.00
Total Costs for Task Four	**$ 87,768.15**			**$ 76,335.42**			**$ 10,464.72**			**$ 968.00**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

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3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK FIVE	TOTAL AMOUNT TASK 5 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 10,344.00	$ 29.00	120	$ 3,480.00	$ 30.00	128	$ 3,840.00	$ 31.50	96	$ 3,024.00
Senior Restoration Ecologist	$ 3,112.00	$ 34.00	24	$ 816.00	$ 35.50	40	$ 1,420.00	$ 36.50	24	$ 876.00
Biologist	$ 1,672.00	$ 20.00	24	$ 480.00	$ 21.00	40	$ 840.00	$ 22.00	16	$ 352.00
Biological Technician	$ 4,310.00	$ 14.00	120	$ 1,680.00	$ 14.50	140	$ 2,030.00	$ 15.00	40	$ 600.00
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 19,438.00**			**$ 6,456.00**			**$ 8,130.00**			**$ 4,852.00**
[1/] Benefits as percent of salary	24%			$1,568.81			$1,975.59			$1,179.04
Personnel Total (salary + benefits)	**$24,161.43**			**$8,024.81**			**$10,105.59**			**$6,031.04**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 1,500.00			$ 200.00			$ 1,000.00			$ 300.00
[2/] Travel and Per Diem	$ 700.00			$ 200.00			$ 200.00			$ 300.00
[3/] Equipment	$ -			$ -			$ -			$ -
[4/] Environmental Compliance and Permitting Consultant	$ 150,000.00			$ 95,000.00			$ 45,000.00			$ 10,000.00
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 152,200.00**			**$ 95,400.00**			**$ 46,200.00**			**$ 10,600.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 21,719.21			$ 11,824.17			$ 3,492.52
Total Costs for Task Five	**$ 213,397.34**			**$ 125,144.02**			**$ 68,129.76**			**$ 20,123.55**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK SIX	TOTAL AMOUNT TASK 6 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 6,180.00	$ 29.00		$ -	$ 30.00	80	$ 2,400.00	$ 31.50	120	$ 3,780.00
Senior Restoration Ecologist	$ 2,458.00	$ 34.00		$ -	$ 35.50	24	$ 852.00	$ 36.50	44	$ 1,606.00
Biologist	$ 1,812.00	$ 20.00		$ -	$ 21.00	36	$ 756.00	$ 22.00	48	$ 1,056.00
Biological Technician	$ 3,792.00	$ 14.00		$ -	$ 14.50	96	$ 1,392.00	$ 15.00	160	$ 2,400.00
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 14,242.00**			**$ -**			**$ 5,400.00**			**$ 8,842.00**
[1/] Benefits as percent of salary	24%			$0.00			$1,312.20			$2,148.61
Personnel Total (salary + benefits)	**$17,702.81**			**$0.00**			**$6,712.20**			**$10,990.61**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 15,600.00			$ 100.00			$ 500.00			$ 15,000.00
[2/] Travel and Per Diem	$ 500.00			$ -			$ 200.00			$ 300.00
[3/] Equipment	$ -			$ -			$ -			$ -
[4/] Design contractor	$ 70,000.00			$ 7,500.00			$ 47,500.00			$ 15,000.00
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
[4/] Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 86,100.00**			**$ 7,600.00**			**$ 48,200.00**			**$ 30,300.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ 1,596.00			$ 11,531.56			$ 8,671.03
Total Costs for Task Six	**$ 125,601.40**			**$ 9,196.00**			**$ 66,443.76**			**$ 49,961.63**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

BUDGET FOR TASK SEVEN	TOTAL AMOUNT TASK 7 All Years	Year 1 Amount per hour	Year 1 Number of Hours	Year 1 Total Amount for Year 1	Year 2 Amount per hour	Year 2 Number of Hours	Year 2 Total Amount for Year 2	Year 3 Amount per hour	Year 3 Number of Hours	Year 3 Total Amount for Year 3
Personnel										
Restoration Ecologist	$ 2,592.00	$ 29.00		$ -	$ 30.00	36	$ 1,080.00	$ 31.50	48	$ 1,512.00
Senior Restoration Ecologist	$ 1,882.00	$ 34.00		$ -	$ 35.50	16	$ 568.00	$ 36.50	36	$ 1,314.00
Biologist	$ 1,216.00	$ 20.00		$ -	$ 21.00	16	$ 336.00	$ 22.00	40	$ 880.00
Biological Technician	$ 1,480.00	$ 14.00		$ -	$ 14.50	40	$ 580.00	$ 15.00	60	$ 900.00
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 7,170.00**			**$ -**			**$ 2,564.00**			**$ 4,606.00**
[1/] Benefits as percent of salary	24%			$0.00			$623.05			$1,119.26
Personnel Total (salary + benefits)	**$8,912.31**			**$0.00**			**$3,187.05**			**$5,725.26**
Other Costs	**Total All Years**			**Total Year 1**			**Total Year 2**			**Total Year 3**
Operating Expenses: (ex: seed, plant materials, irrigation supplies, software, office supplies, etc)	$ 1,500.00			$ -			$ 500.00			$ 1,000.00
2/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 1,500.00**			**$ -**			**$ 500.00**			**$ 1,000.00**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	21%			$ -			$ 774.28			$ 1,412.30
Total Costs for Task Seven	**$ 12,598.90**			**$ -**			**$ 4,461.33**			**$ 8,137.56**

1/ Indicate your rate, and change formula in column immediately to the right of this cell

2/ Travel expenses and per diem must be at rates specified by the Department of Personnel Administration. The contractor is required to maintain travel receipts and records for auditing purposes. No travel out of the state of California shall be reimbursed unless prior written authorization is obtained from the State.

3/ Please provide a list and cost of major equipment ($5,000 or more) to be purchased, and complete "Equipment Detail" Worksheet

4/ Please list each subcontractor and amounts (if subcontractor not selected yet, use function like "ditch construction subcontractor")

5/ Indicate rate in column immediately to the right of this cell; and provide a description of what expenses are covered by overhead. If overhead is > 15% must provide justification

Proposal Number
Proposal Name

Detailed Breakdown of Equipment Purchase

Applicant Name

EQUIPMENT DETAIL

Use this worksheet as a sample of how to present project equipment costing more than $5,000. Applicants must complete a spreadsheet as shown below to present project equipment costing more than $5,000.

Task No	List of Equipment	Unit Cost	Task Total
		TOTAL	**$ -**

Equipment purchased for a project shall be purchased by (*Name of Contractor*) and shall adhere to State of California Contracting rules and regulations as stated in State Contracting Manual (SCM) 7.29 Equipment Purchases.

For further information please go to: http://www.ols.dgs.ca.gov/Contract+Manual/default.htm

The Contractor shall maintain an inventory record for each piece of non-expendable equipment purchased with the funds provided under the terms of this agreement. The inventory record for each piece of such equipment should include the date acquired, total cost, serial number, model identification, and any other information or description necessary to identify said equipment. Non-expendable equipment are those items of equipment that have a normal life expectancy of one year or more and an approximate cost of $5,000 or more.

Contractor shall provide DFG with a copy of the inventory record at the time an invoice is presented for reimbursement for such equipment purchase.

NOTE: Ownership and reporting requirements for equipment purchased depends upon the Contractor's type of organization (state agency, local entity, private, etc.). Specific provisions for equipment purchases shall be provided at the time contract documents are prepared.

Environmental Compliance

CEQA Compliance

Which type of CEQA documentation do you anticipate?
− none *Skip the remaining questions in this section.*
− negative declaration or mitigated negative declaration
X EIR
− categorical exemption *A categorical exemption may not be used for a project which may which may cause a substantial adverse change in the significance of a historical resource or result in damage to scenic resources within an officially designated state scenic highway.*

If you are using a categorical exemption, choose all of the applicable classes below.

− Class 1. Operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. The types of "existing facilities" itemized above are not intended to be all−inclusive of the types of projects which might fall within Class 1. The key consideration is whether the project involves negligible or no expansion of an existing use.

− Class 2. Replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced.

− Class 3. Construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The numbers of structures described in this section are the maximum allowable on any legal parcel, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

− Class 4. Minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

– Class 6. Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded.

– Class 11. Construction, or placement of minor structures accessory to (appurtenant to) existing commercial, industrial, or institutional facilities, except where the project may impact on an environmental resource of hazardous or critical concern where designated, precisely mapped, and officially adopted pursuant to law by federal, state, or local agencies.

Identify the lead agency.
ENTER LATER
Please write out all words in the agency title other than United States (Use the abbreviation "US".) and California (Use the abbreviation "CA".).

Is the CEQA environmental impact assessment complete?
No.

If the CEQA environmental impact assessment process is complete, provide the following information about the resulting document.

Document Name

State Clearinghouse Number

If the CEQA environmental impact assessment process is not complete, describe the plan for completing draft and/or final CEQA documents.

Environmental compliance is a major component of the project and is discussed in detail in the project description.

NEPA Compliance

Which type of NEPA documentation do you anticipate?
– none *Skip the remaining questions in this section.*
X environmental assessment/FONSI
– EIS
– categorical exclusion

Identify the lead agency or agencies.

US Fish and Wildlife Service

Please write out all words in the agency title other than United States (Use the abbreviation "US".) and California (Use the abbreviation "CA".).

If the NEPA environmental impact assessment process is complete, provide the name of the resulting document.

If the NEPA environmental impact assessment process is not complete, describe the plan for completing draft and/or final NEPA documents.

Environmental compliance is a major component of the project and is discussed in detail in the project description.

Successful applicants must tier their project's permitting from the CALFED Record of Decision and attachments providing programmatic guidance on complying with the state and federal endangered species acts, the Coastal Zone Management Act, and sections 404 and 401 of the Clean Water Act.

Please indicate what permits or other approvals may be required for the activities contained in your proposal and also which have already been obtained. Please check all that apply. If a permit is *not* required, leave both Required? and Obtained? check boxes blank.

Local Permits And Approvals	Required?	Obtained?	Permit Number (If Applicable)
conditional Use Permit	–	–	
variance	–	–	
Subdivision Map Act	–	–	
grading Permit	–	–	
general Plan Amendment	–	–	
specific Plan Approval	–	–	
rezone	–	–	
Williamson Act Contract Cancellation	–	–	

other	–	–	

State Permits And Approvals	Required?	Obtained?	Permit Number (If Applicable)
scientific Collecting Permit	–	–	
CESA Compliance: 2081	–	–	
CESA Complance: NCCP	–	–	
Lake Or Streambed Alteration Agreement	X	–	
CWA 401 Certification	–	–	
Bay Conservation And Development Commission Permit	–	–	
reclamation Board Approval	X	–	
Delta Protection Commission Notification	–	–	
state Lands Commission Lease Or Permit	–	–	
action Specific Implementation Plan	–	–	
SWRCB Water Transfer Approval	–	–	
other	–	–	

Federal Permits And Approvals	Required?	Obtained?	Permit Number (If Applicable)
ESA Compliance Section 7 Consultation	X	–	
ESA Compliance Section 10 Permit	–	–	
Rivers And Harbors Act	X	–	
CWA 404	X	–	
other	–	–	

Permission To Access Property	Required?	Obtained?	Permit Number (If Applicable)
permission To Access City, County Or Other Local Agency Land Agency Name	–	–	
	–	–	

permission To Access State Land Agency Name			
permission To Access Federal Land Agency Name	–	–	
permission To Access Private Land Landowner Name	–	–	

If you have comments about any of these questions, enter them here.

Permiting and compliance are an important part of the project. Some of these permits may not be required depending on the action selected for implementation.

Land Use

Does the project involve land acquisition, either in fee or through easements?
X No. *Skip to the next set of questions.*
– Yes. *Answer the following questions.*

How many acres will be acquired by fee?

How many acres will be acquired by easement?

Describe the entity or organization that will manage the property and project activities, including operation and maintenance.

Is there an existing plan describing how the land and water will be managed?
– No.
– Yes. *Cite the title and author or describe briefly.*

Will the applicant require access across to or through public or private property that the applicant does not own to accomplish the activities in the proposal?
– No. *Skip to the next set of questions.*
X Yes. *Answer the following question.*

Describe briefly the provisions made to secure this access.

We have secured access to the site via the main entrance to the Llano Seco Rancho. Other access points are possible on the other side of the river.

Do the actions in the proposal involve physical changes in the current land use?
X No. *Skip to the next set of questions.*
– Yes. *Answer the following questions.*

Describe the current zoning, including the zoning designation and the principal permitted uses permitted in the zone.

Describe the general plan land use element designation, including the purpose and uses allowed in the designation.

Describe relevant provisions in other general plan elements affecting the site, if any.

Is the land mapped as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance under the California Department of Conservation's Farmland Mapping and Monitoring Program?
X No. *Skip to the next set of questions.*
– Yes. *Answer the following questions.*

Land Designation	Acres	Currently In Production?
Prime Farmland		**–**
Farmland Of Statewide Importance		**–**
Unique Farmland		**–**
Farmland Of Local Importance		**–**

Is the land affected by the project currently in an agricultural preserve established under the Williamson Act?
X No. *Skip to the next set of questions.*
– Yes. *Answer the following question.*

Is the land affected by the project currently under a Williamson Act contract?
– No. *Skip to the next set of questions.*
– Yes. *Answer the following question.*

Why is the land use proposed consistent with the contract's terms?

Describe any additional comments you have about the projects land use.

Much of the land affected by the project are owned by project partners (USFWS and PCGID–PID).