Project Information

2005 Proposal Number: 0092

Proposal Title: **Gauging the Benefits of Riparian Restoration/Enhancement in a Working Agricultural Landscape**

Applicant Organization Name: **San Joaquin County Resource Conservation District**

Total Amount Requested: $**1,174,003**

ERP Region: Delta Region

Short Description

Restore and enhance native riparian habitat in working agricultural landscapes in the lower Mokelumne River Watershed. Identify and work with willing producers, provide incentives, recover at risk species, reduce occurrences of NIS, and measure benefits.

Executive Summary

The Mokelumne River is the largest of the East Side tributaries of the San Joaquin–Sacramento Delta. The lower Mokelumne River is defined here as the regulated section of the river from the base of Camanche Dam to the Sacramento–San Joaquin Delta west of the City of Lodi in San Joaquin County. The Cosumnes River ultimately flows into the Mokelumne River as a tributary near the town of Thornton in Sacramento County.

The problem addressed by the proposed project, is the overall loss and the subsequent decline in the quality of native riparian habitat due to agricultural encroachment and non–native invasive plant species in the Lower Mokelumne River Watershed.

The hypothesis proposed by this pilot/demonstration project to address the problem is that restoring and enhancing riparian habitat and re–establishing links with working agricultural operations will benefit biodiversity including at–risk

species, working agricultural operation(s), and overall ecosystem function.

The objectives of the proposed project are: to identify and work with producers willing to integrate Ag operations with riparian enhancement and restoration in the watershed to develop an educational and demonstration program that shows the benefits of riparian restoration in a working agricultural landscape; to provide incentives for Agriculture producers to conduct riparian restoration; to recover endangered and other at−risk species and native biotic communities, especially VELB; to prevent establishment, reduce acreage and decrease impacts from NIS, and; to measure tangible benefits of riparian restoration to working agricultural operations and overall ecosystem function.

The proposed project seeks to determine which native plants or combinations of native plants are best at out−competing and displacing NIS plant species and noxious weeds. The proposed project also seeks to show that increased biodiversity and improved riparian ecosystem function improves conditions for beneficial insects and aids agricultural operations in utilizing integrated pest management techniques. The project additionally seeks to show that threatened and endangered species can co−exist and thrive in a working agricultural landscape when safe harbor agreements are utilized to protect the needs of both the species and the landowners.

The adaptive management approach to this project is: to analyze the data gathered to determine whether expected outcomes are being realized; if the expected outcomes are not being realized, to determine why not; and, to make adjustments as needed to the conceptual model so it can be applied to larger scale projects.

The proposed project also will help to meet milestones identified for the Delta and East Side Tributaries in the CALFED Ecosystem Restoration Program Draft Stage 1 Implementation Plan. These milestones include: to develop and implement a program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid

shaded riverine aquatic habitat, and in−stream cover along at least one tributary within the Eastside Delta Tributary EMZ; to restore a minimum of 300 acres of self−sustaining or managed diverse natural riparian habitat along the Mokelumne River, Cosumnes River, and Calaveras River, and protect existing riparian habitat; and, to develop and begin implementation of a demonstration program to reduce invasive non−native plant abundance within at least one EMU in the Delta

GAUGING THE BENEFITS OF RIPARIAN RESTORATION/ENHANCEMENT IN A WORKING AGRICULTURAL LANDSCAPE

A. Project Description

1. Problem

The problem addressed by the proposed project, as identified in the Lower Mokelumne River Watershed Stewardship Plan (SJRCD 2002), is the overall loss and the subsequent decline in the quality of native riparian habitat due to agricultural encroachment and non-native invasive plant species in the Lower Mokelumne River Watershed (LMRW).

The Mokelumne River (Figure 1) is the largest of the East Side tributaries of the San Joaquin-Sacramento Delta (CALFED 2000). The headwaters of the Mokelumne River originate in the Sierra Nevada Mountains at approximately 3,100 m in elevation. The river flows down the western slope of the Sierras and exits the foothills near the town of Clements, California. It continues its journey west flowing through a broad alluvial floodplain created by planation of the river over the past several thousand years (Piper *et al*. 1939). The lower Mokelumne River is defined here as the regulated section of the river from the base of Camanche Dam to the Sacramento-San Joaquin Delta west of the City of Lodi in San Joaquin County. The Cosumnes River ultimately flows into the Mokelumne River as a tributary near the town of Thornton in Sacramento County (Figure 1). Associated land use within the surrounding 28,558-hectare watershed consists of agriculture, gravel mining, urban, and recreation. The LMRW landscape is dominated by agriculture land use (20,234 hectares or 70% of the watershed) consisting primarily of winegrape vineyards, orchards, annual cropland, and grazing (Rankin et al. 2004). Natural habitat comprises 6,070 hectares or 21% of the total watershed. Riparian habitat makes up 1,432 hectares or 23% of the natural habitat and 5% of the total landbase of LMRW (Rankin et al. 2004). The remaining land use in the watershed is urban.

Riparian ecosystems are spatially and temporally dynamic systems shaped by fluvial and upland geomorphic processes. Restoration of these ecosystems requires an understanding of how the river's channel, floodplain, and vegetation have changed due to natural processes and human alteration. Edwards et al. (2004) conducted a time series spatial analysis (1910- 2001) of the lower Mokelumne River using riparian-stream metrics to characterize the structural attributes of the riparian system. Historical aerial photographs and maps of the study area were rectified and important structural attributes of the Mokelumne River were quantified. Based on this study, over 80% of seasonal lakes were converted to agriculture, and 73% of the floodplains have been cleared of riparian forest and shrub communities leaving a narrow ribbon of vegetation adjacent to the river (Edwards et al. 2004).

Approximately 1,997 hectares (4,930 acres) of riparian vegetation was mapped along the lower Mokelumne River from 2001 – 2003 from Camanche Dam downriver to the confluence with the San Joaquin River (Reeves and Jones 2004a). Non-native riparian vegetation was also identified and mapped (Reeves and Jones 2004b) during this period. Approximately 347 hectares (856 acres) or 17% of the riparian vegetation consists of non-native vegetation (Table 1). Most of the non-native vegetation occurs within Reach 5 between Elliot Road and Camanche Dam (Table 1).

Table 1. Total Hectares (Acres) of Non-native Vegetation by Reach along the lower Mokelumne River.

REACH #	HECTARES (ACRES) OF NON-NATIVE VEGETATION
Reach 1	114.12 hectares (281.77 acres)
Reach 2	31.97 hectares (78.96 acres)
Reach 3	29.34 hectares (72.49 acres)
Reach 4	45.92 hectares (113.39 acres)
Reach 5	125.46 hectares (309.76 acres)
TOTAL	**346.81 hectares (856.37 acres)**

Numerous species of invertebrates, amphibians, reptiles, birds, and mammals are dependent on riparian habitat at some point during their lifetime (Warner and Hendrix 1984, Mayer and Laudenslayer 1988, Morrison et al. 1998, Ammon et al. 2003, Digaudio 2003, Nevers 2003). Riparian systems in California support, either directly or indirectly, an abundance and diversity of wildlife by providing food, water, migration and dispersal corridors, and escape, nesting, and thermal cover (Sands 1978, Brode and Bury 1984, Eng 1984, Laymon 1984, Trapp et al. 1984, Williams and Kilburn 1984, Mayer and Laudenslayer 1988, Borchert 2003, Digaudio 2003, Lynn et al. 2003, Nevers 2003). Along the lower Mokelumne River there are over 19 species of amphibians and reptiles (Workman and Smith 2004), 200 species of birds (Yee et al. 2002, Reeves et al. 2001, Smith 2004, Pfeffer et al. 2005), and more than 40 species of mammals (Reeves and Jones 2004). The Mokelumne River Riparian zone is an important area for nesting raptors (Reeves and Smith 2004, Swolgaard et al. 2004). Thus, riparian habitat loss is a significant factor in species decline along the Mokelumne River. Restoration of this important habitat is crucial to sensitive species recovery within a working landscape.

Habitat loss and invasive species are two of the most important threats to the persistence of threatened and endangered species. Habitat specialists are particularly sensitive to habitat loss and fragmentation, as is evidenced by the decline and subsequent listing of the Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) or VELB (Barr 1991, USFWS 1996, Collinge et al. 2001, Huxel et al. 2003, Morrison et al. 2003), which is an MSCS-R species. Elderberry shrubs (*Sambucus* spp.) are the only host plant for the VELB. However, restoration of riparian habitat that includes elderberries as a component can contribute to increased populations of VELB (River Partners 2004).

Elderberry is a component of Valley Foothill Riparian Habitat (Mayer and Laudenslayer 1988). Valley Foothill Riparian Habitat is a mosaic of vegetative associations distributed across the landscape and along the river corridor. The mosaic pattern includes areas dominated by trees and tall shrubs interspersed with areas dominated by low shrubs and open areas dominated by herbaceous vegetation.

Non-native invasive plant species (NIS) are now widely recognized worldwide as posing threats to biological diversity second only to direct habitat loss and fragmentation (Pimm and Gilpin 1989, Noss and Cooperrider 1994, Scott and Wilcove 1998, Bossard et al. 2000, Nuxel et al. 2003). Invasive plants in the United States cause major environmental damages and economic losses totaling more than $138 million per year (Pimentel et al. 1999). Invasive plants in natural areas are considered a major environmental problem in California (CalIPC 1999, Bossard et al. 2000, Gaffney and Gledhill 2003, Johnson 2003) and contribute to the degradation of riparian habitat quality and quantity (Bossard et al. 2000, Faber 2003). Non-native invasive plant species are also detrimental to adjacent agricultural lands by providing habitat for pest insects that contribute to economic loss (Pickett and Bugg 1998, Long, 2000).

The most significant NIS species in the Lower Mokelumne River riparian zone are: Himalayan blackberry *(Rubus discolor),* giant reed *(Arundo donax),* Chinese tree of heaven (*Ailanthus altissima),* black locust *(Robinia pseudoacacia)* and yellow starthistle (*Centaurea solstitialis).*

Hypothesis

The hypothesis proposed by this project to address the problem is that restoring and enhancing riparian habitat and re-establishing links with working agricultural operations will benefit biodiversity including at-risk species, working agricultural operation(s), and overall ecosystem function.

2. Goals and Objectives

The goal of the project is to restore and enhance native riparian habitat in working agricultural landscapes in the Lower Mokelumne River Watershed.

The objectives of the proposed project are:

- Identify and work with producers willing to integrate Ag operations with riparian enhancement and restoration in the watershed to develop an educational and demonstration program that shows the benefits of riparian restoration in a working agricultural landscape.

- Provide incentives for Agriculture producers to conduct riparian restoration.

- Recover endangered and other at-risk species and native biotic communities, especially VELB.

- Prevent establishment, reduce acreage and decrease impacts from NIS.

- Measure tangible benefits of riparian restoration to working agricultural operations and overall ecosystem function.

The proposed project will assist farmers in integrating agricultural activities with ecosystem restoration in at least three ways.

- First, the proposed project seeks to determine which native plants or combinations of native plants are best at out-competing and displacing NIS plant species and noxious weeds; thereby increasing overall ecosystem function. This will assist farmers by decreasing the amount of noxious weeds that migrate from riparian areas into crops.
- Second, the proposed project seeks to show that increased biodiversity and improved riparian ecosystem function improves conditions for beneficial insects and aids agricultural operations in utilizing integrated pest management techniques; thereby decreasing the need for chemical pesticide applications. This will assist farmers by decreasing the amount of time, energy, and money devoted to pest insect control.
- Third, the proposed project seeks to demonstrate that threatened and endangered species can co-exist and thrive in a working agricultural landscape when safe harbor agreements are utilized to protect the needs of both the species and the landowners. This will assist farmers by providing them a mechanism to maintain normal agricultural operations in proximity to threatened and endangered species.

The proposed project also will help to meet milestones identified for the Delta and East Side Tributaries in the CALFED Ecosystem Restoration Program Draft Stage 1 Implementation Plan. These milestones include:

- Develop and implement a program to establish, restore, and maintain riparian habitat to improve floodplain habitat, salmonid shaded riverine aquatic habitat, and in-stream cover along at least one tributary within the Eastside Delta Tributary EMZ.
- Restore a minimum of 300 acres of self-sustaining or managed diverse natural riparian habitat along the Mokelumne River, Cosumnes River, and Calaveras River, and protect existing riparian habitat.
- Develop and begin implementation of a demonstration program to reduce invasive non-native plant abundance within at least one EMU in the Delta.

3. Conceptual Model

The Conceptual Model for this project is graphically illustrated in Figure 2.

4. Approach and Scope of Work

A. Riparian Restoration

This project seeks to restore and/or enhance 16 hectares (40 acres) of riparian habitat. The specific properties where restoration activities will occur will be selected based on a ranking criteria now being developed under a grant from the State Water Board (task 2.4, grant agreement # 04-115-555-0 Implementation of the Lower Mokelumne River Watershed Stewardship Plan). In addition to the scientific guidance and landowner priorities identified in the ranking criteria, a landowner(s) will be selected for this project based on willingness to plant elderberry shrubs as part of restoration activities and sign a programmatic Safe Harbor Agreement for VELB that will cover landowners in the LMRW.

Task 1 Project Management and Administration

All activities under task 1 will be performed by San Joaquin County Resource Conservation District (SJCRCD).

Task 1.1 Contracting and Subcontracting
This task includes securing subcontracts with River Partners and the Lodi Woodbridge Winegrape Commission for completion of subsequent tasks approved by the grantor.

Deliverable: Copy(s) of all subcontract agreements.

Task 1.2 Project Administration
This task includes completion of all reporting requirements, submission of deliverables, and invoices, and data storage for subsequent tasks approved by the grantor. It also includes maintaining communications between grantor and subcontractors and landowners and ensuring the quality of work performed by subcontractors on behalf of the grantor and landowners.

Deliverable: Quarterly/monthly reports (as required), invoices and supporting documentation, submission of all project deliverables, data and data analysis.

Task 2 Permitting and Environmental Documentation
All work under task 2 will be performed by SJCRCD.

Task 2.1 CEQA Documentation
CEQA Documentation will be completed as a part of a programmatic permit for restoration work in the LMRW. The programmatic permit is being pursued and is being funded under a Grant from the State Water Board (Exhibit C, tasks 6 and 22, Grant Agreement # 04-115-555-0 Implementation of the Lower Mokelumne River Watershed Stewardship Plan).

Deliverable: A copy of CEQA Documentation (Mitigated Negative Declaration or other instrument).

Task 2.2 State and Local Permits
Permits for restoration work from various agencies will be completed as part of a programmatic permit for restoration work in the LMRW. The programmatic permit is being pursued and is being funded under a Grant from the State Water Board (Exhibit C, tasks 6 and 22, Grant Agreement # 04-115-555-0 Implementation of the Lower Mokelumne River Watershed Stewardship Plan).

Deliverable: Copies of all permits or permit exemptions.

Task 3 Restoration of Riparian Areas in a Working Agricultural Landscape
All activities under task 3 will be performed by River Partners.

Task 3.1 Project Planning/Designing
This task includes the preparation of one Restoration Plan describing site conditions, plant design, and project implementation activities including plant installation, irrigation, weed control, and maintenance, and monitoring methods.

Deliverable: Restoration Plan

Task 3.2 Plant Propagation
Local plant material will be collected, propagated, and incorporated into the restored and enhanced areas of the project. This task is contingent upon completion of task 3.1 and the identification of plants that will be incorporated into the actual restoration.

Deliverable: Plant materials for the restoration and enhancement project.

Task 3.3 Initial Weed Control
Invasive plant species, including arundo, Himalayan blackberry, and tree of heaven will be treated and controlled prior to planting of native species. Techniques include physical removal and herbicide treatment.

Deliverable: Photos of work in progress. Report on the estimated number of hectares (acres) of NIS removed and type of NIS removed.

Task 3.4 Ground Preparation
Restoration and enhancement areas will be cleared of debris and free of weedy material at the time of planting. Disking, ripping, and harrowing may be needed to accomplish these objectives.

Deliverable: Photos of work in progress. Report on volume of debris cleared, burned, or otherwise disposed of. Report on the number of hectares (acres) treated with disking, ripping, harrowing versus total number of hectares (acres) to be treated.

Task 3.5 Irrigation Installation
River Partners will develop irrigation infrastructure to supply, convey, and distribute irrigation water to restored areas during the three-year plant establishment period.

Deliverable: Photos of work in progress. Report on total length of irrigation piping installed.

Task 3.6 Planting
River Partners will survey and layout restoration and enhancement areas, design individual plant communities, plant native woody species in appropriate areas, and provide every plant with a plant protector. Plant species may include California rose (*Rosa californica*), California blackberry (*Rubus ursinus*), valley oak (*Quercus lobata*), elderberry, box elder (*Acer negundo*), and coyote brush (*Baccharis pilularis*). River Partners will replant trees and shrubs as required to guarantee a 70 percent overall survival rate at the end of three years. Herbaceous understory species will be planted in appropriate areas in year 2 as a measure of protection against potential weed invasion. This task is contingent upon completion of tasks 3.1 through 3.5.

Deliverables: Photos of work in progress, plant list, maps of test areas for NIS displacement, analysis of actual planting conducted versus planting outlined in planting plan.

Task 3.7 Irrigation Operation

River Partners will operate, maintain, and repair the developed irrigation system during the three-year plant establishment period. This task is contingent upon tasks 3.5 and 3.6.

Deliverable: Photos of work in progress. Report included as a part of deliverable for task 3.9.

Task 3.8 Maintenance
This task includes routine field maintenance operations such as hoeing, mowing, spraying, and disking for weed control to optimize growing conditions for young riparian plants. This task is contingent upon tasks 3.3, 3.6, and 3.7

Deliverable: Photos of work in progress. Analyses included as a part of deliverable for task 3.9.

Task 3.9 Monitoring and Reporting
Field managers and biology staff will regularly monitor field and plant conditions to guide adaptive management decisions. At the end of the first growing season, River Partners will complete a field census that monitors survival and density of each planted species. River Partners will utilize permanent plots in years two and three to collect data on overall survivorship, height, and cover. To evaluate the effectiveness of the riparian restoration/enhancement, cover data for native and non-native species will be collected using the line intercept method in areas where invasive species have been removed and natives planted. This data will be compared with control areas where no weed control or native planting have occurred. This task is contingent upon tasks 3.6 and 3.8.

Deliverable: This task includes: 1) two Annual Reports which describe each year's activities, present monitoring data results, display site photos, and note any management recommendations or changes to the plant design and 2) a Final Project Report.

Task 3.10 Project Management
River Partners shall be responsible for managing the implementation of the restoration and enhancement project. This includes contract management, coordination with partners, other subcontractors, and stakeholders, budget management, and accounting. This task is contingent upon overall approval of task 3.

Deliverable: Timely submission of all required reports, deliverables, invoices, and documentation to project contractor and grantor.

Task 4 Lodi Sustainable Viticulture Certification and Monitoring Restoration Benefits
All work under task 4 will be performed by the Lodi Woodbridge Winegrape Commission.

Task 4.1: Sustainable Viticulture Certification
Identify and work with growers willing to implement best management practices in vineyards (Ag operations) adjacent to riparian restoration sites and provide incentives to these growers to do this work and for carrying out riparian restoration.

The Lodi-Woodbridge Winegrape Commission has created a third party sustainable farming certification program, *The Lodi Rules for Sustainable Winegrowing* (www.lodirules.com). The

program was created in part with funds under two Grants from the State Water Board (Exhibit C, tasks 6 and 22, Grant Agreement # 04-115-555-0 Implementation of the Lower Mokelumne River Watershed Stewardship Plan, and Grant Agreement #04-027-555-0 Improving water quality in California Crush District 11 through implementation of sustainable viticulture). *The Lodi Rules* program certifies that a grower has used a specified number of sustainable farming practices in each of their vineyards. These practices address two of the four CalFed Bay Delta objectives; ecosystem quality and water quality. Moreover, *The Lodi Rules* program provides a marketing incentive to the grower for implementing sustainable farming practices and carrying out riparian restoration.

Deliverables: Enroll a minimum of 20 winegrape growers in the Lower Mokelumne watershed in *The Lodi Rules* program during the life of the grant. Copies of certification criteria and submission of list of names of all qualified growers.

Task 4.2 VELB Monitoring
Carry out Valley Elderberry Longhorned beetle (VELB) monitoring, both baseline and performance, on the restoration sites established in task 3.

A 100% population census of elderberry bushes, both natural and planted will be carried out and mapped on the restoration sites established in Task 3. Pre-existing elderberry bushes will be monitored for VELB exit holes to estimate the baseline of the VELB population at the start of the project using the protocols outlined in River Partners (2004). Once a month, the first week in each month, from April to June all elderberry bushes on the restoration sites will be monitored for new adult exit holes and flowers will be observed for adult beetle feeding activity to assess current VELB activity. Elderberry stems will also be checked for oviposition sites. Since it can take up to 2 years for a VELB larva to emerge as an adult, final success of the project will require follow-up monitoring the following the end of the project. Since 100% of the elderberry bushes will be monitored for exit holes over the life of the project success will be measured by the increase in the number of holes over time.

Deliverables: VELB monitoring records and analyses.

Task 4.3 Pest and Beneficial Insect Monitoring
Carry out monitoring of vineyard pests and their natural enemies in vineyards adjacent to restoration sites established in task 3 and compare the results to those from comparable vineyards not adjacent to restoration sites.

Lodi-Woodbridge Winegrape Commission staff and growers have been monitoring vineyard pests and their natural enemies in 70 vineyards throughout the district for the last 8 years recording the results in a relational database. They have used this data to develop accurate monitoring protocols (Ohmart and Matthiasson 2000). Vineyards adjacent to restoration sites will be paired with similar vineyards away from the restoration sites (e.g. similar winegrape variety, age, rootstock, trellis type, soil type). Vineyards will be divided up into 4 quadrants and each week during the growing season at least 30 inner canopy leaves will be sampled from each quadrant for the following important vineyard pests: leafhopper, spider mites, omnivorous leafroller, and powdery mildew. They will also be monitored for the following important natural

enemies: egg parasite of leafhoppers (*Anagrus spp.*), the mite predator (*Galendromus occidentalis*), and six-spotted thrips (*Scolothrips sexmaculatus*). Data will be analyzed to look for any changes in arthropod numbers or powdery mildew incidence in the vineyards adjacent to the restoration sites as compared to the vineyards where restoration has not occurred.

Deliverables: Monitoring records of vineyard pests and their natural enemies and analyses of these records.

Task 4.4 Non-Pest Invertebrate Monitoring
Monitor invertebrates not related to pests as a measure of biodiversity in vineyards adjacent to restoration sites established in task 3 and compare the results to those from comparable vineyards not adjacent to restoration sites.

There are many ways to sample invertebrates to obtain a measure of their abundance and biodiversity. Since, in relation to adjacent vineyards, the riparian restoration sites are most likely to have the biggest effect on flying insects; sweep netting will be used to monitor the grape canopies for invertebrate biodiversity. Vineyards adjacent to restoration sites will be paired with similar vineyards not adjacent to the restoration sites (e.g. similar winegrape variety, age, rootstock, trellis type, soil type). Each week during the growing season twenty fives sweeps, using a standard sized sweep net, will be made in the following locations of vineyards adjacent to the restoration sites: row ends and row-middles of the row adjacent to the restoration site, the row one quarter of the way through the vineyard moving away from the restoration site, the row three quarters of the way and also on the outer row away from the restoration site. Invertebrates will be identified to family and their numbers recorded. Data will be analyzed using a diversity index such as Shannon-Weaver or Simpson-Yule (Southwood 1978).

Deliverables: Monitoring records of invertebrates that are not related to vineyard pests and analyses of these records.

Task 5 Outreach and Education
Work under this task will conducted by the Contractor and all subcontractors.

Task 5.1 Work with Local High School Teachers and Students
River Partners will work through the Center for Land-Based Learning's (CLBL) Student and Landowner Education and Watershed Stewardship (SLEWS) program to engage the local community, support public education, and enhance the lives of young people. The overall SLEWS experience will introduce and prepare students for possible careers in agriculture, education, and natural resource conservation, while developing their skills as leaders and their connection to the natural world. This task is contingent upon overall approval of task 3.

Deliverable: Photos of students working at field sites, names of participating teachers and subjects, copies of each day's agenda. SLEWS program staff will recruit local high school teachers for yearlong projects consisting of four field days. Possible field day activities include seed collecting, planting native vegetation, erosion control, removing invasive species, and ecological monitoring.

Task 5.2 Report Results to the Local Agriculture Community
Through the Lodi-Woodbridge Winegrape Commission's newsletters and breakfast meetings, LWWC will report on progress of the project to local grape growers. Articles will be submitted to the local Farm Bureau publication through the column of the Stockton-area NRCS District Conservationist and the newsletter of the local water quality coalition (formed to comply with requirements of the Waiver of Discharge Requirements for Irrigated Agricultural Land). Information will be included as a part of Agricultural Filed Days sponsored by SJCRCD and posted on the SJCRCD website. This task is contingent upon completion of tasks 3 and 4.

Deliverables: Copies of all newsletters, publications, power point presentations, materials posted on websites of the principles, cooperators and partners, and outlines of oral presentations given at field days.

Task 5.3 Report Results to Scientific and Other Interested Communities
Submit papers and presentations to symposia including the CALFED Science Conference, the CALFED BDPAC Watershed and Working Landscapes subcommittees, the California Association of Resource Conservation Districts, the California Non-Point Source Conference, and others. This task is contingent upon completion of tasks 3 and 4.

Deliverables: Copies of papers, power point presentations, and outlines of oral presentations given at various symposia and/or conferences.

Task 5.4 Tours of Restoration Sites
Conduct tours for interested CALFED BDPAC subcommittees, agricultural groups, NGOs, and other interested groups to demonstrate the success of restoration in working agricultural landscapes. This task is contingent upon completion of tasks 3 and 4.

Deliverables: Photos of tours, attendance lists for those who take part in tours, a list of the property(s) where tours have taken place, copies of any communications received by tour participants following the tours, and description of topics highlighted during each tour.

Task 6 Project Evaluation and Assessment
All work under this task will be performed by SJCRCD.

This task is based on the principals and criteria outlined in the following section (5. Performance Evaluation). See Table 2 for a draft copy of the Project Assessment and Evaluation Form.

Deliverables: PAEP forms, written analyses with each required report.

Task 7 Final Reports
All work under this task will be performed by SJCRCD.

Task 7.1 Draft Final Report and Invoice

Deliverable: SJCRCD will submit a draft final report and invoice by the deadline specified by the grantor.

Task 7.2 Final Report and Invoice

Deliverable: SJCRCD will submit the final report and invoice based on recommendations made by the grantor on the draft submittals, by the deadline specified by the grantor.

5. Performance Evaluation

The monitoring plan for this project is based on the State Water Board's Project Assessment and Evaluation Plan guide (www.swrcb.ca.gov/funding/paep.html) and the conceptual model for this project. The project specific performance measures for this project are included in Table 2 and will be based on the following criteria:

1. For task 1, timely completion and submission of all subcontracting agreements per the project timeline and grant agreement; and timely submission of all reporting and invoicing requirements as set forth in a grant agreement.

The rationale for selecting these criteria is that timely submission of the required documentation will ensure the project stays on track for completion in the contracted time frame and reporting serves as an adjunct to the project monitoring and performance.

2. For task 2, a copy of all-environmental documents and permits or exemptions as appropriate for individual projects. Programmatic Permitting is being completed as part of a separate grant, so these documents should be available by the time a grant agreement is signed.

The rationale for selecting these criteria is that environmental documents and permits are necessary for restoration projects. The documentation and permits certify that the restoration will be completed per the laws of the state of California and the quality guidelines of state and local agencies, boards, and commissions.

3. For task 3, a planting plan specific to each site that identifies the NIS species to be removed, the total acreage of the NIS species to be removed at each site, the native plant(s) or plant combinations that will be used to displace and out-compete NIS species at each site, the total number of native plants and acres replanted at each site and in aggregate, completion of a field census that monitors survival and density of native plantings at each site and in aggregate, and an analysis of the data collected for adaptive management purposes.

   The analysis of the data collected will lead to an experimental design change if unexpected results are detected. Results might show that a plant community designed to displace arundo is more successful at displacing black locust, or a plant community designed to displace yellow star thistle is more effective at displacing Himalayan blackberry. Results could also show that site-specific soil conditions and exposure to sunlight have a greater effect on NIS than re-establishment of native plant communities.

The rationale for selecting these criteria is that different sites in the watershed will have conditions unique to those individual sites. NIS species at one site will be different from NIS

species at another site. Plant and soil conditions at one site will differ from plant and soil conditions at a separate site in a different part of the watershed. A specific planting and monitoring regimen for each site will provide direct and detailed measurement data, a better analysis for each site, and allow for more focused adaptive management measures if results do not match the hypothesis.

4. For task 4, meet or exceed the minimum number of growers enrolled in the "Lodi Rules" program of the LWWC, an increase in the number of VELB exit holes in Valley Elderberry plants at one or more of the project restoration and monitoring sites, a comparison and analysis of pest insect populations versus beneficial insect populations at project restoration sites and control sites, a comparison and analysis of non-pest related invertebrates at project restoration sites and control sites.

   The analysis of data collected could lead to an experimental design change if expected results are not achieved. For example, it is assumed that increasing native plant communities in riparian areas adjacent to working agricultural operations will decrease NIS species and populations of pest insects in the agricultural landscape. If the data collected does not support that assumption, a new hypothesis must be developed.

The rationale for selecting these criteria is that these specific measurements will provide a baseline and data that can be analyzed for adaptive management needs, data that will be used for education and outreach as a part of task 5, and data that can be used to measure the overall success of the project.

5. For Task 5, a minimum of two teachers and 30 students participating in the SLEWS program at project restoration sites, a minimum of five articles regarding the project in agricultural interest publications, a minimum of two agriculture education field days conducted on at least one project restoration site, a minimum of at least one poster paper or presentation during at least three of the following meeting, conferences or symposia: the CALFED Science Conference, the CALFED BDPAC Watershed and Working Landscapes subcommittees, the California Association of Resource Conservation Districts, the California Non-Point Source Conference, and the California Watershed Council, conduct a minimum of three tours with a minimum of ten persons each on a minimum of two project restoration sites.

The rational for selecting these criteria is to measure the number of education and outreach exposures to a targeted audience interested in the outcomes of the project, and takes advantage of forums for disseminating the information about lessons learned during the course of completing the project.

6. For task 6, submission of a completed project monitoring form as represented in Table 2, and critical analyses of each completed table submitted with each report and invoice as specified in the grant agreement.

The rationale for selecting these criteria is that it will provide the grantor, the contractor, and subcontractors with objective information to measure the progress and gauge the success of the project and provide data to guide adaptive management measures.

7. For task 7, submission of draft and final reports and invoices as specified in the grant agreement.

6. Feasibility

The proposed project is feasible and appropriate for the proposed work based on current work already underway or completed in the watershed. There is already a significant amount of baseline data on the composition of riparian communities in the watershed through studies conducted by East Bay Municipal Utility District. River Partners has achieved success in design of riparian restoration activities, design of site plans, and vegetation monitoring. LWWC already has a significant database on vineyard insect populations, weed management practices, and has previously established monitoring protocols.

The planting, monitoring, and education and outreach portions of this proposal were carefully constructed with the three year time frame of project funding in mind. This includes considerations for crop seasons, wildlife needs, and organizational capacity.

This project does have a certain dependence on the outcomes of other projects, including the restoration site ranking criteria, programmatic Safe Harbor Agreement, and programmatic watershed restoration environmental document(s) and permit(s) previously mentioned. The site ranking criteria and Safe Harbor Agreement are expected to be completed by the spring of 2006. The programmatic watershed restoration permit is expected to be completed in time for the fall/winter 2006-2007 planting season. Neither zoning laws, other local ordinances, Williamson Act contracts, nor other land use restrictions are expected to affect the proposed project. They have not affected previous restoration projects in the watershed.

This project will be carried out in concert with the Lodi Rules and SLEWS programs. Both the Lodi Rules and SLEWS programs receive funding from outside sources. The Lodi Rules program is funded by participating growers. A current pest monitoring analysis near riparian restoration areas is funded through spring of 2007. The SLEWS program is funded through the 2006-2007 planting season; however funding is needed for individual restoration site activities.

The Lodi Rules program is a high-priority for LWWC and its member growers. This third-party certification program is in its first year of operation and is designed to provide growers with a marketing advantage for the crops produced. The SLEWS program is high priority and the signature program for the Center for Land-Based Learning.

SJCRCD first began working with LWWC in 1999 and helped secure funding for a winegrowers self-assessment workbook that now serves as the basis for the Lodi Rules program. SJCRCD and LWWC have since partnered in three other grant projects. SJCRCD began working with CLBL and the SLEWS program in 2004. SJCRCD, through a memorandum of understanding with the USDA Natural Resources Conservation Service, provides office space and other needs

for the SLEWS program in San Joaquin County at the NRCS Plant Materials Center in Lockeford. Timing, disclosure requirements, and other factors are not expected to present barriers to this project.

Specific locations where the restoration, and therefore much of the monitoring, will take place have yet to be determined. All restoration and monitoring activities will take place on private land where working agricultural activities are adjacent to the restoration/enhancement areas. To date, nearly 45 landowners with working agricultural operations in the LMRW have expressed an interest in riparian restoration/enhancement activities on their land.
Site selection will be made in part by the restoration site ranking criteria previously noted. This project seeks to restore/enhance up to 16 hectares (40 acres) of riparian habitat, with separate sites in at least three of the river reaches as identified in Table 1. Site selection will additionally be contingent upon participating landowners agreeing to: sign the programmatic Safe Harbor Agreement, allow the planting of elderberry shrubs as part of the restoration activities, allow LWWC and River Partners to conduct monitoring activities, and cooperate with education and outreach activities of SLEWS, LWWC, and SJCRCD, and allow the dissemination of information related to project activities including GIS mapping.

It is anticipated that the monitoring portion of the project will need to extend beyond the maximum three year duration of ERP grant agreements. At the end of three years, we expect to be able to identify trends as a result of the monitoring. However, three years may be too soon to specify species benefits and ecosystem improvements, especially as they relate to the benefits these improvements will provide to working agricultural lands. This is especially true in monitoring the response of an endangered species to the restoration activities.

Any third party impacts that may result from this project are expected to be beneficial to all through improvements to the overall agricultural operation, a decrease in chemical inputs, and an increase in knowledge about ecosystem repair and function.

7. Data Handling and Storage

Initial data handling and storage will be conducted by the entities collecting the data and conducting the data analyses. All data will be primarily stored in compatible personal computer operating system formats (i.e. Microsoft Word, Excel, Access, PowerPoint, etc.). SJCRCD will be responsible for final data handling and data storage. SJCRCD has the capability to convert all data to PDF formats for wider distribution and usage. All data will be stored in both original and PDF formats, with back-up storage in both original and PDF formats on cd-rom discs. Copies of all discs will be submitted to the CALFED ERP program.

In addition to sharing the data as reports and analysis as part of the grant agreement with the CALFED ERP program, the data will be posted as relevant to the SJCRCD and subcontractor websites. The data will also be shared as a part of the pubic involvement, education, and outreach tasks of this project.

8. Information Value

This project seeks to increase the knowledge base relating to the benefits of integrating agricultural operations with riparian ecosystem enhancement and restoration. The conceptual model seeks to show that riparian ecosystem restoration benefits working agricultural operations by reducing the occurrence of noxious weeds in crop areas and demonstrating a direct correlation between riparian ecosystem restoration and enhancement and a simultaneous increase in the number of beneficial insects and decrease in the number of pest insects. The conceptual model also seeks to show that working agricultural operations are compatible with threatened and endangered species (in this case, VELB) when riparian ecosystem restoration/enhancement activities occur.

The conceptual model and the findings of this project can assist weed management areas in implementing strategies for the control of noxious weeds in agricultural and other landscapes. The model and findings can be another Integrated Pest Management (IPM) tool for local agriculture commissioners, commodity groups, and pest control advisors. The information will also be useful to NRCS District Conservationists when providing technical assistance to growers through the EQIP and other conservation programs, and provide additional multi-benefit best management practice examples to the Department of Pesticide Regulation, water quality coalitions formed to comply with regulations on irrigated agricultural land, and other agencies and NGOs interested in decreasing the use of chemical herbicides and pesticides.

9. Public Involvement and Outreach

A minimum of two public meetings will be held for outreach to groups or individuals that may be affected by the project. At least one of these public meetings will be held during a watershed open house event for all residents of the watershed. The open house will be held as a part of a grant from the State Water Board (task 2.4, grant agreement # 04-115-555-0 Implementation of the Lower Mokelumne River Watershed Stewardship Plan.) Additional outreach will occur as a part of regular agricultural field days sponsored by SJCRCD, LWWC, USDA NRCS Stockton Service Center, or San Joaquin County and Delta Water Quality Coalition.

Landowners adjacent to the project site(s) will be identified as part of the permitting process and will receive direct notification of the project and project activities and be given an opportunity to comment on the project and its goals and objectives. Any concerns will be addressed in person by the project contractor, subcontractors, partners, and cooperators. CALFED ERP Program officials will also be consulted in crafting responses to concerns and compromises as needed. Previous restoration activities along the Lower Mokelumne River have not drawn objections from adjacent landowners.

This project is proposed by the SJCRCD on the recommendation of the Lower Mokelumne River Watershed Stewardship Steering Committee. The Steering Committee consists of a variety of stakeholders who crafted and are overseeing implementation of the LMRWSP. Steering committee members (Appendix C) will report on grant activities and progress to their various grower, environmental, business, landowner groups, and public agencies.

Results of the project and the knowledge gained during the course of this project will be disseminated in a variety of ways to groups and individuals that may benefit from knowledge

gained during the course of this project. SJCRCD, project subcontractors, and partners will communicate/share the results of this project by submitting reports to or encouraging articles in general interest publications (local newspapers, a watershed newsletter), agricultural interest publications (i.e., Water Coalition newsletter, Farm Bureau News).

SJCRCD, LWWC, and the USDA NRCS Stockton Service Center also conduct agriculture education field days regularly. Field days can be held at one or more of the restoration/enhancement and monitoring sites and discuss the hypotheses, goals, and objectives of the project as well as preliminary findings. Reports, oral presentations, poster papers, and scientific papers will be presented at various meetings, conferences, and symposia on a local, state, regional, and even national basis. These meetings, conferences, etc, can include the CALFED Science Conference, the CALFED BDPAC Watershed and Working Landscapes subcommittees, the California Association of Resource Conservation Districts, the California Non-Point Source Conference, and the California Watershed Council.

B. Applicability to CALFED Bay-Delta Program and ERP Goals, and Priorities for This Solicitation

1. ERP Priorities

This project directly addresses two of the ERP priorities as stated in Chapter Two of the ERP PSP dated October 2005. The first priority directly addressed by this project is that it contributes to the understanding of the relative effectiveness of different conservation-based farming practices and systems, and their contribution to larger restoration efforts.
This is a pilot scale demonstration of practices that integrate agricultural activities with ecosystem restoration/enhancement. The proposed project addresses this priority by seeking to show that riparian ecosystem restoration/enhancement reduces the occurrence of noxious weeds in cropping areas and improves the effectiveness of integrated pest management practices. If successful, the results will show an economic benefit to integrating ecosystem restoration in conjunction with agricultural activities by reducing the need for chemical control of noxious weeds and pest insects in addition to the environmental benefits of increased biodiversity, restored ecosystem function, and the decreased need for chemical inputs. These restored and enhanced riparian areas will also provide a greater natural buffer between working agriculture operations and waterways.

The second priority directly addressed by this project is that it will develop and implement agricultural activities that benefit MSCS-R covered species, specifically VELB. The planting plan for each of the project sites will include the planting of elderberry shrubs as part of the riparian restoration and enhancement activities. Agricultural practices in proximity to the elderberry plants are outlined as a part of the Safe Harbor Agreement that landowners who participate in the proposed project will sign. The proposed project seeks to demonstrate to farmers, regulators, and others that farming is compatible with VELB restoration efforts.

This proposed project seeks to meet three other goals, objectives, milestones, or priorities identified in the ERP Draft Stage 1 Implementation Plan. The first is an objective to develop and implement a program to establish, restore, and maintain riparian habitat to improve floodplain

habitat, salmonid shaded riverine aquatic habitat, and in-stream cover along at least one tributary within the Eastside Delta Tributary EMZ. All of the restoration conducted as a part of this proposed project will occur well within the one hundred year floodplain of the Lower Mokelumne River.

The second is a milestone to restore a minimum of 300 acres (121 hectares) of self-sustaining or managed diverse natural riparian habitat along the Mokelumne River, Cosumnes River, and Calaveras River, and protect existing riparian habitat. This project proposes to restore up to 16 hectares (40 acres) of self-sustaining or managed diverse natural riparian habitat along the Lower Mokelumne River. The 16 hectares (40 acres) represents about 13% of the milestone for restoration acreage for the Eastside Delta Tributaries.

The third is an objective to begin implementation of a demonstration program to reduce invasive non-native plant abundance within at least one EMU in the Delta. This project proposes to reduce non-native plant abundance and demonstrate a strategy for preventing recurrence of NIS within restored and enhanced riparian areas in an agricultural landscape.

2. Relationship to Other Ecosystem Restoration Actions or Program Investments

This project seeks to build on other restoration activities in the Lower Mokelumne River Watershed funded as part of ERP-02-P20. Insect and VELB monitoring that will be conducted as a part of this project will include areas restored as a part of the P20 project. Activities undertaken as a part of this project are consistent with and identified in the Lower Mokelumne River Watershed Stewardship Plan. Other restoration activities in the Watershed completed or underway include the Murphy Creek Restoration Project, (funded by the CALFED Watershed Program and the National Fish and Wildlife Foundation), Gill Creek Restoration Project and Calvary Bible Church Riparian Restoration (funded by the Lower Mokelumne River Partnership), Locke Ranch Hedgerow and IPM Insectary (funded by the Lower Mokelumne River Partnership and the USDA NRCS), and the El Rio Farms Conservation Easement and Restoration Project (funded by San Joaquin Council of Governments.

C. Qualifications and Organization

San Joaquin County Resource Conservation District – John Brodie, Project Manager

John has been a subcontracted project manager since 2002. In that time, John has grown the District's project budget from $300,000 to more than $2,000,000.00. His project management experience includes administration, bookkeeping, invoicing, and reporting for grant funded projects. Projects he has managed for the District funded by CALFED include the Murphy Creek Restoration Project (contract number) and Restoration and Monitoring of Riparian Habitat Corridors Along the Lower Mokelumne River (ERP-02-P20).

Lodi-Woodbridge Winegrape Commission – Dr. Clifford P. Ohmart, Research/IPM Director:

Dr. Ohmart has a Bachelors Degree in Forestry and a Ph.D. in Entomology, specializing in integrated pest management. His experience as a research scientist, IPM consultant, and presently as Research/IPM Director at LWWC has provided him with the knowledge and expertise to aid in achieving the goals and objectives of this project. In particular, he was program leader for the development of the *Lodi Winegrower's Workbook* which is the tool winegrape growers use to help them integrate vineyard Ag operations with surrounding ecosystems such as riparian areas. He was also program leader for the development of the *Lodi Rules* program which provides market-based incentives for growers to integrate their vineyard Ag operations with surrounding ecosystems. Furthermore, his research experience in the US and Australia in sampling insect communities to measure biodiversity will be put to great use in helping measure the tangible benefits of riparian restoration to adjacent Ag operations in vineyards. Moreover, his pest management experience in winegrapes will greatly benefit the project in regards to measuring the effects of riparian restoration on vineyard pest populations.

River Partners

River Partners is a California non-profit corporation founded in 1998 dedicated to the mission of creating wildlife habitat for the benefit of people and the environment. River Partners' staff and directors have unique experience that bridges both agriculture and conservation. Six out of nine River Partners board of directors currently depend on agriculture for their businesses, and three quarters of their staff either have worked in agriculture or own farms in the area. River Partners works cooperatively with a variety of agency and private landowner partners and engages agribusiness in much of the restoration work.

River Partners has planted more than 400,000 native plants on nearly 4,000 acres along the Sacramento, Feather, Merced, Stanislaus, Tuolumne, and San Joaquin rivers and tributaries since their inception. Their projects provide both food and cover for endangered species as well as exceptional outdoor science classrooms. Developing and utilizing the best available science, River Partners' team of restoration experts are breaking new ground in the field of riparian restoration. Their qualifications are based on significant project experience and appropriate training and professional development.

The SLEWS Program – Center for Land-Based Learning

The SLEWS Program represents a unique opportunity to implement high quality restoration projects in a way that engages the local community, supports public education and enhances the lives of young people. The Center for Land-Based Learning will function as a subcontractor to implement a portion of the restoration that will be conducted as a part of this proposal.

SLEWS program staff will work with the San Joaquin RCD and local high school teachers to devise yearlong projects consisting of four field days. The focus of these field days will evolve throughout the year according to the restoration cycle. Possible field day activities might include seed collecting, plant propagation, planting native vegetation, erosion control, building and installing bird boxes, removing invasive species, installing irrigation equipment and ecological monitoring. During the field days SLEWS maintains a 5:1 student-to-trained mentor ratio, thus

ensuring the highest possible quality product on-the-ground and the best overall student experience.

Throughout the year our staff works closely with participating SLEWS teachers to help them take advantage of their project site as a place to introduce or emphasize classroom concepts and better engage students in their learning. The overall SLEWS experience introduces and prepares students for possible careers in agriculture, education and natural resource conservation, while developing their skills as leaders and their connection to the natural world.

East bay Municipal Utility District – EBMUD

The East Bay Municipal Utility District (EBMUD) Division of Fisheries and Wildlife – Mokelumne Area provides technical advice and biological capabilities relative to monitoring biological resources along the lower Mokelumne River. Staff provide technical services for restoration and enhancement projects as well as monitoring of salmon, steelhead, and wildlife. There are 13 EBMUD employees consisting of biologists, technicians, and biological aids who have been monitoring biological resources since 1990. This monitoring complements the implementation phase of the LMRW Stewardship Plan by providing value information relative to biological resources and response to restoration and enhancement projects. Division staff also have provided outreach to private landowners regarding benefits of restoration relative to agriculture along the Mokelumne River. Through the combined efforts of the SJCRCD and EBMUD staff, over 50 landowners have demonstrated a commitment to protect, restore, and/or enhance riparian habitat along the river.

D. Cost

As outlined in the tasks and prior proposal tasks, the components of this project are interrelated and dependent upon each other. It is possible to scale back the total acreage restored in Task 3, but the information gathered might not be enough to justify applying the conceptual model to larger scale projects. Task 4 is necessary to show the benefits of the project to local agricultural interests. Task 2 is being completed with funds from another grant, and nearly all of task 5 will be completed with matching funds. It is possible to scale back from 2 to 1 SLEWS class in task 5.1, which would decrease the cost by 50%.

Matching funds will come from SJCRCD for tasks 2 and a portion of tasks 5.2-5.4. The Lodi Woodbridge Winegrape Commission and USDA NRCS Stockton Service Center are also providing matching funds for education and outreach activities. A letter of commitment from NRCS for $100,000 per year in assistance is available, as is a letter of commitment from LWWC for $1,000 per year. SJCRCD will provide the rest of the match from education and outreach funds of the San Joaquin County and Delta Water Quality Coalition and the time of the watershed coordinator paid for by a grant from Department of Conservation.

EBMUD is providing nearly $23,000 per year in cost-share for this project in the form of technical assistance from staff biologists and technicians. A letter of commitment from the EBMUD fisheries and wildlife office in Lodi is also available.

E. Compliance with Standard Terms and Conditions

SJCRCD is willing and able to comply with standard terms and conditions of the ERP Grant Agreement.

F. Literature Cited

Barr, C.B. 1991. The distribution, habitat, and status of the Valley Elderberry Longhorn Beetle, *Desmocerus californicus dimorphus.* U.S. Fish and Wildlife Service Publication, Sacramento, CA.

Bell, G. 1998. Ecology and management of *Arundo donax* and approaches to riparian habitat restoration in southern California. In: Brock, J.H., M. Wade, P. Pysek, and D. Green (eds.). Plant Invasions. Backhuys Publ., Leiden, The Netherlands.

Blumenthal, D. M., N. R. Jordan, and E. L. Svenson. 2003. Weed control as a rationale for restoration: the example of tallgrass prairie. Conservation Ecology **7**(1): 6. [online] URL: http://www.consecol.org/vol7/iss1/art6

Borchert, M. 2003. Environmental relationships of riparian birds in the Transverse Ranges of southern California. In: Faber, P.M., Editor. California riparian systems: processes and floodplains management, ecology, and restoration. Proceedings from a 2001 Conference, Sacramento, CA, March 12-15, 2001.

Bossard, C.C., J.M. Randall, and M.C. Hoshovsky. 2000. Invasive plants of California wildlands. University of California Press, Berkeley, CA. http://groups.ucanr.org/ceppc/Invasive_Plants_of_California's_Wildlands/California

Brode, J.M., and R.B. Bury. 1984. The importance of riparian systems to amphibians and reptiles. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Bugg, R.L. 2001. Restoration ecology and conservation biology in agriculture (PART I). Sustatinable Agriculture Newsletter Fall 2001 (v13n3). http://www.sarep.ucdavis.edu/newsltr/v13n3/technical-1.htm.

Bugg, R.L. 2002. Restoration ecology and conservation biology in agriculture (PART II). Sustatinable Agriculture Newsletter Fall 2001 (v14n1). http://www.sarep.ucdavis.edu/newsltr/v14n1/technical-1.htm.

California Bay-Delta Authority (CALFED). 2000. Ecosystem restoration program plan: Strategic plan for ecosystem restoration. Final programmatic EIS/EIR Technical Appendix Volume II. Eastside Delta Tributaries Ecological Management Zone Vision, pp. 328 – 352. http://calfed.ca.gov/Programs/EcosystemRestoration/EcosystemVol3RestorationPlan.shtml

California Department of Food and Agriculture. 2003a. Weed Management Areas.

http://www.cdfa.ca.gov/phpps/ipc/weedmgtareas/SJ-Stan-Merced/SJ-Stan-Merced_hp.htm

California Department of Food and Agriculture. 2003b. California's noxious weed list. http://pi.cdfa.ca.gov/weed/wff/species/index.html

California Invasive Plant Council (CalIPC). 1999. Exotic pest plants of greatest ecological concern in California as of October 1999, http://ucce.ucdavis.edu/freeform/CalIPC/documents/Pest_Plant_List2325.pdf.

California Natural Diversity Data Base (CNDDB). 2003. List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Data Base, September 2003 Edition. http://www.dfg.ca.gov/whdab/natcomlist.pdf

CalWeed Database. http://endeavor.des.ucdavis.edu/weeds/

Collinge, S.K., M. Holyoak, C.B. Barr, and J.T. Marty. 2001. Riparian habitat fragmentation and population persistence of the threatened valley elderberry longhorn beetle in central Califoria. Biological Conservation 100 (2001) 103-113.

De Nevers, G. 2003. Amphibians and bats in riparian ecosystems. In: Faber, P.M., Editor. California riparian systems: processes and floodplains management, ecology, and restoration. Proceedings from a 2001 Conference, Sacramento, CA, March 12-15, 2001.

Digaudio, R.T. 2003. Songbird richness, diversity and abundance in mature and early successional stage riparian habitat along the Cosumnes River. In: Faber, P.M., Editor. California riparian systems: processes and floodplains management, ecology, and restoration. Proceedings from a 2001 Conference, Sacramento, CA, March 12-15, 2001.

Edwards, B.R., C. H. Perry, S.J. Steinberg, and K.A. Reeves. 2004. A century of riparian change in the lower Mokelumne River. American Water Resources Association, Spring Specialty Conference, Nashville, TN. 9 pp.

Eng, L.L. 1984. Rare, threatened, and endangered invertebrates in California riparian systems. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Gaffney, K.A., and K. Gledhill. 2003. Giant reed in the Russian River riparian zone: distribution, plant community effects and control methods. In: Faber, P.M., Editor. California riparian systems: processes and floodplains management, ecology, and restoration. Proceedings from a 2001 Conference, Sacramento, CA, March 12-15, 2001.

Gaines, D. F. 1978. The valley riparian forests of California: Their importance to bird populations. *in* Ann Sands (editor) Riparian Forests in California: Their ecology

and conservation. Institute of Ecology Publication 15, Univ. of California, Davis, CA. 57 - 85.

Grenfell, W.E., Jr. 1988. Valley foothill riparian habitat. In: Mayer, K.E., and W.F. Laudenslayer Jr., Editors. A guide to wildlife habitats of California. Calif. Div. of Forestry, Sacramento, CA.

Huxel, G.R., M. Holyoak, T.S. Talley, and S. Collinge. 2003. Perspectives on the recovery of the threatened valley elderberry longhorn beetle. In: Faber, P.M., Editor. California riparian systems: processes and floodplains management, ecology, and restoration. Proceedings from a 2001 Conference, Sacramento, CA, March 12-15, 2001.

Jennings, M.R., and M.P. Hayes. 1994. Amphibian and reptile species of special concern in California. California Department of Fish & Game, Region 2, Inland Fisheries Division, Rancho Cordova, CA.

Katibah, E.F. 1984. A brief history of riparian forests in the Central Valley of California. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Laymon, S.A. 1984. Riparian bird community structure and dynamics: Dog Island, Red Bluff, California. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Long, R. 2000 Quantifying pest and beneficial insects in insectary hedgerows. Final report April 2000. http://www.sarep.ucdavis.edu/grants/Reports/Long/Long99-22.htm

Mayer, K.E., and W.F. Laudenslayer, (Editors). 1988. A guide to wildlife habitats of California. California Department of Forestry and Fire Protection, Sacramento, CA. 166 pp.

Morrison, M.L., T. Tennant, and T.A. Scott. 1994. Environmental Auditing: laying the foundation for a comprehensive program of restoration for wildlife habitat in a riparian floodplain. Environmental Management 18(6):939-955.

Morrison, M.L., K.S. Smallwood, and L.S. Hall. 2003. Creating habitat through plant relocation: lessons from the valley elderberry longhorn beetle mitigation. Ecological Restoration 21(2):95-100.

Motroni, R.S. 1984. Seasonal variation of bird numbers in a riparian forest, Sacramento Valley, California. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Noss, R.F., and A.Y. Cooperrider. 1994. Saving nature's legacy: Protecting and restoring biodiversity. Island Press, Covelo, CA.

Ohmart, C. P. and S. K. Matthiasson. 2000. The Lodi Winegrowers Workbook: A self-assessment of integrated farming practices. Lodi-Woodbridge Winegrape Commission, 135pp.

Pfeffer, A., J.K. Wood, and G.R. Geupel. 2005. Songbird breeding and migration along the lower Mokelumne River, 2004. Progress report submitted to San Joaquin County Resource Conservation District and California Bay-Delta Authority. CALFED ERP-02-P20, Restoration and Monitoring of Riparian Habitat Corridors Along the Lower Mokelumne River. 41 pp.

Pickett, C.H., and R.L. Bugg., Editors. 1998. Enhancing biological control: habitat management to promote natural enemies of agricultural pests. University of California Press, Berkeley, CA. 422 pp.

Pimentel, D., L. Lach, R. Zuniga, and D. Morrison. 1999. Environmental and economic costs associated with non-indigenous species in the United States. College of Agriculture and Life Sciences, Cornell University, Ithaca, NY. http://www.hear.org/AlienSpeciesInHawaii/articles/pimentaletal990612.pdf

Pimm, S.L. and M.E. Gilpin. 1989. Theoretical issues in conservation biology. In: Roughgarden, J., R. May, and S.A. Levin (eds.). Perspectives in Ecological Theory. Princeton University Press, Princeton, NJ. Pp. 287-305.

Piper, A. M., Gale, H. S., Thomas, H. E., and Robinson, T. W., 1939, Geology and Ground-water Hydrology of the Mokelumne Area, California. U. S. Geological Survey Water-Supply Paper 780. U. S. Government Printing Office, Washington, D. C., 230 pp.

Rankin, B., K.A. Reeves, and J.S. Jones. 2004. Wildlife habitat of the lower Mokelumne River Watershed. Proceedings of the 2004 CALFED Bay-Delta Program Science Conference, Sacramento, CA. Poster presentation.

Reeves, K.A., L.S. Hall, J.S. Jones, and J. Hammond. 2001. Species richness, species diversity and abundance of riparian birds along the lower Mokelumne River. Proceedings of the 2001 CALFED Bay-Delta Program Science Conference, Sacramento, CA. Poster presentation.

Reeves, K.A., and J.S. Jones. 2004a. Terrestrial vegetation communities along the lower Mokelumne River, California. East Bay Municipal Utility District, Lodi, California. 20 pp.

Reeves, K.A., and J.S. Jones. 2004b. Non-native terrestrial vegetation communities along the lower Mokelumne River, California. East Bay Municipal Utility District, Lodi, California. 53 pp.

Reeves, K.A., and J.S. Jones. 2004c. Lower Mokelumne River small mammal inventory. East Bay Municipal Utility District, Lodi, California. 30 pp.

Reeves, K.A., and J.R. Smith. 2004. Survey of falcons, kites, hawks and owls in the lower Mokelumne River Watershed, Sacramento and San Joaquin counties, California. East Bay Municipal Utility District, Lodi, CA.

River Partners. 2004. Survey of Planted Elderberry on Sacramento River National Wildlife Refuge Riparian Restoration Sites for Use by Valley Elderberry Longhorn Beetles. Tehama, Butte and Glenn County, California. Helen Swagerty and Scott Chamberlain. Chico, California. 14 pp.

San Joaquin County Resource Conservation District (SJCRCD). 2002. Lower Mokelumne River Watershed Stewardship Plan. Stockton, CA. http://sjcrcd.org/articles/MokP.asp.

Sawyer, J.O., and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento, CA.

Scott, J.M. and D.S. Wilcove. 1998. Improving the future for endangered species. Bioscience. 48(8): 579-80.

Smith, J.R. 2004. Lower Mokelumne River riparian bird surveys. East Bay Municipal Utility District, Lodi, CA.

Southwood, T.R.E. 1978. Ecological Methods with Particular Reference to the Study of Insect Populations. Chapman and Hall, London. 524pp.

Swolgaard, C.A., D.A. Bell, and K.A. Reeves. 2004. Habitat use of Swainson's hawk in a vineyard landscape in the lower Mokelumne River Watershed. Proceedings of the 2004 CALFED Bay-Delta Program Science Conference, Sacramento, CA. Poster presentation.

Trapp, G.R., G.L. Linck, and E.D. Whisler. 1984. The status of ecological research on the mammal fauna of Californias Central Valley riparian communities. In: Warner, R.E. and K.M.Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Trowbridge, W., and M. Tu. 1999. Vegetation ground-truthing project. John Muir Center for the Environment, University of California, Davis. Report submitted to EBMUD, October 29, 1999. 14 pp.

U.S. Fish and Wildlife Service (USFWS). 1999. Conservation guidelines for the Valley Elderberry Longhorn Beetle. Sacramento, CA.

Warner, R.E. and K.M. Hendrix, eds. 1984. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Williams, D.F., and K.S. Kilburn. 1984. Sensitive, threatened, and endangered mammals of riparian and other wetland communities in California. In: Warner, R.E. and K.M. Hendrix, eds. California riparian systems: ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Workman, M.L., and J.R. Smith. 2004. Lower Mokelumne River Amphibian and Reptile Inventory. East Bay Municipal Utility District, Lodi, CA.

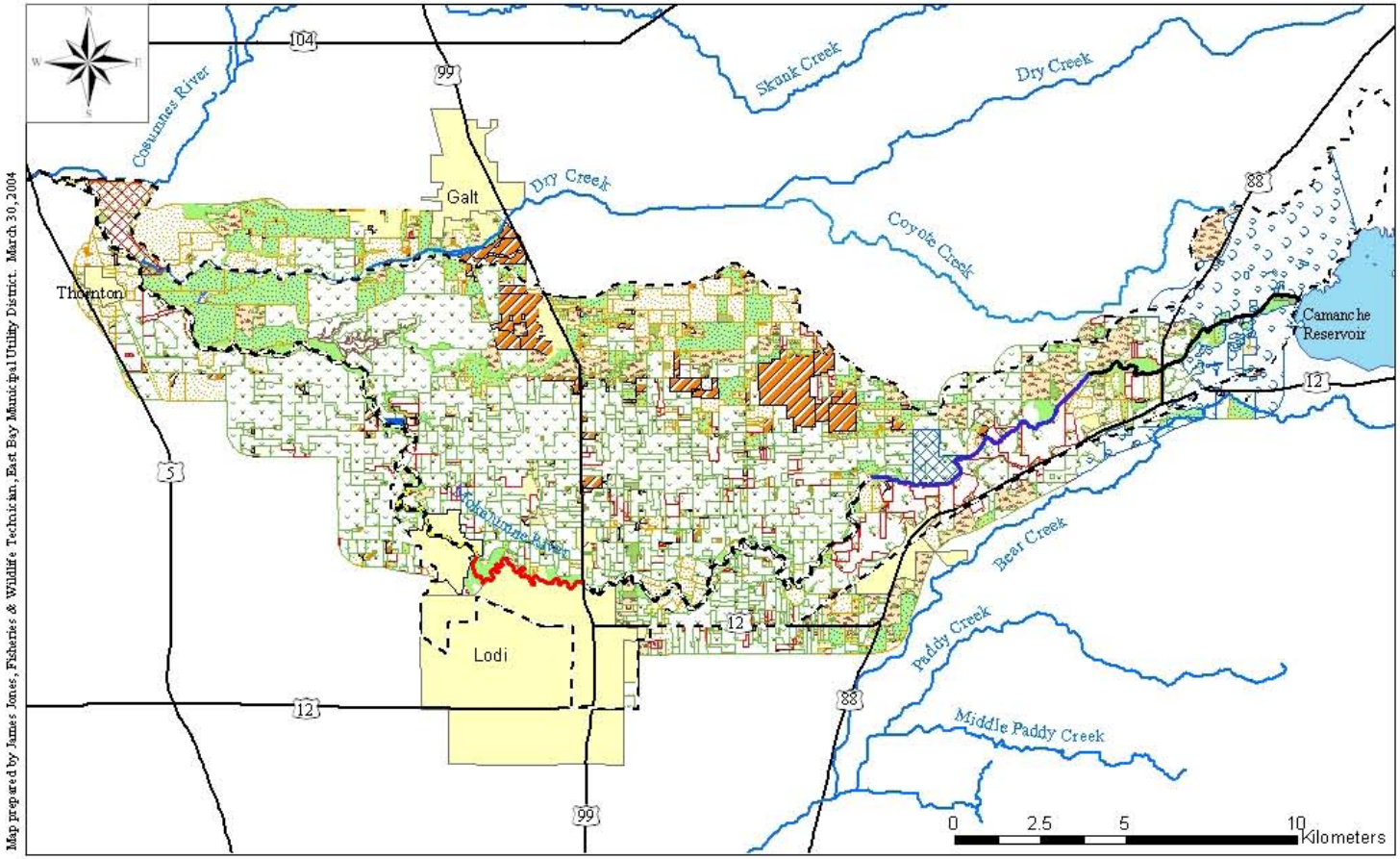

Fig 1. Lower Mokelumne River Watershed.

Figure 2: Conceptual Model

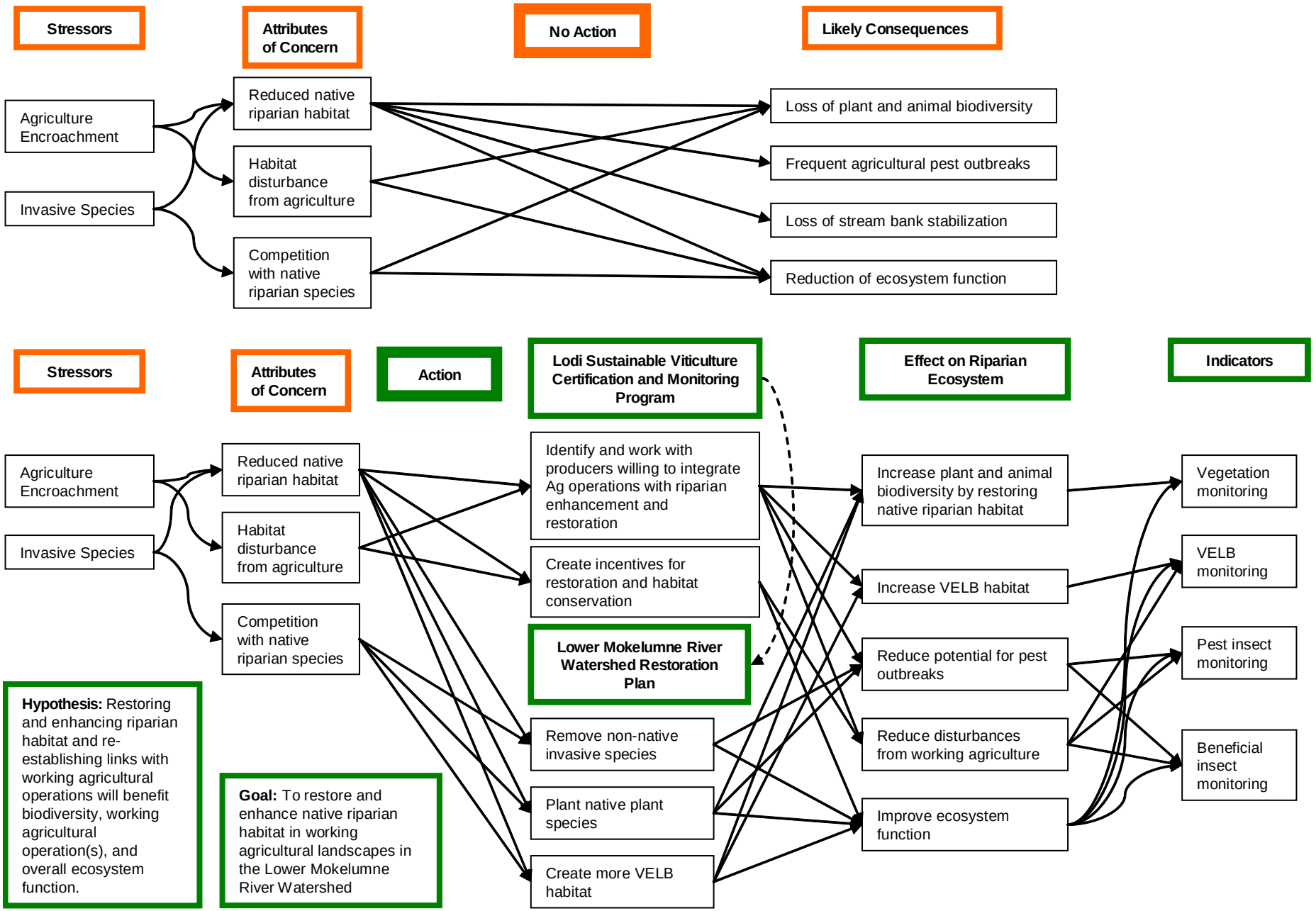

Table 2 Project Assessment and Evaluation Plan

Project Goal	Desired Outcome	Real Outcome	Measurement Tools	Deliverable	Adaptive Management Action
Restoration of Riparian Areas in a Working Agricultural Landscape	1. 4 project sites totaling 40 acres 2. Removal of NIS 3. Native plants out-compete NIS 4. 70% survival rate for installed plant materials		1. Permission from landowners 2. Plot transects and surveys	Permission letters; Photos of work in progress; reports and analyses of plot transect surveys	
Sustainable Viticulture Certification	20 landowners enrolled in 3rd party certification program		Number of landowners enrolled	Names of all landowners enrolled	
Insect Monitoring	1. Increase in VELB population 2. Increase in beneficial insect population 3. Decrease in pest insect population 4. Increase in non-pest related invertebrate population		1. River Partners protocols for exit hole and feeding observations 2. LWWC protocols for canopy leaf monitoring in vineyards. 3. Sweep netting	Report and analyses of survey results	
Education and	1. Two SLEWS		1. Numbers of	Names of teachers	

Outreach	classes at restoration sites 2. Results reported to local ag community 3. Results reported to scientific and other interested communities 4. Tours of the restoration sites		teachers and students participating 2. Number of presentations and articles in publications 3. number of tours and diversity of tour participants	and students, presentation outlines and documentation, symposia programs, names and affiliations of tour participants	

Tasks And Deliverables

Task ID	Task Name	Start Month	End Month	Personnel Involved	Deliverables
1	Project Management and Administration	1	36	Brodie, John	See deliverables for the subtasks
1.1	Contracting and subcontracting	1	3	Brodie, John	Copies of all required contracts and insurance documentation as well as notice of subcontract approval from CALFED Grant Manager
1.2	Project Administration	1	36	Brodie, John	Quarterly/monthly and annual reports (as required by Grant Agreement), invoices and supporting documentation, submission of all project deliverables, data and data analysis
2	Permitting and Environmental Documentation	1	6	Brodie, John	See deliverables for the subtasks
2.1	CEQA Documentation	1	4	Brodie, John	A copy of CEQA Documentation (Mitigated Negative Declaration or other instrument).
2.2	State and Local Permits	1	6	Brodie, John	Copies of all permits or permit exemptions
3	Restoration of Riparian Areas in a Working Agricultural Landscape	2	35	Sperber, Tamara	See deliverables for the subtasks
3.1	Project Planning/Designing	2	6	Sperber,	One restoration plan with specific designs

				Tamara	for each site
3.2	Plant Propagation	2	30	Sperber, Tamara	Specified Plant materials for each of the restoration/enhancement sites
3.3	Initial Weed Control	6	7	Sperber, Tamara	Photos of work in progress. Report on the estimated number of hectares (acres) of NIS removed and type of NIS removed
3.4	Ground Preparation	6	7	Sperber, Tamara	Photos of work in progress. Report on volume of debris cleared, burned, or otherwise disposed of. Report on the number of hectares (acres) treated with disking, ripping, harrowing versus total number of hectares (acres) to be treated.
3.5	Irrigation Installation	8	10	Sperber, Tamara	Photos of work in progress. Report on total length of irrigation piping installed.
3.6	Planting	8	28	Sperber, Tamara	Photos of work in progress, plant list, maps of test areas for NIS displacement, analysis of actual planting conducted versus planting outlined in planting plan.
3.7	Irrigation Operation	11	33	Sperber, Tamara	Photos of work in progress. Report included as a part of deliverable for task 3.9

3.8	**Maintenance**	**12**	**33**	**Sperber, Tamara**	**Photos of work in progress. Analyses included as a part of deliverable for task 3.9**
3.9	**Monitoring and reporting**	**12**	**33**	**Sperber, Tamara**	**two Annual Reports which describe each year's activities, present monitoring data results, display site photos, and note any management recommendations or changes to the plant design and 2) a Final Project Report.**
3.10	**Project Management**	**2**	**35**	**Sperber, Tamara**	**Timely submission of all required reports, deliverables, invoices, and documentation to project contractor and grantor**
4	**Lodi Sustainable Viticulture Certification and Monitoring Restoration Benefits**	**2**	**35**	**Ohmart, Cliff**	**See deliverables for the subtasks**
4.1	**Sustainable Viticulture Certification**	**2**	**30**	**Ohmart, Cliff**	**Enroll a minimum of 20 winegrape growers in the Lower Mokelumne watershed in The Lodi Rules program during the life of the grant. Copies of certification criteria and submission of a list of names of all qualified growers.**
4.2	**VELB Monitoring**	**2**	**33**	**Ohmart, Cliff**	**VELB monitoring records and analyses**
4.3					

	Pest and Beneficial Insect Monitoring	**6**	**33**	**Ohmart, Cliff**	**Monitoring records of vineyard pests and their natural enemies and analyses of these records.**
4.4	**Non−Pest Invertebrate Monitoring**	**2**	**33**	**Ohmart, Cliff**	**Monitoring records of invertebrates that are not related to vineyard pests and analyses of these records.**
5	**Outreach and Education**	**5**	**33**	**Brodie, John Ohmart, Cliff Douglas, Susie Sperber, Tamara**	**See deliverables for the subtasks**
5.1	**Work with Local High School Teachers and Students**	**3**	**33**	**Brodie, John Douglas, Susie Sperber, Tamara**	**Photos of students working at field sites, names of participating teachers and subjects, copies of each day's agenda.**
5.2	**Report Results to the Local Agriculture Community**	**12**	**33**	**Brodie, John Ohmart, Cliff Douglas, Susie Sperber, Tamara**	**Copies of all newsletters, publications, power point presentations, materials posted on websites of the principles, cooperators and partners, and outlines of oral presentations given at field days.**
5.3	**Report Results to Scientific and Other Interested**	**12**	**33**	**Brodie, John**	**Copies of papers, power point presentations, and outlines of oral**

	Communities			**Ohmart, Cliff Douglas, Susie Sperber, Tamara**	**presentations given at various symposia and/or conferences.**
5.4	**Tours of Restoration Sites**	**12**	**33**	**Brodie, John Ohmart, Cliff Douglas, Susie Sperber, Tamara**	**Photos of tours, attendance lists for those who take part in tours, a list of the property(s) where tours have taken place, copies of any communications received by tour participants following the tours, and description of topics highlighted during each tour.**
6	**Project Assessment and Evaluation**	**1**	**36**	**Brodie, John**	**Approval of draft Project Assessment and Evaluation forms, PAE forms, written analyses with each required report**
7	**Draft and Final Reports**	**34**	**36**	**Brodie, John Ohmart, Cliff Sperber, Tamara**	**See deliverables for the subtasks**
7.1	**Draft Final Report and Invoice**	**34**	**35**	**Brodie, John Ohmart, Cliff Sperber, Tamara**	**a draft final report and invoice will be submitted by the deadline specified by the grantor.**
7.2	**Final Report and**				**the final report and**

	Invoice	**35**	**36**	**Brodie, John Ohmart, Cliff Sperber, Tamara**	**invoice will be submitted, based on recommendations made by the grantor on the draft submittals, by the deadline specified by the grantor.**

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	$ 8,580.00	$ 8,580.00	$ 9,240.00	$ 26,400.00
Total Costs for Task Two	$ -	$ -	$ -	$ -
Total Costs for Task Three	$ 425,794.60	$ 204,436.10	$ 87,052.90	$ 717,283.60
Total Costs for Task Four	$ 114,620.00	$ 114,620.00	$ 114,620.00	$ 343,860.00
Total Costs for Task Five	$ 27,500.00	$ -	$ -	$ 27,500.00
Total Costs for Task Six	$ 17,160.00	$ 17,160.00	$ 18,480.00	$ 52,800.00
Total Costs for Task Seven	$ -	$ -	$ 6,160.00	$ 6,160.00
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	$ 593,654.60	$ 344,796.10	$ 235,552.90	$ 1,174,003.60
1/Cost Share	$ 22,920.30	$ 22,920.30	$ 22,920.30	$ 68,760.90
2/ Other Matching Funds	$ 250,000.00	$ 150,000.00	$ 150,000.00	$ 550,000.00

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**			**Year 2**			**Year 3**		
		Amount per hour	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
Project Manager	$ 24,000.00	$ 65.00	120	$ 7,800.00	$ 65.00	120	$ 7,800.00	$ 70.00	120	$ 8,400.00
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 24,000.00**			**$ 7,800.00**			**$ 7,800.00**			**$ 8,400.00**
										-
[1/] Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$24,000.00**			**$7,800.00**			**$7,800.00**			**$8,400.00**
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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5/] Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ 780.00			$ 780.00			$ 840.00
Total Costs for Task One	**$ 26,400.00**			**$ 8,580.00**			**$ 8,580.00**			**$ 9,240.00**

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										
Projecet Manager	$ -	$ 65.00	0	$	$ 65.00	0	$	$ 70.00	0	$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ - -
	$ -	$ -		$ - -	$ -		$ - -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$ - -**
										-
[1/] Benefits as percent of salary	0%			$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5/]Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ -			$ -			$ -
Total Costs for Task Two	**$ -**			**$ -**			**$ -**			**$ -**

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

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										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -

-
-

Proposal Number Proposal Name	Detailed Budget Breakdown by Task and by Fiscal Year	Applicant Name

	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
River Partners	$ 652,076.00			$ 387,086.00			$ 185,851.00			$ 79,139.00
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 652,076.00**			**$ 387,086.00**			**$ 185,851.00**			**$ 79,139.00**
5/ Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ 38,708.60			$ 18,585.10			$ 7,913.90
Total Costs for Task Three	**$ 717,283.60**			**$ 425,794.60**			**$ 204,436.10**			**$ 87,052.90**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK FOUR	**TOTAL AMOUNT TASK 4 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
										-
										-

	$ -	$ -		$ -	$ -		$ -	$ -		$
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
Lodi-Woodbridge Winegrape Commission	$ 312,600.00			$ 104,200.00			$ 104,200.00			$ 104,200.00
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 312,600.00**			**$ 104,200.00**			**$ 104,200.00**			**$ 104,200.00**
5/ Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ 10,420.00			$ 10,420.00			$ 10,420.00
Total Costs for Task Four	**$ 343,860.00**			**$ 114,620.00**			**$ 114,620.00**			**$ 114,620.00**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK FIVE	**TOTAL AMOUNT TASK 5 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$ - -**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$0.00**

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
Center for Land-Based Learning	$ 24,000.00			$ 24,000.00			$ -			$ -
Substitute Teachers	$ 1,000.00			$ 1,000.00						
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ 25,000.00**			**$ 25,000.00**			**$ -**			**$ -**
[5/]Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ 2,500.00			$ -			$ -
Total Costs for Task Five	**$ 27,500.00**			**$ 27,500.00**			**$ -**			**$ -**

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

		Year 1			**Year 2**			**Year 3**		
BUDGET FOR TASK SIX	**TOTAL AMOUNT TASK 6 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
Project Manager	$ 48,000.00	$ 65.00	240	$ 15,600.00	$ 65.00	240	$ 15,600.00	$ 70.00	240	$ 16,800.00
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 48,000.00**			**$ 15,600.00**			**$ 15,600.00**			**$ 16,800.00**
										-
[1/] Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$48,000.00**			**$15,600.00**			**$15,600.00**			**$16,800.00**
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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -

4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5/]Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ 1,560.00			$ 1,560.00			$ 1,680.00
Total Costs for Task Six	**$ 52,800.00**			**$ 17,160.00**			**$ 17,160.00**			**$ 18,480.00**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK SEVEN	**TOTAL AMOUNT TASK 7 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
project Manager	$ 5,600.00	$ -		$ -	$ -		$ -	$ 70.00	80	$
	$ -	$ -		$ -	$ -		$ -	$ -		$ 5,600.00
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ 5,600.00**			**$ -**			**$ -**			**$ 5,600.00**
										-
[1/] Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$5,600.00**			**$0.00**			**$0.00**			**$5,600.00**
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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**

5/ Overhead Percentage (Applied to Personnel & Other Costs)	10%			$ -			$ -			$ 560.00
Total Costs for Task Seven	**$ 6,160.00**			**$ -**			**$ -**			**$ 6,160.00**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK EIGHT	**TOTAL AMOUNT TASK 8 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
5/ Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Eight	**$ -**			**$ -**			**$ -**			**$ -**

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.

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK NINE	**TOTAL AMOUNT TASK 9 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
[1/] Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5/]Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Nine	**$ -**			**$ -**			**$ -**			**$ -**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK TEN	**TOTAL AMOUNT TASK 10 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$ - -**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
5/ Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Ten	**$ -**			**$ -**			**$ -**			**$ -**

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

		Year 1			**Year 2**			**Year 3**		
BUDGET FOR TASK ELEVEN	**TOTAL AMOUNT TASK 11 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -

-
-

	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
5/ Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Eleven	**$ -**			**$ -**			**$ -**			**$ -**

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

BUDGET FOR TASK TWELVE	**TOTAL AMOUNT TASK 12 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										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00

Proposal Number
Proposal Name

Detailed Budget Breakdown by Task and by Fiscal Year

Applicant Name

Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
5/ Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Twelve	**$ -**			**$ -**			**$ -**			**$ -**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK THIRTEEN	**TOTAL AMOUNT TASK 13 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
5/ Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Thirteen	**$ -**			**$ -**			**$ -**			**$ -**
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										
		Year 1			**Year 2**			**Year 3**		
BUDGET FOR TASK FOURTEEN	**TOTAL AMOUNT TASK 14 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
1/ Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -

Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5]Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Fourteen	**$ -**			**$ -**			**$ -**			**$ -**

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

		Year 1			Year 2			Year 3		
BUDGET FOR TASK FIFTEEN	**TOTAL AMOUNT TASK 15 All Years**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 1**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 2**	**Amount per hour**	**Number of Hours**	**Total Amount for Year 3**
Personnel										
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
	$ -	$ -		$ -	$ -		$ -	$ -		$ -
Personnel Subtotal	**$ -**			**$ -**			**$ -**			**$** - **-**
										-
[1]Benefits as percent of salary				$0.00			$0.00			$0.00
Personnel Total (salary + benefits)	**$0.00**			**$0.00**			**$0.00**			**$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/ Travel and Per Diem	$ -			$ -			$ -			$ -
3/ Equipment	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
4/ Sub-Contractor	$ -			$ -			$ -			$ -
Other Costs Subtotal	**$ -**			**$ -**			**$ -**			**$ -**
[5]Overhead Percentage (Applied to Personnel & Other Costs)				$ -			$ -			$ -
Total Costs for Task Fifteen	**$ -**			**$ -**			**$ -**			**$ -**

Detailed Budget Breakdown by Task and by Fiscal Year

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

Environmental Compliance

CEQA Compliance

Which type of CEQA documentation do you anticipate?
− none *Skip the remaining questions in this section.*
X negative declaration or mitigated negative declaration
− 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.
San Joaquin County Resource Conservation District
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.

We are moving forward with a programmatic watershed permit for restoration activities in the Lower Mokelumne River Watershed. We anticipate the documentaiton and permitting will be complete in time for the fall/winter 2006/2007 planting season

NEPA Compliance

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

Identify the lead agency or agencies.

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.

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	–	–	
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	–	–	
CWA 404	–	–	
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 **Names Of Individual Landowners Are Not Known At This Time**	X	–	

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

We have not yet identified the specific properties where restoration will take place. We are completing a restoration site ranking criteria and assessment as funded under a separate grant program. The criteria is expected to be compelted in the Spring of 2006 with site selection shortly thereafter.

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.

An estimated 45 landowners in the Lower Mokelumne River watershed have expressed interest in Riparian restoration activities. They know access for the planning, restoration, monitoring, and outreach adn education activities will be required to receive funding for restoration work.

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?
– No. *Skip to the next set of questions.*
X Yes. *Answer the following questions.*

Land Designation	Acres	Currently In Production?
Prime Farmland	**20**	**X**
Farmland Of Statewide Importance		**–**
Unique Farmland	**10**	**X**
Farmland Of Local Importance	**10**	**X**

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.

The exact location of the project sites are unknown at this time. Project locations will be selected based on a restoration site ranking criteria being established as part of a Floodplain Resources Characterization Report for a CALFED funded project title "The Lower Cosumnes–Lower Mokelumne INtegrated Resource Management Plan." About half of the Lower Mokelumne River watershed is currently mapped as Prime Farmland, including riparian areas. Only about 15% of the land in the watershed is currently mapped as farmland of Statewide Importance, and there are only two small pockets of it in riparian areas. Unique farmland comprises about 30 percent of the watershed, with riparian areas under that designation confined to the upper and lower ends of the watershed. The

question above on the number of acres in each category as part of this project again will not be known until the specific sites are chosen. Since riparian areas are designated on the map as farmland and not as riparian areas, the actual number of acres of farmland in production that will be part of this project will be lower...however farmland in production will be adjacent to all restoration/enhancement sites of this project.