Selection Panel (Primary) Review

− ***Fund*** (a proposal recommended for funding at the amount sought or funding in part of selected project tasks or subtasks)

− ***Reconsider if Revised*** (a proposal that is a high priority but that requires some revision followed by additional review prior to being recommended for funding)

X Not Recommended

Amount Sought: $1,464,782

Fund This Amount: $***0***

Conditions recommended (Conditions that applicants would need to meet to obtain funds may be recommended for proposals suggested for either full or partial funding. For proposals recommended for partial funding, conditions that identify the funded tasks or subtasks must be recommended.)

Please provide a brief explanation of your rating, including an explanation of the reasons for any conditions that the panel recommends. Revisions required of proposals recommended for reconsideration should be outlined, together with a justification for the suggested revisions:

The proposed project is intended to assemble a large set of biological and physical data measuring the results of a major floodplain restoration project with significant prior CALFED investments. Although a very important site with significant previous investment, the Selection Panel agrees with the Technical Panel's assessment and recommends not funding this proposal. This is a huge, complex monitoring effort that would entail measuring lots of biological and physical variables in lots of places. Unfortunately, there is no clear explanation of how these efforts will be standardized, shared, and coordinated. The proposal did not follow the 20−page format required in the PSP. It was more than 100 pages with critical information buried in appendices. Yet, despite its length, the proposal lacks detail on specific tasks, performance measures, mechanisms or protocols for coordination, is unclear in descrbing the status of NEPA−required review and permitting, and provides inadequate information on how the presently stalled contract negotiations over a previous grant agreement affects the completion of this agreement or the underlying work. Finally, all data and work products produced under publicly−funded grants must be available for public use and information. The proposal lacks a clear indication that the data will be collectively owned, standardized, stored, and accessible to guide future restoration efforts.

Technical Panel (Primary) Review

inadequate

Explanation Of Summary Rating

This project has many strong points but coordination is lacking and data management is inadequate. There has been no progress on a very large prior funding committment, raising significant administrative concerns.

Review Form

Goals And Justification

This project is a broad monitoring scheme for five San Joaquin River floodplain and riparian restoration projects (1,300 ac restored, 230 planned for restoration, 3,000 ac adjacent to a levee breach as potential floodplain. 6,950 ac total protected). Goals of this project are to monitor VELB, Riparian Brush Rabbit, wetland and riparian birds, small mammals, pollinators, fish, vegetation, invasive seeds, hydrology and topography, both in restored riparian habitat and in an area adjacent to a levee breach. Some of the monitoring plans are new while others are continuations.

The justification for the project is that it assesses whether restorations benefit the recovery of a wide variety of at−risk species. In addition the tasks may allow greater understanding of floodplain processes, which should lead to a greater understanding of how restoration techniques affect both biotic and abiotic processes. Most reviewers found the goals worthy, and applauded the breadth of response variables included. However, the project lacked overall integration and many of the individual tasks lacked clear benchmarks for success. There was a basic misconception about how a conceptual model should be developed. A good model should reflect how a restoration works mechanistically − what the restoration 'does' and how species or ecosystem processes are expected to respond as a result. Development of a better model could enhance integration of project tasks. Restored areas would be monitored over time for use by focal taxa, or in some cases for changes in abundance or diversity. It was not clear whether different areas would be monitored for each task. Target levels of use, abundances or diversity tended to be vague. In some cases it was unclear whether focal taxa would also be monitored in unmanipulated areas for comparison. Little information was provided on existing knowledge. For example, one reviewer faulted the proposal for not considering the outcome of levee breaches on the Consumnes River preserve. Information from the Consumnes project could be very useful to designing and

sampling the floodplain project proposed here.

Approach

The project builds on prior monitoring activities (although few details are offered in the main text), expands some monitoring, and initiates new, important activities (e.g. monitoring insects of concern, and potential outcomes of the floodplain restoration). Unfortunately the critical details of virtually all tasks are buried in nearly a dozen appendices, in clear violation of project description requirements. The entire proposal is 129 pages, which the applicants should have recognized as excessive, if not egregious. Appendices appear to have been written entirely independently of each other. The body of the proposal should have included at least the following information for each task: whether the design includes unrestored and/or relatively pristine sites for comparison, number and size of each type of site, site interspersion if any, sampling design (transect, quadrat, grid, etc), number of samples or observations to be taken, temporal pattern of sampling, sampling/observation techniques, and statistical techniques to be used.

The body of the proposal does a reasonable job of addressing the overall picture, but few details are given on how monitoring and data will be coordinated among the groups performing the various tasks. It was not clear whether teams of researchers would work in the same areas when possible to produce a holistic view of how restorations change biotic assemblages. Data format should be standardized and copies sent to a centralized database. Will data be shared among groups, and if so, in what time frame?

Feasibility And Likelihood Of Success

As mentioned above, technical feasibility could not be assessed without recourse to extensive appendices, which often represent distinct projects rather than a coordinated sampling scheme. In the appendices, sampling designs were more satisfactory but spot−checks of modules frequently revealed deficiencies. Many left out crucial details such as criteria for restoration success, sites to be sampled or statistical approach. For example, the waterbird survey omitted the number of units to be surveyed. The vegetation surveys promised to track 'focal native and invasive species' but we do not know how many species or how the focal ones will be chosen. Spot−checking of fish methods showed that disparate methods would be used in pre− and post−restoration sampling. This will make pre− versus post−restoration differences uninterpretable. The biases of different fish sampling methods were not addressed. Little information was given on how observations of animal activity should be interpreted. In the future, project coordinators should review each task to make sure that critical details are presented.

Performance Measures

The lack of clear performance measures is a pervasive weakness of this project. Having said that, several individual modules are designed sufficiently to yield valuable information. It was unclear whether information would be integrated to evaluate the prospects for effective multi−species management. That is, does the same kind of habitat or invasive control benefit brush rabbit, VELB, birds and so forth? In some cases it was unclear if surveys would document actual population increases or just changes in spatial distributions of fauna.

Products

Many of the task modules can yield information valuable to habitat managers, restoration scientists and policymakers. It is likely that this project will produce a number of useful publications on individual taxa, vegetation types or floodplain processes. It seems less likely that the information will be integrated. Although there will be a central location for copies of study results, plans for database management are weak in that data format is not standardized. The current plan for distributed data storage implies personal rather than collective ownership of the data. While scientists like to protect their publication interests, there should be a reasonable timeline for data sharing and centralized access.

In addition study locations do not seem to be coordinated to either leverage knowledge or provide comprehensive site coverage; for example vegetation will be sampled independently and by different methods in the bird, floodplain and invasive species modules. One reviewer pointed out that a couple of the investigators are less likely to publish their results, making these modules less useful in guiding future restoration efforts.

We suggest that in future that the project coordinator commit to writing a synthetic review of all project outcomes, as a 'white paper' for agencies and landowners, and if possible also as a primary literature paper.

Capabilities

Overall, panel and external reviewers found individual task teams to be highly qualified, with relevant experience and good track records in restoration and monitoring.

Budget

All reviewers found that this project offers good 'bang for the buck' in terms of the variety of continued and new monitoring activities to be funded. We agree with the suggestion that a project coordinator be added to handle data standardization (insofar as is possible) and databasing.

The budget reviewer raised some concerns about the details of the budget. Overhead was mistakenly charged on equipment. Promised matching funds are high in proportion to the cost of the grant, and the budget reviewer requests documentation that this level of match can actually be accomplished − heavy reliance on matching funds can endanger the project or lead to high supplemental requests. There are some contract language details to be worked out. Because many of the tasks lacked details of sampling design, the budget reviewer requested more details on the specific work and end products to be accomplished for each of the tasks.

Regional Review

The regional review ranked this proposal as 'high'. Many of the same issues were raised by the regional review as by the external reviewers and the panel: the project will accomplish many individual tasks but needs better coordination both internally and with other projects in the region, a database plan is needed, and dissemination of results should be improved. This panel also pointed out that the levee breaches do not guarantee flood of the floodplain, therefore the project should include flexibility in the timing of monitoring. The regional panel requested more linkage to water quality issues, and also to prior restoration and monitoring efforts in similar areas. Like the technical panel, the regional review stressed that USFWS needs to take a leadership role in integrating project results and disseminating them in a cohesive manner.

Administrative Review

Budget issues are addressed above.

The administrative review raised serious issues with prior performance of USFWS on a major contract. Contract negotiations and land acquisition are stalled on the riparian brush rabbit and wood rat project, thus no progress has been made on this 6.4 million dollar project for a couple of years. This reviewer worried that the current stalled negotiations were likely to delay the proposed project as well. Thus, prior performance has been inadequate.

The expanded scope of the work will mean that the applicants need additional permits (e.g. collection permits).

Additional Comments

External, technical and regional reviewers were excited by the broad scope of this project, but concerned by the lack of coordination among its modules. There is risk that the whole could be less than the sum of its parts. The project needs concrete performance measures for all tasks, site and data synchronization, database management, and a better plan for

dissemination of results.

Technical Review Panel's Overall Evaluation Rating:
inadequate

San Joaquin Regional Review

High

Review:

1. ***Applicability to ERP goals and regional priorities.***

This project is highly applicable to the ERP's priorities in our region. It addresses a wide range of processes, habitats and species.

2. ***Links with other restoration actions.***

Medium to High 1. Makes the claim but better explanation needed of the applicability and transferability (both monitoring techniques and results)of this project to other CalFed and regional projects. 2. Better explanation needed of the cumulative repsonses of related projects and how they will be integrated into overall 'story" of the Refuge and CalFed investment 3. Standard data and results sharing explained but important project like this should have better and more disseminated sharing and coordination of data and results 4. Needs better explanation of how monitoring capacity will be used to asses other restoration actions in region 5. Should make more of an effort to coordinate with ongoing water quality monitoring to assess potential water quality benefit of the restoration actions.

3. ***Local Circumstances.***

High. Part of monitoring contingent on levee breach which has not occurred. If levee breach does not occur in 2005, monitoring effort should be reduced. Also floodplain fish monitoring requires sufficient flow to inundate floodplain; level of effort should be reduced if that does not occur.

4. ***Local involvement.***

High.

5. ***Local Value.***

High

6. ***Other comments:***

Monitoring could be better integrated to tell the compelling "story" of the Refuge and the high level of investment by CalFed

Linkage to water quality benefits should be more explicit.

Because of the project's importance and relatively high visibility, FWS should take active leadership role on data and results dissemination to wide audience. Continue and expand sharing and coordination with similar projects in other areas (e.g. Cosumnes and Sac Basin).

Reference to knowledge gained from past projects is ambiguous. The land acquisition portion is important even if no active restoration is done.

The fish monitoring lacked detail given high expenditure and contigency on levee breach.

Questions Do all the project components need to be monitored so intensively and frequently? At what point can monitoring be more periodic, less frequent. Are there other sources of funding given the number of endangered species and that the Refuge should have an existing monitoring budget separate from one time infusions from CalFed.

Overall Ranking:
High

Provide a brief summary explanation of the committee's ranking:

Very important project with high value. Several concerns noted should be addressed.

External Technical Review

Goals And Justification

This proposal seeks funding for new and continued monitoring of a large riparian restoration project at the San Joaquin River National Wildlife Refuge. The monitoring program is impressive in its scope, including assessments of several endangered species, mammal communities, riparian and wetland bird assemblages, riparian vegetation, and physical features such as hydrological and fluvial processes. I applaud the comprehensive nature of the project, and believe that, if done properly, this project could provide a detailed, extensive and intensive picture of riparian restoration in the Central Valley. The proposal does identify the restoration actions whose outcomes will be monitored.

The project also includes a before− and after− look at a planned levee breach, used as a process−based restoration approach. The proposal states that nothing like this has been done before in the Central Valley. They fail to cite the project done by The Nature Conservancy at the Cosumnes River Preserve, which also involved a levee breach and subsequent vegetation recovery. There may be some lessons learned from that project that could usefully guide the restoration efforts at the SJRNWR.

The proposal does not provide enough details to discern whether this project will indeed produce the intended results. The goals of the restoration actions are quite vague; it is not clear how the project will be rated to determine whether it is successful or is a failure. Few of the various monitoring programs clearly state how they will measure success, e.g., through the use of performance standards. The conceptual model presented in Fig. 1 is vague and simplistic, and thus does not provide adequate explanation fort the restoration actions. The proposal does state several hypotheses that will be tested, but these are not designed in such a way as to provide clear answers to the over−arching question of the project, which is, "Is this restoration successful?" For example, specific goals might be to establish populations of the brush rabbit at a certain size range (e.g., 100−200 individuals), or to have a certain percentage of appropriate habitat occupied by a particular species.

Approach

The general approach is a good one−−the project aims to measure a wide variety of factors that will indicate whether this restoration project is successful at supporting riparian vegetation and riparian and riverine fish and wildlife communities, as well as functioning in a hydrological sense. The project would build upon previous monitoring, although it is not clear how any changes would be imposed based upon lessons learned in previous monitoring. These results from previous monitoring are not generally indicated in the proposal.

My main criticism with the sampling schemes is that they are not well coordinated. This is a huge, complex monitoring effort, which would entail measuring lots of biological and physical variables in lots of places. However, there is no clear mention in the proposal of how these efforts will be standardized, shared, and coordinated spatially. For example, The RP vegetation monitoring program mentions a permanent plot system that has already been established. However, no other sampling program mentions this system nor attempts to coordinate their sampling with it. This is a missed opportunity. To accurately relate various factors to one another (e.g., sites with diverse native plant communities support high native bee diversity and also support reproducing populations of riparian brush rabbits), the sampling must be orchestrated. The data collection needs to be systematized and data entered into a standard format database so that they can be shared. The description of data management suggested that each set of data would be held in a separate place and potentially stored in a different format. With such a complex project, there is a desperate need for data coordination, perhaps by hiring a part−time data manager.

Technical Feasibility

The project is technically feasible, in that the methods to be used to sample various biological and physical features are well established. The proposal does not include enough discussion of data handling and archival methods.

Performance Measures

The objectives listed for each sampling program in the project are somewhat vague (with the exception of the pollinator sampling), and there are not clear performance measures listed. This makes it difficult to discern how the project managers will know if the restoration has been successful. This is an incredibly important aspect of the proposal and it is just not well described here.

Products

The project will potentially produce information that is highly useful to managers, scientists, and decision makers. This is a large restoration project and the proposal would measure many different aspects of this restored habitat. As stated above, the plan for data handling and dissemination is weak, making it difficult for others to directly use the information. The project would likely yield publishable results, but these results would be strengthened by a spatially coordinated set of sampling schemes.

Capabilities

This is a high quality project team with highly relevant experience. The mix of disciplines is appropriate to the project, and the project team has worked with similar (but less comprehensive) sampling efforts in the past.

Budget

The budget seems reasonable and adequate, with a minor exception. The project would greatly benefit from spatially coordinated sampling and from coordinated data management. This may require a part− to full−time specialist who has GIS and database skills that can contribute to these key parts of the project.

Additional Comments

This project is ambitious and would provide detailed information on restoration of key habitats in California. The project's strengths are also its weaknesses, however. Perhaps because of its interdisciplinarity, the proposal suffers from a clear statement of goals and performance measures. As well, the proposal's sampling schemes are not well designed and coordinated. This coordination is essential if the project is to compare responses of various biological and physical variables to restoration actions.

External Technical Review

Goals And Justification

This proposal outlines clear objectives overall, and in most modules the objectives are straightforward and well justified. There is no real conceptual model per se, but I don't know that one is needed – restore habitat, hope for positive responses by native fauna.

Hypotheses are pretty self−evident throughout, so really don't need redundant clarification in each module. When presented (p. 3) they seem a bit trivial – restored habitats will "receive use" by T species (shouldn't this at least be relative to a control?); riparian &wetlands dependent species will increase use of restored habitats over time (again, no control noted); active restoration "will result in diverse, functioning riparian plant communities" (I imagine they are functioning already, although they may or may not be diverse, and they may function differently than "pristine" or restored systems – no real mention of how improved function might be documented or quantified); breaching of levees will led to channel cutting (seems self−evident) and restore "more natural hydrological and fluvial processes" (how will this be quantified, and to what compared?); active reveg. and weed control will limit establishment and expansion of non−native invasive weeds.

Approach

The lead investigator has pulled together a solid team of researchers who seem wholly suitable and appropriate for the proposed research. Most of the proposed studies appear well integrated towards understanding of the system−wide responses to large−scale habitat restoration. By integrating small mammals, riparian brush rabbit, songbirds, plants, invasive species, flow regimes, fish, pollinating bees, and other response elements into one study, this project has a good opportunity of assessing the general effectiveness of restoration rather than a taxon−specific evaluation. Because of this holistic approach the results are likely to be highly useful to decision−makers in California (and likely elsewhere).

Technical Feasibility

Overall, each module of this proposal seems entirely feasible. Indeed, many of these are ongoing projects, and the present proposal seeks funds to keep some of these running, sometimes with new objectives and sometimes to complete earlier objectives. Some topics are not entirely clear:

Task B.2 (rabbits); what are "double−density clusters" in the rabbit module, why are riparian woodrats mentioned here when they really aren't a part of this proposal;

Task B.3 (waterbirds); exactly what types of “techniques to minimize disturbance to nest sites” will be employed?; it appears that these investigators intend to apply t−tests to a variety of species (comparing pre−restoration to post−restoration), but this poses two serious problems – first, species may not be independent so critical values should probably be adjusted, and second, pre− and post−restoration samples are not independent and should be treated as time−series (I recommend ANOVA, treating species as response variables and treatment (pre− vs. post−restoration) as a repeated measure);

Task B.4 (songbirds); the optional mist netting that is mentioned will compare a single cultivated restoration site with a single mature riparian reference site, so n=1 in this analysis; I would think that this may not be worth the effort if at least 3 replicates cannot be established;

Task B.5 (small mammals); unclear what data will be collected with cover boards (or their size or distribution in the field); how will mammal density be estimated (direct counts, estimators, if the latter, which?); what is the point of recording number of occurrences on track plates and cameras (seems that this should be spelled out – population estimates? Community metrics?); what sort of “major changes in the rodent community” (p. 53) have been observed with additional ground cover?;

Task B.6 (bees); how will years 1, 2, 3 be compared (see p. 62)?; otherwise this was one of the most clearly presented modules;

Task C.1 (fish); clearly presented with rational and direct hypotheses;

Task D.1 &E.3 (habitat monitoring); several figures missing from my copy; goals of this module seem to be essentially identical to the goals of the entire proposal, making this a bit foggy for me; this module notes that “monitoring is essential to demonstrate the success of a project and to improve its success during implementation” (p. 3 of the module), leading me to wonder why the entire project was initiated without these monitoring plans in place, or were they actually in place then?; in general, this module seems designed merely to check that the objectives of the initial plan were met, but is this to evaluate success, to continue monitoring, to monitor ongoing restoration, etc. (a bit vague); on p. 12 (Appendix I) we learn that River Partners has developed a computer database system that identifies plant species within rows and field locations, and that this is used to develop planting designs – I really wonder what the need is, since I could paint colors on a map just as readily with a crayon (with apologies for the sarcasm) and then put colored pin flags in the field to guide field workers – I simply don’t recognize the need for a computer database to develop planting designs;

Task D.3 (invasive plant monitoring); data from 2003 will be compared with 2005 data, and “analyses will be direct comparison of reduction of area infested by species by year” (p. 22) –

but how will these “direct comparison[s]” be made? What stats?

These points aside, the scale of investigation is fully consistent with the project objectives.

Performance Measures

As noted above, not all modules have clearly articulated the means by which they will assess performance. In general, modules are well stitched together to yield an important and useful framework for evaluating and understanding biotic responses at this site to restoration efforts, and most plans appear highly likely to yield sufficient data for meaningful assessments. The comments I note above largely pertain to analytical details that the investigators should consider when pursuing this work, but most of these should be relatively simple to address and to integrate.

Products

Without a doubt this project is certain to yield information useful to resource managers. I am a bit less sanguine about the likelihood of conceptual or theoretical utility to less applied scientists, but if an effort is made to address concerns raised above, this also could be rectified. Of course, many of these may also be issues that the scientists overlooked merely because they seemed self−evident, but this cannot be evaluated from the current proposal.

Capabilities

As this proposal is a joint effort by a large number of independent scientists, some internal heterogeneity should be expected. Most modules are pretty well designed and clearly written, but some are more oblique and even dense, suggesting limited capacity to convert observations and data into published products (at least in the peer−reviewed literature).

Budget

This budget is pretty steep, although it must be recognized that a lot of work is proposed. Clerical support is critical to this project, and in general most funds are being allocated to clerical and scientific staff salaries. Overhead rates are very low (relative to most academic institutions). Overall, budget seems in line with the quantity of modules and effort being expended.

Additional Comments

The structure of this proposal, with 11 appendices serving as the real body of the proposal, is

rather redundant, with the authors of many appendices repeating similar background information. It seems that the coordinators could have taken a bit more time to synthesize this material and to streamline the overall presentation. That said, this is a very ambitious proposal to build upon earlier efforts at the San Luis NWR Complex in the northern San Joaquin Valley. Earlier work led to the initiation of ambitious restoration of riparian habitat and breeding and reintroduction of riparian brush rabbits. The current proposal seeks to continue some facets of this work while notably building upon this to make a more comprehensive and inclusive study of the effects and consequences both of restoration and species reintroduction but also of proposed levee breaches. With collaborators from USFWS, CSU Stanislaus, UC Berkeley, UC Davis, ESRP, Pt. Reyes Bird Observatory, River Partners, and private consultants, this project includes a broad array of interrelated modules, including continued support for riparian brush rabbits (endangered taxon), avian monitoring, assessment of success of vegetation restoration and invasive weed control, and ongoing evaluation of groundwater; expansion of four new elements are being added studies on waterbirds, small mammals, fish communities, and of vegetation restoration, and entirely new modules to evaluate valley elderberry longhorn beetles in restored and mature riparian habitat (another endangered species), assessment of pollinating bees in restored habitats, and of plant communities and floodplain topography changes in response to levee breaches. This is exciting work and if successful, will have ramifications throughout the Bay−Delta region.

External Technical Review

Goals And Justification

The restoration actions are large−scale restoration of riparian (800+ acres planted) and wetland habitats (500 acres) by horticultural and passive methods and restoration of floodplain hydrologic−geomorphic processes by levee breaching (potentially affecting an additional 3000 acres). An additional restoration action was the reintroduction of riparian brush rabbits to a portion of the San Joaquin River NWR. This proposal outlines a quite ambitious and comprehensive program of monitoring animal and plant responses to active restoration and hydrologic−geomorphic responses to levee breaching. The main goals appear to be endangered species recovery and protection/restoration of riparian habitat and biota. The author presents a conceptual model that represents the adaptive nature of the monitoring process (results of monitoring will be used to determine whether current restoration actions are meeting goals or whether they need to be modified). An implicit conceptual model is that endangered and other riparian/wetland species of interest have declined because of riparian habitat destruction, and that proposed restoration actions will help to increase populations of those organisms. The monitoring will be used to test multiple hypotheses, most of which relate to assessing restoration success in providing habitat that is used by species or communities of interest. These hypotheses are rather simple and directly link to assessing the success of restoration actions. Hence, the hypotheses are justified relative to the goals outlined for the restorations.

Approach

The monitoring approaches seem well−designed for answering the hypotheses and assessing restoration success. Each of the components of the monitoring program is handled by individual group of experts on that particular taxon or subject (birds, small mammals, riparian vegetation, floodplain topography, etc.). Greater detail on monitoring approaches for particular taxa or categories is provided in a set of Appendices. Most of these proposed monitoring activities are a continuation of monitoring begun under previous (CALFED and other) grants, although some activities have been expanded (e.g. brush rabbit, small mammals, vegetation) and some new ones have been added (e.g., VELB surveys, pollinator surveys, and vegetation, hydrology, and geomorphology monitoring on proposed levee−breach sites). It is not clear to what extent approaches have been modified based on lessons learned from prior monitoring. The monitoring and evaluation activities outlined in the proposal will assess the success of the restoration for meeting project goals and, under the adapative management model, may point to needed adjustments in further restoration activities. In addition, this rather comprehensive monitoring program should also provide information that will be useful to decision−makers and managers on other restoration

projects. Information gained from monitoring of planted vegetation success will help River Partners further refine their restoration planting protocols. Data collected on bird and mammal community responses to large−scale forest restoration will add to the cumulative knowledge−base (much of this housed with PRBO) from other restoration projects in northern California. The contribution of this project may be particularly valuable, given the scale (800+ acres) of the restoration. Perhaps the most valuable information will be gained by monitoring floodplain vegetation, hydrology, fish, and geomorphology both before and after levee−breaching that is designed to restore hydrogeomorphic function to 3000+ acres of floodplain. According to the authors, this planned levee−breaching exercise is the first of its kind in the Central Valley. Documentation of these results may be useful for projecting floodplain responses to levee−breaching projects on other rivers.

Technical Feasibility

Monitoring approaches are summarized in the main body of the text and documented in detail in Appendices dealing with each monitoring component. Although the overall scope of the project is rather ambitious, each of the individual monitoring goals appears to be feasible. The scale of the monitoring is quite comprehensive and is consistent with the large−scale of the restoration activities and goals.

Performance Measures

The data collected should enable assessment of (a) the extent to which the restoration activities are providing habitat for target species, such as riparian brush rabbit and valley elderberry longhorn beetle; (b) the relative success of planting designs for habitat provision, plant survival, and control of exotic species; (c) the extent to which the restoration is providing other ecosystem services, such as pollinators; and (d) the effects of levee−breaching on floodplain vegetation, geomorphology, and hydrology. Some of these, particularly for the vegetation plantings are stated as specific performance measures for assessing or modifying restoration design. As such, the monitoring could be used for adaptive management, as outlined in the conceptual model. In general, these monitoring results should also allow evaluation of the extent to which riparian restoration results in habitat provision and recovery of threatened and endangered or other riparian species. The monitoring plan is quite detailed, yielding sufficient information to assess the responses of a wide range of ecological indicators to restoration actions.

Products

As I have indicated above, I do believe that much useful information will be generated by this comprehensive, large−scale monitoring project. The central repository for reports and publications will be the San Luis NWR Complex. The refuge complex will hence be the main

source of access for others interested in the comprehensive project results. Although the reports will be available on request to other scientists and decision makers, perhaps the authors should consider some other ways to disseminate their findings (e.g., hosting workshops on riparian restoration, making their results available on a web page, etc.). Individual team members will store data from their individual monitoring components and will present results in scientific symposia and technical publications. The involvement of several investigators from universities suggests that portions of the monitoring results will likely be presented in scientific journal articles (which will provide incentive for conducting the monitoring in a scientifically rigorous way). Given the level of expertise of the investigators and the documentation of their monitoring procedures, I believe that the project will yield high−quality results that will be robust to scientific peer−review.

Capabilities

This project has assembled an excellent team of experts for each individual monitoring component. Each discipline is covered by an expert and the mix of disciplines comprehensively covers the monitoring needs. Each of the team members appears to have an established track record of high quality work in restoration and/or the science of their topic. The team has already completed a considerable amount of restoration and monitoring work on the site over the last 7 years through funding by CALFED and other entities. The work outlined in this proposal is a part of a comprehensive, long−term plan for habitat preservation, species recovery, and restoration on the San Joaquin River NWR. This proposal will enable them to better document the effects of past and ongoing restoration and the effects of a new proposed levee−breaching action.

Budget

The budget is fairly large for a monitoring project, but so is the scale of the restoration being monitored (800+ acres of active riparian restoration, 500 acres of wetland restoration, 3000+ acres of floodplain process restoration from levee breaching) and the breadth of the monitoring components (birds, endangered rabbit and insect species, pollinators, small mammals, fish riparian vegetation, geomorphology, hydrology). As the investigators point out, they have already been entrusted with over $28 million of past CALFED monies. Such a high investment in restoration demands a high level of investment in comprehensive monitoring and evaluation of success. So, I believe the budget is reasonable and adequate for the work.

Additional Comments

This is an ambitious and comprehensive project, with a strong team of experts, an ambitious scale of restoration, and a fairly well documented monitoring approach. Given the scale of

the restoration, I think we can learn much from the monitoring. In addition to funding new monitoring, this project will provide a valuable extension to earlier monitoring, enabling assessment of the continuing response of birds and small mammals as the restoration plantings mature. As indicated above, I encourage the authors to seek ways to more widely disseminate or publicize the lessons learned from this restoration and subsequent monitoring.

Budget Review

1. Does the proposal include a detailed budget for each year of the requested support?
Yes.

If no, please explain:

none

2. Does the proposal include a detailed budget for each task identified?
Yes.

If no, please explain:

Recommend more detail on deliverables on task deliverable table.

3. Are project management expenses appropriately budgeted?
No.

If no, please explain:

Total project management costs are part of cost sharing. Not clearly identified.

4. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs? Are indirect rates, if used, appropriately applied?
Yes.

If no, please explain:

none

5. Does the budget justification adequately explain major expenses? Are the labor rates and other charges proposed reasonable in relation to current state rates?
Yes.

If no, please explain:

Recommend evaluation of equipment costs ($47,010). Refer to previous grant approval, no overhead on equipment should be applied.

6. Are other agencies contributing or likely to contribute a share of the projects costs?
Yes.

If yes, when sufficient information is available, please sum the amount of matching funds likely to be provided:

Total cost share is 748,424 FWS (522071), PRBO (21,733), CSU (14,340), UC Berkeley (190,280) Recommend evaluation of cost share.

Cost Sharing− Recommend that grantee provide information regarding its financial capability and stability as well as its level of commitment for any proposed cost share funds. A detailed budget of the project's proposed cost share funds should be provided prior to grant funds being awarded. A financial evaluation is recommended for grant agreements that state/claim over 30 % or $250,000 (which ever is less) of matching funds. The evaluation will avoid likelihood of the grantee requesting an amendment to increase project funding due to lack of or miscalculation of matching funds to complete the project.

7. Does the applicant take exception to the standard grant agreement's terms and conditions? If yes, are the approaches the applicant proposes to address these issues a reasonable starting point for negotiating a grant agreement?
No.

If no, please explain:

Applicant does not agree with terms and conditions. Performance retentios (10%).

Contract Language Exceptions – Proposals submitted by grantees which identify exceptions to State of California's standard contract language provisions as provided in the 2004 PSP; and/or submit alternative contract language in lieu of the State's standard contract language should be carefully reviewed prior to awarding grant funds. Review will initially be conducted by the funding agency's contract office and referred to the legal department as needed.

8. Are there other budget issues that warrant consideration?
Yes.

If yes, please explain:

More detailed information is needed for task and deliverables including subcontractor work for each specific task, services, and work to be performed with the appropriate and corresponding deliverable or end product for each task(s) and/or sub−task(s). Costs associated with each task and deliverable should be evaluated based on what is considered to be reasonable costs for performing similar services.

Other comments:

Recommend proposal grantee use standardized format for sub−contractor budget detail. Recommend more detail on tasks and sub−contractor deliverables if awarded.

Task and Deliverables –More detailed information is needed for task and deliverables including subcontractor work for each specific task, services, and work to be performed with the appropriate and corresponding deliverable or end product for each task(s) and/or sub−task(s). Costs associated with each task and deliverable should be evaluated based on what is considered to be reasonable costs for performing similar services.

Environmental Compliance Review

1. Is compliance with California Environmental Quality Act (CEQA) required for this project?
YES− NO***X***

2. Is compliance with National Environmental Policy Act (NEPA) required for this project?
YES***X*** NO−

3. Does this project qualify for an Exemption or Exclusion under CEQA and NEPA, respectively?
YES***X*** NO− N/A−
Comments:

4. Did the applicant correctly identify if CEQA/NEPA compliance was required?
YES***X*** NO−
Comments:

5. Did the applicant correctly identify the correct CEQA/NEPA document required for the project?
YES***X*** NO− N/A−
Comments:

6. Has the CEQA/NEPA document been completed?
YES− NO***X*** N/A−

7. If the document has not been completed, did the applicant allot enough time to complete the document before the project start date?
YES***X*** NO− N/A−

8. If the document has not been completed, did the applicant allot enough funds to complete it?
YES***X*** NO− N/A−
Comments:

It was not clear if the NEPA Categorical Exclusion has been obtained yet or not.

9. Did the applicant adequately identify other legal or regulatory compliance issues (Incidental Take permits, Scientific Collecting permits, etc,) that may affect the project?
YES***X*** NO− N/A−
Comments:

The Environmental Compliance Worksheet did not indicate the required federal permits, however, page 8 of the proposal description stated that ESRP already holds the necessary State and federal permits and San Luis NWR staff will apply for the required State and federal permits.

Existing permits may need to be amended to cover expanded work scope.

Identify those additional permits that may be needed by this project:

10. Does the proposal include written permission from the owners of any private property on which project activities are proposed or, if specific locations for project activities are not yet determined, is it likely that permission for access can be obtained?
YES− NO− Project is on public land/water or question is otherwise N/A***X***
Comments:

Project on USFWS land, permission not needed.

11. Do any of these issues affect the project's feasibility due to significant deficiencies in planning and/or budgeting for legal and regulatory compliance or access to property?
YES− NO***X***
Comments:

Prior−Phase Funding Review

Project Title	San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project − Phase I
CALFED Contract Management Agency	CALFED
Amount Funded	$10,827,000
Date Awarded	1997/01/01
Project Number	ERP 97−B04

Project Title	Lower San Joaquin River Floodplain Protection and Restoration Project
CALFED Contract Management Agency	CALFED
Amount Funded	$1,100,000
Date Awarded	1998/01/01
Project Number	ERP 98−F21

3. Have negotiations about contracts or contract amendments with this organization proceeded smoothly, without persistent difficulties related to standard contract terms and conditions?
No.

We have been unable to reach agreement on terms and conditions of the latest grant application for habitat acquisition with the US Fish and Wildlife Service. The disagreement concerns standard contract teems and conditions and at this time progress towards resolution has not been made for a significant period of time.

4. Are the status, progress, and accomplishments of the organization's current CALFED or CVPIA project(s) accurately stated in the proposal?
No.

The proposal is quite comprehensive on most issues and does summarize the status of some of the previous and on−going CALFED projects. The proposal does indicate though, that

contracting issues have resulted in a complete lack of progress on the current project. This proposal does not explain whether the lack of progress on the latest grant will have impacts on the proposed work. Without clarification of these issues, the feasibility of this project is not assessable.

5. Has this organization made adequate progress towards these project(s)' milestones and outcomes, without unreasonable divergences from project schedules or poor−quality deliverables?
No.

The USFWS on much of the task associated with the earlier projects has made adequate progress, but on their latest project, “Recovery Implementation for Riparian Brush Rabbit and Riparian Woodrat on the Lower Stanislaus River,” (Nov. 2002) progress has not been made.

6. Is the applicant's reporting, record keeping, and financial management of these projects satisfactory?
No.

Due to lack of contract agreement, the current project does not have any reporting, record keeping or financial management record. Earlier projects where reported and managed adequately.

7. If this application is for a next phase of a project whose contract your agency currently manages, will the project(s) be ready for next−phase funding to monitor and evaluate project outcomes in fiscal year 2005/6, based on its current progress and expenditure rates?
No.

Again, contracting issues have stalled the current project. Resolving these issues in time to keep this current proposal on track does not seem likely.

Other comments:

Although the US Fish and Wildlife Service has been successful with several CalFed projects in the past, there are serious issues with their current land acquisition project at this site (the contracting process is stalled). At best, any new contracting processes will be difficult without resolution of the current issues.

Prior−Phase Funding Review

Project Title	San Joaquin River NWR Riparian Habitat Protection and Floodplain Restoration Project − Phase II
CALFED Contract Management Agency	National Fish and Wildife Foundation
Amount Funded	$7,646,253
Date Awarded	2001/01/01
Project Number	ERP 01−N08

Project Title	Habitat Acquisition for Riparian Brush Rabbit and Riparian Woodrat on the Lower Stanislaus River
CALFED Contract Management Agency	National Fish and Wildlife Foundation
Amount Funded	$2,720,085
Date Awarded	2001/01/01
Project Number	ERP 01−N11

3. Have negotiations about contracts or contract amendments with this organization proceeded smoothly, without persistent difficulties related to standard contract terms and conditions?
Yes.

4. Are the status, progress, and accomplishments of the organization's current CALFED or CVPIA project(s) accurately stated in the proposal?
Yes.

5. Has this organization made adequate progress towards these project(s)' milestones and outcomes, without unreasonable divergences from project schedules or poor−quality deliverables?
Yes.

6. Is the applicant's reporting, record keeping, and financial management of these projects satisfactory?
No.

Invoices are good. There have been some minor delays with the fiscal quarterly report due to regional staff not having access to full financial data.

7. If this application is for a next phase of a project whose contract your agency currently manages, will the project(s) be ready for next−phase funding to monitor and evaluate project outcomes in fiscal year 2005/6, based on its current progress and expenditure rates?
Yes.

Other comments:

Prior−Phase Funding Review

Project Title	Lower San Joaquin River Floodplain Protection and Restoration Project
CALFED Contract Management Agency	CALFED
Amount Funded	$1,100,000
Date Awarded	1998/01/01
Project Number	ERP 98−F21

3. Have negotiations about contracts or contract amendments with this organization proceeded smoothly, without persistent difficulties related to standard contract terms and conditions?
Yes.

4. Are the status, progress, and accomplishments of the organization's current CALFED or CVPIA project(s) accurately stated in the proposal?
Yes.

5. Has this organization made adequate progress towards these project(s)' milestones and outcomes, without unreasonable divergences from project schedules or poor−quality deliverables?
Yes.

6. Is the applicant's reporting, record keeping, and financial management of these projects satisfactory?
Yes.

7. If this application is for a next phase of a project whose contract your agency currently manages, will the project(s) be ready for next−phase funding to monitor and evaluate project outcomes in fiscal year 2005/6, based on its current progress and expenditure rates?
Yes.

Other comments: