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March 23, 2005

Daniel Efseaff,
River Partners
Re: CALFED Monitoring PSP

Dear Mr. Efseaff:

The Sacramento River Conservation Area Forum welcomes the opportunity to comment regarding your CALFED Monitoring PSP that recently came before our organization. The project involves a Vegetation and Wildlife Response to Restoration monitoring activity between Sacramento River Miles 166 and 170 on the Beehive Bend Unit in Glenn County. This project is listed as Project # 50 in the "Project Tracker" system on our website at: www.sacramentoriver.ca.gov. Please keep this project updated as it progresses.

On February 1st, 2005, you presented this project to our Technical Advisory Committee for review and comment. The project was determined to be consistent with the principles and guidelines of the SRCA Forum Handbook and was forwarded to the SRCAF Board of Directors with that recommendation.

On March 17, 2005, the project was presented to the SRCA Forum Board of Directors and was found to be consistent with the principles and guidelines of the SRCA Forum Handbook with no objections noted at this time.

We appreciate the effort your organization has made in bringing these projects to the Forum and your recognition of the value of the principles and guidelines of the Handbook. We look forward to your continued coordination with SRCAF and the local contacts on this project as well as any future project proposals.

Sincerely,

Burt Bundy, Manager
SRCA Forum

Cc: CALFED ERP Monitoring PSP

**Assessment of Vegetative and Wildlife
Responses to Innovative Restoration Design
on the Beehive Bend Unit**

Michelle K Cederborg

Initial Selection Panel Review

Not Recommended

Amount Sought: \$364,156

Fund This Amount: \$0

Brief explanation of rating:

This proposal is to monitor vegetative and wildlife response to restoration at "Beehive Bend" on the Sacramento River. The technical panel described this proposal as inadequate for a variety of reasons, with many concerns expressed about the lack of key details regarding sampling and surveying methodology. The reviewers also raised concern about the adequacy of the proposal in handling the question of source vs sink for bird populations. The Selection Panel does not recommend funding, although the importance of the Sacramento River ERP investments is recognized.

Technical Panel Review

Technical Review Panel's Overall Evaluation Rating:

Inadequate

Explanation Of Summary Rating

This project has potential, but the lack of detail precludes a higher ranking. Missing details could easily have been accommodated in the text of the proposal, and it is a mystery why the applicants did not do so. There were abundant instances of poor grammar, vague wording, sloppy construction, misspellings, and typos in the proposal. A table is numbered incorrectly. The requested budget is listed as \$370,265 in the project description and executive summary but \$364,156 in the budget summary, suggesting a lack of attention to detail. Such carelessness genuinely interfered with the ease of understanding parts of the proposal.

Goals And Justification

Applicants propose to follow up on a restoration project on the Beehive Bend Unit (mile 166.5 R) of the Sacramento River. The restoration actions are identified clearly, and the goals and objectives of the restoration actions (to provide habitat for wildlife) are presented. The monitoring actions proposed (birds, rodents, plants) do not entirely meet these goals because they focus principally on birds and to a lesser degree rodents to the exclusion of other wildlife. There is an implicit and inaccurate assumption that birds are a good indicator for other species groups.

The conceptual model underlying the restoration is clear and appropriately detailed, but the accompanying figures do not add to the understanding of the model. The hypotheses are somewhat brief and worded awkwardly. In general, the hypotheses are not scientifically rigorous or testable. They

Technical Panel Review

also fail to address the key issues of restoration. For example, one question was "Do restoration conditions allow for native plant succession?" The more relevant question is whether restoration leads to sustainable increase in native plant diversity and abundance.

This group initiated horticultural restoration on the BBU, and has since documented substantial increases in avian community richness and numbers. They suggest that further monitoring is required to determine if some of these sites may be population sinks; by appearing attractive to birds, they may attract individuals but ultimately be unable to support reproductive efforts. In the present proposal they will follow up on avian responses in greater detail (most notably by tracking reproductive effort and success), further quantify vegetative succession and structure, and compare small mammal (rodent) numbers in the restored area vs. adjacent or nearby areas with varied land use (unfortunately, no pre-restoration data are available for mammals).

The discussion of source-sink issues could have been more detailed. The proposal assumes that establishing a sink habitat is always a negative result, but in this case, the measure is relative to pre-restoration conditions and also to other available habitats. Establishing a new population, even if subsidized from a source habitat, may be a positive result in certain contexts. Sinks may also become sources over time or as conditions change. Finally, the important data to determine source or sink status for a species are long-term, and this proposal will not collect long-term data. However, the mere fact that the topic was discussed indicates that the applicants are thinking along productive lines.

The conceptual model underlying the restoration is clear and appropriately detailed, but the accompanying figures do not add to the understanding of the model. The hypotheses are somewhat brief and worded awkwardly. In general, the hypotheses are not scientifically rigorous or testable. They also fail to address the key issues of restoration. Do restoration conditions allow for native plant succession? The more relevant question is whether restoration leads to

Technical Panel Review

sustainable increase in native plant diversity and abundance.

Approach

The proposed project builds upon earlier monitoring work for plants and birds done at this site using standard avian and mammalian sampling methods. The applicants recognize that comparison against a control will be critical for evaluation of the hypotheses, and they plan on taking measurements in 'remnant' areas that have not been restored. It is clear from the aerial photo that there are likely to be confounding factors with these remnant areas (e.g. distance to water), depending on where they are sampling. This problem is not discussed in the proposal. External technical reviewers felt that results from monitoring activities are likely to be useful to our knowledge-base regarding the effectiveness of active re-vegetation after restoration within the context of the Sacramento/San Joaquin Valleys, assuming that adequate controls are used and proper analysis tools are employed.

The proposed comparison of remote sensing and ground-based monitoring is poorly developed in the proposal. This is certainly not the first effort to do such a thing, but relevant literature is not cited. The scope of the results of the proposed work is not clear. Is this a general effort to evaluate the use of remotely-sensed data, or is it specific to the small plot under consideration? More justification for the inclusion of this portion of the proposal, including citations from relevant literature, would have been useful.

Feasibility And Likelihood Of Success

The absence of methodological detail makes the proposal difficult to evaluate. Methods that are described are suitable and appropriate, but much detail is left out of vegetation, bird, and rodent sampling schemes. External reviewers and members of the Technical Panel identified many parts of the proposal where key information was lacking. Most metrics presented in Table 2 are rather vague and difficult to interpret. The proposal states that one of its tasks will be to develop a monitoring plan; such a plan should have been

Technical Panel Review

included in the proposal.

Performance Measures

External technical reviewers agreed that the proposed performance targets were vague and required further development. As presently stated, the performance standards do not permit a clear evaluation of the effect of restoration.

Products

Assuming the development of a more detailed monitoring plan and performance measures, this project should yield useful information for managers, decision-makers, and other scientists. Examining multiple restoration sites will allow generalizations about how certain restoration actions benefit Central Valley riparian birds. Caution should be exercised in extrapolating these results elsewhere.

The process by which data and results will be made available is well described and seems appropriate. Managers, scientists, and others should be able to access the data easily if the process outlined is followed. There is no proposal to publish the results in peer-reviewed literature, and given the inadequacy of methodological description, the quality of the results are hard to predict.

The data management plan is marginal. Standards for data and metadata are not discussed. The proposal lacks a clear data access policy. The proposal states that data handling and storage will be considered in the monitoring plan to be developed.

Capabilities

The team has the requisite qualifications for this work, and they have been very successful in this restoration project to date.

Technical Panel Review

Budget

The budget seems very reasonable for the amount of work being proposed.

Regional Review

The Sacramento Regional Panel ranked the proposal "Very High" and thought that the work proposed met most of the regional criteria. Information to be generated will have exceptional regional value, as it investigates questions for which there is little information (source/sink investigation, rodent study, remote sensing testing).

Administrative Review

Prior-phase funding raised no significant concerns.

The environmental compliance review suggested that if any species collected are listed as Threatened or Endangered under CESA/ESA, a Take Permit will be required which may trigger CEQA and/or NEPA compliance.

Budget review

Substantial concerns about the budget were expressed. These included combination of labor rates with the direct overhead rate, lack of a detailed list of items included in the indirect cost rate, lack of detailed information for all subcontractor work, lack of a detailed list of equipment purchases, lack of a justification on how each subcontractor was selected, lack of information about subcontractor labor rates, indirect costs rates, deliverables, performance evaluations, position descriptions, absence of a reduced indirect cost rate to the state for services that will be subcontracted, lack of information regarding the grantee's financial capability and stability as well as its level of commitment for any proposed cost share funds, and other concerns.

Additional Comments

Sacramento Regional Review

Sacramento Regional Panel's Overall Ranking:

Very High

Summary:

The project meets most of the regional criteria. Information that would be generated has exceptional regional value, as it investigates questions for which there is little information (source/sink investigation, rodent study, remote sensing testing). There are no implementation concerns.

1. Applicability To ERP Goals And Regional Priorities.

The project evaluates how well restoration actions are attaining objectives upon which design was based, if ecosystem functions are recovering, and what adjustments may be needed (avian source vs. sink, rodent populations). It monitors restoration in a high-priority ecosystem (Sacramento River) and would assess riparian restoration actions, which are particularly important and common in the region.

Monitoring would not provide information specific to any Big R species.

2. Links With Other Restoration Actions.

The project is indirectly linked to other restoration actions because information generated would be applicable to other projects, and is coordinated with Sacramento River Conservation Area Forum.

The project focuses on monitoring of a single restoration action.

Data will be stored in a manner that could be used by people involved in related restoration activities. Data would not necessarily be made publicly available, though project reports

Sacramento Regional Review

would be posted on a public website. The value and applicability of the bird data will be improved if it is made readily accessible.

The project continues and expands upon monitoring conducted since restoration was implemented. It is assumed this was part of the restoration implementation and was, therefore, ERP-funded. It would fill important data gaps, including information on success of wildlife-based restoration design and rodent populations.

Information provided by the proposed project could be very useful in planning and design of other restoration actions. Evaluation of remote sensing could lead to development of new monitoring methods for assessing other restoration actions in the region.

3. Local Circumstances.

There are no apparent local circumstances that could affect the project's feasibility. It is an extension of existing monitoring and should be able to continue in a timely and successful manner. No permits or permission to access private property are necessary.

4. Local Involvement.

The project incorporates a limited degree of local involvement, including collaboration with CSU Chico and presentation of information to SRCAF. It would also include collaboration with DFG, as the project was established under an agreement with them. The project is built on an established partnership with DFG and PRBO, which would be further strengthened, increasing the potential to attract future funding from multiple sources.

5. Local Value.

Products generated by the project will increase the understanding of, and evaluate success of, restoration actions. This information could lead to more informed

Sacramento Regional Review

management decisions and identify appropriate adjustments to RHJV restoration recommendations. Results will be useful at various scales, and evaluation of remote sensing could be applicable on watershed and regional levels.

External Technical Review #1

Goals And Justification

Monitoring of restoration actions on the Beehive Bend are proposed in a generally clear way. This restoration was done with raptor habitat in mind, but the proposal states that the proposed monitoring will extend beyond raptors (which is a good thing, because it appears that no raptors have yet been observed in the restored area), but not to all vertebrates or animals. Monitoring only rodents and birds is not a "comprehensive evaluation of the wildlife-oriented design" as they suggest, however, with the vegetation monitoring, can certainly be indicator species/guilds of overall ecosystem health. Many hypotheses are presented, regarding the effect of restoration activity on bird and rodent populations and recruitment of native plants. Justification of these is fine, however supporting materials in figures were un-readable due to small fonts and poor scanning resolution.

Approach

Comparison against a control will be critical for evaluation of the hypotheses; the researchers do plan on taking measurements in 'remnant' areas that have not been restored, but it is clear from the arial photo that there are likely to be confounding factors (e.g. distance to water), depending on where they are sampling. This is not made clear, nor are sample sizes/replication made clear. For bird surveys, they intend to sample an additional two locations, but this is not well-justified. For plant surveys, the Table 2 Summary of Data Collection was very useful for evaluating their planning, which appears to be sound, but only covers data that have already been taken (years 1-3). Assuming that this monitoring will continue in the same way, it will build nicely on what was done, however this was not clear from what is written. Rodent monitoring appears sound. All activities mentioned are likely to be useful to our knowledge-base regarding the effectiveness of active re-vegetation after restoration, assuming that adequate controls are used and proper analysis

External Technical Review #1

tools are employed, neither of which are well-described in this proposal.

Technical Feasibility

This project doesn't employ any technically difficult approaches and appears feasible. The scale is appropriate, if a bit small.

Performance Measures

PI's could have spelled out handling of data and it's relationship to testing the hypotheses better. See other comments on design and analysis above, under 'Approach'. I do feel that the proposed actions are likely to assess performance of the restoration actions, but it is not well-clarified how the conceptual models will be tested (e.g., how will 'native plant succession' be determined? Does this mean other, non-planted species coming in? What level constitutes success?).

Products

Monitoring of this restoration project is likely to be of interest to other land-managers, and will test some important hypotheses in the field. However, there is no proposal to publish the results in peer-reviewed literature. That the results will be publicly posted on a website only makes up for this deficiency somewhat. Thus, it will be difficult to evaluate whether results are high-quality or not. Data handling and storage are appropriate.

Capabilities

The team appears very strong and fully capable of completing the project.

Budget

Budget is reasonable.

External Technical Review #1

Additional Comments

Literature cited section is not complete. Figures difficult to read in pdf file.

External Technical Review #2

Goals And Justification

The restoration actions are identified clearly. Generally, the goals and objectives of the restoration actions are presented clearly (to provide habitat for wildlife), but the monitoring actions proposed (birds, rodents, plants) do not entirely meet these goals. It is unclear if the goal was to provide wildlife habitat or just bird habitat. There is an implicit assumption that birds are a good indicator for other species groups, but I am not comfortable with this assumption without testing. Apart from this point, the project's objectives are clearly laid out and internally consistent.

The conceptual model underlying the restoration is clear and appropriately detailed and stands as the most complete part of the proposal. The hypotheses are somewhat brief, but seem justified. The exception is the first hypothesis, relating to bird monitoring. It is a general statement not specific to the project, and is worded awkwardly. It would be good to know exactly what they expected the restoration to accomplish. For example: bird diversity will increase for several years until the richness and composition of the restoration site resemble that of a natural riparian forest, and the restoration will allow successful reproduction of native birds such that populations are stable or increasing. This hypothesis as written is not testable with the proposed approach.

Approach

The approach is suitable for the defined objectives. However, if one of the project's main objectives is to improve habitat for wildlife, then why are birds and small mammals the only wildlife monitored? Small mammals (rodents) are apparently only monitored because of potential conflicts having to do with herbivory on croplands and on the restoration site itself. Yet small mammals are also an important wildlife community that could have been addressed, assessing changes resulting from the restoration with some target. Similarly,

External Technical Review #2

habitat needs for other species traditionally considered "wildlife," such as deer, midsized mammals, reptiles (particularly snakes), and amphibians could have been addressed. If the objective was truly to provide bird habitat, then the proposal should have stated this more directly.

The approach for mammals and plants seems well designed and builds on previous monitoring. The suggested bird component also builds nicely on previous monitoring; it is a logical next step to go from monitoring species composition and abundance to monitoring reproductive success, and this point is convincingly made. Unfortunately, there is nowhere near enough detail in the methods to determine the adequacy or appropriateness of the proposed bird monitoring (see Technical Feasibility).

The project could contribute to our knowledge base—mainly as a case study that could be used to determine the effectiveness of different restoration techniques. The contributions that the project could make would be useful to decision-makers looking to manage bird or small mammal populations regionally. The comparison between remotely-sensed and on-the-ground vegetation measurements would probably have the broadest application. This is certainly not the first study to compare these two kinds of vegetation measurements, but perhaps these habitat types have not been studied thoroughly in this way. More justification for the inclusion of this portion of the proposal, including citations from relevant literature, would have been useful.

Technical Feasibility

The proposal defines one of the project's tasks as development of a monitoring plan. It is difficult to imagine that CALFED would not like to see more detail before funding this project, particularly the bird monitoring component. As written, it is impossible to determine the adequacy and appropriateness of the proposed bird monitoring. For point count surveys, how will the stations be arrayed? How many stations will there be? What time of day will they be surveyed? Why not use distance sampling to obtain better estimates of density? Five-minute

External Technical Review #2

counts conducted two times each seems like an absolute minimum (or perhaps below minimum), but again, this depends on the number of stations intended to describe the area of interest. For nest monitoring, which "key species" will be addressed? How large are the plots? Without this information, it is impossible to determine whether sufficient sample sizes will be available. If these are typical BBIRD plots, then they should be 40 ha. We are not given the size of the study area, but it appears from one map to average approximately 300 m by 1000 m, which equates to approximately 30 ha, not allowing for the proposed two plots to be established unless they are quite small. The plot size is important because simulations have shown that an absolute minimum of 20 nests (and more likely 75) per species (or species group) per treatment are necessary to obtain adequate estimates of nest success. How many nests can one expect in a 30 ha area? Maybe this is large enough, but estimates of nest density are needed. Modern nest survival models may not have quite as stringent requirements, but as the proposal does not describe any analysis methods for nest success, we can't know what is intended. For territory mapping, it is again impossible to determine the adequacy of proposed sampling without knowledge of the size of the study plot. Plus, what are the survey and analysis methods? How many visits will be conducted? Without this detail and simply an allusion to developing a monitoring plan after funding is obtained, it is impossible to determine the adequacy of the field methods.

The two types of vegetation measurements are well described, but it is not entirely clear how the remote sensing and ground measurements will be compared. The Sherman trapping is feasible and much more fully documented. The use of pitfall trapping in this study is questionable. The proposal states that their use will provide preliminary information on animals such as voles; they will likely also catch shrews, which are notoriously susceptible to dying in pitfall traps. Reptiles and amphibians will also be captured—what will be done with these non-target detections? I'm not sure of the value of pitfalls in providing preliminary information on species missed by Sherman trapping, if sample sizes are small. More detail is needed, including the number of arrays and the

External Technical Review #2

frequency of checking. Are giant garter snakes in the area? If so, there is some chance of their being captured in pitfall traps. The data analysis section in the small mammal section is useful, and makes one wonder why this level of detail was omitted for the bird monitoring section.

Finally, the notion that a walnut orchard may serve as a reference site is unsubstantiated.

Performance Measures

Performance measures are somewhat vague. The proposal alludes to population "targets" and management actions that might be taken but does not specify what those are. How many small mammals is too many? What is a sufficient level of nest success? Low nest success can certainly indicate a potential population sink, but it is unclear at what level red flags would be raised. Further, how will the data be compared among years? Nest success can vary from year to year with climate and other factors. Regarding the comparison of ground to remote methods of vegetation sampling, what accuracy level will be determined to be sufficient?

The data obtained will allow the evaluation of the project's conceptual model, but only after more detailed performance measures are drafted and subjected to peer review. Performance measures can be developed from the scientific and gray literature and from expert opinion. The monitoring plan, as stated elsewhere, is currently lacking sufficient detail. According to the proposal, the plan will be developed once funding is secured. If this is acceptable to the funding agency, then the plan should be subject to peer review, a standard procedure not mentioned in the description of the task.

Products

Assuming the development of a more detailed monitoring plan and performance measures, this project should yield useful information for managers, decision-makers, and other scientists. Examining multiple restoration sites will allow

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generalizations about how certain restoration actions benefit Central Valley riparian birds. Caution should be exercised in extrapolating these results elsewhere. The process by which data and results will be made available is well described and seems appropriate. Managers, scientists, and others should be able to access the data easily if the process outlined is followed. It is difficult to tell, particularly for the bird monitoring component, whether the results will stand up under scientific peer review, as the proposal does not describe the layout, methods, or expected sample sizes in sufficient detail. From that perspective, however, the involvement of PRBO is encouraging.

Capabilities

The project has an impressive team with a wealth of experience, including members with the expertise necessary to perform the tasks described.

Budget

Overall, the budget seems reasonable for a project of this scope. But there isn't much detail given, so one wonders, for instance, why the budget requirements change from year to year. This may be a result of salaries increasing over time, but in many cases it appears that less monitoring will be conducted as time goes on. The details necessary to evaluate the appropriateness of declining effort over time are lacking. Similarly, because plot sizes and estimated sample sizes were not given in the body of the proposal, it is impossible to know whether the amount requested would allow the collection of data that is proposed. Finally, is the budget \$370,265 (in the project description and executive summary) or \$364,156 (in the budget summary)? It appears that changes were made in the budget summary and not carried through in the proposal.

Additional Comments

The writing in this proposal detracts from its overall quality. This is of concern in two ways: 1) because communicating the results will require good writing skills,

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and 2) because it shows a lack of care in preparing the proposal. There are abundant instances of poor grammar, vague wording, sloppy construction, misspellings, and typos. A table is numbered incorrectly. Such carelessness genuinely interfered with this reviewer's ease of understanding parts of the proposal. Most worrisomely, the requested budget is listed as \$370,265 in the project description and executive summary but \$364,156 in the budget summary, suggesting a lack of attention to detail that is to be expected especially in matters of accounting.

External Technical Review #3

Goals And Justification

Applicants propose to follow up on a restoration project on the Beehive Bend Unit (mile 166.5 R) of the Sacramento River. In recent years this group initiated horticultural restoration on the BBU, and have since documented substantial increases in avian community richness and numbers, but they claim that uncertainty exists that some of these sites may be population sinks; by appearing attractive to birds, they may attract individuals but ultimately be unable to support reproductive efforts. In the present proposal they will follow up on avian responses in greater detail (most notably by tracking reproductive effort and success), further quantify vegetative succession and structure (a bit mundane except as connected to avian and mammalian responses), and compare small mammal (rodent) numbers in the restored area vs. adjacent or nearby areas with varied land use (unfortunately, no pre-restoration data are available for mammals). While generally clear there are areas of ambiguity in this proposal. The amount requested is either ca. 364K or ca. 370K (not terribly different), but some hypotheses and proposed work is not entirely clear. I don't quite understand the hypothesis that "bird usage represents and nesting success represents a source for bird populations" (p. 13). Later we are told that the applicants plan to compare different remote sensing approaches but nowhere are we told how these comparisons will be made (p. 19) - what statistical or comparative analyses will be applied to this? The applicants plan either 8 or 12 sites for sampling small mammals (p. 19) - how many really will be used?

Approach

The approach taken here is largely quite standard for these objectives. The avian and mammalian sampling methods are standard, and the use of relevé techniques to document vegetative structure and complexity has a long history in both applied (e.g., restoration) and basic plant ecology. This project clearly builds upon earlier work done at this site,

External Technical Review #3

although at times it is not clear why some preliminary work was not pursued in the first phases (specifically, I note the lack of pre-restoration data on small mammal populations). I don't know that this work will contribute greatly to our knowledge on the responses of avian and mammalian communities to habitat restoration, but within the context of the Sac/San Joaquin valleys, this work is likely to provide important observations on how effective restoration is for these taxa, leading to useful and potentially very important recommendations for future work of this sort.

Technical Feasibility

There are some missing details here, some of which are trivial and some of which may not be trivial. We don't really get into planned efforts until p. 14 of the proposal, at which point we get down to brass tacks. This includes boring stuff such as details of project administration, but also a "task" to develop a monitoring plan - shouldn't we be told here how RP plans to monitor these efforts in this proposal? Perhaps monitoring is considered separate from the CALFED efforts? Task 3 is finally getting interesting, and addresses avian responses to the existing restoration efforts. Planned methods are suitable and appropriate, and include fixed-radius (50 m) point counts for avian abundance and community composition, and associated relevés to document vegetative structure and composition (although the authors state that "the point count method . . . also contains a vegetative assessment component—a relevé" (p. 14); relevés are a method of vegetative analysis and while they are very important to provide data for comparison with avian data, by no means are they a part of avian point counts; kudos to these authors for making this connection clear and explicit, however). Unfortunately, while telling us that point counts will be pursued at three sites, we are not told how many stations will be sampled, or how these will be distributed in space; we are told that they will be sampled "two times per year" but not when these will be done (I am assuming spring and summer or fall, but my guess could be entirely wrong). Additionally, we are not told how the avian-vegetative data will be "connected" analytically - correlation? multivariate ordination? etc. I am pleased that

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nest monitoring also is planned, but here again we are simply not provided with methodological detail to evaluate if this is sufficiently thought-out yet. Which "few key species" are being considered? How often "throughout the breeding season" will measures be made? How will nest vegetation assessments be made and analyzed/interpreted? Finally (for birds), territory mapping will be applied to evaluate the number (and size? structure? characteristics?) of bird territories. Again, however, details are practically absent. Task 4 focuses on vegetative structure and composition, but this appears to emphasize comparisons with earlier measurements and so it is not clear to me if this work relates to avian territories, nest sites, etc. At any rate, I fully support the notion of such follow-up sampling to evaluate temporal changes in vegetative structure and composition. While this emphasizes woody vegetation for comparison with earlier samples, 5 herbaceous plots are "envision[ed]" (p. 18) (does this mean "we hope to do this" or is this really part of the current plans?). Table 2 evidently is provided to exemplify how data were/will be collected, but most of the metrics presented are rather vague. For example, "'visual estimates" for native grasses - estimates of what, cover, number, survival? Not clear. Unfortunately, most metrics are not readily interpreted. We are told (p. 18) that "after the census subsequent monitoring . . ." but I really don't know what census they are referring to here. The remote sensing is great, but how will these different approaches be compared or evaluated? Task 5 - rodents. It strikes me as odd that "one of the assertions made in the [original] plan . . . was that rodent populations would decrease as the site transformation occurred [sic]" yet the applicants didn't see it sufficiently worthwhile to document small mammal numbers either before or during initial restoration. Now they are stuck making the best of a mediocre situation by proposing to compare rodent numbers in restored sites with those in nearby habitats; presumably they assume that these will represent what was in the BBU prior to restoration efforts, and while this likely is valid, it will only allow them to make predictions for future efforts but not to really conclude an effect in the BBU. How many sites will be sampled? We are told "approximately 8 sites" and then only 5 lines later that by sampling multiple sites

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simultaneously the expect "that all 12 sites may be sampled within a 30-day period." I am VERY pleased to see pitfall arrays included here (will herps or macroinverts be documented with these as well?) but how many will be used and how will these be distributed spatially? Will they be sampled simultaneously with live trapping efforts? A cautionary note - I have marked small mammals with Sharpie pens and other "permanent markers" only to find they lick these off; run some trials with your "dye" if you have any doubts about it being permanent (or use ear tags - they're cheap and you can greatly increase the value of your data with individual marks). Finally, the authors propose nonparametric K-W tests to compare median relative abundances (relative abundances are not defined here); why medians? I can see justifications but it would be useful to have this presented here. I am not personally familiar with multiple response permutation procedures; a reference would be useful here.

Performance Measures

If the missing details are indeed clear in the minds of the researchers then this monitoring plan is highly likely to yield a clear understanding of the effects of restoration. As noted above, many of the missing details likely are obvious to the researchers, but some others may not be. Such issues as the spatial distribution of sampling efforts (random vs. structured, and if the latter, how structured) probably will not be problematic for the researchers, but missing details of how pre- and post-restoration data will be compared, or control vs. restored sites, may not be as clearly developed in their minds. Again, they may well be, but the present proposal fails to clearly outline what I consider to be rather important methodological details.

Products

My gut reaction is that this will yield useful information. As noted above, some details of data collection and analysis are not clear in the proposal. Results could stand up to rigorous peer-review if these issues are suitably addressed, but it is not clear in the present proposal that this is the case.

Capabilities

Yes, the team that has been organized here seems to have the requisite qualifications for this work. Frankly, the work is not that challenging in conceptual terms, so the issue may come down to an understanding by the researchers of the relevant literature and methods, and their ability to see this type of work from beginning to end. On those lines, it seems pretty clear that they have been very successful in this restoration project to date (excepting the unfortunate lack of pre-treatment data on small mammals - likely this had to do with funding limitations, however) and I see no reason to doubt their abilities to see this work through to productive conclusions. I remain frustrated with the missing methodological or analytical details, however, and while I suspect these are simply sufficiently self-evident to the researchers, I would have appreciated more detail on these matters in the proposal.

Budget

Quite frankly this budget seems very reasonable for the amount of work being proposed. The overhead rates are quite reasonable and below that expected at most research institutions. I don't see any "slush" in this budget, although it seems unfortunate that so much work is allocated to consultants; still, much of this involves CSUC which has good expertise in this arena and low financial needs.

Additional Comments

In sum, this is a great project that has tremendous potential. Unfortunately, this reviewer is not able to divine the missing details and so it is a bit challenging to fully critique the proposal. I would like to see just a small bit of additional methodological and analytical detail, which I fully recognize would require trimming the fat elsewhere; I would recommend slimming down the introductory materials. I don't think we need quite so many pages to point out the importance of such efforts on the Sac. R., and some of the initial 13 pages might be better spent on a clearer description of what you plan to

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do, rather than what you already have done. Oh, finally, several of the figures were sufficiently unclear in my copy of the proposal that I wonder if they really justified the space they took as well.

Budget Review

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

Yes.

If no, please explain:

COMMENTS: 1. IDC rate is 21% 2. IDC applied to supplies, expendables, & equipment 3. 49% of \$\$ to subs 4. Review supplies & expendables to ensure no duplication of charges for OH/IDC

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

Yes.

If no, please explain:

COMMENTS: 1. Review consultant \$\$ which includes housing, utilities, etc. 2. Review for duplication of charges 3. Note: Travel mileage reimbursement is charged out at 0.55c/mile not per CA State reimbursement rates. (Need to clarify if applicant will abide with all other State reimbursement guidelines/rules.)

Budget Detail/Administrative Overhead Fees - Budget detail combines the labor rates with the direct overhead rate. The labor rate, benefits and indirect rate should be itemized in the format provided by the PSP to enable reviewers to better evaluate and ensure that proposed labor rates are comparable to state rates.

SUBS WORK REIMBURSEMENTS \$\$\$ FUNDING, ETC. NEEDS VERY CAREFUL REVIEW

Subcontracting - Proposals for work to be performed by subcontractors or other entities in excess of the 25% of the total project dollars the grantee is required to provide a justification for subcontracting services. If subcontractors are pre-selected and identified in the proposals as part of the project team, the grantee should provide a justification on how each subcontractor was selected. Grantee shall identify

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Budget Review

labor rates and indirect costs rates paid to each identified subcontractor to ensure that labor rates are comparable to State rates.

The Subcontracted work should be identified with a rate and hours and attributed to each task and deliverable for each year. A performance evaluation is also recommended for subcontractors that receive more than 50% of the grant funds. If the subcontractor has not been identified, a position description complete with education level, experience, and abilities be submitted and the rate and hour associated with that position will be attributed to a task, and deliverable. The grantee must also comply with the State competitive bidding process as stated in the PSP.

Task and Deliverables - Grantee must provide detailed information for all work 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.

3. Are project management expenses appropriately budgeted?

No.

If no, please explain

COMMENTS: 1. Only 2% of total project \$\$ is allocated to proj mgmt. 2. As allocated does not appear that principal applicant will have much involvement w/ project

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

No.

If no, please explain

COMMENTS: 1. Applicant merely references OH rate of 21% for current ctrs w/ CALFED. By this, it appears that applicant

Budget Review

assumes that the same rate will be ok. 2. Need to provide detailed info on what is covered by OH/IDC.

Budget Detail/Administrative Overhead Fees - Budget detail combines the labor rates with the direct overhead rate. The labor rate, benefits and indirect rate should be itemized in the format provided by the PSP to enable reviewers to better evaluate and ensure that proposed labor rates are comparable to state rates.

If proposal is funded, a detailed list of items included in the indirect cost rate should be provided by the grantee. Grantee must provide itemized and detailed information included and charged as part of Indirect Rates (IDC) charges.

Note: No overhead or indirect rate charges on the equipment purchases should be allowed as part of the budget that shall be funded as a result of this PSP.

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

No.

If no, please explain:

COMMENTS: 1. Unable to determine rates "rolled up" & includes incidental expenses (e.g., housing, utilities, etc.) 2. Several items were marked as TBD 3. Need to review budget carefully prior to award

Major Expenses - If the grant is awarded a detailed list of equipment purchases should be provided by the grantee so reviewers can better evaluate whether it is more cost effective for the state to purchase large dollar equipment items through the state procurement process. If the equipment list is available within the State inventory or stock, then purchase of some or all of the listed items may be provided, loaned or leased by the state to the grantee. In the event, that the equipment is purchased by the grantee, the grantee shall maintain an inventory of major equipment for auditing purposes and potential use for future projects. Grantee shall

Budget Review

follow State Contracting Manual (SCM) Section 7.61 to 7.62 rules pertinent to equipment purchase, lease, etc. Small and new Non-profit Organizations - A financial evaluation of small and Non-profit organizations is recommended to ensure cost share funds are available and the organization has the financial capability to do business with the State.

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:

COMMENTS: 1. Need more info 2. Multiple assumptions are made re cost shares

Cost Sharing - Grantee shall provide information regarding its financial capability and stability as well as it's 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.

Small and new Non-profit Organizations - A financial evaluation of small and Non-profit organizations is recommended to ensure cost share funds are available and the organization has the financial capability to do business with the State.

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?
Yes.

If no, please explain:

Budget Review

COMMENTS: 1. Applicant references current ctrs w/ CALFED 2. May assume that what is current is ok to use for future. 2004 PSP has major revisions to ctr T &Cs.

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:

COMMENTS: 1. All items of concern have already been previously mentioned

See Questions #1 and #6.

Other comments:

SUPPLEMENTAL COMMENT: 1. Proposal will need re-work to be a SOW/Agreement

Small & new Non-Profit organizations - a financial evaluation of small & non-profit orgs is recommended to ensure entity has the financial capacity to do business with the State and the cash flow to handle quarterly invoices in arrear.

END OF REVIEW

Environmental Compliance Review

1. Is compliance with California Environmental Quality Act (CEQA) required for this project?

No.

2. Is compliance with National Environmental Policy Act (NEPA) required for this project?

No.

3. Does this project qualify for an Exemption or Exclusion under CEQA and NEPA, respectively?

Does not apply.

Comments

The applicant will conduct biological monitoring which will include species collection. These species were not identified in the proposal. If any of these species collected are listed as Threatened or Endangered under CESA/ESA a Take Permit will be required which may trigger CEQA and/or NEPA compliance.

4. Did the applicant correctly identify if CEQA/NEPA compliance was required?

Yes.

Comments

See comment #3.

5. Did the applicant correctly identify the correct CEQA/NEPA document required for the project?

Does not apply.

Comments:

See comment #3.

6. Has the CEQA/NEPA document been completed?

Does not apply.

7. If the document has not been completed, did the applicant allot enough time to complete the document before the project start date?

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Environmental Compliance Review

Does not apply.

8. If the document has not been completed, did the applicant allot enough funds to complete it?

Does not apply.

Comments:

See comment #3.

9. Did the applicant adequately identify other legal or regulatory compliance issues (Incidental Take permits, Scientific Collecting permits, etc.) that may affect the project?

No.

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

A Scientific Collecting Permit per DFG Code Section 1002 will be required. If any of the species collected or potentially collected are listed as Threatened or Endangered a Take Permit will be required under CESA/ESA.

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?

Does not apply.

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?

No.

Comments:

I do not anticipate the above permits or possible documents that may be required to be too costly or time consuming.

Prior-Phase Funding Review

Project Title	Riparian Restoration Planning and Feasibility Study for the Riparian Sanctuary, Llano Seco Unit
CALFED Contract Management Agency	GCAP
Amount Funded	\$ 289,784
Date Awarded	2003/01/01
Project Number	ERP-02-P39

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?

N/A

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.

See "Other Comments" below.

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?

N/A

Other comments:

Feasibility studies and monitoring plan on current Agreement have been delayed due to coordinating reviews and comments through a large TAC and several partners and due to one

Prior-Phase Funding Review

subcontractor late with a deliverable. Grantee will determine in early May if an Amendment Request is needed to extend the Agreement term by a few months.