

**Evaluation of the conservation value of lands  
purchased with CALFED funds for wintering  
Sandhill Cranes**

**Michael L Casazza**

# Final Selection Panel Review

Recommendation: Fund

*Amount Sought:* \$490,909

*Fund This Amount:* \$490,909

Brief response to comments received:

The selection panel has recommended funding for this project, subject to the conditions listed above, for the following reasons:

(1) The project will provide evaluation of over \$46 million invested by CALFED to acquire and enhance properties in the San-Joaquin-Sacramento Delta region; of particular importance is \$30 million invested in 9,100 ac Staten Island for which wintering Sandhill Cranes are a primary focus. The Selection Panel noted that there has been considerable effort by CALFED to acquire properties of critical value for species of concern, but an outstanding need remains to evaluate the benefit of these acquisitions. This project will contribute significantly to that goal.

(2) The project will facilitate adaptive management, particularly at the Stone Lake Wildlife Refuge and Staten Island, where water control structures, including those funded by \$1 million of the 2003 grant to Ducks Unlimited, will allow fine tuning of water and farm management activities to benefit cranes and other wetland dependent species. Those structures, which are just being built now, can facilitate intensive management of both water and land cover, including Staten Island's cropping systems. The proposal includes steps to gather information about maximum water depth and habitat type, including crop types, at roost sites and will record habitat type in other areas used by radio-collared birds, which could be useful in fine tuning water and farm management at these sites.

## Final Selection Panel Review

(3) The project will support planning for Delta water facilities by providing information on cranes' use of key areas in the Delta (although additional information on the eastern delta is needed, as noted below). Planning for the North Delta Project's examination of flood control options involving Staten Island will benefit from better information about how cranes use the region, for example. The information can also support evaluation of potential conversions of lands used by cranes to urban development or more intensive agricultural use.

(4) The project will be of value in identifying the large scale connections of public and private lands - working landscapes - that will be needed to provide habitat for species of concern. The project has considerable potential to evaluate and provide guidance for wildlife-friendly farming initiatives throughout the San-Joaquin-Sacramento Delta region.

(5) The technical panel rated the proposal highly (one of the few scored as above average). The panel noted that restoration actions addressed by the proposal were clearly identified and that the products of the proposed research were likely to make a significant contribution. The technical panel suggested that the information provided by the project would be useful in future decisions to expand, or not, public holdings. The technical panel also noted that public interest is likely to be high, given that sandhill cranes are a large, highly visible and charismatic species.

The conditions of approval are recommended to address several points: (1) Prior monitoring. A recently-funded project to benefit cranes, Ducks Unlimited (DU)'s Staten Island Wildlife-Friendly Farming Demonstration, includes funds for 3 years of monitoring of cranes and other wildlife at the site. Two (2) years of pre-project monitoring are complete and a final year of post-project wildlife monitoring will conclude in spring 2006. The USGS's new monitoring needs to be carefully coordinated with this prior DU monitoring effort (which is not mentioned in the pending proposal.) The conditions require careful coordination with DU's previous

## Final Selection Panel Review

monitoring. This should include consideration of analytical and statistical methods, current status, links to the conceptual models and performance measures used in the monitoring efforts, accomplishments to date, information generated, findings, and, if previously-funded aspects of these studies are not complete, any outstanding regulatory or implementation issues, the funds remaining from prior grants to complete them, and the timeline for their completion.

(2) Adaptive management. The applicant's project needs to be carried out in closer cooperation with The Nature Conservancy (TNC), which owns Staten Island, and the managers of the Stone Lake Wildlife Refuge. They should be consulted to determine what specific information would most help them improve site management, so that the USGS's monitoring effort fully achieves its stated objective to "help define best management practices for cranes on public and private lands". The projects scope of work should include steps to effectively involve managers of these sites and, if they are interested, those of adjacent private lands, in evaluating and reporting monitoring results in ways that lead to shared understanding about cranes, the lands they use, and practices that benefit them. These should be in addition to the public involvement activities to share information at interpretive centers, regional bird festivals, and peer-reviewed professional publications that are already described in the proposal.

(3) Need for additional information. Additional information about cranes' use of areas in the eastern Delta is needed, particularly with respect to expected conversions of some lands used by cranes to wine grapes, and urban development at other sites. Planning for future Delta water facilities, such as the North Delta Project's examination of flood control options involving Staten Island, will also benefit from better information about how cranes use the region.

# Initial Selection Panel Review

Recommendation: Fund

*Amount Sought:* \$490,909

*Fund This Amount:* \$490,909

Brief explanation of rating:

This project proposes to evaluate how ERP investments in land acquisitions, easements and habitat enhancements in the San Joaquin-Sacramento Delta region contribute to the conservation and recovery of Greater Sandhill Cranes (*Grus canadensis tabida*; listed as threatened under CA endangered species and at-risk in CALFED MSCS). The project will accomplish these objectives by using radio-telemetry to track cranes, by weekly surveys at known and potential roost sites, and by aerial surveys conducted every 2 weeks. The proposed study area for field work will include the Delta, northern San Joaquin Valley and east side tributaries regions, focusing especially on three sites where ERP investments have been made. The data collected during the field portion will be incorporated into a predictive model of habitat use by cranes in the Delta Region to help guide management of these lands as well as provide input into Wildlife Friendly Agriculture programs that may benefit cranes.

The Selection Panel feels that there is merit in this project, in agreement with the Technical Panel (rated as "above average"), Regional Review (rated as "high") and External Reviews. The products of the proposed research would make a significant contribution by evaluating the impacts of previous ERP investments and other public holdings for Sandhill Cranes, and would be of use to land-managers and other decision makers. The project also has potential for a high-profile, professionally managed outreach effort, although this element of the project requires further development (reviewers suggested that the project team should consider working with an outreach specialist).

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## Initial Selection Panel Review

A number of concerns were raised and should be considered by the research team. These include: (1) the conceptual model on how cranes move about habitats and landscapes was vague and needs to be more specific, (2) various aspects of the sampling design and data collection should be revised or reconsidered (comparison of used and potential roosts, sampling strategies for roost sites, power analysis to determine required sample sizes, selection of habitat variables, estimators for home range) and (3) the predictive model, while an excellent goal, is inadequately described.

The Selection Panel felt that a strong value of this project was that it would consider the connectivity of public and private lands in creating working landscapes. However, this linkage was not described in the present proposal. The research team needs to identify the land ownership status on areas the birds might use, and to clarify how this research will evaluate both public and private land in the overall model. Consideration might be given to cost-sharing this proposal with other initiatives that support a working landscapes approach.

# Technical Panel Review

*Technical Review Panel's Overall Evaluation Rating:*

Above Average

## Explanation Of Summary Rating

The proposed work will provide useful information related to evaluating present and future conservation needs for the Greater Sandhill Crane. This information will guide the future acquisition of additional land as well as the types of land management and ownership that will be most beneficial to wintering populations of the crane.

## Goals And Justification

Monitoring of movement and habitat use of two subspecies of Sandhill Cranes is proposed to evaluate the adequacy of state land holdings for protection of these subspecies. The Greater Sandhill Crane is listed as Threatened by the state, and the Lesser Sandhill Crane is a Species of Conservation Concern. The restoration actions addressed by the proposed monitoring are clearly identified, as are the goals of the restoration actions. A general conceptual model of roost use by cranes is described with some detail; but, the conceptual model presented for how cranes move about habitats and the landscape is vague and would have been helped by a figure. Four hypotheses at two scales will lead to an understanding of what proportion of lands are "unavailable" to cranes given the current configuration of roosts and foraging areas and will guide planning for future acquisitions. Of particular note in the proposal is the plan to evaluate both public and private land as part of an overall model.

## Approach

Previous work by the authors in 2002-03 lays a foundation for the present proposal. The products of the proposed research appear likely to make a significant contribution to our knowledge base by evaluating the adequacy of the current CALFED and other public holdings for sandhill cranes. This information will be useful in future decisions to expand, or not, public holdings. The interest of the public in the results is likely to be high, since the cranes are charismatic taxa.

One external reviewer suggested that departure phenology should be examined as well as arrival phenology. There was concern that the comparison of used and potential roosts was not well designed. One external reviewer suggested alternative sampling strategies and a power analysis to determine sample size. Only a small number of habitat variables are to be recorded at each site, and the rationale for these particular variables is not presented. Estimators for home range size were also questioned, and alternative non-parametric measures suggested. One external reviewer suggested that satellite tracking would provide an economical alternative to radiotelemetry. There was a conspicuous absence of citations from other work on cranes suggesting that the likelihood of peer-reviewed publications from the proposed work was low. The questions raised in the proposal are not unique to the Central Valley, and a brief review of the current state of knowledge would have been useful.

## Feasibility And Likelihood Of Success

There are no serious issues with technical feasibility of the project. Proven methods are proposed, and the authors have extensive experience with those methods. The large scale of the project is required to properly evaluate habitat use by cranes. Two issues arise from lack of sufficient detail in the proposal. Objective 5, determining the foraging needs of wintering cranes, is never discussed. It is unclear whether this objective corresponds to the predictive model mentioned in Task 4. In any case, the predictive model, while an

## Technical Panel Review

excellent goal, is inadequately described. A substantial sum of money is directed towards this task, and a more thorough technical description should have been presented.

### Performance Measures

The proposal does not identify specific performance measures, although the proportion of unavailable habitat certainly could be used to evaluate the system as a whole. The lack of performance measures may arise from the focal scale of the project, which makes finding comparable reference sites difficult. Moreover, the restoration activities in this case seem to consist of buying property, which limits the kinds of performance evaluation possible. In any event, performance measures should have been discussed in the proposal. Data being collected will allow CalFed to determine 1) the importance of current CalFed acquired habitat to cranes in the Delta, 2) how CalFed might better evaluate critical habitat for the wintering sandhill cranes in the Central Valley for future purchases, and 3) potential habitat management measures for creating and/or enhancing crane habitat in the Central Valley.

### Products

The results will be of clear use to land-use managers and other decision makers. Data will be made available to the public on a website, which is an excellent idea. However, no data or metadata standards are discussed, and it is unclear whether all data will be accessible and when. The data will probably be sufficient to permit publication in a journal like the Journal of Wildlife Management. Other publications are possible since a Ph.D. dissertation is part of the project.

There is high potential for a high-profile, coordinated, and professionally managed outreach effort in association with this project. However, the outreach component requires further description. Specifically, it would be useful to have more information about materials to be provided to participants, the target of outreach, and the number of stakeholder to be reached over what period of time? A plan for evaluation of the

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proposed outreach activities should be included.

### Capabilities

Staff appear to be strong and experienced in all areas except outreach and extension. Consideration should be given to adding an outreach specialist to the team or input solicited from a professional outreach/public education/extension specialist. The research team has extensive field and applied experience in doing ecological research in the Central Valley. The Technical Review panel felt that the output of the team in terms of peer-reviewed publications was low.

### Budget

There were no significant concerns regarding budget.

### Regional Review

The Delta Review panel ranked the proposal as "High". Panelists agreed that the proposal will provide valuable data through monitoring of crane use on sites acquired with ERP funds for that purpose.

### Administrative Review

#### Environmental compliance

The applicant states that it has an MOU with CDFG but did not list the number of the permit. The applicant also states it has a Federal banding permit but it is not attached and no number is listed. If they indeed do have these permits, nothing else is needed.

#### Budget review

The budget review raised significant objections, but these were based in part on a mis-reading of the proposal. Rather than an indirect cost rate of 72%, the subcontractor rate is around 21%. The Technical Panel found little or no evidence of redundant indirect costs, although USGS charges a 3% pass

## Technical Panel Review

through rate for the subcontract. Other budget issues were not significant.

### **Additional Comments**

The regional review suggested that the project could compare the value of privately-owned lands under easement agreements versus that of lands that were acquired in fee (i.e., are easement programs sufficient to achieve benefits for cranes?).

# Delta Regional Review

*Delta Regional Panel's Overall Ranking:*

High

## Summary:

Panelists agree that although the proposal contains some aspect of research (what are the limiting factors for cranes' use of particular sites in the Delta?), the proposal will also provide valuable data through monitoring of crane use on sites acquired with ERP funds for that purpose.

### 1. Applicability To ERP Goals And Regional Priorities.

This proposal is applicable to the PSP's priorities in that it will monitor and evaluate previous CALFED ERP investments in land acquisitions for the Greater Sandhill Crane (Greater Sandhill Crane is identified in the MSCS as a "r" species). The project focuses primarily on the Cosumnes River watershed and east Delta sites. The project will build upon one year of work studying properties of crane roost sites and food preferences and will yield information on how to maximize crane benefit on properties acquired with public funds.

### 2. Links With Other Restoration Actions.

The project may include private lands in the analysis of benefits to cranes. There are potential ties to federal (NRCS) wildlife-friendly farming programs in the Delta (such as the Wetlands Preserve Program). This project would continue and expand upon previously-funded monitoring (one year) at Staten Island. It will provide guidance for the design of restoration actions for Greater Sandhill Cranes on properties acquired with public funds. Ties to other programs include: Environmental Water Account (more applicable to the Sacto Valley than to Delta & east side tribs) and the in-Delta storage (or Delta Wetlands) project (still under evaluation). There could be some benefit in extending the study into the

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## Delta Regional Review

Sacramento Valley, which is another important habitat area for Sandhill Cranes.

### 3. Local Circumstances.

There appear to be no circumstances that would make the project infeasible. Applicants may have some trouble obtaining permission from private landowners to evaluate their properties, but applicants state that collecting data on these properties is not critical to the success of the monitoring project. The applicant may need a take permit (2081) to capture and band/radio collar Greater Sandhill Cranes from the Department of Fish and Game in addition to, or as a condition of, their scientific collection permit.

### 4. Local Involvement.

The applicants plan regular publishing of annual reports and maintenance of a database where interested parties can keep apprised of the progress of the project. Info from the project would be shared with preserves and refuges in the area to assist with management decisions. Presentations to certain nonprofits and interest groups as well as information for bird festivals will also be available.

### 5. Local Value.

The project will be useful in evaluating and maximizing the benefits of CALFED investments to date for Greater sandhill crane habitat. Investigations would be useful at regional scale.

### 6. Other Comments:

Overall, this is a good proposal. The project could be useful in comparing the value of privately-owned lands under easement agreements versus that of lands that were acquired in fee (i.e., are easement programs sufficient to achieve benefits for cranes?).

# External Technical Review #1

## Goals And Justification

The proposal identifies habitat use of the sandhill crane species as the topic of interest. Of particular interest is the integration of publicly and privately-held lands in the winter movements of these mobile animals, and their Threatened population status. The organizing idea is largely to accumulate a time budget of cranes during the winter to assess the relative use of CALFED lands and private lands, and to determine the degree to which the habitat requirements of existing populations are met by current habitat availability. This objective is clearly enunciated in section A1 of the Project Description. The objectives appear to be well-justified by the gaps in knowledge identified by the authors.

## Approach

The design of the study is an extension of previous work by the authors in 2002-03, and the foundation provided by the previous work is valuable in motivating the proposed work. The products of the proposed do appear to be likely to make a significant contribution to our knowledge base. The major contribution will be the evaluation of the adequacy of the current CALFED and other public holdings for sandhill cranes. This information will be useful in future decisions to expand, or not, public holdings. The interest of the public in the results is likely to be high, since the cranes are charismatic taxa.

## Technical Feasibility

The project appears to be technically feasible, with apparently proven methods being used, and the authors have extensive experience with the methods. The large scale of the project is what is required to properly evaluate habitat use by cranes. I question the use of radiotelemetry to locate the free-living birds, to which over \$70,000 in two years is

## External Technical Review #1

definitely budgeted, and probably a significant part of the salary is required by the radiotelemetry. Satellite-tracking offers what appears to be a viable alternative, providing a proven method that would probably be cost-effective. The panel may wish to ask the authors to compare the two methods.

### **Performance Measures**

This reviewer did not detect mention of specific performance measures, perhaps because the project is oriented toward simply describing time budgets, rather than, for example, assessing differences in crane performance in different habitats. The monitoring and evaluation plan is explicit and detailed.

### **Products**

As described, the results will be of clear use to land-use managers as descriptions of activity foci of cranes. Data will be made available to the public on a website, which is an excellent idea. The data will probably be sufficient to permit publication in a journal like the Journal of Wildlife Management.

### **Capabilities**

The large group of collaborators appears well-equipped (possibly unnecessarily well-equipped) to carry out the proposed work. A variety of expertises is included in the mix, as well as personnel experienced with sandhill cranes in particular and the proposed methods in general.

### **Budget**

The number of personnel seems on the large side. One way to trim that is to convert the radio-tracking to satellite tracking.

# External Technical Review #2

## Goals And Justification

The proposal clearly identifies five objectives for documenting phenology, movements, and habitat use of Sandhill Cranes wintering in the Central Valley. Collection of data to meet these objectives will provide better background data for effective habitat purchase and management for the threatened Greater Sandhill Crane and Lesser Sandhill Cranes in California's Central Valley; however, specific restoration actions proposed are rather vague. A general conceptual model of roost use by cranes is described with some detail; but, the conceptual model presented for how cranes move about habitats and the landscape is vague and would have been helped by a figure.

It is not entirely clear what hypotheses are being proposed for testing. Under the Justification section, only three explicit hypotheses are presented: 1)Roost capacity is determined by the amount and types of suitable agricultural crops available to the cranes (alt. hyp. That roost sites are lacking) 2)Roosts separated by a distance of less than a crane's daily foraging radius will be used as part of a "habitat complex" 3)Lesser Sandhill Cranes will move among ecosystem units more frequently and move longer distances than Greater Sandhill Cranes

These are valid and interesting hypotheses but other hypotheses concerning other objectives would have been useful. For instance, one of the most useful and primary objectives is to determine wintering habitat foraging needs of cranes (see also Task 4) - no hypotheses are presented to test this. Some of this is presented as questions under the Problem, Goals, and Objectives section, but articulation of the hypotheses is not clear.

## Approach

A plus of this project is that a year of background data has

## External Technical Review #2

already been collected by this group of biologists. Their approach has been shaped by this experience. While they do not say how their approach has been modified by their previous experience, I think this is implicit in a project like this. This project should provide a solid backbone of general data on the wintering ecology of cranes in the Central Valley, data that are largely lacking and help land managers better manage their lands for cranes in the valley during the winter. These are important data to have since the Greater Sandhill Crane is a threatened species in the state. Overall, the project is well designed to meet most of the objectives listed below (but see Technical Feasibility comments):

1. Document timing of arrival, abundance, and subspecies composition at key roost sites located on Staten Island, Cosumnes Preserve and Stone Lakes NWR.
2. Characterize the physical properties of crane roost sites and correlate crane population size at a roost with physical characteristics of a roost (e.g., size).
3. Estimate Sandhill Crane abundance and characterize distribution in the Delta during fall and winter.
4. Characterize the daily movement of Lesser and Greater Sandhill Cranes between roosts and foraging fields and seasonal movements between use areas.
5. Determine foraging habitat needs of wintering cranes.

### Technical Feasibility

The one weakness in the documentation of the project has to do with objective 5 and Task 4 - the habitat use and modeling for the cranes. Not enough detail is given in the proposal to evaluate methods of how habitat use of cranes will be measured and modeled. The Task 4 description is woefully inadequate. This is in conflict with the budget where \$73,294 dollars have been set aside for habitat modeling. Will only statistical modeling be done? If use vs. availability models are being used, how will habitat availability be measured? If a landscape component is being added to the modeling how will this be done? Will there be a GIS component to the modeling (other than using it to calculate home range estimates and movement patterns)?

## Performance Measures

Data being collected will allow CalFed to determine 1) the importance of current CalFed acquired habitat to cranes in the Delta, 2) how CalFed might better evaluate critical habitat for the wintering sandhill cranes in the Central Valley for future purchases, and 3) potential habitat management measures for creating and/or enhancing crane habitat in the Central Valley.

## Products

This project provide usefule information to resource managers, other decision makers, and scientists involved in the conservation and management of wintering cranes in the Central Valley. The project will publish a technical report and perhaps other scientific publications. Scientific publications are likely since this project is funding a Ph.D. dissertation. The project describes how results and data will be available on a USGS based web page and/or available upon request.

## Capabilities

This is a competent team of biologists with extensive field and applied experience in doing ecological research in the Central Valley. Gary Ivey, the Ph.D. student, has studied cranes for many years throughout the west and his advisor, Dr. Bruce Dugger is a well respected ecologist with a solid and diverse publication record. Dr. Joe Fleskes has extensive radiotelemetry experience in the Central Valley. The lead investigator, Mike Casazza, also has extensive experience doing ecological research in the Central Valley.

This team is particularly well suited to conduct radiotelemetry studies of cranes in the Central Valley. USGS has been doing these types of studies there for many years. It is not easy to trap cranes but this team should be able to succeed, if anyone is to succeed. The team definitely has the ability to complete the field work. From the proposal, it is not clear who will do the habitat modeling and how that will be done. I am unable to evaluate capabilities there. Based on

## External Technical Review #2

the five selected publications listed, the scientific publication record of the team, especially the lead investigator, is not particularly strong.

### **Budget**

The budget is reasonable for the work being proposed and has the added benefit of supporting a Ph.D. project which is, in my opinion, a bonus.

### **Additional Comments**

None

# External Technical Review #3

## Goals And Justification

The proposal is well developed with respect to explicitly stating goals and objectives and proposing a clear conceptual model. The proposed research builds logically upon the work of Ivey and Herziger done in 2002/2003.

## Approach

The approach is straightforward, using well established and tested methods and observational procedures.

The proposal only states explicitly that arrival period will be determined for migrant Sandhill Cranes. In addition to obtaining information about the time period of arrival for Sandhill Cranes to the study areas, information also should be obtained on the departure period of cranes from the area in Spring. Doing so will allow determination of the extent of the period of use of the study areas by the cranes in addition to the areas used and the types of use.

It is not clear why a random sample of roosting areas is proposed for detailed study. Though the expected number of roosting areas is not stated, a characterization of all roosting and feeding areas should be considered, given that the number of variables that are to be sampled in the field for each area is relatively modest. If the number of expected roosting areas is large, a stratified random sample, where the strata could be land ownership (e.g. public or private agricultural) or type of land management, should be considered. In the case of either sampling design, a pre-sample of variables to be measured should be taken and its variance determined so that an estimated sample size required for statistical tests can be calculated, if such an approach is applicable to parts of this study. An approach for estimating sample size using a pre-sample can be found in the text book Biometry (Sokal and Rohlf, 1995, p. 263), and other introductory statistics texts.

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The proposal indicates that home ranges will be calculated using minimum convex polygon and kernel estimation procedures. At least one group of researchers (Girard et al., 2002, *Journal of Wildlife Management* 66(4): 1290-1300) has reported that large numbers of statistically independent observations of an animal's positions (30 to 100 locations seasonally, and more annually) are required for the minimum convex polygon approach and that kernel estimation procedures also can have significant biases at lower sample sizes. The researchers might want to consider alternative, nonparametric estimators for home range that have been reviewed and evaluated by other authors (e.g. Anderson, 1982, *Ecology* 63(1): 103-112).

### Technical Feasibility

I rate the technical feasibility of this proposal as high, given that the researchers propose to use methods of observation that are well established and fully tested. The scale of the project is consistent with its objectives.

### Performance Measures

See comments above related to Approach. More attention needs to be paid to sampling design and the choice of variables used to characterize both roosting and feeding locations.

### Products

The work described in this proposal is a "natural" for a relatively high-profile, coordinated, and professionally managed outreach effort. The outreach component needs to be described in greater detail. It is not clear what materials will be provided to participants and how the anticipated audience(s) are characterized (birdwatchers, farmers, public school teachers and students, or others?). How many individuals in what stakeholder groups are expected to be reached over what period of time? If cranes use privately owned agricultural lands, farmers could be a significant stakeholder group. Is an outreach component aimed specifically at farmers contemplated? Is involvement of USDA/Natural Resources Conservation Service a reasonable consideration?

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Will outreach elements be continued beyond the three-year period of the research? A method for assessing the effectiveness of the outreach component is not proposed. A plan for evaluation of the proposed outreach activities should be included.

Outreach expertise is not identified as an attribute for any of the staff to be associated with the project. If outreach expertise is not among the skills of the proposed staff, the researchers should consider adding someone to their team with professional expertise in outreach and extension.

## Capabilities

Staff appear to be strong and experienced in all areas except outreach and extension. See related comments above. Consideration should be given to adding an outreach specialist to the team or input solicited from a professional outreach/public education/extension specialist.

## Budget

The amount of cost-sharing from the partners, other than equipment provided by USGS/WERC, is not explicitly stated and it should be.

My greatest concern with this proposal is in the area of its budget. Why are costs of salaries and fringes for USGS/WERC Staff at GS-11, -12, and -13 levels, amounting to approximately 15.6% (\$76,445) of the total project costs over 3 years, included in the budget? Are these staff not permanent USGS/WERC employees?

From the USGS/WERC Mission Statement at <http://www.werc.usgs.gov/mission.html>, I found the following:

"The most valuable resource of the Center is its dedicated staff. Their integrity and professionalism are the foundation for the Center's success. They work in an environment that encourages teamwork, growth, and problem solving. Center staff are accessible and responsive to all persons, groups, or

### External Technical Review #3

organizations that request ecological information. Center scientists provide objective information on natural resources issues." "The Center was created and operates under the principle of decentralized streamlined government. The Center maintains a small headquarters on the campus of California State University at Sacramento. The structure of the Center is designed for fluid, high quality scientific response to priority resource issues throughout the Pacific Southwest. The Center's field stations, located in all major Pacific Southwest bioregions, form the core of its science program. Center stations were founded on the principle of client service, and the Center's research, inventory and monitoring, and information transfer agenda is shaped by client needs. Center scientists actively seek client input and participation at all phases of research projects."

Nowhere in the Center's mission statement does it say that clients will be charged fees for the services the Center can provide. A clear and explicit explanation of the rationale for charging the costs of USGS/WERC permanent staff salaries and fringes needs to be included in the budget justification

Likewise, a clear rationale for charging salary costs for a Professor at Oregon State University should be included. Typically, university professors engage in research as part of their jobs, unless the professor is working under the terms of a nine-month appointment. While it is customary to seek external funding for graduate student stipends, as is the case here, professorial salaries usually are covered by the university.

### **Additional Comments**

The work that is proposed will provide useful information related to evaluating present and future conservation needs for the Greater Sandhill Crane. Such information can be expected to guide the possibility of acquisition of additional land, along with guidance regarding the types of land management and ownership that will be most beneficial to wintering populations of the crane.

# Budget Review

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

**Yes.**

If no, please explain:

**Except the large amounts of Supplies & Equipment, no explanation.**

**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.**

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

**Yes.**

3. Are project management expenses appropriately budgeted?

**Yes.**

If no, please explain

**26 Hrs/mo**

**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.**

## Budget Review

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

High overhead costs USGS 45.7 %, high indirect 26.9%

For subcontractors 21% indirect, overhead 72% very high, and USGS is charging a 3% pass through rate.

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:

Overhead rate of 45.7% isn't good, 72% overhead rate for subs is just bad.

Costs associated with each task and deliverable should be evaluated based on what is considered to be reasonable costs for performing similar services.

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

## Budget Review

**Yes.**

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

**USGS \$100,00 use of equipment?**

**USFW - Unknown CDFG - Unknown BLM - Unknown**

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:

**No objection to std T's and C's.**

8. Are there other budget issues that warrant consideration?

**No.**

If yes, please explain:

**no**

# 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.**

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

**Yes.**

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

**Yes.**

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?

**Does not apply.**

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

**Does not apply.**

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.**

Comments:

**The applicant states that it has an MOU with CDFG but did not list the number of the permit. The applicant also states it has a Federal banding permit but it is not attached and no number is listed. If they indeed do have these permits,**

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**nothing else is needed.**

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?

**No.**

Comments:

**There are no permission letters attached, but they state they will be able to gain access to the properties.**

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.**