Near−field and Far−field Effects of Tidal Wetland Restoration in the Lower Napa River

John Y Takekawa

Final Selection Panel Review

Not Recommended

Amount Sought: $2,731,376

Fund This Amount: $**0**

Brief response to comments received:

Several comment letters received in response to the panel's initial recommendation were considered by the panel. Many simply recommended funding without addressing the the panel's concerns. Those letters with suggestions still did not address the concerns identified by the Technical and Selection panels

Coastal Conservancy

May 3, 2005

Dan Ray, Grants Officer
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall, 5th Floor
Sacramento, CA 95814
FAX: (916) 445-7297

Dear Mr. Ray:

The State Coastal Conservancy strongly encourages the California Bay-Delta Authority to recommend that our proposal entitled "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa" be categorized as "revise and reconsider" versus "do not fund", as initially recommended by the Selection Panel. In addition, if the budget is a consideration in the decision, we recommend reducing the budget versus not funding the entire $2.7 million request. The State Coastal Conservancy would then be able to work with USGS and the other proposal partners to revise to meet the external review comments and to decrease the budget, and the project can be reconsidered.

The Napa River Salt Marsh Restoration Project will be the largest tidal restoration conducted to date in San Francisco Bay, consisting of 3,000 acres of former salt ponds (Ponds 3, 4, and 5) that will be breached during 2005 and 2006 and opened to full tidal action. A significant amount of state funding has been committed towards the planning and implementation of the restoration project to date. The California Bay-Delta Authority has contributed approximately $4.5 million towards the planning, baseline monitoring, and restoration of Pond 3, 4, and 5. The Wildlife Conservation Board is providing approximately $12 million for construction, construction management, and construction related monitoring for Ponds 1, 1A, 2, 3, 4, and 5. The State Coastal Conservancy provided approximately $1.5 million to complete the Feasibility Study and EIR/EIS for the restoration of the Napa River Salt Marsh Project. Funding for this monitoring proposal would be well matched by other funders and would build upon the state funds that have already gone towards the project.

Monitoring of the results of the restoration work (including physical changes, vegetation rates, and fish and bird use) is essential to make decisions about future actions in the Napa Marsh and for other restoration or management work in San Francisco Bay, Suisun Marsh, and the Delta. Without the California Bay-Delta Authority's support of the monitoring proposal, monitoring will most likely be limited to simply meeting the requirements of permits, potentially missing an opportunity to understand the effects of large-scale restoration in the San Francisco-Bay Delta Estuary.

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The Napa River Salt Marsh Restoration Project is predicted to benefit a similar suite of fish as are in Suisun Marsh and the Delta, namely Steelhead Trout (the Napa River supports the Coastal ESU), Sacramento splittail, and Delta smelt. Monitoring the physical and biological changes associated with restoration of Ponds 3, 4, and 5 could contribute towards understanding the effects of tidal restoration and changing salinity regimes that could be applied to the Bay-Delta Authority's efforts in Suisun Marsh and the Delta. The Napa River shares many of the same attributes as the Delta, with a watershed that is a mix of open space, agriculture, and development, a significant area subject to tidal influence, and a similar suite of wildlife. The Napa River, however, is not dammed and does not have major withdrawals of water, providing an opportunity to understand the effects of large-scale tidal wetland habitat restoration on fish in the absence of large-scale hydrologic manipulation.

The "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa" proposal was rated "very high" by the Bay Regional review panel, who stated that "the study results of this proposal will provide valuable information to future restoration projects and successful large scale planning in the South Bay, San Pablo Bay and the Suisun Marsh." The Technical Panel's critical comments focused on the conceptual model, the hypotheses, consistency of methods, and performance measures. These can be addressed in a revised proposal, and do not reflect on the merits of the project, the capabilities of the applicants, or the need for monitoring of this restoration project. For example, the Technical Panel states that "a simple table showing how the BACI framework will be applied to the major sampling efforts would have helped to answer most of [our] questions." This table, as well as revisions to and scientific documentation for the conceptual model and hypotheses and inclusion of performance measures, can be produced if the project is categorized as "revise and reconsider." In addition, most of the external technical reviews were positive, with constructive criticism that can be addressed.

In summary, we encourage the California Bay-Delta Authority to recommend that the proposal entitled "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa" be categorized as "revise and reconsider" at either the original budget amount or at a reduced budget amount. You can contact Amy Hutzel at (510) 286-4180 if there are questions.

Sincerely,

Samuel Schuchat
Executive Officer

PAMELA A. MILLER
Clerk of the Board

COUNTY of NAPA

BOARD OF SUPERVISORS

1195 Third Street, Suite 310, Napa, CA 94559
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February 8, 2005

Mr. Dan Ray
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall Parkway, 5th Floor
Sacramento, California 95814

SUBJECT: Support of Monitoring Proposal by State Coastal Conservancy

Restoration of the Napa-Sonoma Salt Ponds and the Lower Napa River Ecosystem: Near-Field and Far-Field Effects of Tidal Wetland Restoration

Dear Mr. Ray:

The Napa County Board of Supervisors is supportive of the California State Coastal Conservancy's grant proposal to the Ecosystem Restoration Program for the monitoring of Tidal Wetland Restoration effects. The proposal is well aligned with the mission of the Watershed Information Center & Conservancy (WICC) of Napa County, which is to guide and support community efforts to maintain and improve the health of Napa County's watershed lands. The WICC Board, which serves as an advisory committee to the County Board of Supervisors, has recommended that the County support the proposed grant. The proposed work plan is an integral part of fostering watershed-based assessment efforts that will ultimately lead to improved land management practices and hopefully the de-listing of the Napa River as an impaired water body. The WICC, which is supported by the County's Conservation, Development and Planning Department, is capable of becoming a collaborating partner in the proposed work effort should funding be awarded for the grant proposal.

Napa County has continually shown its dedication in matters addressing watershed health and management. Our staff is committed to working closely with the State Coastal Conservancy in support of the restoration measures and monitoring associated the Napa-Sonoma Salt Pond effort. The grant application submitted by the State Coastal Conservancy for your consideration is complementary to the on-going and planned data compilation and assessment work already underway and funded by the County (e.g. - countywide environmental Baseline Data Report (BDR) $1.6 million). The BDR work is intended to support the County's General Plan Update, as well as supporting the CEQA process necessary for permit processing.

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The proposed monitoring program described in the Coastal Conservancy's grant application will enhance the overall understanding of the restoration process in the project area and the effect of a large-scale restoration project on other restoration projects it the lower Napa River basin. The grant application proposes continued monitoring "after" construction, and will include pre- and post-construction monitoring of selected sites downstream, adjacent, and upstream of the restoration area, thereby examining near-field and far-field effects on hydrology, fish and avian communities within the ecosystem. The proposal includes a baseline-monitoring phase that complements existing information and a comprehensive post-construction monitoring element of the entire area in 2007 and 2008.

CALFED has previously recognized the value of this project by generously providing $4.5 million for design, construction, and monitoring for the 2002 tidal restoration component of the project. The proposal submitted by the California State Coastal Conservancy further leverages these funds and previous monitoring efforts to gain a better understanding of the complexity and environmental benefits of tidal wetland restoration. For these reasons and others discussed above, Napa County is supportive of the proposed work plan and would request your favorable consideration of the Coastal Conservancy's proposal.

Sincerely,

Diane Dillon

Diane Dillon
Chair,
Napa County Board of Supervisors

COUNTY of NAPA

ROBERT J. PETERSON, P.E.
District Engineer

May 4, 2005

Dan Ray, Grants Officer
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall, 5th Floor
Sacramento, CA 95814

Dear Mr. Ray:

The Napa County Flood Control and Water Conservation District supports the efforts to restore the former commercial salt ponds on the lower Napa River and encourages the California Bay-Delta Authority to fund the State Coastal Conservancy's grant proposal: *Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa River*. The Napa River, which runs 55 miles from the Mayacamas Mountain Range to the San Pablo Bay and drains a 426 square mile watershed, supports a diversity of fish and wildlife. The Napa River is considered one of the most significant anadromous fish streams within San Francisco Bay, after the Delta.

There are a number of ongoing and proposed projects along the Napa River to restore wetland habitat. The Napa County Flood Control and Water Conservation District, with the U.S. Army Corps of Engineers, is implementing the award-winning Napa River Flood Management Plan, based on the "Living River" design. As part of this project, over 650 acres of tidal wetlands have been restored downstream of the City of Napa and upstream of the former salt ponds (the South Wetlands Opportunity Area). Several other wetland restoration projects in the lower Napa River are also being planned, including Cullinan Ranch, the Napa Plant Site on the east side of the River, the American Canyon wetlands project, and the Napa River Salt Marsh Restoration Project (the former Cargill salt ponds). The Napa River Salt Marsh will be the largest tidal restoration conducted to date in San Francisco Bay, consisting of 3,000 acres of former salt ponds (Ponds 3, 4, and 5) that will be breached during 2005 and 2006 and opened to full tidal action. Monitoring the results of this tidal wetlands restoration in the lower Napa River is essential to understand the effects of restoration on fish and wildlife, to make decisions about future restoration actions in the lower Napa River, and for other restoration or management work in San Francisco Bay, Suisun Marsh, and the Delta.

Tidal wetland restoration in the Napa River is predicted to benefit a similar suite of fish as are in Suisun Marsh and the Delta, namely Steelhead Trout, Sacramento splittail, and Delta smelt. In fact, monitoring of the South Wetlands Opportunity Area between 2001 and 2004 revealed an abundance of Sacramento

splittail, as well as Pacific herring and staghorn sculpin, and the presence of steelhead trout, Chinook salmon, and Delta smelt. The State Coastal Conservancy proposes to work with many of the same researchers to conduct the fish monitoring as part of their study of restoration of Ponds 3, 4, and 5.

A number of fish species in the Delta appear to be experiencing rapid population declines for reasons that are not well understood. The proposed project offers an opportunity to examine some of the factors in this decline by monitoring the benefit to the fish from large-scale tidal restoration efforts on the lower Napa River. The Napa River shares many of the same attributes as the Delta but on a smaller scale, providing an opportunity to understand the effects of large-scale tidal wetland habitat restoration on fish in the absence of significant hydrologic manipulation.

Along with monitoring fish presence and abundance, the State Coastal Conservancy will also monitor physical evolution of the tidal habitat, hydrologic effects, and the effects of the restoration on other wildlife, including migratory birds and endangered species. The team, which includes USGS, Jones and Stokes, Stillwater, Napa County Resource Conservation District, U.C. Davis, and Philip Williams and Associates, is well qualified and has significant experience conducting monitoring work in the Napa River.

In summary, we encourage the California Bay-Delta Authority to fund the proposal *Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa River.*

Sincerely,

Jill Techel

Jill Techel
Chairperson
Board of Directors

JT:gm

cc: Board of Directors
Senator Barbara Boxer

SONOMA COUNTY WATER AGENCY

FILE:WC/45-0-1 NAPA SALT MARSH RESTORATION

May 4, 2005

Dan Ray, Grants Officer
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall, 5th Floor
Sacramento, CA 95814

RE: NEAR-FIELD AND FAR-FIELD EFFECTS OF TIDAL WETLAND RESTORATION IN THE LOWER NAPA RIVER

Dear Mr. Ray:

The Sonoma County Water Agency has played a significant role in the Napa River Salt Marsh Restoration Project and is very supportive of the effort to understand and learn from the outcomes of this important restoration project. We strongly encourage the California Bay-Delta Authority to recommend that the State Coastal Conservancy's grant proposal entitled "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa River" be funded.

The first phase of the Napa River Salt Marsh Restoration Project under construction this year by the California Department of Fish and Game includes tidal restoration of 3,000 acres of former salt ponds (Ponds 3, 4, and 5). Monitoring the physical and biological results of the restoration will help the involved agencies make better decisions about future actions in the Napa Marsh and will provide insights for other restoration projects throughout the Bay and Delta.

As you know, several fish species in the Delta appear to be experiencing rapid population declines for reasons that are not well understood. The proposed project offers an opportunity to examine some of the factors in this decline by monitoring the benefit to the fish from the tidal restoration effort. The monitoring work may explain some of the reasons for the decline in the Delta which may contribute to the recovery of these at-risk fish.

We encourage the California Bay-Delta Authority to fund the State Coastal Conservancy's grant proposal, "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa River".

Sincerely,

Randy Poole
General Manger/Chief Engineer

rs3/u/cl/rw/pubinf/Anderson/CALFED support letter SCWA -50305

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DUCKS UNLIMITED

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May 3, 2005

Dan Ray, Grants Officer
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall, 5th Floor
Sacramento, CA 95814
FAX: (916) 445-7297

RE: Monitoring Proposal Titled *Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa*

Dear Mr. Ray:

Ducks Unlimited, Inc. understands the proposal entitled "*Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa*" was not recommended for funding through the California Bay-Delta Authority. Ducks Unlimited would like to encourage the California Bay-Delta Authority to reconsider the decision, and fund this proposal in some capacity. The monitoring activities listed in this proposal are an important aspect of the Napa River Salt Marsh Restoration Project, and the data to be collected could assist with evaluating and making management decisions on this, as well as other current and future projects throughout the San Francisco Bay-Delta system.

The Napa River Salt Marsh Restoration Project, consisting of 6,000 acres of former salt ponds, will be the largest tidal marsh restoration conducted in San Francisco Bay to date. The proposed restoration activities, which include Ponds 1, 1A, 2, 3, 4, and 5, have received significant amounts of funding for planning through the California Bay-Delta Authority and the State Coastal Conservancy. The Wildlife Conservation Board recently awarded a grant to Ducks Unlimited for project implementation and construction management. Without the California Bay-Delta Authority's support of the monitoring, project permitting may be delayed thus impacting the construction activities scheduled for this summer.

Monitoring the physical and biological changes on a watershed scale during and after construction of a single restoration project is an unmatched opportunity. Ducks Unlimited supports monitoring for this project, and requests the California Bay-Delta Authority to recommend that the proposal be categorized as "revise and reconsider."

Sincerely,

Mark Biddlecomb
Director of Conservation Programs

cc: Ryan Broddrick, Al Wright, Patrick Wright

May 5, 2005

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Dan Ray, Grants Officer
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall, 5th Floor
Sacramento, CA 95814 FAX: (916) 445-7297

SUBJECT: Endorsement of Monitoring Proposal
Restoration of the Napa-Sonoma Salt Ponds and the Lower Napa River Ecosystem: Near-field and Far-field Effects of Tidal Wetland Restoration

Dear Mr. Ray:

I am writing on behalf of the San Francisco Bay Joint Venture to encourage the California Bay-Delta Authority to recommend that the proposal entitled "Near-field and Far-field Effects of Tidal Wetland Restoration in the Lower Napa" be categorized as "revise and reconsider" versus "do not fund", as initially recommended by the Selection Panel. If the cost of the project was the major consideration in the decision to not recommend the project for funding, we suggest providing the State Coastal Conservancy with the opportunity to revise the project and reduce the budget versus not funding the entire $2.7 million request so that the project can be reconsidered.

The San Francisco Bay Joint Venture is a partnership of non-governmental organizations, utilities, landowners, and non-voting agencies working to acquire, restore, and enhance 200,000 acres of wetlands in San Francisco Bay. The San Francisco Bay Joint Venture is one of the twelve wetland habitat joint ventures operating under the certification of the North American Waterfowl Management Plan, a Congressional agreement between the United States, Canada, and Mexico. In addition to the securing and restoring a targeted number of acres for each habitat type as specified in "*Restoring the Estuary, the Implementation Strategy of the San Francisco Bay Joint Venture*", joint ventures are now being requested by Congress and the Administration to monitor and document success of projects toward habitat restoration and ecosystem function.

A comprehensive monitoring program centered on the Napa Sonoma Marshes will not only provide information to CALFED, it will also be beneficial to demonstrating how the restoration of Napa Sonoma Marshes will provide functioning wetland habitats that also meet Joint Venture goals. Most importantly, the proposed monitoring program will enhance the overall understanding of the restoration process in the project area, and the effect of this large-scale restoration project on other restoration projects and the Napa River in the vicinity of the project area.

We urge CALFED to consider changing the recommendation to "revise and consider".

Sincerely,

Ellie Cohen
Chair

Friends of the Napa River

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November 8, 2004

Mr. Dan Ray
California Bay-Delta Authority
Ecosystem Restoration Program
650 Capitol Mall Parkway, 5th Floor
Sacramento, California 95814

SUBJECT: Endorsement of Monitoring Proposal
Restoration of the Napa-Sonoma Salt Ponds and the Lower Napa River Ecosystem: Near-field and Far-field Effects of Tidal Wetland Restoration

Dear Mr. Ray:

Friends of the Napa River (FONR) is dedicated to the restoration, protection and celebration of the Napa River and its watershed. A co-sponsor of the Coalition for a Flood Management Plan, Friends of the Napa River continues to play a critical role in shaping this project to restore the Napa River for the benefit of wildlife and aesthetic enjoyment of the communities in the Napa River Valley.

FONR strongly supports the grant application entitled *Restoration of the Napa-Sonoma Salt Ponds and the Lower Napa River Ecosystem: Near-field and Far-field Effects of Tidal Wetland Restoration* being submitted by the California State Coastal Conservancy. We encourage CALFED to consider funding the proposed effort. The monitoring effort centers on the Napa Salt Marsh Restoration project, an approximately 9,500-acre area that includes tidal marsh and managed pond restoration. Design of the tidal marsh restoration and a portion of the managed pond restoration are nearing completion. Construction is expected to begin in mid-2005 and be completed in 2006. Adaptive Management is an integral component of the project, and monitoring and adaptive management results will determine whether two additional ponds are restored to tidal marsh 10 to 15 years after the start of construction.

The proposed monitoring program described in the Conservancy's grant application (submitted in response to the Ecosystem Restoration Program Proposal Solicitation) will enhance the overall understanding of the restoration process in the project area, and the effect of this large-scale restoration project on other restoration projects and the Napa River in the vicinity of the project area. The grant application proposes to continue monitoring "after" construction, and will include pre- and post-construction monitoring of selected sites downstream, adjacent, and upstream of the restoration to examine near-field and far-field effects on hydrology and fish and avian communities in the ecosystem. The proposal consists of a baseline-monitoring phase in the project vicinity to complement the existing baseline monitoring in the project area, and comprehensive post-construction monitoring of the entire area in 2007 and 2008.

CALFED recognized the value of this project by providing a $4.5 million grant for design, construction, and monitoring of the tidal restoration component of the project in 2002. As part of the existing grant, baseline monitoring of the entire pond complex is being conducted by USGS under contract to the Conservancy. Baseline monitoring began in November 2003, and built on previous monitoring conducted by USGS and others in the same area.

The proposed monitoring program will build on and integrate monitoring efforts that have occurred at a number of nearby projects (including the White Slough, South Wetland Opportunity Area, Cullinan Ranch, Guadalcanal, and City of American Canyon wetlands restoration projects and the Napa River Flood Control Project), as well as related CALFED initiatives, such as the Integrated Regional Wetlands Monitoring Program (IRWM). The proposed monitoring effort will provide valuable baseline information for upcoming restoration projects, including the Napa Crystallizer Ponds (Phase I construction is scheduled to begin in Spring 2007), and the Cullinan Ranch project.

Other information:

The U.S. Army Corps of Engineers (Corps), California State Coastal Conservancy (Conservancy), and California Department of Fish and Game (DFG) began the planning process for the Napa Salt Marsh Restoration Project in 1997. The Federal feasibility study phase is expected to conclude with the completion of a Chief's Report in late November 2004. This nearly 9,500-acre area was purchased by the State of California from Cargill, Inc. in 1994, and is managed by DFG as the Napa River Unit of the Napa-Sonoma Marshes State Wildlife Area.

The Corps, Conservancy, and DFG have all contributed staff time and funding to the project, and the EIS, EIR, and Corps Feasibility Report have been completed. The project will consist of both tidal marsh restoration (in Ponds 3, 4, and 5), and managed pond restoration (in the remaining ponds). An unplanned breach to Pond 3 in August 2002 is demonstrating the ability of the system to respond to the reintroduction of tidal flow. Historic slough channels are starting to reestablish, and initial marsh vegetation colonization has been observed in some of the higher elevation portions of this pond.

The Corps, Conservancy, and DFG have diligently involved a wide range of stakeholders, including public agencies, environmental organizations, researchers, and the interested public. The project has widespread support among regulatory and trustee agencies. In 2003, the U.S. Fish and Wildlife Service issued a Biological Opinion (1-1-03-F-0044) which concluded that the project was consistent with special-status species recovery objectives, was not likely to jeopardize the continued existence of special status species found within the area, and would not destroy or adversely modify any critical habitat. The opinion included an Incidental Take Statement for the California Clapper Rail, salt marsh harvest mouse, western snowy plover (*Charadrius alexandrinus nivosus*), delta smelt (*Hypomesus transpacificus*) and Sacramento splittail (*Pogonichthys macrolepidotus).*

The NOAA-Fisheries issued a Letter of Concurrence (LOC; 151422SWR02SR6288: MEM) for the project on June 30, 2003 concluding that the project was not likely to adversely affect endangered and threatened salmonid species or designated critical habitat, and that Essential Fish Habitat Conservation Recommendations were not necessary.

In conclusion, let me add that FONR is very much interested in supporting these efforts through our member volunteer programs.

Bernhard Krevet
President, Friends of the Napa River

Initial Selection Panel Review

Not Recommended

Amount Sought: **$**2,731,376

Fund This Amount: $**0**

Brief explanation of rating:

This proposal is not recommended for funding because of uncertainties about the quality of the approach and potential results noted by the Technical Panel. The Technical Panel rated the proposal inadequate and noted several major technical shortcomings as well as concerns over the lack of detail in the budget. Shortcomings with this proposal include the conceptual model lacking documentation, many of the several sets of hypotheses not being testable, inconsistent methods, unclear linkage to the ongoing sampling effort, the lack of performance measures, and the vague evaluation plan which makes it difficult to conclude that the monitoring data will be useful in evaluating the restoration project's on- or off-site effects.

Technical Panel Review

Technical Review Panel's Overall Evaluation Rating:
Inadequate

Explanation Of Summary Rating

The proposal needs to place the hypotheses in the context of the conceptual model and document/rationalize the sampling strategy and design. A careful description of tasks covered under current funding and those proposed for new funding was needed. Sampling methods need to be identical at all sites. No consideration was given to sampling unrestored systems. Data management and dissemination should be addressed. Cost share partners should be better detailed/identified.

The technical panel recognized the need to establish careful baseline data, but was not convinced that the post restoration monitoring would be likely to show signficiant responses in the short time frame. They could not determine whether baseline data (e.g., fish sampling) will be completed under current funding. The panel would like to see immediate coordination with other sampling partners to coordinate methods and set up the near−field and far−field effects tests for future research.

Goals And Justification

Tidal wetland restoration in abandoned salt works of the Lower Napa River has begun (Pond 3) and will be expanded to two (?) other ponds in 2007. This monitoring project plans to extend current monitoring on site for two further years and expand monitoring to include areas up and down stream of the project site to determine larger scale effects of the tidal restoration. The monitoring goals are clear and support the goals of the restoration and those of the ERP program of CAL FED.

The conceptual models put forward include an expectation that landscape level (Napa Estuary−wide) effects will be detectable as well as the on−site effects. These effects include physical changes in salinity and sediment transport and biological changes in habitat use by fish and birds. Aside from the final paragraph, the description of the conceptual model is without scientific documentation despite the many studies already completed for this site and area (listed in tables A.1.2−1 and A.3−1 in Appendices).

The seven sets of hypotheses address the components of the conceptual model. As more than one reviewer has pointed out, however, several of the hypotheses are untestable and several others are trivial. If the authors had used the literature to document the conceptual model and made clear the timing of the responses relative to the monitoring proposed, the external reviewers could determine whether even the testable, non−trivial hypotheses were justified.

Approach

The approach appears well designed to meet the project's objectives, but there also appear to be some flaws. Specifically, the project will coordinate several teams of researchers and consultants that will monitor the same things in different marshes. Some methods will be identical, but others will not (fish and birds). If these methods are not exactly equivalent, how will the data be usable in the BACI framework? The panel was unsure whether the techniques proposed for bathymetric mapping would have great enough resolution to detect changes over the short time interval of the project.

The monitoring approach extends (so likely builds on) previous monitoring, but we are not told how previous results have helped to make the proposed effort more efficient. Many reviewers were hopeful that the work will make a significant contribution to knowledge of salt works restoration as well as broader scale improvements in a small estuary, but others were not optimistic.

Feasibility And Likelihood Of Success

The project is well documented in many areas, but has weak or no documentation in others. Specifically, reviewers had problems with the conceptual model being 'non science', the hypotheses being weak or non−testable, and serious flaws in the description of the sampling strategy. The proposal failed to address several important questions. How does the sampling on site 'dovetail' with the current sampling effort? Does the current effort have off−site reference marshes that will be used in the wider effort? Are the five off−site sample locations being monitored by others funded under other restoration project funding? If Pool #3 is already breached in several locations, how will this fit into the BACI approach? What pools will be breached and when? How much area do these pools represent? A simple table showing how the BACI framework will be applied to the major sampling efforts would have helped to answer most of these questions.

The methods proposed are standard approaches to assessment of physical and biological variables, but the feasibility of success for this project in terms of the landscape questions and usefulness of the information for larger−scale assessments of the Bay restoration requires that the methods are part of a standardized set of assessment methods. It was clear that this was not the case. Many of the assessments would need to be more exhaustive (e.g., algae, invertebrates) to address the hypotheses they are to test.

The regional panel reviewed the proposal positively, but had timeline concerns for post restoration monitoring. They felt that pre−restoration monitoring should be supported to establish a strong dataset of baseline conditions at control and impacts sites (BCI parts of BACI), but questioned whether, from the information provided to them, restoration would be accomplished to provide quality post−restoration information. The technical panel agreed with these criticisms and saw the need for strong baseline monitoring and coordination of similar fish sampling protocols with cooperating agencies, but not a large−scale monitoring effort to determine post−restoration responses until several years have passed. On

this basis (as well as shortcomings in the science), we disagreed with the Bay Regional Review ranking (see below).

The environmental compliance review found no evidence of permit requests (less approvals) on file and believed there were serious deficiencies with regard to environmental compliance.

Performance Measures

No performance measures were proposed. The broad scope of the project led most reviewers to forgive this deficiency and most felt that the data would be appropriate and of sufficient quality to support evaluation of the restoration and associated hypotheses. Another indicated, "This was one of the weakest aspects of this proposal and must be addressed, presumably with extant data." Furthermore, the evaluation plan is not explicit (see paragraph #1 under Feasibility). Thus, reviewers cannot determine whether the monitoring will provide the data to effectively evaluate the restoration project's on−site and off−site effects.

Products

Data management appears to be a strong point in this proposal, and reviewers had confidence that the information generated by the project would provide at least a good assessment of the on−site effects from the project. The project team is highly diverse and will make the data available and the results will be disseminated at least locally. One reviewer was not satisfied from the information presented in the proposal that the information would become part of the peer−reviewed literature. Usability of the data, again depends upon whether the project will adhere to methods and protocols that are used regionally. The technical panel believed the the actual products will not live up to expectations that are based on the conceptual model and hypotheses.

Capabilities

The project team appears diverse and highly qualified to conduct the project.

Budget

The budget is large, but seems appropriate for work proposed. One third of the budget is used to examine fish (about $1,000,000), but the sampling methods are not as explicit or as equivalent as desired.

Regional Review

The Bay Regional Review panel was supportive of the proposal and ranked it as "very high". The panel liked the two tier nature of the assessment of physical changes and biological responses on and off site to evaluate ERP goals. The local involvement and web−based dissemination of results were appreciated. The panel, as indicated earlier, had issues with the timing of the construction and the assessment, but saw the need for pre−restoration monitoring to proceed. They questioned how Pond #3 would fit into the overall design, since the tides have been partially restored already. The panel suggested other sediment variables and sources of data that might be useful for the project (IEP).

Administrative Review

The environmental compliance review indicated problems with the proposal in that CEQA/NEPA compliance was required for the project yet was incorrectly identified. It is unclear from the proposal which documents are required specifically for this phase and which can be used from Phase I to cover the proposed activities. If further CEQA/NEPA documents are required, there was concern that no funds were appropriated for the preparation of these documents.

The prior performance review included the earlier phase of this project and two exotic Spartina eradication projects. The reviewer is satisfied with the applicant’s performance to

date. Although the applicant is on time with the project, it ends in November, 2006 and evaluation of their performance cannot be included here.

The budget review indicated several issues witht he budget, but none that were serious problems. The budget will need to be reworked to show details and explain high overhead rates.

Additional Comments

Bay Regional Review

Bay Regional Panel's Overall Ranking:
Very High

Summary:

The committee felt the proposal was well presented and addresses many uncertainties and benefits of tidal wetland restoration. The study results of this proposal will provide valuable information to future restoration projects and successful large scale planning in the South Bay, San Pablo Bay and the Suisun Marsh.

1. Applicability To ERP Goals And Regional Priorities.

This proposal represents priorities –Monitoring and evaluation of multiple restoration actions, groups of restoration actions, that were previously funded through the ERP Program. This proposal is consistent. The 3,000 acre Napa Salt Marsh Restoration Project, and 5 other ERP funded projects are located within this region to restore over 1,150 acres of tidal wetlands and conduct a Napa River Watershed study. This proposal monitors and evaluates restoration outcomes in a high priority region. San Pablo Bay, and the Napa River are high priorities with the greatest ERP investment. This proposal addresses existing tidally restored sites, proposed restoration sites (pre and post project monitoring), and near and far-field effects on physical processes and biological resources. The proposal will provide information on species response to large scale tidal restoration projects. Five big R species and 2 small R species, including critical habitats, will be addressed by this proposal. Additionally, this proposal will include monitoring of physical processes, which may influence species distribution and evaluate and monitor the primary productivity, vegetation colonization, macro inverts, fishes, and birds. The proposal will use the BACI (before-after, control-impact) sampling framework to determine changes in the tidally restored salt ponds. ·The project will

assess and compare restoration actions. This proposal will not only evaluate the effects of a individual tidal restoration project (ERP –02–P04–D), but it will also consider estuary level effects and links between habitat restoration, changes in existing environmental conditions (water quality, hydrology, and habitat evolution), biological responses to these restoration project's changing environmental conditions.

2. Links With Other Restoration Actions.

We believe this proposal is quite unique, for it addresses multiple aspects of the scientific uncertainty of tidal restoration and resulting physical modification of existing habitats. This proposal has two approaches: 1) conduct pre– and post– physical and biological monitoring of the tidal restoration site, 2) include hydrology monitoring sites downstream, adjacent, and upstream of the project to examine near–field and far–field effects on the entire Napa River Estuary. Tidal wetland habitats are critical for the recovery of numerous listed and at–risk species. This proposal includes assessment of tidal wetland habitat evolution, biological responses to the tidal restoration project, as well as an assessment of the Napa River Estuary hydrology and biological response. The results of this project could have far reaching benefits with other regional planning processes and restoration strategies such as, the South Bay and the Suisun Marsh which have ERP goals for increasing tidal wetland acreage. The geographic location of this proposal, the scope and magnitude of this project will contribute to understanding of biological and physical relationships of large scale tidal restoration. The results of this proposal will increase the scientific knowledge and assist in project planning for successful restoration projects in the Bay.

3. Local Circumstances.

This project seems to be very feasible, building off existing monitoring programs and a wealth of regional expertise. The

nine partners in this proposal include State and federal resource agencies, local government, private consulting firms, and U.C. Davis. This interdisciplinary partnership appears to bring the resources and expertise to the grant proposal to achieve the objectives identified in the proposal. The project site is an ERP priority area and is appropriate in scope. It is unclear in this proposal if funding for the restoration proposal has been obtained. It is clear that acquisition is complete, although it is unclear if the timeline for permitting and project construction to restore tidal action to Pond 4 and Pond 5 are realistic. Pre−project monitoring could proceed currently, yet the full implementation of the proposal will be dependent on permitting and completion of project construction. No access issues are evident, all activities are on public lands with local support letters provided.

4. Local Involvement.

It appears that the applicants have included adequate local involvement including nonprofit organizations and agencies. The properties involved are publicly owned and access is currently granted to all proposed monitoring sites. The proposal identifies a method for data storage and dissemination. Three project partners or collaborators have been identified to provide online web− hosting or web sites to post monitoring reports. Reports will include peer−reviewed journal articles, semi−annual progress reports, presentations, and Web center outreach. It appears that this proposal will create a local / public partnership which will endure beyond the term of the grant. Public outreach and presentations should be increased to the local communities.

5. Local Value.

SEE NUMBER 2 ABOVE

6. Other Comments:

The Panel Requested Clarification On The Status Of Construction Funding, Permits, And Environmental Documentation Preparation. It Was Determined That The Funding And Permit Completion Is Expected In Feb. 2005. The Timeline For The Completion Of Pre−Project Monitoring Is Obtainable, Although The Post−Project Monitoring Will Be Directly Dependent On The Completion Of Project Construction. How Will Pond Three Integrate Into The Monitoring Design, Which Currently Has Two Levee Breaches And Additional Breaches During Construction? This Pond Is At An Interim State Between Full Tidal And Diked Salt Pond. Construction Will Increase The Number And Size Of Breaches And Return Full Tidal Action Upon Project Completion. Water Quality Monitoring Could Include Other Parameters, Such As: Primary Carbon Production, Contaminants, And Methyl Mercury. The IEP Fisheries Monitoring Program Should Be Considered As A Source Of Additional Fisheries Monitoring Data.

External Technical Review #1

Goals And Justification

The proposal identifies a previously restored site and a set of monitoring goals. The proposed work will monitor the "success" of a previously conducted restoration effort in the Napa Salt Marsh. There are two points worth considering: 1) the entity that oversaw the actual restoration action is the same entity that will now evaluate the success of the same restoration. This appears to be a conflict of interest; how can one group perform the work and then objectively evaluate its own success. This potential conflict of interest may have been addressed through the hiring of different subcontractors but it is not made clear that this is the case. 2) no justification is given for why the sets of proposed physical measurements will be made, nor is sampling frequency or requisite accuracy stated.

The proposal does not present a clear conceptual model that adequately explains the underlying basis for restoration actions. The proposal contains a section called "conceptual model" but it does not adequately describe the effort. Part of the problem rests with the fact that this section has a paucity of cited references. This weakens the arguments, inferences or statements about how the system functions. Hence, the conceptual model presented appears to be a mish−mash of unsupported statements. For example, why is this a 3−year project? At what rate will the system respond to the perturbation? There appears to be adequate information to address this issue but none of it is used here to make a convincing case for duration (this is just one example). There is no science in this section.

The proposal lists a number of hypotheses and some are testable and some are not. For example, 1a., if the channels are filled with sediment how will they be detected apriori, a requirement needed to address this hypothesis. On the other hand, the restoration has already occurred so either the new channels now occupy the old channel segments or they do not. How will the position and geometry of previous channel

segments be quantified? This is not clearly articulated. Some hypotheses appear trivial. For example, when will hypothesis 2a never be true? The same is true for hypothesis 3, trivial, and so on…..

All proposal hypotheses are not justified relative to the existing state of knowledge, see above.

Approach

The approach is adequate. As stated on page 3 the objectives are to monitor, only, and therefore, the design is adequate. However, the monitoring should be performed in the context of previous work in Bay marshlands. In particular, the study relies on the concept of dynamic equilibrium (page 5), but the authors illustrate some confusion related to the concept. It is postulated that mudflat and marshlands are in dynamic equilibrium (with present day forcings, implied). In the next sentence the authors state that large fetch waves are likely to hinder the deposition of sediment. If the authors believe the landscape is in dynamic equilibrium wouldn't it already be in equilibrium with large fetch waves, a recurrent forcing in the system. The concept of dynamic equilibrium most likely does not apply as expressed here (page 5).

The project does not build on previous monitoring efforts. This project does not build on previous monitoring efforts, and this appears to be a major weakness. Although the authors include a table listing highly relevant previous work they do not explain how those data will be used to guide or enhance this study, nor do they use those data to formulate predictions about how this current study site will differ in space and time from other previous monitoring efforts. Given the substantial budget for this work I would have expected the authors to at least perform some rudimentary analyses on data from nearby sites and to use those data and analyses to discuss some expected outcomes that will result from the proposed effort. Failing that I do not see any useful lessons learned.

The project adds to the plethora of data already available

from previous CALFED projects. Given that so few citations are included in the conceptualization of the problem (conceptual model) and that there is no presentation of data from other monitoring efforts I do not see how this project can make a significant contribution to our knowledge base. Instead, the work is just a reiteration of the same type of monitoring efforts that have been going on for years. A very interesting and competitive proposal should include some modeling component (e.g. network extension).

Technical Feasibility

This monitoring project seems to be fully documented and technically feasible. The various aspects of the project are documented although the narrative does not elucidate why certain procedures are undertaken. For example, on the CTD deployment (page 14), why is a 90 day observation period chosen? How will 90 days worth of data be superior to 30 days or 120 days. What questions will be addressed with this deployment?

The scale of the project seems appropriate. Explanations for the planned spatial or temporal scales of observation were not included in the narrative (this could have been addressed with results from previous studies. The scale of the monitoring project appears to be consistent with the overall goal, assess the effects of a change in the tidal prism on landscape structure but no substantive details are provided.

Performance Measures

The data collected may permit the evaluation of pertinent restoration actions. The planned data acquisitions will shed light on landscape response to the restoration measures. What is not clear, however, is how previous work and data will be used to guide and streamline this planned evaluation.

There are specific measures proposed for evaluating the restoration action but simply consist of a few time series of many different measurements. There is no explanation of how one would know when the landscape becomes stable.

The rationale for performance measures is not clearly demonstrated. This is one of the weakest aspects of this proposal and must be addressed, presumably with extant data.

The data and analyses are likely to allow for evaluation of the restoration action as it affects the marsh landscape. However, the monitoring and evaluation plan do not include explicit details needed to assess performance.

Products

The main product resulting from this effort is a large data set.

The project briefly describes how other users might use these data.

Data handling, storage and dissemination seem adequate.

The project may produce high quality results that will stand up to the peer review process. This however, seems unlikely. I base this assessment on the fact that fewer than 30% of the references are in international peer−reviewed journals, not including books (which by the way should have the inclusive page numbers to which the citation refers). The likely fate of data analyses and manuscripts resulting from this work will be the gray literature, similar to the 70% of citations. Also, it is unlikely that the consultants in this project will be given company time to produce a peer−reviewed manuscript. CVs were not included so it is not possible to determine the collaborators track records in this endeavor. Moreover, the seven main hypotheses are not particularly groundbreaking or novel; nothing about this $2.7M project is novel. The authors propose to continue with the same old methods of measuring the same old things.

Capabilities

Capabilities The project collaborators seem capable but their CVs were not included. It would have been useful to illustrate a flow chart with tasks AND names.

Budget

Budget The budget seems appropriate for the planned work but the funds could be better utilized on a project that uses extant data and includes a modeling component.

Additional Comments

This reviewer is a physical scientist and therefore will limit comments to the physical aspects of the proposed work.

The authors repeatedly claim that this work provides a UNIQUE opportunity to assess landscape response characteristics to a restorative action. I agree this is a unique opportunity, but there is nothing interesting or unique about the approach taken to assess the landscape or in the hypotheses tested. I suppose this may be a product of this type of applied science. On the other hand, this project could have benefited immensely from analyses of extant data and incorporation of how those data and analyses will guide the current effort. Failing that, I do not recommend that this proposal be funded.

External Technical Review #2

Goals And Justification

The project specifically aims to monitor the near−field and far−field effects of a 1200 ha tidal marsh restoration in the Napa River. The statement of the problem, and the goals and objectives of the study are clearly articulated at the outset of the proposal; that is to study the interactions between physical and biological effects of the proposed restoration project within the entire Napa Estuary system. A suite of physical parameters will be measured and related to a suite of biotic parameters over a three year study interval. A conceptual model has been developed which illustrates how changes within the restoration site determine subsequent changes in the greater estuary. Preliminary expectations of ecosystem change are depicted in the model and accompanying text. Seven main hypotheses are to be tested, along with a range of sub−hypotheses. The hypotheses are related to the specific habitat features which currently exist on site, or which may result from the implementation of the restoration project. The suite of hypotheses is evidently based upon a wealth of prior knowledge about tidal wetland restoration in the region.

Approach

The proposed approach appears to be well−suited for collection of the necessary data on physical and biotic process in the estuary. The specific field and analytical techniques are documented in considerable detail, as are the data storage and analysis protocols. Review of previous experimentation and monitoring of restoration projects within the region is included as part of the data gathering protocol. It is likely that the results of this project will advance the state of knowledge of physical and biotic processes in the Napa Estuary, both for unimpaired and disturbed/altered habitat types. Restoration practitioners and ecosystem managers in the region (and potentially elsewhere, depending on dissemination of the results) will find the outputs of this project to be

useful.

Technical Feasibility

The scale of the project seems consistent with the objectives; which are ambitious. While the suite of parameters is impressive and comprehensive, the vast majority of monitoring activities are straightforward, making use of well−proven existing technology. There is little in the way of innovative approaches or application of new, unproven technology. This does not detract from the proposed project; rather it guarantees consistency, and eliminates uncertainty or potential gaps in the monitoring dataset. This is a large−scale, relatively long−term project, and it is likely that impacts to the estuary will continue to occur beyond the three years of the funding cycle as the restoration site advances towards maturity.

Performance Measures

The data collected during this project will allow for evaluation of restoration actions; however specific performance measures are not identified in section A46 "Performance Measures." Rather a brief discussion of data products and their dissemination, along with opportunities for peer−review, are presented. Nonetheless, the details of the monitoring parameters, and their justification in terms of prior research/monitoring and applicability to the proposed hypotheses is included in the preceding section (Approach). The monitoring plan appears to be developed in sufficient detail to address the stated goals and objectives and to test the proposed conceptual model.

Products

The primary data product will be a final report, which will be made available to interested parties via several web sites. The investigators anticipate generation of peer−reviewed journal articles based upon this report, and presentations, presumably at regional and national restoration conferences/symposia.

Capabilities

The list of primary investigators is comprehensive and represents several disciplines, including wildlife biology, fisheries biology, toxicology, water quality, sedimentology, coastal geomorphology and environmental engineering. Academia, government and the private sector are each represented among the project participants. It would appear that this team has the "right stuff" to tackle this complex, multi−disciplinary project.

Budget

The budget is presented in considerable detail, broken down by tasks and project year. This is an intensive, multi−disciplinary, long−term project and thus the total costs are significant. The budget justification seem reasonable, and the rates for personnel, travel and supplies/equipment seem appropriate for this type of work and the geographic region within which it will be conducted.

Additional Comments

This is a comprehensive, well−constructed proposal which addresses an important issue in coastal restoration ecology. The cost of this project is high; however I recommend that CALFED fund this project, should sufficient monies be available. I look forward to seeing the results of this study.

External Technical Review #3

Goals And Justification

Overall, this proposal successfully describes the restoration actions that are being addressed (breaching of salt ponds to restore tidal flow and wetland habitat) and the physical and biological variables that are likely to be impacted. Furthermore, a sequence of changes that is expected to occur after the breaching both within the salt ponds and in the adjacent Napa River Estuary is described. The proposal also justifies why the investigators are seeking money to monitor the impact of all the restorations occurring along the Napa River Estuary. The conceptual model explaining the expected changes to the restored salt ponds as well as the surrounding estuary is described in some detail. Overall, the sequences of responses seem reasonable and are for the most part testable. Consequently, the hypotheses being tested are justified with respect to what is known about the impact of tidal wetland restoration. In addition, the workplan, although not described in detail, appears adequate to test the hypotheses and to develop a sense of how the restoration activities are impacting the surrounding estuary.

Approach

The overall goal of this monitoring program is to determine the local impact of restoring tidal flow to three large salt ponds and to look at the total impact of all recent restorations on the Napa River Estuary as a whole. To accomplish this goal, the project proposes to monitor a relatively large number of variables that bridge physical, chemical and biological processes. Consequently, the project is complex. This can lead to difficulties in co−ordination and completion of activities. However, the monitoring effort is using an ecosystem approach that has been shown to be effective in understanding estuarine environments. Furthermore, the management plan appears well organized.

Overall, the generalized workplan presented seems to be

reasonable and if successfully carried out will likely provide much of the information required. However, it is somewhat hard to evaluate all the techniques, as the level of detail in the discussion of the technical approach does not provide exact locations of sampling stations or all the methods being used. Personally, it would be helpful to see a figure or two with all the proposed sampling locations shown. Also, more detail about the sampling would be useful. However it does appear from the presented material and the references to publications and reports that the methodology is adequate and will do the job. Plus, most, if not all, of the methods being proposed appear to have been successfully used by the investigators previously.

There are several questions, however, that need to be addressed. The first involves modeling – are there any models that have been developed for the ponds or the Napa River Estuary? If yes, then more information is needed in the proposal. If not, are there any plans to develop predictive models and would they be helpful. Ultimately, this would be useful to managers. Second, some of the monitoring of physical parameters in the Napa River seem confined to the summer months. If this is the case – is there any seasonality in freshwater river discharge and how would this effect the primary physical processes and the response of the estuary. Does the sampling need to be done over other parts of the year? Third, the benthic macrofauna and plant work in the estuary seems directed at the salt marshes, with no sampling directly in the estuary. Is this correct? If yes, why are samples not being collected directly in the estuary? Fourth, a little more discussion of recently completed monitoring programs, their results, and how this project builds on earlier work is needed. Several databases are mentioned, but more synthesis would be useful for the proposal.

Technical Feasibility

Achieving the goals and objectives of the proposed monitoring program is technically feasible and the scale of the project is reasonable to meet the objectives.

Performance Measures

As stated in the proposal, the primary products of this monitoring project are databases, timely reports, and ultimately scientific publications and presentations. Specific proposed performance measures to develop these products include having peer reviews of field programs and databases, tracking of the percentage of samples collected or work completed, and oversight of QA/QC work. All of this is needed. However, more clarification on how each of the many components of this project is going to be integrated and how this will be measured as the monitoring program is conducted is needed. This needs to be done from the beginning of the project.

Products

The basic products identified in the proposal that will be produced by this project include databases, reports, presentations to the CALFED program and ultimately scientific papers and presentations at scientific meetings. In addition, web based access to the databases and reports that are generated will be developed. Overall, these products and results will be useful to managers and decision makers. However, also useful to managers and to restoration science would be the development of conceptual and/or numerical models describing the changes in the salt ponds and the resultant changes in the estuary. These types are products will probably come out in the reports and scientific publications, but it would be useful to have some sense of what types of process−response models may be expected.

Capabilities

Based solely on the proposal, the project appears well structured and the primary people responsible for oversight and management are experienced. In addition, the list of participants who will be involved in other aspects of the study and their expertise show that the needed skills are available. However, I did not see anywhere in the proposal with the exception of the project manager, principal investigator, and the technical coordinator who was conducting

the various components of the study. This needs to be clarified.

Budget

The budget for this project is hard to analyze. However, each task seems reasonable and the total request does not seem out of line for the amount of work being proposed.

External Technical Review #4

Goals And Justification

Yes. The proposal identifies restoration actions whose outcomes will be monitored. The project has a clear and consistent statement of goals and uses a straightforward conceptual model. The conceptual model is linked to a BACI analysis structure.

The stated hypotheses are grouped logically and, together, provide a comprehensive series of statements of belief. However, many are more statements of what will likely occur than testable hypotheses. They seem to identify qualities to be measured or monitored. They are not formal hypotheses with obvious means of objective testing and possible rejection. Several specific examples are given below.

The specific hypotheses provided under 1. on page 6 seem to be statements of processes that will occur. Is there much chance of rejecting the hypothesis that "Borrow ditch blocks will promote reestablishment of historic channels by inhibiting existing borrow ditches from capturing the tidal supply"? Similarly for 2, is it likely that the hypothesis, "Increased and diversified marsh habitat will benefit listed species that depend upon wetlands, specfically California clapper rail, salt march arvest mouse, San Pablo song sparrow, and black rail by providing foraging and nesting habitat", will be rejected? Or in 3., is there much question about whether "Increasing tidal prism in the Estuary will increase salinity upstream"? Wouldn't this happen by definition? Or in 4. that "A variety of tidal habitats, including tidal lagoons, will provide a greater habitat range for shorebirds and waterfowl, leading to increased populations"? The hypotheses seem to be an insightful series of linked statements of belief about what will occur, often beyond the 3 years of the study.

Approach

The design seems to be a reasonable extension of other

regional studies. I am not certain if the proposal will provide clear answers to the hypothesized questions; but it will definitiely provide valuable monitoring information consistent with past monitoring information.

Some sections are too brief to assess the adequacy of the associated approach. An example is A.4.3.3. Task 8. Restoration Project Macroinvertebrates. The sampling seems inadequate to the task and the description of the approach to processing the invertebrates is too brief to assess. This contrasts with the relatively detailed approach given for the fish surveys.

Technical Feasibility

Yes. The project is technically feasible and of appropriate scale.

Performance Measures

The proposed project will allow evaluation of the restoration actions. The performance objectives are clear and provided in a table.

Products

Yes. The project will provide useful monitoring information to resource managers. The project results will be effectively communicated. Relative to high−quality results, it is not clear that all hypotheses are testable. The testability of a scientific hypothesis is its most essential feature. If interpreted as presented in this proposal, some of the "hypothesis−driven" data analyses may not stand up to rigorous peer review. I suggest that the hypotheses be reexamined and restated.

Capabilities

The team has a proven history and its members are completely familiar with the subject area.

Budget

The project is expensive but, given the proposed work, is appropriate. If necessary, some components could be deleted to reduce the cost.

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 ranges from 67% to 123% 2. IDC charges are applied to equipment purchases 3. Proj Mgmt at 10%

If proposal is funded, a detailed list of items included in the indirect cost rate should 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.

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

If no, please explain:

COMMENTS: 1. Review supplies &expendables $72,790 are not duplicating OH/IDC items 2. Review consultant services charges $243,508 of total proj 3. Equipment $29,300, supplies &expendables are charged IDCs 4. Budget confusing −rolled up − difficult to determine consultant rates by category as presented in the budget

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 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.

Task &Deliverables – Grantee must provide detailed info for all work including subcontractor work for each specific task, services, &work to be performed witht he appropriate &corresponding deliverable or end product for each task(s) and/or sub–task(s). Costs associated with each task &deliverable should be evaluated for performing similar services.

3. Are project management expenses appropriately budgeted?
Yes.

If no, please explain

COMMENTS: 1. Proj mgmt charges average 10–12% of project cost 2. Justification comments: applicant acknowledges in narrative that Proj mgmt hrs &$ may be insufficient to complete the job – CCC will contribute balance needed 3. Add this info to ctr if awarded – so add'l $ are not requested/approved if amendment of add'l $$ is requested

BECAUSE NARRATIVE STATES THAT PROJ MGMT WILL BE PERFORMED BY SUBS – FUNDING &BUDGET ALLOCATIONS SHOULD BE CAREFULLY REVIEWED. IS PRIME PROPOSER MAJOR PORTIONS OF THE WORK OR ARE THE SUBS????!!!

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 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.

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. Budget is confusing difficult to determine which rates are applied to what 2. Applicant using Fed IDC rate of 42% 3. Labor &Benefits is 1.63%

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 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.

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 follow State Contracting Manual [SCM] Section 7.61 thru 7.62 rules pertinent to equipment purchase, lease, etc.

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. It appears that consultants will help manage project 2. a 1.5% mark−up will be charged for all sub costs 3. Need to review budget against currently funded project to ensure no overlap or duplication of charges

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 follow State Contracting Manual [SCM] Section 7.61 thru 7.62 rules pertinent to equipment purchase, lease, etc.

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 add'l info

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.

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:

COMMENTS: 1. Applicant will accept T but would like to substitute Ex C to short form GIA 101

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. Review IDC rates 2. Review labor costs for subs 3. Review mark up for all sub costs

Other comments:

SUPPLEMENTAL COMMENTS: 1. Proj mgmt task (per narrative) may be shared w/ subs 2. Proposal will need re−work to make into SOW/agreement 3. Deliverables are general &need more detail 4. Need to identify which project team members are performing which tasks 5. Need special attention to sub selection (as identified) see gen comments

END OF REVIEW

Environmental Compliance Review

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

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

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

Comments

Possibly. The monitoring could qualify for an Exemption or Exclusion.

4. Did the applicant correctly identify if CEQA/NEPA compliance was required?
No.

Comments

The applicant states they already have an MOU and federal take permit which may have triggered CEQA/NEPA. But no document was completed or filed. It is difficult to determine whether these permits were for the past funded proposal or if the actions in this monitoring proposal are covered under these permits. Also, they may obtain federal cost−share funding which could trigger NEPA.

5. Did the applicant correctly identify the correct CEQA/NEPA document required for the project?
No.

Comments:

No, but it is difficult to determine if a document is required.

6. Has the CEQA/NEPA document been completed?
No.

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

8. If the document has not been completed, did the applicant allot enough funds to complete it?
No.

Comments:

The applicant states that they have received all permits so no funding or time were allocated for regulatory compliance. Again, it is difficult to determine if the permits and MOU cover the tasks in this proposal. See comment above.

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.

Comments:

It is dificult to determine if the obtained permits are for past construction/monitoring or if they are specifically for this monitoring PSP. The applicant will need take permits to cover activities under "Restoration Project Fish" and activities under A.4.5.

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:

Possibly. If they do not have the permits they will need to obtain these before the monitoring begins.

Prior−Phase Funding Review

List the CALFED or CVPIA funded phases of this project for which your agency manages contracts:

Project Title	Napa Sonoma Marsh Restoration Project (Napa River Salt Marsh Restoration Project)
CALFED Contract Management Agency	Californai Coastal Conservancy
Amount Funded	$4,511,400.00
Date Awarded	2002/01/01
Lead Institution	Californai Coastal Conservancy
Project Number	ERP−02−P04−D

List the other CALFED or CVPIA grants received by this applicant for which your agency manages contracts:

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

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

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

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

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

CCC is moving ahead fine with the project, but IAA term ends Nov 2, 2006; so project outcomes cannot be evaluated in FY2005/6. As CCC noted in proposal, a portion of the next phase project will overlap with the existing grant. CCC structured next phase budget to reflect work being done on current contract, resulting in lower baseline monitoring costs for Year 1. See Other Comments.

Other comments:

Due to legal/regulatory issues, the CCC cannot perform the construction task on the current IAA. An Amendment was approved and is in process to delete this task. The construction work will be on a new IAA. Baseline, construction and post−construction monitoring will remain with the CCC.