

Proposal Reviews

#153: Petaluma Watershed Science and Ecosystem Restoration Project

Southern Sonoma County Resource Conservation District

Initial Selection Panel Review

Research and Restoration Technical Panel Review

Bay Regional Review

#1

#2

External Scientific Review #3

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Prior Performance/Next Phase Funding

Environmental Compliance

Budget

Initial Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

Proposal Number: 153

Applicant Organization: Southern Sonoma County Resource Conservation District

Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

Please provide an overall evaluation rating.

Explanation of Recommendation Categories: Fund

- **As Is** (a proposal recommended for funding as proposed)
- **In Part** (a proposal for which partial funding is recommended for selected project phases or components)
- **With Conditions** (a proposal for which funds are recommended if the applicant contractually agrees to meet the specified conditions)

Consider as Directed Action in Annual Workplan (a proposal addressing a high priority action that requires some revision followed by additional review prior to being recommended for funding)

Not Recommended (a proposal not currently recommended for funding-after revision may be considered in the future)

Note on "Amount":

For proposals recommended as Fund As Is, Fund In Part or Fund With Conditions, the dollar amount is the amount recommended by the Selection Panel.

For proposals recommended as Consider as Directed Action in Annual Workplan, the dollar amount is the amount requested by the applicant(s).

Fund	
As Is	-
In Part	-
With Conditions	-
Consider as Directed Action	-
Not Recommended	X

Amount: **\$0**

Conditions, if any, of approval (if there are no conditions, please put "None"):

None

Provide a brief explanation of your rating:

The Selection Panel agrees with the assessment of the Technical Panel - the proposal as written has some technical shortcomings. In addition, several projects have been funded in the Petaluma River watershed by the ERP (e.g., Petaluma River Watershed Restoration Program), and it's critical to put any future proposals in this context.

Research and Restoration Technical Panel Review:

CALFED Bay-Delta 2002 ERP PSP Research and Restoration Technical Panel Review Form

Proposal Number: 153

Applicant Organization: Southern Sonoma County Resource Conservation District

Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

Review:

Please provide an overall evaluation summary rating:

Superior: outstanding in all respects;

Above Average: Quality proposal, medium or high regional value, and no significant administrative concerns;

Adequate: No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

Not Recommended: Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	The proposal is clearly written and the site in need of work. However, the hypotheses are vague and the approach inadequate, particularly with respect to geomorphic considerations. The likelihood of success was questioned. While, the streambank stabilization work may be of value locally placing this work in a broader watershed context would strengthen it.
-Above average	
XAdequate	
-Not recommended	

1. **Goals and Justification.** Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

Reviewers generally agreed that the proposal was clear to read and the site a very important one in which restoration work is justified. The PIs propose a great deal of work in a variety of areas that should help us understand the problems leading to the severe erosion and sedimentation problems. Unfortunately, their hypotheses are very vague and not well tied to the meat of the proposal. So, there was a gap between the conceptual underpinning of the project and the specific tasks. Several of the reviewers actually felt the goals were weak and poorly justified.

2. **Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).** Is the project likely to succeed based on the approach, feasibility and project team capabilities? Are the proposed performance measures adequate for measuring the project's success?

The streambank stabilization is probably well designed and the capabilities of the PIs are strong. The primary short-coming was the lack of detail on the geomorphic work. Specifically, to really understand the problems, a sediment budget needs to be developed for the site and this is not proposed. There were also concerns that the specific site is not considered in the broader watershed context. It is difficult to assess the likelihood of success without knowing sediment fluxes in and out and how this site will respond given its context in the larger watershed.

3. **Outcomes and Products.** Will the project advance the state of scientific knowledge in general and/or make an important contribution to the state of knowledge of the Bay-Delta Watershed? For restoration proposals, is the project likely to contribute to ecosystem restoration or species recoveries in a significant way? Will the project produce products useful to decision-makers and scientists?

In general, the reviewers felt despite the short-comings, this project may provide some useful data particularly the streambank characterization portion. It is less clear if the streambank restoration monitoring data will be useful in a broader context (i.e., other than assessing success at this one site).

4. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget seems reasonable but does not include funds for the type of geomorphic work that particularly one of the external reviewers recommends.

5. **Regional Review.** How did the regional panel(s) rank the proposal (High, Medium, Low)? Did the regional panel(s) identify significant benefits (regional priorities, linkages with other activities, local involvement) or impediments (local constraints, conflicts with other activities, lack of local involvement) to this proposal? What were they?

The regional review panel ranked this as medium priority. It is viewed as a comprehensive project that should contribute to regional priorities.

6. **Administrative Review.** Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

In the budget summary, it doesnt indicate funding for environmental compliance. Further, NEPA compliance is required due to the federal funding cost-share by NRCS. An encroachment permit by the RWQCB may be required for levee construction. A collecting permit will be required for the birds and consultation with CDFG for incidental take if there are listed birds in the area.

Miscellaneous comments:

None

Bay Regional Review:

Proposal Number: 153

Applicant Organization: Southern Sonoma County Resource Conservation District

Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

Overall Ranking: -Low -Medium **XHigh**

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

the project is a good model for watershed restoration, includes partnerships and is action-oriented

1. Is the project feasible based on local constraints?

XYes -No

How?

- thorough examination of constraints, which are addressed - comprehensive project, lots of tasks: restoration project, erosion control, fencing, biological surveys fish and birds, geomorphology study, GIS, aerial photos, mapping, watershed coordination - working with appropriate state/local/federal agencies - will require 1601 permit

2. Does the project pursue the restoration priorities applicable to the region as outlined in the PSP?

XYes -No

How?

- carries out Bay region goals 1 (Restore critical San Pablo Bay wetlands),3 (Control NIS),4 (Understand wetland restoration performance),5 (restore shallow water, stream, + riparian habitats to benefit at-risk species),7 (Improve understanding of links between at risk species + inflows, esp. relative to regulatory measures like X2)+ 8 (Use monitoring, evaluation of existng data. + investigations to improve fish restoration strategies),

3. Is the project adequately linked with other restoration activities in the region, such as ongoing implementation projects and regional planning efforts?

XYes -No

How?

- implements Petaluma Watershed Enhancement Plan (multi-stakeholder, consensus) - focusing on San Antonio Creek based on previously identified as priority subwatershed - builds on past work, other CALFED funded projects - links to other riparian restoration projects in upper watershed - links to studies related to TMDL process on the river

4. Does the project adequately involve local people and institutions?

Yes -No

How?

- will provide public outreach through watershed coordinator - currently, good involvement by local stakeholder group and RCD - provides opportunities for involvement by landowners stakeholders through education and outreach

Other Comments:

none

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: **153**

Applicant Organization: **Southern Sonoma County Resource Conservation District**

Proposal Title: **Petaluma Watershed Science and Ecosystem Restoration Project**

Conflict of Interest Statements:

I have no financial interest in this proposal.

Correct

Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	Im not convinced that this project should receive a high priority by CALFED.
<input checked="" type="checkbox"/> Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

Rating: Fair. The goals are weak. One central hypothesis that basically states if the applicants can research the stressors, restore the habitat, and educate the public, the overall health of the Petaluma River will be improved.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Rating: Fair. I wasnt convinced the applicants justified their project. The conceptual model is a simple flowchart that partitions general concepts and no specifics.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

Rating: Very Good. The approach is more detailed and better organized than the design aspects noted above.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

Rating: Very Good. This 3-year project appears to be feasible.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

Rating: Very Good. The performance measures for each task seem to be outlined in sufficient detail.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

Rating: Very Good. Good detail on products.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

Rating: Very Good. The team appears to have the requisite credentials and experience.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

Rating: no comment.

Miscellaneous comments:

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: **153**

Applicant Organization: **Southern Sonoma County Resource Conservation District**

Proposal Title: **Petaluma Watershed Science and Ecosystem Restoration Project**

Conflict of Interest Statements:

I have no financial interest in this proposal.

Correct

Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	The project is not tightly focused. The hypothesis or general questions are vague and not compelling. This could be focused on critical ecological components with well stated questions and measurement systems, but this proposal does not capture the opportunity effectively.
-Good	
<input checked="" type="checkbox"/> Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The goal of the proposal is a mix of site-based restoration, assessment, and public outreach. The objectives are clear but limited in scope.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

The single general hypothesis is not a scientifically based, testable hypothesis, but instead is a statement of intent and general expected outcome. The justification for the proposed actions is vague and largely related to the local community.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The proposed restoration efforts would have limited effect and have contributed mostly to local community awareness and involvement. The mix of site-specific actions on San Antonio Creek and larger watershed assessments is poorly linked and is not hierarchical. Bird surveys are not linked to the watershed assessment or streambank restoration. Local monitoring of birds is largely descriptive.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

no comment

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The performance measures focus on implementation.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The project will contribute little to the understanding of the Bay Delta Watershed. Bird surveys will provide the most substantial data. Geomorphic studies are so broad and descriptive that they will have limited local use and almost no regional use. The restoration of riparian areas and tidal slough habitat is minor (<1600 ft and 2 acres). No sensitive species are explicitly identified and targeted by the actions. The outcome of this proposal has little significance to decision makers or ecologists and environmental scientists.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

no comment

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget is consistent with the objectives.

Miscellaneous comments:

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: **153**

Applicant Organization: **Southern Sonoma County Resource Conservation District**

Proposal Title: **Petaluma Watershed Science and Ecosystem Restoration Project**

Conflict of Interest Statements:

I have no financial interest in this proposal.

Correct

Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	This proposal covers restoration, monitoring, and additional related studies. The information targeted in this proposal, including geomorphology and fish and bird studies, has the potential to be very useful to the scientific community. However, I would encourage the applicants to sharpen their focus by making their hypotheses more specific and strengthening the links between their conceptual model and the proposed work.
<input checked="" type="checkbox"/> Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

This proposal includes several very timely and interrelated goals: restoration through bank stabilization combined with a geomorphic study of the surrounding area; GIS assessment of factors limiting dispersal of both fish; and surveys determining the effects of habitat on reproduction and dispersal of birds. Unfortunately the hypothesis as stated is rather weak ("if we assess conditions..., determine unknown stressors and limiting factors, address identified stressors and limiting factors, restore and maintain key habitat types, and educate the community about current watershed conditions and how they can improve them, we will improve watershed health"). Nevertheless, the work as proposed does seem to have the potential to provide a large amount of useful information.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

The study proposes to obtain both baseline conditions of watershed health and in-depth information about the San Antonio Creek subwatershed. The proposed activities seem to build on already completed work in a reasonable and efficient manner. For example, the geomorphology study at San Antonio Creek will be a continuation of earlier geomorphology studies of the mainstem. However, the first study was confined to the mainstem channel, while the proposed study will extend results to a sub-watershed with high erosion potential, and widen geomorphological understanding to a watershed-scale view. Studies of habitat use and dispersal of the San Pablo song sparrow have also been carefully chosen to complement current study sites, in order to provide information across a spectrum of habitat types.

A very general conceptual model is summarized in figure 2. Links between the conceptual model and the proposed work are sketchily presented although it is clear that many of the factors listed in the conceptual model are indeed addressed in the proposal.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The approach was designed to take advantage of existing studies and enhancement plans for the Petaluma watershed, and to implement projects for previously indentified stressors and limiting factors. It seems adequate for the objectives of the project, particularly if it indeed proves possible to take advantage of existing knowledge about the system. The results of the study, e.g., geomorphology, monitoring of bank stabilization project, identifying dispersal limitations for fish, and evaluating habitat and dispersal potential for birds, will be useful additions to the base of knowledge. Novel methodologies are not likely to arise from this project, but the information collected should be of use to decision-makers.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

Each of the tasks set forth seems eminently feasible in the time available, and should be successful in acquiring the information desired.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

Monitoring for the restoration site includes checks on the integrity of bank stabilization, counts of plant survival, and monitoring of birds moving into the area. Bird monitoring, which receives a great deal of the emphasis, should be able to function as an integrative measure of the success of restoration. As such it will be of interest to the scientific community. The geomorphology study follows established protocols in this watershed and thus performance measures should be adequate.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The major scientific products proposed are as follows: Monitoring will be conducted on the stream restoration site to assure that bank stabilization, revegetation and repair is proceeding as expected. The geomorphology , bird and fish studies will result in reports and meetings to present information to landowners and community stakeholders. The bird studies will also result in at least 2 scientific publications. These products seem reasonable, although scientific publications on the and geomorphology study could also be of interest.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

The applicants appear to be well-qualified in terms of experience in private consulting, education and outreach, and federal and state government. Several members of the team have extensive experience in this watershed. The bird studies portion of the project should benefit from the guidance of Dr. Nadav Nur, a population ecologist with extensive experience in avian monitoring.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget appears reasonable and adequate.

Miscellaneous comments:

none

External Scientific: #4

Research and Restoration External Scientific Review Form

Proposal Number: **153**

Applicant Organization: **Southern Sonoma County Resource Conservation District**

Proposal Title: **Petaluma Watershed Science and Ecosystem Restoration Project**

Conflict of Interest Statements:

I have no financial interest in this proposal.

Correct

Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	A very important area with well justified tasks and an excellent team. The linkage of the geomorph and GIS work to reach the overall goal of identifying stressors was not as strong as it should be nor the broader scale linkage spatially. This in conjunction with the lack of detail in the performance measures moved this proposal from and VG to G.
<input checked="" type="checkbox"/> Good	
-Poor	

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The goals and objectives are very clearly stated. This is a very well written proposal with excellent well defined objectives that are very timely. The Petaluma is in need of restoration but perhaps more importantly there is a need to understand what is causing the severe erosion and sedimentation problems. This proposal promises to not only start some restoration activities (bank stabilization & riparian replanting) but to conduct a broader study to understand the causes of the problem. So the geomorph and GIS work will look at broader (than the study sites) spatial and temporal scales to determine watershed constraints and causes of erosion, etc.

There is a hypothesis clearly stated (bottom page 3) and the only reason I did not rank this a 1 is that there is no attempt in the proposal to outline how they will determine if they (adequately) meet the desired outcome if we assess conditions, ... determine unknown stressors, restore habitat, and educate the community, we will improve watershed health.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

Very well justified; excellent prior work to build on. Conceptual model clearly stated

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

very well designed & appropriate for objectives. This will certainly be useful to decision-makers; The PIs could provided more detail on how the geomorph work and GIS will be linked and what will come out of that i.e., more specifically how that will be used to understand the large-scale (watershed) & most significant stressors.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

The linkage of geomorph & GIS work not fully documented nor is the work put in a larger watershed context . The bird work is outlined in great detail and similar details were needed for the broader picture of how overall stressors will be identified.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The performance measures (page 9 10) they list are basically a restatement of their objectives (i.e., we will do the work); in some cases, this is the only way to state perf measures but in other cases, what would constitute success should have been better defined. E.g., page 10 last sentence on Task 4 our target for this task is to layer these maps together to determine sub-watersheds that have the best chance for recovery of at risk species and self-maintaining ecosystem health. It is never stated what self-maintaining health is nor when they will know they have it/can potentially achieve it. Earlier (page 6) they stated that restoration goals they would identify could range from reduced sediment supply, increased base flow, reduced flood peaks. Etc. yet they are never clear how their geomorph + GIS work will allow them to determine which of these goals are needed.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

No question they will be valuable. Even if the PIs dont do what I outline in 5) above, they will have a wealth of data that is available for this analysis. These data are needed.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

very well qualified, infrastructure/ linkages to watershed groups very strong

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

budget seems pretty tight. The amount spent on the bird work is high relative to the other costs; I would like to see more emphasis on tying together the geomorph + GIS layers and the overall synthesis.

Miscellaneous comments:

External Scientific: #5

Research and Restoration External Scientific Review Form

Proposal Number: **153**

Applicant Organization: **Southern Sonoma County Resource Conservation District**

Proposal Title: **Petaluma Watershed Science and Ecosystem Restoration Project**

Conflict of Interest Statements:

I have no financial interest in this proposal.

Correct

Incorrect

In the blank below please explain any connection to proposal, to applicant, co-applicant or subcontractor or to submitting institution (write "none" if no connection):

none

Review:

Please provide an overall evaluation summary rating:

Excellent: outstanding in all respects;

Good: quality but some deficiencies;

Poor: serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	The project will restore an eroding streambank and will provide useful data on the characterization of the stream channel and potential sediment sources. These project components would be best used in conjunction with an attempt to quantify sources, fluxes, and sediment sinks in the watershed in terms of a budget, so that the impact of specific projects can be evaluated with greater precision.
XGood	
-Poor	I cannot comment on the other aspects of the study.

1. **Goals.** Are the goals, objectives and hypotheses clearly stated and internally consistent? Is the concept timely and important?

The proposal is a conglomeration of widely differing projects, including streambank restoration, stream characterization, public outreach, and bird studies. These are tied together by the general hypothesis that if improved information is available, and if that information is communicated to the public, then the watershed will also improve. This concept is probably reasonable, but it doesn't necessarily follow that all these separate projects should be together in a single proposal. They will all help the same watershed, but otherwise are not closely related. The methods used also do not attempt to explicitly tie them

together, also.

2. **Justification.** Is the study justified relative to existing knowledge? Is a conceptual model clearly stated in the proposal and does it explain the underlying basis for the proposed work? Is the selection of research, pilot or demonstration project, or a full-scale implementation project justified?

I cannot comment on the bird study, as it is well outside my areas of experience and expertise. The public outreach component is also not part of my experience. The proposal also includes streambank stabilization and stream characterization. A watershed perspective is not provided to justify these projects. In particular, the existing problem at the scale of the watershed is not clearly quantified in such a way that the proposal efforts can be evaluated except in general terms. The streambank stabilization will in fact, if properly designed, restore the streambank, but the extent to which this will improve the watershed as a whole is not addressed. The stream characterization effort can be similarly criticized, in the sense that the sediment problems of the watershed, though identified, are not treated at the watershed scale in the context of a BUDGET, which is the usual means of evaluating sediment issues.

3. **Approach.** Is the approach well designed and appropriate for meeting the objectives of the project? Are results likely to add to the base of knowledge? Is the project likely to generate novel information, methodology or approaches? Will the information ultimately be useful to decision-makers?

The streambank stabilization and stream characterization are well-designed by competent practitioners. The latter will add to a base of knowledge, as that is its primary goal. The former will restore a streambank, and will not add to a base of knowledge. The problem to be solved is not put in a watershed perspective in terms of volumes or fluxes, so we cannot be sure that stabilizing a particular streambank will necessarily solve any watershed scale problem.

4. **Feasibility.** Is the approach fully documented and technically feasible? What is the likelihood of success? Is the scale of the project consistent with the objectives?

The projects are well documented and feasible (I am not commented on the bird study and the public outreach effort). They are likely to be implemented as designed. They will, in sum, be successful. I would like to see some effort to quantify the overall sediment budget of the watershed in an effort to determine what impact specific restoration projects will have on the watershed as a whole.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The restoration will be monitored, primarily through photographs, and the stream characterization does not require performance measures. It would be useful to have some data before and after the stream restoration, either in the form of stream sediment gaging or monitoring of the channel characteristics to determine if the stabilization is solving any problem beyond that of the eroding streambank. Bank erosion, of course, is a natural phenomenon, and is only a problem when its magnitude or frequency is deemed excessive beyond some clearly identified standard.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The streambank characterization will provide useful information to managers, and should help identify problem areas in the watershed. The monitoring of the streambank restoration will evaluate the restoration, but little else.

7. **Capabilities.** What is the track record of applicants in terms of past projects? Is the project team qualified to efficiently and effectively implement the proposed project? Do they have available the infrastructure and other aspects of support necessary to accomplish the project?

I am only aware of the consulting geomorphologist's previous work, which is excellent.

8. **Cost/Benefit Comments.** Is the budget reasonable and adequate for the work proposed?

The budget appears to be reasonable.

Miscellaneous comments:

Prior Performance/Next Phase Funding:

New Proposal Number: 153

New Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

1. Prior CALFED project numbers, titles, and programs: *(list only projects for which you are the contract manager)*

2000-E04, Sonoma Creek Watershed Conservancy, 98-E04, Petaluma River Watershed Restoration Program 01-N27, Sonoma Creek Watershed Conservancy Ecosystem Restoration

2. Prior CVPIA project numbers, titles, and programs: *(list only projects for which you are the contract manager)*

N/A

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

XYes -No -N/A

If no, please explain any difficulties:

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

-Yes **X**No -N/A

If no, please explain any inaccuracies:

Status of 01-N27, 98-E04 and 2000-E04 not stated in proposal.

5. Is the applicant's progress towards these project(s)' milestones and outcomes to date satisfactory?

XYes -No -N/A

If no, please explain deficiencies:

98-E04 is complete. 2000-E04 is scheduled to be complete May 2002. 01-N27, Sonoma Creek Watershed Conservancy is in progress.

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

XYes -No -N/A

If no, please explain deficiencies:

7. Will the project(s) be ready for next phase funding in 2002, based on its current progress and expenditure rates?

-Yes -No N/A

If no, please explain:

This is not a next phase effort of an existing project. The area to be addressed was covered by 98-E04, now complete.

Other Comments:

Environmental Compliance:

Proposal Number: 153

Applicant Organization: Southern Sonoma County Resource Conservation District

Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?

-Yes No

If no, please explain:

NEPA compliance is required due to the federal funding cost-share by NRCS. An Encroachment Permit by the RWQCB may be required for levee restoration work. A Scientific Collecting Permit from CDFG will be required for collecting and banding birds, and consultation with CDFG for Incidental Take if there are listed birds in the area. Consultation with USFWS may be required for restoration activities in red-legged frog habitat.

2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?

-Yes No

If no, please explain:

In the budget summary, it doesn't state funding for environmental compliance. But in the proposal it states part of this funding will go towards the task of environmental compliance.

3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?

Yes -No

If yes, please explain:

The applicant must comply with the environmental regulations to complete the project.

Other Comments:

Budget:

Proposal Number: 153

Applicant Organization: Southern Sonoma County Resource Conservation District

Proposal Title: Petaluma Watershed Science and Ecosystem Restoration Project

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

Yes -No

If no, please explain:

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

Yes -No

If no, please explain:

3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?

Yes -No

If no, please explain:

4. Are appropriate project management costs clearly identified?

Yes -No

If no, please explain:

5. Do the total funds requested (Form I, Question 17A) equal the combined total annual costs in the budget summary?

Yes -No

If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).

6. Does the budget justification adequately explain major expenses?

Yes -No

If no, please explain:

7. Are there other budget issues that warrant consideration?

-Yes No

If yes, please explain:

Other Comments:

well defined in budget summary and budget justification