

Proposal Reviews

#107: Agricultural Drainage Treatment for Selenium & Nitrate Removal

Panoche Drainage District

Final Selection Panel Review

Initial Selection Panel Review

Research and Restoration Technical Panel Review

Land Acquisition

San Joaquin Regional Review

#1

External Scientific Review

#2

#3

#4

Prior Performance/Next Phase Funding

Environmental Compliance

Budget

Final Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Final Selection Panel Review

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

Please provide an overall evaluation rating.

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 received one comment letter, from the applicant, in advance of the 30-day public comment period. The letter describes the total project cost as \$1.9 million and a grant award of \$750,000 from the CALFED Drinking Water Quality Program. The letter requests that the CALFED ERP consider the CALFED Drinking Water Quality Program funds as a matching grant, and fund the balance of the total project costs.

No comments were received before or during the public comment period that addressed the Selection Panel or technical panel recommendations. Therefore, the initial Selection Panel recommendation stands.

Initial Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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 recognizes the importance of reducing selenium and nitrate loading to the San Joaquin River. The project could provide incremental progress towards that goal. However, the Panel agrees with the technical reviews that the proposal does not demonstrate sufficient cost-benefit towards ERP goals and cost-share by Panoche Drainage District.

The Selection Panel also recommends close coordination with ERP and other CALFED programs (Water Use Efficiency, Drinking Water Quality) and with the San Joaquin Valley Drainage Implementation Program to achieve a comprehensive solution to this problem.

Research and Restoration Technical Panel Review:

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

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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	Some issues were raised regarding the cost effectiveness of such treatment. The project treatment costs are at \$200-300/acre-ft. What are the cost of alternative treatment options (e.g., RO, wetland treatment) compared to the proposed ABSR process. Questions were raised regarding future scale up of the facility and the cost of treatment per acre-ft. Questions about environment compliance needs to be addressed.
-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?

Goals and hypotheses are clearly stated.

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?

Good credentials of the team. Maybe performance measures needs more refinement especially for monitoring.

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?

Question as whether the information will be scientifically validated and useful to decision makers. Another reviewer thought the information would be helpful for decision makers. Methods of analysis are not provided.

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

Question whether this approach will be cost effective for general use without government subsidies. Concern over whether spending \$200-300/acre-ft for a full scale operation is reasonable. Some question about the budget being high given the existing structure.

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?

No concerns identified. Noted that this project is linked to the Grassland Bypass Project which is focusing on-farm efforts to reduce entrainment of Se. Treatment is the next phase and should work with other treatments.

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?

Budget has a question about budget summary grand total amount.

Environmental compliance cannot determine if budget is adequate if a categorical exemption is not allowed.

Prior performance noted that applicant on 98-B14 is UC and not Panoche district, therefore questions were answered N/A.

Miscellaneous comments:

None

Land Acquisition:

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

1. Is the site's ecological importance documented in the proposal?

Yes -No

If yes, please import relevant text and citations here:

Only a little information is provided. 6 acres of land will be acquired for the treatment facilities. "The site is ideal due to its proximity to channels carrying drainage with the highest selenium concentrations within the Panoche Drainage District. The source of drainage for the Facility will be the Buick Drain which collects drainage from 12 sumps with high selenium concentrations...." These drains will feed an experimental treatment facility capable of removing up to 87% of influent total selenium and 95% of influent nitrate from 1 acre-foot/day or 220 gpm of drainage water per day.

2. Is the owner's willingness to sell the site documented in the proposal?

-Yes No

If no, please explain:

No information about the landowner's willingness is provided.

3. Is evidence of local government support for the purchase included in the proposal?

-Yes No

If yes, please explain:

4. Is the use proposed for the site after its purchase clearly consistent with the site's general plan designation and zoning?

-Yes No

If no, please explain:

The site is planned and zoned for agriculture. This farm drainage facility is likely consistent with these designations, but this can't be confirmed from the application.

5. Is the land mapped as prime farmland, farmland of statewide significance, unique farmland, or farmland of local importance?

-Yes No

If yes, please explain the classification:

Is the site under a Williamson Act contract?

-Yes No

Will use of the site change from agriculture after its purchase?

Yes -No -Not Currently in Agriculture

6. Is this a time-sensitive acquisition opportunity, according to the proposal?

-Yes No

If yes, please import relevant text here:

Other Comments:

The application lacks the information requested by the PSP in proposals that include land acquisition.

San Joaquin Regional Review:

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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

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

This proposal is to extend a promising pilot project to remove selenium and nitrates, two contaminants of concern in the San Joaquin River, from agricultural drainwater. Treatment is an integral component of San Joaquin Valley agricultural drainage management that is needed to meet waste discharge requirements.

1. Is the project feasible based on local constraints?

XYes -No

How?

The project is tailored to meet local constraints, in this case, the characteristics of agricultural drainwater. The potential for high removal of selenium, coupled with potential for denitrification and low solid residuals volume, makes this a reasonable treatment alternative.

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

XYes -No

How?

The proposal is to reduce the amount of a naturally occurring contaminant from the aquatic system, and may reduce the nutrient load as well.

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?

The project is linked to the Grassland Bypass Project, which is currently focusing on on-farm efforts to reduce entrainment of selenium. Treatment is the next phase. This particular treatment will also work with other treatment processes under consideration.

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

Yes -No

How?

The investigators are working directly with the Panoche Water District, which is within the Grassland Bypass Project area.

Other Comments:

This proposal received strong support among the reviewers.

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: **107**

Applicant Organization: **Panoche Drainage District**

Proposal Title: **Agricultural Drainage Treatment for Selenium & Nitrate Removal**

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
<input checked="" type="checkbox"/> Excellent	I gave an excellent rating because of the overall description and intent of the project, which appears to be an effective means of reducing pollutants to the San Joaquin River.
<input type="checkbox"/> -Good	
<input type="checkbox"/> -Poor	

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

Rating: Excellent. The goal of developing an algal-bacterial selenium removal process is clear and well defined. The 5 hypotheses are also clear and are consistent with the overall goal.

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: Excellent. The existing pilot study and preliminary design sets a basis for this study. The location and present environmental issues further justify this restoration project.

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 well described and ordered into reasonable tasks. The schedule seems a bit ambitious in the construction phase to be up and running in 3 months. The applicants do not offer alternatives if their hypotheses should prove wrong.

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. The project is likely very feasible, given the pre-existing pilot study. I believe the scale and testing of the hypotheses to be within the grasp of the applicants.

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: Excellent. Quantitative targets are given to measure success of project (see Table 1).

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: Excellent. Adequate reporting is proposed.

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: Excellent. Good credentials of team members.

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

Rating: Very Good. Budget proposed is 1.9 mil, which seems high given the existing structure.

Miscellaneous comments:

The proposed treatment of drain water and the return to the drainage system is the preferred method of eliminating pollutants with minimal change to the hydrograph. The question I have is how much drainage is being treated by this project? I noted an acreage of 6 acres for the project. However, I am not sure of the extent of the drainage.

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: **107**

Applicant Organization: **Panoche Drainage District**

Proposal Title: **Agricultural Drainage Treatment for Selenium & Nitrate Removal**

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	Technically, this project is excellent. I question, in the long-term, whether this method of treatment will be cost effective enough for general use without government subsidies. In addition, to meet water quality objectives more "treatment" or dilution is necessary beyond ABSR. A better long-term solution would be to not use this land for irrigated agriculture.
<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?

Goals, hypothesis and approach are clear and logical.

Concept is timely. Pilot scale project success indicates the need to demonstrate large scale operation.

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?

Study is justified by the success of the pilot project and by the questions (hypothesis) that need to be tested. The basis of the work is adequately explained. This large scale project will clarify if this technology could cost-effectively treat selenium and nitrogen contamination agricultural drainage.

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 is well designed and results will increase our knowledge base. The project will refine a method tested at the "pilot" level. The information generated will be useful 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?

I believe that the approach here is feasible in light of the results of the small scale trials. The likelihood of success is high and the scale is appropriate.

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?

Performance measures are based on water and sediment sampling and analysis at timely intervals. Detail is sufficient at the proposal stage. More refinement of the monitoring may be necessary when developing the contract for this project.

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 main product will be a well-tested methodology. Interpretive outcomes are unlikely because reduction in Se and N will be evident.

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 applicant is well qualified and has infrastructure in place for proper operation.

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

The total amount requested is nearly \$2 million for this 3-year project. The projected reductions in Se are about 80-85% and the projected reductions in N are about 90-95% if this project yields similar results as the pilot scale project. However, as stated in the proposal, this system, when in full operation, may cost \$200-\$300/acre-ft for a full scale facility. This seems like an expensive way to treat agricultural drainage considering the original cost of the water.

Miscellaneous comments:

I apologise for the brief review and comments, as time is very limited. I was not recruited until 2/21. Thank you for opportunity to participate.

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-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	Good to excellent. This project has clearly stated goals, hypothesis and approach to ensure success. The team is very qualified to perform the tasks and generate the products of the proposals. Good cost sharing.
XGood	
-Poor	

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

The project goals, objectives and hypotheses are clearly stated.

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 goals are relevant to CALFED and regulatory processes.

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 study clearly outlines the tasks to be conducted over the 3 year period. On page 6, the proposal mentions stockpiles for disposal, but fails to discuss the removal of the stockpiles and are costs for long term disposal covered (maybe covered in A8)? The tasks are clearly presented in the proposal.

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?

To fairly assess the feasibility it is outside my specific area of expertise.

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 are clearly outlined.

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?

Improved water quality by reduced Se and nitrogen to the SJR/Bay-Delta.

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 team has adequate experience as a collective whole.

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

Good cost share by the district, \$90,000

Miscellaneous comments:

Good coordination with the regional board, local public entities and irrigation districts.

External Scientific: #4

Research and Restoration External Scientific Review Form

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

Conflict of Interest Statements:

I have no financial interest in this proposal.

XCorrect

-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 appears to be a case of a project that has the potential to be very good but a proposal that itself is weak. It was not put together well.
XGood	
-Poor	

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

The goals are clear, the hypotheses are clearly stated. The concept is relevant to the improvement of water quality.

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 project is justified and a demonstration project is a next logical step after the pilot scale work on algal-bacterial selenium removal that has already taken place. The proposal, however, was not well written; references were missing for some important statements,

initials are used without explaining what they stand for, and there are weaknesses in the design of the experiments to test the hypotheses.

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 is practical and will lead to new information, but the information will not be scientifically validated, and therefore may not be useful to decision makers. They plan to have a single system that will be divided into two halves for testing their hypotheses. One half will serve as the experimental and the other as the control This approach does not lend itself to statistical analyses of data, since there will be an N of 1, and no statistics can be done. There are ways of getting around this difficulty, but they do not mention them in their experimental design. Given the cost of building the facility, it is understandable that it cannot be replicated many times, but there is no awareness in the proposal about how to deal with this problem in experimental design. Furthermore, their "approach" to test each of their hypotheses is very skimpy and inadequate. More description of what they will measure and how they will do it is necessary. Methods of analysis are generally not given.

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?

It is technically feasible, but the plans for the project, as described, will not lead to scientifically defensible data.

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?

Performance measures are listed as the levels of various constituents to be expected in the effluent after treatment, but the absence of the measurement techniques for these constituents, or any quality assurance or quality control, makes this uncertain and unreliable.

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 product will be a larger system for removing selenium and nitrate, but the value from monitoring is uncertain, and interpretation will not be possible due to the problems discussed above.

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?

They may have the infrastructure, but they do not seem to have the scientific background to design the project in a way that is convincing. They seem unaware of the issues of replication and pseudoreplication, and how to overcome these problems to make a project that is scientifically valid.

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

On page 3 they state that they are asking for \$28,000 and will provide matching funds of \$90,000. Then in the budget pages, the bottom line is almost 2 million dollars. It is hard to evaluate whether this budget is reasonable, since I do not have the background in such large scale construction projects.

Miscellaneous comments:

This may be an example of a project that might be good, marred by a proposal that is weak. In order to develop their project in a scientifically valid way, they need to consult someone with some statistical training. Since their appears to be some merit in the project itself, I will rate it as "good" rather than "poor."

Prior Performance/Next Phase Funding:

New Proposal Number: 107

New Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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

CALFED # 98-B14, USBR # 98-FC-20-16660, Irrigation Drainage Water Treatment for Selenium Removal: Panoche Drainage District Demonstration Facility.

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

none

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

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

If no, please explain any inaccuracies:

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

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

If no, please explain deficiencies:

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

-Yes -No **X**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?

XYes -No -N/A

If no, please explain:

Yes, expected completion of 98-B14 was January 31, 2002.

Other Comments:

Other comments: Note that applicant for 98-B14 is The Regents of the University of California , Berkeley Campus and the applicant for this follow-on work is Panoche Drainage District, therefore the questions concerning the applicant are answered N/A.

Environmental Compliance:

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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

Yes -No

If no, please explain:

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:

Cannot determine whether budget is adequate if a Categorical Exemption is not allowed.

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

-Yes No

If yes, please explain:

Other Comments:

Budget:

Proposal Number: 107

Applicant Organization: Panoche Drainage District

Proposal Title: Agricultural Drainage Treatment for Selenium & Nitrate Removal

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).

Question 17a shows \$28,000 for a total funds and the budget summary shows \$1,921,800 for a grand total, a difference of \$1,893,800.

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:

information well provided in the budget justification. not sure of why there is such a difference in question #5.