

Proposal Reviews

#182: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

Turlock Irrigation District

Final Selection Panel Review

Initial Selection Panel Review

Research and Restoration Technical Panel Review

San Joaquin Regional Review

#1

External Scientific Review

#2

#3

#4

Prior Performance/Next Phase Funding

#1

#2

Environmental Compliance

Budget

Final Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Final Selection Panel Review

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

Please provide an overall evaluation rating.

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

Amount: **\$4,350,000**

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

None

Provide a brief explanation of your rating:

This project's initial reviews raised issues that caused the Selection Panel to recommend it for potential "directed action". The proposal's authors pointed out that all issues raised were already addressed in the proposal. The Selection Panel reviewed the proposal to evaluate its contents relative to issues raised in earlier reviews. The Panel found that the project is science-based. It uses hypothesis testing and there is a significant section on adaptive management, for example. Consequently, this proposal does not need to be rewritten to address the reviews and should be funded as is. The Panel also encourages Turlock Irrigation District to continue to interact with the Tuolumne River Adaptive Management Forum.

Initial Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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	X
Not Recommended	-

Amount: **\$4,350,000.00**

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

none

Provide a brief explanation of your rating:

This project includes river restoration through gravel transfusion and adjacent upland restoration. Gravel will be purchased from nearby tailing piles. This project is upstream of an ongoing restoration activity on the Tuolumne and is part of a long-term plan for Tuolumne river/floodplain restoration. Although there is some concern for the requirement of continual gravel augmentation, one possible solution of grade control mentioned by some reviewers will not allow natural stream processes to take place. Although river restoration and gravel augmentation is of high priority to CALFED, the Selection Panel recommends that this proposal be revised and re-reviewed and be considered as a directed action. This recommendation is based on the need to include, as an important aspect of the revised proposal, application of science within the study design and adaptive management concepts into the project. Also, the revised proposal should respond to the Tuolumne River Adaptive Management Forum report and concepts.

Research and Restoration Technical Panel Review:

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

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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	Cost is the major concern of this proposal. Other construction techniques need to be explored and developed
-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?

The goals and objectives were clearly presented. The hypotheses were reasonable relative to the restoration component. The gravel acquisition element needs no hypothesis. The arguments for restoring the mined, highly disturbed landscapes were well made and supported. However, the idea of extracting gravel, i.e. destroying the landscape, in one location to restore another seems odd. The implication is that the restored landscape has a higher value than the one being destroyed. No discussion of issue was presented.

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?

Securing gravel resources for this project and others to follow is a novel idea. However, some estimate of need should be undertaken first. The resource and transportation costs need to be carefully vis-à-vis the anticipated projects. This work is outside the scope of the proposed project. The design uses accepted methods and the restoration approach relies on traditional construction methods. As such, new ideas or experiences are not likely to emerge. Since the project relies on more traditional methods, landscape construction likely will be successful. As to whether the desired habitats result is another matter. This will depend on the critical relationship between new landscape and the ambient hydrology. The scale of the project is consistent with the objectives.

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?

The performance measures of the restoration work are reasonable. Still, monitoring should cover at least five years. The administrative products include the contracts for the gravel resources and the restoration design. The product of greatest concern is the restored landscape. This product will offer many interpretative opportunities.

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

The cost of the gravel seems reasonable. The cost of restoration seems extremely expensive. Assuming 300 are restored, the unit cost would be approximately \$15,000/acre. Ignoring the gravel cost, the unit cost would be \$10,500/acre. Other construction techniques need to be explored. Grade controls to prevent bed load movement and the use of the stream to transport and distribute materials need to be evaluated.

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 San Joaquin Regional Review is low. The fact that only a few landowners would benefit limited the rating.

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?

Other than a possible 2081 permitting issue, no administrative problems were identified.

Miscellaneous comments:

None

San Joaquin Regional Review:

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

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

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

Provides river wide benefits because it provides gravel source for other restoration projects.

1. Is the project feasible based on local constraints?

XYes -No

How?

This project address local constraints on gravel for restoration projects by identifying and purchasing degraded sites near to the river reaches slated augmentation. Avoids using commercial quality gravel

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

XYes -No

How?

Implements SJ-1 habitat restoration actions

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 Toulumne River has a well known ongoing restoration plan which this project is just one piece of. This project also has the support of local government planners.

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

XYes -No

How?

The project obtained the support of the local county and is supported by the TRTRAC

Other Comments:

We think the scale of this project and funds that are being committed to this River require that this project have a concerted effort to document the lessons learned that could be applied to other restoration projects in the Central Valley. An outreach effort to other Rivers should be encouraged.

The following should be addressed: Are there other sources of gravel closer and cheaper to augmentation sites by La Grange Bridge

What lessons have been learned so far with the gravel augmentation projects implemented so far on the River? * * Is there any known local opposition

This project will be a long term investment for the other projects on the Tuolumne. It sounds like a wise investment for future needs.

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: **182**

Applicant Organization: **Turlock Irrigation District**

Proposal Title: **Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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 Good rating was given. However, the applicants took more than the requisite 20 pages to make their case. I believe this gives these applicants an unfair advantage over other proposals.
<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: Very Good. This is a very comprehensive habitat restoration project whereby a large amount of coarse sediment will need to be input into the Tuolumne and maintained. In addition, much vegetation and wetlands will be required. How will continual maintenance be accomplished?

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: Very Good. The justification is based on the need for restoration in this section of the Tuolumne R. Also, a FERC relicensing process cited the restoration as being a prime goal. This project is touted as an adaptive response to previous planning efforts.

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. However, the actual process could be more detailed to provide a clearer idea of how the applicants plan to implement this massive project.

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: Good. The applicants have given a good deal of thought to the implementation and the uncertainties associated with this project. The uncertainties may be a confounding factor in the ultimate success of this project. I am curious as to the extent of the continued maintenance required once this project ends.

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: Good. Performance measures are briefly described as the process. No quantitative endpoints are provided that would help characterize the adherence to the scope.

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. The diversity of products that also include a public outreach aspect are adequate for this project.

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. The team members have excellent and complimentary skills and credentials.

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

Rating: Not sure how to rate. The budget is very large, with the bulk of the funds identified for sediment transport. Will maintenance require subsequent sediment transports, as well?

Miscellaneous comments:

This was a very large proposal and was longer than the 20 pages including the pictures and tables. The length notwithstanding, the proposal was well-organized. Certain aspects of the approach could have been better explained.

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: **182**

Applicant Organization: **Turlock Irrigation District**

Proposal Title: **Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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 to add gravel is simply a band-aid approach. The overall processes of gravel supply and dynamics in the river are not addressed. The ecological measures are simple and inadequate to add substantially to our knowledge of the river. It is a costly project.
<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 proposal clearly states the goal of acquiring gravel resources for adding to the Tuolumne River. The objectives and proposed actions are clearly presented.

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 proposal justifies the project based on regional assessment and priorities. The hypotheses are not testable scientific hypotheses and are largely directed at administration and implementation. There is an explicit conceptual framework and it is clearly linked to the

proposed restoration actions.

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 size and complexity of the system create uncertainties, but those are clearly recognized 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?

There is a reasonable likelihood that the proposed restoration efforts would successfully restore many geomorphic features to this reach of river.

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 largely administrative and physical channel dynamics. Biological responses are not addressed in 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?

As noted above, the biological responses are not addressed in detail. Most of the advancement in knowledge will be in the area of channel dynamics and riparian recovery. This will be a substantial addition to the understanding of the Bay Delta Watershed. The project has the potential to contributing to the restoration of channel functions and sensitive fish species. The outcome of this proposal has substantial significance to decision makers. Ecologists and environmental scientists will gain understanding of channel dynamics from the proposed restoration project.

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 large (>\$4 million), but the costs of a project of this size will be large.

Miscellaneous comments:

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: **182**

Applicant Organization: **Turlock Irrigation District**

Proposal Title: **Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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 need to continually argument the gravel supply of the restored reach is of great concern. More thought needs to be given to restoration techniques such as grade control. If more efficient construction techniques are developed, the cost of restoration could be greatly reduced.
-Good	
XPoor	

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

The goals and objectives were clearly presented. The hypotheses were reasonable relative to the restoration component. The gravel acquisition element needs no hypothesis.

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 arguments for restoring the mined, highly disturbed landscapes were well made and supported. However, the idea of extracting gravel, i.e. destroying the landscape, in one location to restore another seems odd. The implication is that the restored landscape has a

higher value than the one being destroyed. No discussion of issue was presented.

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?

Securing gravel resources for this project and others to follow is a novel idea. However, some estimate of need should be undertaken first. The resource and transportation costs need to be carefully vis-à-vis the anticipated projects. This work is outside the scope of the proposed project. The design uses accepted methods and the restoration approach relies on traditional construction methods. As such, new ideas or experiences are not likely to emerge.

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?

Since the project relies on more traditional methods, landscape construction likely will be successful. As to whether the desired habitats result is another matter. This will depend on the critical relationship between new landscape and the ambient hydrology. The scale of the project is consistent with the objectives.

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 of the restoration work are reasonable. Still, monitoring should cover at least five years.

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 administrative products include the contracts for the gravel resources and the restoration design. The product of greatest concern is the restored landscape. This product will offer many interpretative opportunities.

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 staff seems well qualified. They seem to be familiar with and have worked on the subject stream and others in the region. Consequently, they should have the necessary tools and infrastructure.

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

The cost of the gravel seems reasonable. The cost of restoration seems extremely expensive. Other construction techniques need to be explored. Grade controls to prevent bed load movement and the use of the stream to transport and distribute materials need to be evaluated.

Miscellaneous comments:

External Scientific: #4

Research and Restoration External Scientific Review Form

Proposal Number: **182**

Applicant Organization: **Turlock Irrigation District**

Proposal Title: **Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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
XExcellent	Excellent vision in acquiring a large supply of high quality gravel for future projects. Identified reach for gravel infusion is very good, and restoration and monitoring of both the upland gravel source area and the channel is good. This project is very well thought out, presented, and documented. It should be funded as part of the several activities in the region.
-Good	
-Poor	

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

The goal of this project is to achieve, to the extent possible, establish natural hydrologic and geomorphic processes within the constraints of a managed flow regime. This is to be applied to approximately 14 miles of the Tuolumne River. The objectives are to (1) obtain a long-term source of gravel for restoration purposes; (2) restore the off-channel habitat affected by gravel recruitment; and (3) introduce the gravel into appropriate reaches in improve geomorphic and fisheries habitat. The hypotheses are clearly spelled out.

The goal, objectives, and hypotheses are all very clearly stated within the context of larger restoration activities. The concept is timely and important. Securing a reliable supply of high-quality gravels will allow restoration projects to continue far into the future.

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 proposed project is one of many ongoing efforts on the Tuolumne River and is consistent with the other activities. Existing knowledge, therefore, justifies the goal and objectives of the present proposal. The conceptual model is only referred to in the main body of the proposal. The actual model is described in appendices, but then in only broad detail. It is difficult to assess the completeness of the conceptual model without a more specific description. In somewhat of an unusual approach, a small amount is budgeted for conceptual design, and a much larger amount is funded for "environmental compliance and permitting," which will serve as the technical oversight of the proposed conceptual restoration. This appears to be consistent with the other ongoing projects on the River. The location of the gravel infusion is appropriate and should yield maximum benefits - downstream from a dam where artificial armoring and channel widening have made the existing gravels less mobile.

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 project is well founded and relies on a well-understood methodology for restoration. Therefore, there is little "new" knowledge to come to light from this restoration project, but the chances of success are very high (see below) as a result. The idea of securing large sources of gravel for future projects will in itself be very useful for 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?

The authors have identified two major hurdles to success: appraisal of the gravel resource and permitting to use the gravel for restoration. The proposal clearly describes the uncertainty inherent in each hurdle and modestly predicts success in overcoming them. If the hurdles are indeed overcome, the likelihood of success is high. The scale of the project is appropriate: not all of the secured gravel will be used in this specific infusion project, so additional supply will be available for future projects.

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?

This is the weakest part of the proposal. Three activities are planned, only one of which can be truly completed within the two year project period: evaluating the unit cost of sediment produced from this project and comparing that to regional costs from commercial producers. The other two performance indicators involve monitoring the progress of vegetation established in the borrow areas and monitoring sediment movement and fish use of the transfused gravels in the River. The described monitoring activities are correct and appropriate. There needs to be in place a longer-term monitoring plan. If there is such a plan already available using funds from other sources, it was not clearly presented in the text.

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?

Perhaps the most valuable product from this project will be the description of the appraisal and permitting process. Describing how these two hurdles were overcome could be of great use to decision-makers for future projects. The other products described in the proposal are fairly routine and static. I encourage CALFED to provide a small supplemental award to the proposers that will allow them to establish a project website and update it during gravel removal, cleaning, placement, and upland restoration.

There is likely to be NO product of value from the restoration activities because the project is only two years in duration. Another three years would likely be required to produce a valuable monitoring report. See "miscellaneous comments" below for my recommendation.

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 project team has many years of experience in applied projects and is very well qualified to complete the outlined tasks. The listed participants have experience in developing, managing, and implementing restoration projects; performing aquatic habitat assessments; providing geomorphic, hydrologic, and hydraulic services, coordinating projects across agencies, environmental planning, and specialized sediment transport modeling. It is impressive that so much is proposed with a relatively small budget for coordination. Most of the non-mineral budget is specified for the team of technical experts. They have access to the informational and physical infrastructure to accomplish the project.

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

The budget, in excess of \$4 million, is very high. More than \$3.5 million is earmarked for acquisition of the gravel resource and placement of infused gravel in the Tuolumne River. In place of overhead charges, a 10% contingency is added to the budget. Overall, even though the budget is high, the conceptual design, permitting, technical evaluation, and monitoring are reasonable within the larger funds required for purchase and construction. CALFED will need to determine if the contingency form of budgeting is allowable, and if so, if a 10% contingency is appropriate.

Miscellaneous comments:

This is a large project that seems to be well justified. Who will take fiscal responsibility for monitoring past the project ending date? This should be addressed by CALFED administrators for all of the restoration projects in general and for this project specifically. Monitoring is the "second half" of all restoration and is usually neglected, minimizing our long-term learning from the restoration activities.

Prior Performance/Next Phase Funding: #1

New Proposal Number: 182

New Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

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

01-N03, Tuolumne River Restoration: Special Run Pool 10, ERP; 01-N09, Tuolumne River Fine Sediment Management, ERP.

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

If no, please explain deficiencies:

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

Yes -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:

Other Comments:

Prior Performance/Next Phase Funding: #2

New Proposal Number: 182

New Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

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

11332-0-J018 Tuolumne River Special Run Pool 10 (SRP 10) Restoration and Pre-Project Monitoring Project

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 -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 -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 -N/A

If no, please explain deficiencies:

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

Yes -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:

Other Comments:

Environmental Compliance:

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion Project

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

-Yes No

If no, please explain:

Proposal does not specify which race of Chinook salmon will potentially be present during project construction, but if any state-listed runs are found in the area, a 2081 may be required.

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:

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

-Yes No

If yes, please explain:

If all necessary permits are obtained, then this project is feasible.

Other Comments:

Budget:

Proposal Number: 182

Applicant Organization: Turlock Irrigation District

Proposal Title: Tuolumne River Sediment Acquisition and Spawning Gravel Transfusion 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:

consultant services are providing funding. "No funds are sought for these purposes" is what reads throughout the proposal.

4. Are appropriate project management costs clearly identified?

-Yes No

If no, please explain:

nothing identified for project management costs. consultants are paying for funding.

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).

difference of \$24,900.00 between 17A on the project sheet and the total of the budget summary

6. Does the budget justification adequately explain major expenses?

-Yes No

If no, please explain:

the only expenses are for services or consultants.

7. Are there other budget issues that warrant consideration?

-Yes No

If yes, please explain:

Other Comments:

Question 1 & 2, the detailed budget is only for consultants and was not broken down by direct labor rates, salary, or benefits. No information was really provided in the budget justification, only "No funds are sought for these purposes".