

Proposal Reviews

#180: Tuolumne River - La Grange Floodplain Restoration

Tuolumne River Preservation Trust

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

Environmental Compliance

Budget

Initial Selection Panel Review:

CALFED Bay-Delta 2002 ERP PSP Initial Selection Panel Review

Proposal Number: 180

Applicant Organization: Tuolumne River Preservation Trust

Proposal Title: Tuolumne River - La Grange Floodplain Restoration

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 mid-range technical and external review ratings indicate the project is not ready for funding due to weaknesses in hypotheses, monitoring, assuring enduring stream channel connection, coordination and cost. Information value seems low outside of the particular project, as there are similar projects nearby. Finally, public support seems modest per the Regional Panel and the lack of coordination.

Research and Restoration Technical Panel Review:

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

Proposal Number: 180

Applicant Organization: Tuolumne River Preservation Trust

Proposal Title: Tuolumne River - La Grange Floodplain Restoration

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 would provide substantial floodplain and vegetative restoration for 77 acres along the Tuolumne River. However, the cost per acre is high. The hypotheses are vague and not testable. Measurements will be relatively coarse and may not adequately document the responses. The budget of \$1.26 million is extremely expensive for only 77 acres of restoration. There is no cost sharing. If this project has local or regional support, why are there no cooperators who are willing to invest in the project? This should be considered if CalFed decides to fund the project.
-Above average	
X Adequate	
-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 project proposes to plan and implement the reconnection of the floodplain and restore native vegetation. The objectives are clearly stated. The hypothesis is not a testable hypothesis but is a general and vague statement of expected outcome. Restoration of native floodplain vegetation is one of the major features of this proposal. On page 4, the proposal indicates that natural revegetation will not be measured, but the surveys and experiments described on page 10 would provide a basis for measuring natural revegetation.

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 project is likely to be at least moderately successful. Hydrologic regimes and their interaction with the regraded floodplains may not lead to the expected outcomes, particularly a return toward natural channel structure and function. The approach is plausible, but the project leaders should anticipate hydrogeomorphic changes that complicate the riparian vegetation restoration. It is not clear that revegetation would trap sufficient sediments that fine sediments would be reduced in the floodway. If upstream sources continue to be high, it is unlikely that sediment retention on site could reduce sediment content in the gravel. The project could be more successful if they consider the sequence of actions (e.g., floodplain modification, flow control, replanting). The measures of performance are related to the objectives but in many cases they are so coarse that they may not provide a good measure of the outcome. No provisions or plans for long-term monitoring (or coordination with public groups) are included.

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 project will contribute to the understanding of the Bay Delta Watershed. The hypothesis is not testable and the monitoring is an experimental weak design. There are no reference systems or off-site sampling areas for comparison. Before and after sampling is not possible and is largely limited to post-implementation description. This aspect of the research could be strengthened. The project will contribute to the restoration of 77 acres of public floodplain. Fencing of livestock is essential. The project potentially will add to the recovery of sensitive fish species.

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

The budget of \$1.26 million is extremely expensive for only 77 acres of restoration. Costs of \$16,000 per acre are very high, though part of the cost is related to the extensive earthmoving involved. There is no cost sharing. If this project has local or regional support, why are there no cooperators who are willing to invest in the project?

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 panel ranked this proposal as Medium because it was not coordinated with other restoration actions in the vicinity.

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?

Several permits may be required that are not described in the proposal.

Miscellaneous comments:

None

San Joaquin Regional Review:

Proposal Number: 180

Applicant Organization: Tuolumne River Preservation Trust

Proposal Title: Tuolumne River - La Grange Floodplain Restoration

Overall Ranking: -Low **XMedium** -High

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

Project is consistent with Tuol. River Restoration Plan in concept, but does not appear to be well coordinated with other restoration actions in the immediate vicinity (La Grange Gravel Infusion; Gasburg Creek fine sediment management.)

1. Is the project feasible based on local constraints?

XYes -No

How?

Support from landowner and local agencies. Concept within known realm of practices

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

XYes -No

How?

As described, project targets restoration of natural river and floodplain processes, a San Joaquin regional priority.

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?

Yes Links with Tuol. River Restoration Plan, County regional parks, Tuol. River Technical Advisory Committee objectives, but

No Did not make good linkage with fine sediment management plan study or La Grange gravel addition. Not clear how reconfiguring floodplain would alter or affect either of these projects.

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

XYes -No

How?

Locally staffed, local interface with county parks, TRTAC, volunteer planting!

Other Comments:

none

External Scientific: #1

Research and Restoration External Scientific Review Form

Proposal Number: **180**

Applicant Organization: **Tuolumne River Preservation Trust**

Proposal Title: **Tuolumne River - La Grange Floodplain Restoration**

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 proposal would provide substantial floodplain and vegetative restoration along the Tuolumne River. The hypotheses are vague and cannot be tested. The proposal does not consider sequencing the restoration effort to see if natural flooding processes will create the desired riparian vegetation and then simply controlling invasives. This offers a great opportunity for testing hypotheses but this proposal does not capture the opportunity. The budget of \$1.26 million is very high for a relatively small area of restoration.
XGood	
-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 reconnecting floodplains and restoring native vegetation. The objectives are clearly stated. The hypothesis is not a testable hypothesis but is a general statement of expected outcome. Restoration of native floodplain vegetation is one of the major features of this proposal. On page 4, the proposal indicates that natural revegetation will not be measured, but the surveys and experiments described on page 10 would provide a basis for measuring natural revegetation.

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 restoration through regional goals and assessments. The conceptual framework is a general framework developed by Stillwater Sciences. While it is generally appropriate, refining the framework for this project would strengthen 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?

Hydrologic regimes and their interaction with the regraded floodplains may not lead to the expected outcomes, particularly a return toward natural channel structure and function.

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 project is likely to be at least moderately successful. The approach is plausible, but the project leaders should anticipate hydrogeomorphic changes that complicate the riparian vegetation restoration.

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 measures of performance are related to the objectives.

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 to the understanding of the Bay Delta Watershed. The hypothesis is not testable and the monitoring is an experimental weak design. There are no reference systems or off-site sampling areas for comparison. Before and after sampling is not possible and is largely limited to post-implementation description. This aspect of the research could be strengthened. The project will contribute to the restoration of 77 acres of public floodplain. Fencing of livestock is essential. The project potentially will add to the recovery of sensitive fish species. The outcome of this proposal will be a useful model for local governments. Ecologists and environmental scientists could learn from the geomorphic, aquatic, and vegetative responses, but the measures are too broad and descriptive to capitalize on the opportunity to learn.

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 of \$1.27 million is fairly expensive for only 77 acres of restoration.

Miscellaneous comments:

External Scientific: #2

Research and Restoration External Scientific Review Form

Proposal Number: **180**

Applicant Organization: **Tuolumne River Preservation Trust**

Proposal Title: **Tuolumne River - La Grange Floodplain Restoration**

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	
<input checked="" type="checkbox"/> Good	The proposal is well organized (thanks to CALFED) and written. The need goes without saying but the solution should be more carefully considered.
-Poor	

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

The goals, objectives and hypothesis were reasonably 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 problems are clearly outlined and the solution arguments are well stated. Most of the test measures are not easily measured, particularly over the time frame of the study (e.g., inundation frequency). The measures need to be more completely defined.

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 action is suitable for intended results. Still, other approaches should have been presented. For example, why was not the possibility of raising the water rather than lowering the floodplain considered? Grade control, the more natural means of increasing water levels should be considered. Most of the work has been done many times before. If successful, the results will be useful to local officials and to making the general argument for restoration

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 work is eminently feasible. The intended improvement and use of floodplain habitat is somewhat uncertain. The risk lies in the ability to properly position the floodplain to achieve the necessary hydrologic conditions.

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 presented but they are not spatially oriented. For the proposal, this may be adequate; for the contract, they should be more specific. The schedule of measurement needs to be better presented (i.e., a graph of the time line).

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 products are listed and discussed. Results of the monitoring program are essential and they will have value beyond this project. Interpretative outcomes, whether good or bad, will result.

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 trained and experienced. As stated, their past performance is good. They imply that they have or have access to most of the.

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

The costs are quite high. For example, their planting estimate yields a cost of \$4,700/acre. They should take a good look at the seed bank and seed dispersal from birds, wind and the river. Perhaps, no planting should be done the first year.

Miscellaneous comments:

External Scientific: #3

Research and Restoration External Scientific Review Form

Proposal Number: **180**

Applicant Organization: **Tuolumne River Preservation Trust**

Proposal Title: **Tuolumne River - La Grange Floodplain Restoration**

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	1. No one with expertise in plant ecology, biology, or rangeland science specifically identified for the project. 2. No coordination with stream channel monitoring plans or activities. 3. No plans to determine whether isolating fine sediments in floodplain has any impact on accumulation of fine sediments in spawning gravels in channel. 4. Inadequate monitoring period to evaluate plant succession. 5. Inadequate monitoring period to include 2 successive years of drought. 6.
-Good	Undetermined probability of a flood of greater than 8,000 cfs occurring during the proposed project period 7. No discussion of the shortcomings identified in items 4, 5, and 6.
XPoor	

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

The goals, objectives, and hypotheses are very clearly stated. The concept is timely and important. To be consistent with testing the hypothesis that the proposed actions will improve floodplain connectivity, improve outmigrant survival, and rehabilitate riparian regeneration and especially succession processes will take longer than the funded three years and longer than the additional two years of unfunded monitoring.

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?

This is a riparian/floodplain restoration project without apparent regard to the stream channel. While the riparian portion of the study appears to be justified according to existing knowledge, little mention is made of the condition of the stream channel, sediment composition, benthic conditions, streambank conditions, spawning habitat, etc. A baseline study will be made as part of this project, but it appears to be concerned with the floodplain areas only. There is not a good connection shown to the stream channel. For example, it is proposed to move fine sands located in the floodplain farther away from the streambanks, making them less accessible for recruitment into the main channel, where fines degrade spawning habitat. The fines are to be further stabilized by planting vegetation over the relocated sediment. But no data regarding present accumulation of sands in the spawning gravels are presented, nor are plans discussed to measure future sand accumulation. How can any increase in salmon production or outmigration success be therefore attributed to a reduction in fine sediment loading to the river channel? It is mentioned that several groups are involved in monitoring activities, and they appear to be primarily devoted to stream channel descriptions. There are no supporting letters from any of these organizations that indicate that the stream channel/floodplain monitoring connection has been discussed, planned, and agreed upon. The proposed project period of three years followed by two unfunded years is very likely too short to prove the proposal hypothesis. It is assumed in the project plan that there will be floods above 4,000 cfs and even 8,000 cfs during the three year project duration. Without more information, it is difficult to assess the probability of those flows actually occurring as desired. It is also proposed to evaluate plant survival after two consecutive years of drought. How can this be expected during the project period?

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 floodplain restoration is well designed to meet the objectives of the project. This pilot program will generate information, but the value of the information will depend upon the hydrologic regime experienced during the three year duration. If completely successful, the project will yield useful information on the restoration of a floodplain vegetative sequence that more closely mimicks pre-invasive conditions. Without documented coordination with stream channel monitoring activities, there will likely be little information generated on how such a restoration measurably improves fishery conditions.

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 approach is fully documented and technically feasible. The likelihood of success of the floodplain restoration project is high, but since longer-term monitoring is not funded under this program, ultimate success cannot be documented.

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 plans are explicit and well defined but unrealistic given the lack of identified funding in years 3-5. The monitoring during the funded period should be excellent: activities and frequency are described in detail. As mentioned under "justification," however, these monitoring activities are not connected to similar activities that may be ongoing in the stream channel. There are no letters of support, coordination, or cooperation from these externally-funded groups.

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?

Products will include a baseline summary, a final project report, monitoring reports after 1, 2, and 5 years, progress reports, presentations to CALFED and television/news stories based upon "publicizing widely to the public" (not described). The project products should provide useful information to future planners about floodplain restoration projects.

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?

Only two individuals are described in the qualifications section. Both appear to be well qualified to coordinate the project and address stream channel issues. No one with specific expertise in riparian vegetation is mentioned, such as a botanist, a plant ecologist, or a rangeland scientist. The consulting firm mentioned in the proposal "applies ecological research" to restoration, but no staff are highlighted besides the Civil Engineer.

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

The project budget of more than \$1 million will allow for floodplain restoration of approximately one mile of river reach. No funds are requested to do in-channel measurements, monitoring, or restoration. The budget seems excessively high without including the stream channel itself. Monitoring costs are expected to be more than \$500 per day. It is proposed that monitoring continue for two years past the end of the project, but no funding source is identified. If monitoring costs continued to be similar to those incurred during the project, an additional \$300,000 would be needed. Since approximately \$300,000 of the requested funding is for planting and monitoring, it seems that a strong commitment to the stated additional years of monitoring would be important.

Miscellaneous comments:

Why isn't this floodplain restoration project more closely coordinated with the efforts of FERC, FSA, USFWS, DFG, USGS, and others?

External Scientific: #4

Research and Restoration External Scientific Review Form

Proposal Number: **180**

Applicant Organization: **Tuolumne River Preservation Trust**

Proposal Title: **Tuolumne River - La Grange Floodplain Restoration**

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 key restoration approaches proposed here, notably lowering of flood plains to reconnect channels and flood plains and exclusion of cattle, should be of great value and as such the project is worthy of funding. My reason for assigning a score of good vs. excellent was a concern that the monitoring methods may not be adequate to determine project success and measure improvement in riparian ecosystem function and condition.
<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, objectives and hypotheses generally were clearly stated but some were a bit vague and inconsistent The overall goal is "to improve functionality of the Tuolumne River flood plain to provide riparian habitat to support riparian species and San Joaquin fall-run Chinook". The reference to riparian species' is vague. A secondary objective of improving regeneration of riparian trees for avian and terrestrial species' is similarly vague (which avian and terrestrial species?) Primary objectives to achieve this goal include lowering the flood plain to allow for more frequent inundation, removing exotic vegetation, planting native trees, and excluding cattle. The hypothesis is that these efforts, in combination, will reduce juvenile salmon stranding and improve riparian plant regeneration and successional

processes. The concept of reconnecting channels and flood plains is timely and important. Inconsistencies arose in the importance given to items in the hypotheses vs. the objectives. Although it is hypothesized that reconstructing flood plains would rehabilitate riparian regeneration, "Improve natural regeneration" is listed as a secondary objective that will not be monitored (although in a later section monitoring methods for this objective are provided). "Reducing fine sediment in the floodway" also is listed as a secondary objective that won't be monitored, despite assertions that they "...propose to reduce the amount of fine sediment in spawning gravel ...by stabilizing soils through revegetation". The objective of removing invasive riparian vegetation may conflict with the goal of stabilizing sediment. Complete removal of the exotics may contribute to increased sediment movement into the channel, during the clearing process as well as in the long-term, if planted natives have less sediment trapping ability than densely growing exotics. Later in the document, additional goals emerge (e.g., increase vegetation biodiversity) that are not well integrated into the overall package.

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?

There is adequate justification for the general objective of lowering the flood plain to restore channel-flood plain connectivity. There also is adequate justification for excluding cattle. However, I am not convinced there is adequate justification for relying so heavily on native riparian plantings, particularly given that one of the project objectives is to restore natural regeneration of the riparian trees. I am not convinced there is adequate justification for removing all exotic vegetation. The functional roles of nonnative invasive species are not adequately represented in the conceptual model. Simply because a species is non-native does not mean it can not also stabilize flood plain soils and play roles in successional 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 approach seems appropriate to meet the goals, but was lacking in detail in some places. For example, what is the basis for excavating flood plains so as to inundate at 4,000 to 5,000 cfs? I assume these cfs values relate to some desired range of inundation frequencies, but what are they? How do they relate to what is known regarding the recruitment needs of riparian plant species? Perhaps the goal should also be expressed in terms of desired inundation frequencies (e.g., 1, 2, or 5 years?). The project will test the idea that 4000-5000 cfs will reconnect the river and flood plain; will this testing be done before planting with the riparian vegetation? If the inundation frequencies are not in the desired range, what happens then? Insufficient detail was provided on planting approaches. It was stated that after earthwork, cottonwoods, willows, and oak will be planted on flood plain surfaces "appropriate for their life history requirements". Provide more specifics on what is known about these life-history appropriate flood plain surfaces. It was unclear whether alders were to be planted or not, and unclear what the prime factors would be for deciding what tree species to plant. How does the decision to prioritize cottonwoods and willows, because of their fast-growth, aesthetics, cost and availability, relate to the prime goal of restoring habitat for avian and terrestrial species? The approach of removing all exotics may be harmful. A better approach might be partial removal, until there is some guarantee of the successful re-development of mature native riparian vegetation. Partial removal could offset negative effects to avian and terrestrial species' that may presently be using the exotics as habitat. The emphasis on riparian plantings over restoring natural regeneration processes seems inconsistent with the overall project goals.

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 stated that "regrading flood plains and planting riparian vegetation as proposed for this project" are techniques that have been undertaken for other projects in the region and are commonly used. This may be true but no documentation or evidence is provided of the long-term success of these approaches. Simply because a technique is commonly used does not mean that its long-term success has been determined.

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 riparian vegetation monitoring methods may not be adequate to assess project success. Coarse-scale mapping will be used to monitor changes in vegetation composition and distribution. This method seems too coarse to detect changes in plant species diversity, or to assess habitat quality for riparian animals. To determine effects of increased inundation frequency, riparian plant recruitment will be monitored for two years in experimental plots within the flood plain. The spatial distribution of these plots seems good but two years of monitoring for seed germination and recruitment seems inadequate. What if the inundating floods that stimulate germination don't occur in this time period? Will the approach then be assumed then to be a failure? Longer monitoring seems essential. A monitoring report will be provided after 1, 2 and 5 years. What variables will be included in the 5-year monitoring report?

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 probably will be of overall value, given the need to reconnect channels and flood plains, but the ability to measure the increased value or distinguish between effects seems low.

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 seem well qualified with respect to river geomorphology but perhaps under-represented with respect to riparian vegetation expertise.

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

The project cost (\$1,262,112 for 77 acres; \$16,000 per acre) seems high; but earth-moving projects do tend to be costly.

Miscellaneous comments:

Prior Performance/Next Phase Funding:

New Proposal Number: 180

New Proposal Title: Tuolumne River - La Grange Floodplain Restoration

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)*

2001-H-202 Tuolumne River Watershed Outreach and Stewardship

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: 180

Applicant Organization: Tuolumne River Preservation Trust

Proposal Title: Tuolumne River - La Grange Floodplain Restoration

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

-Yes No

If no, please explain:

A local grading permit may be required;

NEPA compliance required;

CESA and FESA compliance required;

State Lands Commission land use lease 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:

Other Comments:

Budget:

Proposal Number: 180

Applicant Organization: Tuolumne River Preservation Trust

Proposal Title: Tuolumne River - La Grange Floodplain Restoration

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: