

# Proposal Reviews

## **#176: Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River**

Tri-Dam Project

**Initial Selection Panel Review**

**Research and Restoration Technical Panel Review**

**San Joaquin Regional Review**

**External Scientific Review**

#1

#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:** 176

**Applicant Organization:** Tri-Dam Project

**Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

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).

<b>Fund</b>	
<b>As Is</b>	<b>X</b>
<b>In Part</b>	-
<b>With Conditions</b>	-
<b>Consider as Directed Action</b>	-
<b>Not Recommended</b>	-

Amount: **\$659,590**

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

None

Provide a brief explanation of your rating:

**This proposal was rated superior by the technical review panel and has the potential to provide important information regarding the accuracy of existing methods of estimating numbers of chinook salmon returning to the Stanislaus River, as well as information on steelhead returning to the river. Information on the accuracy of chinook salmon estimates will likely have value throughout the Central Valley. The selection panel recommends funding this proposal. The panel encourages the applicant to consider the technical panels comments concerning the potential to incorporate other counting techniques. The panel raised the question of coordination with California Department of Fish and Game and the usefulness of applying a functional technology to monitoring in other parts of the Sacramento River system. The monitoring need will have to be addressed by the management agencies, likely as part of regional coordination and goal implementation.**

# Research and Restoration Technical Panel Review:

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

**Proposal Number:** 176

**Applicant Organization:** Tri-Dam Project

**Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

**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.

<b>Overall Evaluation Summary Rating</b>	<b>Provide a brief explanation of your summary rating</b>
XSuperior	<b>This is an excellent proposal. The project is labor intensive, but the information gained on fish life history and the demonstration of weir technology in the region justifies its cost.</b>
-Above average	
-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?

**Goals, objective and hypotheses are clearly stated and the project is timely and fills an important gap in knowledge of populations. It will enumerate the accuracy of the run, allow calibration of the carcass surveys, enumerate life history traits, and provide information on smolt-to-adult (SAR) survivals.**

**The project will adapt weir technology developed for Alaska. It is a good application of existing knowledge. The benefits of weir counts are described in the proposal. Identified as a research project, it is also a pilot that will provide by example a technology that can be adapted for other streams in the region. Better information on fish runs is needed to assess recovery success and manage the Environmental Water Account.**

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 feasible; each task is documented and set in a flow chart. Likelihood of success is high. The project is large in terms of hours required for weir operation. This level is needed for a successful operation. S Cramer and Associated have sufficient experience and capabilities. Numerous performance measures are identified including weir vs. carcass counts, weir efficiency, operation and maintenance measures and fish behavior at the weir.**

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 products will be useful to: assess stock population level, assess weir design, calibrate other survey methods, and provide life history information. The research will be valuable for designing monitoring programs. The information will be useful for tracking recovery status and management of the Environmental Water Account by providing more accurate pre-season run forecasts.**

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

**Costs were judged somewhat high but acceptable.**

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

**The regional review rated the proposal medium. The committee felt the proposal did not realistically evaluate the problems of weir operations under all likely conditions. The project needs better coordination with natural resource agencies with regards to operations and permitting issues.**

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?

**The regulatory requirements were not included in the budget. State approval is required.**

#### **Miscellaneous comments:**

**Generally this is an excellent proposal. The project is labor intensive but the information gained on fish life history and the demonstration of weir technology in the region justifies the cost of the project. Coordination with regional groups is essential. In particular, the weir presents an opportunity to evaluate other fish counting structures in the same setting. For example, the panel suggests use of a Logie resistivity counter for automatic enumeration of fish. Cross comparisons of different counting systems are done in other regions. The same coordination is needed in CALFED. Considering that the Regional Review noted a lack of coordination and one of the stated objectives in the proposal is to communicate findings to resource managers, this project needs to devote special attention to coordination. In particular the panel encourages discussions for cross-comparisons of counting systems.**

## San Joaquin Regional Review:

**Proposal Number:** 176

**Applicant Organization:** Tri-Dam Project

**Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

Overall Ranking:    -Low    Medium    -High

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

**Committee felt that the concept is good but lacked a realistic evaluation of problems with weir operations under all the likely conditions. Applicant needs to be coordinating more closely with natural resource agencies with regard to operation of weir and permitting issues.**

1. Is the project feasible based on local constraints?

Yes -No

How?

**The proposal gives appearance that there are no problems other than possible public relations and poaching issues. These are being looked at by the applicant. The committee felt there are other difficulties with the operation of a weir that were not discussed in the proposal.**

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

Yes -No

How?

**They meet the priority for MR #6 and SJ # 4 as they are dealing with increasing the understanding of at risk species.**

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

Yes -No

How?

**This project would provide information to help in the evaluation of restoration action upstream.**

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

-Yes No

How?

**There needs to be much more coordination, especially with regulatory agencies. This is particularly true with regard to the steelhead in the system.**

Other Comments:

**None**

# External Scientific: #1

## Research and Restoration External Scientific Review Form

Proposal Number: 176

Applicant Organization: Tri-Dam Project

Proposal Title: **Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River**

### 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):

**About ten years ago I collaborated with S.P. Cramer on Columbia River fishes issues.**

### 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	<b>This project should tangibly improve the regional monitoring.</b>
<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?

**Goals objective and hypotheses are clearly stated and the project is timely. It will enumerate accuracy the run, allow calibration of the carcass surveys, enumerate life history traits, provide information on smolt-to-adult (SAR) survivals, and educate regional biologists in weir operations. All these accomplishments will improve monitoring of Delta fish.**

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 will adapt weir technology developed for Alaska. It is a good application of existing knowledge. The benefits of weir counts are described in table 2 page 19 of the proposal. Identified as a research project, it is also a pilot that will potentially lead to region wide improved counts of fish runs.**

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?

**Approach is very well designed and will meet the objectives. The direct information on fish run size is immediately useful to managers to assess status of runs. Objective 3 will provide life history information that will be useful in understanding population dynamics of the stocks. This will provide a basis for developing population models for fish recovery. In addition, the SAR information will be vital as a way to get at the effects of climate and ocean variations on returns. Having a clear measure of SAR over years is one of the best indicators of the overall success of the runs because this measure reflects total survival with demographic effects removed. This is novel information of value to management.**

**Other methods of fish enumeration will be explored, with video recording mentioned. The applicants should be made aware that the University of Washington Applied Physics Laboratory is developing new acoustic methods that can count and identify individual fish. It would be cost effective to test this technology during their 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?

**The project is feasible; each task is documented and set in a flow chart. I expect success. The project is large in terms of hours required for weir operation. This level is needed for a success operation.**

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 will include count measures (i.e weir vs. carcass counts and weir efficiency), operation and maintenance measures and fish behavior to the weir. Sufficient detail is provided to suggest the performance measures will be collected successfully.**

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 are listed in Table 2 page 19. The products will be useful to: assess stock run condition, assess weir design, calibrate of other survey methods, and provide life history information. The research will be valuable for designing monitoring programs.**

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?

**S.P. Cramer and Associates have experience in fisheries research and have the required infrastructure to get the job done.**

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

**This project is not inexpensive and requires a significant commitment to biologist time. The hourly rates are on the high end of consultant fees. I expect the cost could be considerably reduced if weirs developed within in a routine monitoring program.**

**Miscellaneous comments:**

**Generally this is an excellent proposal. The project is labor intensive but the information gained on fish life history and the demonstration of weir technology in region justifies the cost of the project.**

## External Scientific: #2

### Research and Restoration External Scientific Review Form

Proposal Number: 176

Applicant Organization: Tri-Dam Project

Proposal Title: **Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River**

#### 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	<b>This project is an excellent fit of techniques to needed data and fills important information gaps. Familiarity with the system and associated data enhance changes for success. Extension of findings to other situations expands benefits substantially.</b>
<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?

**The goals and objectives are clear and well integrated and presented. This project meets an important need.**

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 fills an important gap in knowledge of populations and has potential to improve data gathering elsewhere. The location is also a good choice for application of the techniques. The proponents are familiar with the methods used elsewhere and have anticipated problems.**

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 project has a solid approach, well-designed and should be highly useful for understanding salmon and steelhead population characteristics and timing of spawning in this system. The availability of ongoing sampling provides a good basis for comparison with the weir. The plan to obtain as much information as possible from fish captured is well considered and maximizes efficiency of effort.**

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 feasible at nearly all levels. The only limitation may be the possibility of unusual water years over the 3-year project.**

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?

**In nearly all respects the measurements and tests of outcomes are clear and obtainable. One area is in question: if carcass counts are highly likely to be biased then recovery of fish marked at the weir will not be a valid check on weir efficiency. The proposal argues that the weir is a check on carcass counts so it is circular to use carcass counts to on data from the weir.**

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 obtain substantial new information on nearly the full run of fish and provide needed data on the relative validity of the more-common carcass count approach. There will be, however, limits on explaining causes for poor survival at various life stages (as the proposal suggests) although the project will help quantify to a higher degree of accuracy than before the amount and life stage of survival rates. The knowledge gained from this project should be valuable in helping interpret data collected elsewhere by carcass count methods.**

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 investigators have solid knowledge of the techniques and have vital familiarity with the project area to insure success. Their familiarity with exiting data and conditions in the river enhance the likelihood for success.**

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

**The expected benefits are high and costs for 3 years of accurate data on these runs is quite low. Probabilities for extending the findings of this project to other locations amplifies the benefits substantially.**

**Miscellaneous comments:**

**The project fills an extremely important gap in knowledge and may significantly improve general monitoring of populations if the weir can be used in other rivers or corrections to carcass counts extended elsewhere.**

# External Scientific: #3

## Research and Restoration External Scientific Review Form

Proposal Number: 176

Applicant Organization: Tri-Dam Project

Proposal Title: **Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River**

### 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	<b>I think it would probably be a good idea to run a adult weir on the Stanislaus River long term. Especially since the Tri-Dam Project has been running as rotary screw trap to enumerate outmigrating chinook smolts. Together the smolt trap and adult weir could provide long term stock-recrutment data that would have a multitude of uses.</b>
XGood	<b>However this proposal does not make a clearly compelling case that the proposed project is needed. In particular I would like to see more integration and cooperation with Fish and Game with regard to the asesment of Fish and Games stock assessment techniques and clearer long term goals.</b>
-Poor	<b>I would recommend that a decision on funding this proposal take into account Fish and Game's recommendations.</b>

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

**The goals, objectives and "hypotheses" of this study are reasonably clearly stated and internally consistent.**

**The "concept" of using a fish weir to enumerate spawning escapements of chinook and steelhead is not novel though the application of this technique in California may be. It may be timely to adopt this technique in California.**

**It is important to obtain accurate escapement estimates for important stocks of anadromous salmonids. Currently I gather the California Department of Fish and Game is obtaining these by mark/recapture of carcasses. The important question in evaluating the current proposal is whether the test and demonstration of a fish weir might significantly improve escapement estimates on the Stanislaus in particular and throughout California in general.**

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?

**To fully evaluate whether this work is justified relative to existing knowledge requires the expertise and experience of someone familiar with the stock assessment procedures that the California Department of Fish and Game use to assess chinook escapement and the importance of estimating steelhead escapement. This is because the authors of the proposal justify their study, in part, on the basis that it will point the way to improved stock assessment by Fish and Game (or by the continued operation of the weir by the consulting company SPCA). I do not have the expertise to make this assessment, you need an opinion from someone who knows about the relevant activities of Fish and Game. Under any circumstances I would expect to see much more collaboration with Fish and Game biologists built into this proposal at this stage.**

**I can assess whether the project is justified to demonstrate the feasibility of running a fish weir on the Stanislaus River. I don't think such a demonstration project is necessary because, if properly deployed, the proposed fish weir design will almost certainly work as well in the Stanislaus as it does in Alaskan rivers, the techniques are well worked out.**

**The proposed project is not really a research project. As a consequence there is not really an underlying conceptual model rather the rationale for the study is the (justifiable) belief that high quality stock-recruitment data is the cornerstone of sound management for anadromous salmonids.**

**If a fish weir were needed on the Stanislaus I think one could be confident that it could be run annually, i.e. a full-scale implementation project, so I don't see the need for a demonstration 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?

**The approach is well designed to demonstrate the feasibility of running a fish weir on the Stanislaus River, but, as noted above, we can probably be confident at this stage that this is possible. In this respect the project will not add greatly to the base of knowledge.**

**A fish weir on the Stanislaus could probably provide more detailed information on the chinook and steelhead stocks than is currently obtained by Fish and Game but the proposed project (3 years) is too short to provide a meaningful time-series of information on stock-recruitment of chinook or steelhead. To provide this kind of information would require the weir be run for a few decades rather than a few years. This requires a long term commitment, not just three years funding. I recognise that after running the weir for three years the Tri-Dam project might continue it, ultimately providing a long-term data set, however this is not in the proposal.**

**Some of the information provided by this study might be useful to decision makers. Notably it might be useful for Fish and Game to know if there is a problem with their current methods of estimating chinook escapement. Before funding, or not funding, this proposal I would want to an opinion on this question.**

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 proposed work is technically feasible.**

**The scale of the project is consistent with its objective of assessing Fish and Game's stock assessment practices.**

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?

**Yes.**

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?

**Yes**

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

**I have little basis for evaluating the track record of the applicants in terms of past projects. But, as a research biologist, I am concerned that the consulting company that will implement this work has been collecting data on outmigrating chinook smolts since 1993 but have not published any of their results in the peer reviewed scientific literature (at least none of these results are cited in the proposal). This makes me somewhat cautious about endorsing their ability to follow up on the interpretation of the data they collect to the extent suggested in their proposal.**

**I suspect the team has the ability to implement the field work. I am less confident that they have the track record to turn the data they gather into useful knowledge.**

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

**I don't have the expertise to comment on this. The total price tag seems very high to me. I understand this is typical of consulting companies.**

**Miscellaneous comments:**

## External Scientific: #4

### Research and Restoration External Scientific Review Form

Proposal Number: 176

Applicant Organization: Tri-Dam Project

Proposal Title: **Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River**

#### 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	<b>This seems like a very timely and useful project, and will probably generate information needed for management of this system as well as indications of the feasibility of this kind of weir for other rivers in the region. It has a relatively high probability of yielding useful information, and the team seems qualified to do it.</b>
<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?

**The objectives and goals are very clearly stated. It seems that recent meetings with area managers have called for verification of carcass counts and so the proposal is very timely. The hypotheses are clearly stated as well. In truth they are not really "hypotheses" that can be tested (i.e., with a null and an alternative) but are more like underlying assumptions that provide the justification for the proposal. In this sense this is not a classic scientific hypothesis-driven proposal but one addressing a pressing management need. This is not to imply any criticism of the proposal.**

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?

**Existing information on chinook timing, abundance and size/age distribution in this (and other) rivers seems to come exclusively from carcass surveys, and there are many obvious, documented biases associated with carcass counts. They are also useless for steelhead. I am surprised that the state of knowledge is so limited but if that is the case then this kind of weir may indeed provide many important kinds of information, and opportunities for other sampling and tagging to verify the accuracy of carcass work and get basic life history information. This is essentially a pilot/demonstration project, so selection of both the right river and right site in the river are important. It seems that the team has considered many of the physical, biological, and human variables involved in site selection. I think that the state will have to think carefully about how widely this kind of weir might be used, but without a demonstration in a California river there will probably be no progress.**

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 really the application of existing techniques to California rivers. The authors state that these weirs are not in use in California and I have no reason to doubt this statement though I have no specific knowledge one way or the other. I am not an expert in weir design but some kind of hands-on sampling seems essential if the managers are to get a better handle on the abundance and life history patterns of chinook and steelhead, and this weir seems likely to work well. I would think the Stanislaus River would be a good place to test it, being a combination of a site where the data would be useful, and a site where it might work well. Therefore, I cannot say that the information gained will be novel because counts, mark-recapture, scale collection, and basic biological data are not ground-breaking. Still, given the apparent absence of such data, it should provide extremely useful information for conservation of these stocks.**

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?

**As indicated earlier, I do not consider myself an expert in the construction and maintenance of fish weirs, though I have seen many in operation over a wide range of locations and river types. To some extent the proposal is vague in this regard, and clearly there will be meetings before final site is selected, after discussion of issues related to boating, bank stability, fish, etc. These kinds of weirs are operating in Alaska and I do not see a fundamental reason why they should not work in California. If the weir works (i.e., catches a very large and stable fraction of the fish and permits staff to handle them for biological sampling without injury or delay to the fish), then achievement of the scientific goals should be quite straightforward and highly likely.**

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?

**For the most part the proposal makes clear how performance will be measured. For example, weir counts will be compared to CDFG carcass estimates. However, they indicate that "A subsample of adult chinook passing the weir can be marked ..." In my view such marking is extremely important. First, the proportion of tagged fish recovered in carcass surveys would be useful information. In addition, one could determine if fish passing the weir at certain times tended to go to certain parts of the river system, and the chronology of entry and death. Marking fish is very quick, easy and cheap if the weir is in place and the fish are being handled anyway. I strongly urge that this be done.**

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?

**I think the data outputs will be very useful and easy to interpret. Very little data-processing or sample analysis will be needed, so there will be relatively quick transfer of information to managers.**

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 seems to have the needed experience with the river and the local agencies to do this job. I assume that they will consult regularly with experts from Alaska on siting and operation of the weir.**

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

**The budget seems generally reasonable, though I doubt that \$15K would be needed for equipment for reading scales. The salaries and costs seem a bit high to me but I work at a university where students work long hours for a degree and minimal wage rather than a "living" wage.**

**Miscellaneous comments:**

## **Prior Performance/Next Phase Funding:**

**New Proposal Number:** 176

**New Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

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)*

### **Evaluate the use of radio-tagged juvenile chinook salmon to identify cause and location of mortality Contract # 11332-9-J010**

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:** 176

**Applicant Organization:** Tri-Dam Project

**Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

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

-Yes No

If no, please explain:

**State Lands Commission approval required. CESA compliance required. CEQA and NEPA documentation 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:

**No: Regulatory requirements have not been included in the budget summary.**

**Yes: Work schedule includes environmental compliance.**

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

-Yes No

If yes, please explain:

Other Comments:

## **Budget:**

**Proposal Number:** 176

**Applicant Organization:** Tri-Dam Project

**Proposal Title:** Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River

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:

**the information in clearly stated in the budget summary and the budget justification.**

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: