Assessment of Project Specific and Cumulative Effects of Restoration on Stanislaus River Juvenile Chinook Production

Chrissy L Sonke

Initial Selection Panel Review

Not Recommended

Amount Sought: \$478,509

Fund This Amount: \$0

Brief explanation of rating:

This project proposes an assessment of project specific and cumulative effects of multiple habitat restoration on Stanislaus River to benefit juvenile fall Chinook salmon production. The Stanislaus has an established monitoring dataset that could be continued with funding of this proposal and the project addresses the essence of the PSP in terms of monitoring restoration actions that can benefit a priority fish species identified in the Multi-Species Conservation Strategy. A significant match component is offered by Tri-Dam. The technical panel identified several technical shortcomings of the proposal although they rated it adequate. The technical panel questioned whether results generated by this project and the level of data gathering and analysis would be rigorous enough to pass peer review. The technical panel suggested that this would ultimately limit the usefulness of the project for making sound adaptive management decisions. In addition there are other higher rated proposals in higher priority streams that will address gravel augmentation and the effects on emergence, spawning, and salmon production. Those limitations coupled with the fact that the Stanislaus is not a priority stream in the PSP resulted in the panel not recommending funding this proposal.

Technical Review Panel's Overall Evaluation Rating:

Adequate

Explanation Of Summary Rating

This proposal deals with quantification of outmigration of juvenile salmonide using a rotary screw trap. The Technical Panel rated this proposal as adequate and identified a number of shortcomings that could affect project outcome. These include insufficient descriptions of the methods involving trap placement, drainage monitoring, juvenile survival and water quality analyses. The Technical Panel believes that good information could be produced from this project if the technical deficiencies were addressed.

Goals And Justification

This project will measure outmigration of juvenile salmonids using a rotary screw trap in the Stanislaus river. The specific goals of the project are " (1) identify and quantify improvements in juvenile production per spawner as a result of the Lovers' Leap Restoration Project and (2) monitor the cumulative effect of gravel augmentation projects, and of other measures intended to protect and restore fall-run Chinook salmon, and juvenile production in the Stanislaus River." These are appropriate goals for this Calfed solicitation. Three habitat enhancement projects (i.e., spawning gravel additions) have occurred in the river, Lover's Leap, Knight's Ferry and Goodwin Canyon and there is little information on the success or failure of these actions. The proposal has a strong conceptual model (a graphical presentation would have been easier to understand for everyone) and a strong justification. There were some serious questions raised by the external technical reviewers (detailed in the Approach section below) and the authors did not

unequivocally demonstrate that spawning gravel was the limiting factor determining juvenile recruitment (e.g., what if alevin or juvenile habitat was limiting instead). As noted by at least one external technical referee, most of the information in the proposal pertains to the Lover's Leap (henceforth LL) site with goals and justifications for the remaining two sites being less well thought out.

It is noteworthy that the PI's appear to have sufficient pre-treatment data to potentially assess the effects of spawning gravel addition, although it would have been nice to see an analysis of these data to get an indication of the level of pre-treatment variation present in the response variables. This would have been helpful to the Technical Panel because it would have better enabled us to judge the likelihood that proposed measures will be able to detect change resulting from management actions. The Technical Panel also noted that it will be difficult to separate environmental fluctuations or other changes in the drainage from the treatment effect itself. The PI's are well aware of this but because trap placement was not clearly identified, nor drainage-wide environmental monitoring proposed, the technical Panel could not determine if the problem can be overcome.

Approach

The section on juvenile survival suggests that factors other than suitable spawning habitat may be important to year-class strength. This brings up two main shortcomings of the study, both noted by the Technical Panel and the external technical referees. First, although the trap may estimate cumulative effects, unless it is in close proximity to the gravel additions, it may take a huge increase in juvenile recruitment to produce a statistically identifiable increase. Consequently, the trap must be placed in close proximity to the gravel addition. Second, there may be other disturbances in the watershed that could influence juvenile recruitment including local weather, wider-scale climatic changes, or other habitat degradation/improvement activities. How will changes in trapped juveniles be specifically linked to the gravel additions as opposed to these other factors? It is

clear that the PI's are aware of such effects, but it is unclear how they will deal with them. Frankly, the PI's need to do some sort of basin-wide survey and monitor weather and flow levels to ensure that treatment effects are not confounded by other disturbances. Finally, if stocked juveniles are being placed in this system or other nearby systems, the PI's need to be able to separate stocked juveniles from those that actually were produced by the gravel augmentation.

In general, there are few specific descriptions of how data will be analyzed statistically and hypotheses tested directly (i.e. criteria for confirmation or rejections). This made the proposal difficult to evaluate.

The trap should be sampled the same time each day to reduce bias due to differences in diel migratory behavior?

We were uncertain if the trap efficiency description referred to the amount of time the trap actually fished, or efficiency of capture (more standard usage of the term) or both.

Neither juvenile survival nor water quality methods were described in sufficient detail. In addition, the water quality measurements are limited to temperature and turbidity and there is no justification that these parameters are adequate to quantify water quality for this system.

Feasibility And Likelihood Of Success

The proposal is well organized and the PI's know what they are doing so the feasibility is high. On the other hand, the lack of detail regarding several critical aspects of the proposal (see comments in Approach section above) leaves some aspects of the likelihood of success, open to question.

Performance Measures

The performance measures are good, however there frequently was insufficient detail to address the questions listed in the Performance Measures instructions (see above), in a definitive

manner. If all the stats are done right, then the performance measures will be adequate.

Products

The PI's should provide readily accessible data in a variety of formats (web-based, reports, BDAT) that will be useful to managers and scientists. The Technical Panel noted that an explicit product of this proposal should be a publication in the peer-reviewed scientific literature. Given, the design shortcomings noted in the Approach section (see above) by both the Technical Panel and external technical reviewers, it was not certain that the data will be sufficient to pass peer-review, although they have a shot at it.

Capabilities

The personnel seem well qualified although it seems odd that the senior consultant is an attorney with only a BSc in biology. The vague or missing descriptions of data analysis techniques and statistical testing lead the Technical Panel to wonder about the investigators' capabilities in these areas.

Budget

The Technical Panel agreed with the external technical reviewer who said that the Senior PI costs and workshop costs were excessive and could be cut substantially (maybe by 50% [more for the workshop]). Can consultants charge indirect costs? With sufficient trimming the budget is appropriate.

Regional Review

The regional review was extremely thorough and identified many of the problems noted by the external technical reviewers and Technical Panel, especially the difficulty of specifically attributing changes in juvenile abundance to gravel injections alone. The Regional Panel did not feel that the Stanislaus River was a high priority system. The Regional Panel felt that there was good coordination in this proposal and it clearly is well-linked with local groups. The Regional Panel was

concerned that the PI's could not get the required permits to do the work. The Technical Panel also felt that this was a significant concern, and believes that if this proposal is funded, funds should not be released until the required permit(s) have been obtained. The overall rating was medium.

Administrative Review

The budgetary review noted a number of problematical areas in the budget that need to be addressed prior to funding.

Additional Comments

San Joaquin Regional Panel's Overall Ranking:

Medium

Summary:

The panel finds that this project has potential to produce useful data to understand future priority ranking as related to gravel injection projects and obtaining a understanding of juvinile salmon survival. The panel could not determine whether changes in juvinle production could be attributed to gravel restoration.

1. Applicability To ERP Goals And Regional Priorities.

PSP priorities met: • How well are restoration actions attaining their objectives? The Tri-Dam project proposes to monitor and evaluate three gravel introduction projects located on the Stanislaus River whose objectives were to increase the quality and quantity of Chinook salmon and Central Valley steelhead spawning habitat which should ultimately result in the increase in abundance of both species. The data gathered from this project will assess if increases in spawning habitat yield an increased escapement. • How much progress has been made towards the objectives of the Ecosystem Restoration Program and the Multi-Species Conservation Strategy? This project attempts to provide a quantitative measure of both juvenile Chinook salmon production on the Stanislaus River and the survival ratio of such juveniles entering the main stem of the San Joaquin River. This data will contribute toward assessing if ERP or MSCS objectives are being reached.

• What adjustments to prior restoration actions are needed to better achieve their objectives? This project seeks to provide data that would result in a better understanding of whether gravel augmentation projects alone can accomplish desired increases in anadromous fish production and the role other

factors play in limiting recovery.

• What new information or understandings are resulting from restoration actions that may lead to adjustments in our understanding of Bay-Delta ecosystems? This project will provide information to better understand if funding future gravel augmentation projects is justifiable and their priority on rivers in the delta system where other contributing factors such as water temperature and flows may take precedence.

Will it monitor and evaluate CALFED ERP OR CVPIA restoration actions? Yes. Three gravel introduction projects located on the Stanislaus River will be monitored during the course of the project. Lovers Leap Restoration Project is a CVPIA Andromous Fish Recovery Program (AFRP) funded project to increase the quantity and quality of fish spawning habitat down stream of Goodwin dam that will be completed in 2005. Knights Ferry Gravel Replenishment Project was a CALFED ERP funded project to increase spawning and incubation habitat for Chinook salmon. The Goodwin Canyon Spawning Gravel Introductions occurred at various times between 1997 and 2004 using CVPIA funding.

Does it provide information on how the projects contribute to the MSCS milestone for the region? No. The proposal mentions how it would contribute to the six ERP strategic goals, however it fails make mention of the relevant MSCS Milestones.

Will it provide information about how restoration actions affect one or more of the "Big R" species in the region or habitat processes or stressors affect them? Yes. This project attempts to focus on the effects of restoration projects on two "Big R" species the Central Valley Chinook Salmon and Central Valley steelhead. It will also provide data on the effects of other stressors on juvenile survival rates of these species.

Does the project monitor one of the ecosystems of high priority according to the ERP and where the ERP has made it greatest investments? No, the Stanislaus River is not considered a high priority system according to this PSP.

Will the project assess and compare restoration actions that are important or common in the region? Yes, gravel augmentation projects are common in this region. This project may provide useful data to the adaptive management process of the ERP with regards to improved spawning habitats on juvenile salmon production and increased escapement.

2. Links With Other Restoration Actions.

Describe how it links to ongoing ecosystem restoration activities and its relationships to other actions other than those it monitors: Large dams that prevent course sediment from traveling downstream are found on the San Joaquin River and its tributaries. This often requires periodic injections of appropriate sized gravel into the system to maintain suitable spawning habitat for andromous fish. If the monitoring proposed is as effective as the proposal suggests, this project will evaluate the success of three such injections by monitoring the increase in numbers of juvenile outmigration and adult escapement after three years. The data from this project can then be used in other similar projects to determine if limited spawning habitat is the limiting factor preventing salmonid recovery in this region. Other measurements will be obtained during this study and a byproduct of this project will include data supporting juvenile salmon survival ratios in relation to water temperature and water flow variation. This data can be used to modify present and future projects to better address the recovery of salmon and steelhead in the region.

Does the project monitor several related restoration actions or does it monitor only a single action? This project will monitor and evaluate the responses of three similar gravel introduction projects.

Is the project appropriately coordinated with other restoration and monitoring activities? Yes, Consultants will provide the California Department of Water Resources (DWR) with data obtained from 2 of the trapping stations as part of the Interagency Ecological Program. The data will be intergrated into a database administered by DWR in conjunction

with the CVPIA Comprehensive Assessment and Monitoring program. The results of all rotary screw trap data for the mouths of the tributaries of the Sacramento-San Joaquin basin are housed in this database.

Will it house data in a way that is accessible to people involved in other restoration and monitoring activities? Yes, See above. Plus the consultants will make available to the public a summary all outmigration data on the internet.

Does it fill an important gap in ongoing monitoring of restoration outcomes in the region? Yes, this project will take over the monitoring of two rotary screw traps adjacent to Caswell Park on the Stanislaus River. Previously this monitoring effort was funded by CVPIA AFRP. The project proponent implies that future funding from this source will not be stable and has caused reduction of the quantity of data gathered.

Will it provide information that helps inform planning or design of imminent restoration actions proposed for nearby ecosystems? Yes, if the monitoring is as effective as the proposal suggests. If supplying fish with adequate spawning habitat does not in and of itself increase the number of escaping adults in three years, then other factors must be limiting the return of that cohort to its native river. This project will assess if other factors outside of a lack of spawning habitat plays a significant role in the reduction of the recovery of Chinook salmon and Central Valley stealhead. These other contributing factors will have to be addressed in future actions if recovery of these species is to occur.

3. Local Circumstances.

The pannel is uncirtain about the feasabilty of obtaining section 10 take authorization from NOAA for Central Valley steelhead in timeframe of this proposal. This Project makes asumption that they will obtain this authorization prior to the start of monitoring. If take is not authorized for this project it couldn not be feasibly implemented.

4. Local Involvement.

Does the project provide adequate public outreach? Yes, The consultants will continue to attend and participate in various meetings including the Stanislaus River Fish Group, IEP Juvenile Monitoring Project Work Team. They will also continue to participate in workshops, seminars and conferences. They have handouts available to the public at various locations. They plan to continue to hold tours for school and environmental groups and will participate in local events. Also they will make available to the public a website that contains summarized information regarding this project and they will e-mail data summaries and how that data compares to previous years to interested parties.

5. Local Value.

Describe the value of the projects products to restoration of ecosystems in the region: This project will provide an estimation of future escapement for the Stanislaus River and quantify the river's juvenile salmon contribution to the bay-delta. This project will also provide valuable information to quantify the outmigrating juveniles. This data will determine if gravel injections produce an increase in abundance of juvenile salmon only to have a majority of them die in the 31.5 mile span between sampling sites. If this is the case, other factors need to be addressed in future restoration actions to assure that the improved spawning habitats are productive. This data may provide increased understanding as to the limiting factors on salmon recovery in the San Joaquin river system and how to prioritize future restoration projects.

Does this project synthesize data, draw conclusions, and report results in a way that will increase understanding of restoration actions and be useful to others in making resources management decisions?

Yes, this project will provide the framework to better understand the limiting factors of recovering to Chinook salmon to desired levels. An expectable level of analysis will

be preformed and the project will make available the results of this project to any interested parties.

Will it help to understand how well restoration actions are attaining their objectives, how ecosystems are responding to multiple restoration actions in local areas, or if adjustments to prior restoration actions are needed to better achieve their objectives? Yes, this project will look at the estimated increase in juvenile production per spawning adult resulting from habitat restoration projects and then attempt to justify the value of specific restoration actions as they relate to surviving outmigrating juvenile Chinook salmon. This project will attempt to determine if other limiting factors should be addressed prior to or in conjunction with similar restoration actions.

6. Other Comments:

The panel questions how ratios of juveniles to adults can be assertained with gravel injections. Other factors that could increase juvenile production could contribute to an increase in salmon production.

Goals And Justification

Proposal identifies goals and objectives and, in general, links it to the restoration actions. the conceptual model does explain the restoration action.

Approach

Project seems well designed and linked to objectives.

Technical Feasibility

project seems technically feasible

Performance Measures

I do not know. this seems to be the biggest weakness of the project. although there is a linkage between outmigration and spawning capacity, it is important to examine other parameters as well such as flow. although they are examining flow in terms of trap efficiency it was not clear to me what types of analyses they were going to conduct with the data to link the restoration action back to the monitoring

Products

the products should be quite useful.

Capabilities

team seems well qualified.

Budget

budget seems reasonable

Additional Comments

in summary this seems like an important project. however a better link between the outmigrant data, the types of analysis that will be conducted, and the restoration action would help make this a better proposal

Goals And Justification

The proposal clearly identifies the restoration actions to be monitored, as well as the action's goals and objectives. The conceptual model - increase in spawning gravel should lead to increase in juveniles per spawner - is also clear. The hypothesis appears justified as well.

Approach

The approach is well designed. However, I am concerned that unless the effect size - increase in juveniles per spawner - is very large, it may not be detectable any time soon (e.g., Williams. J. G. "Stock dynamics and adaptive management of habitat," N. Am. J. Fish. Mgmt. 19, May 1999, pp. 329-341). A Before-after-control-impact (BACI) design would probably be much more powerful, but I do not know if existing data would allow this type of design. The project builds on or simply extends previous work, and is likely to make a useful addition to scientific knowledge regarding smolts per spawner in the system under study. If it can indeed detect the effects of gravel addition, this would be very useful.

Technical Feasibility

The project is well documented and the monitoring is technically feasible. Its scale is consistent with stated objectives.

Performance Measures

Data collected will allow evaluation of restoration actions, but see comments on approach. Performance metrics - juveniles per spawner - are clearly identified, as is the rationale. This will allow evaluation of the models, and the plan is detailed enough to assess the performance of the activity.

Products

Products should be useful, and data access is well described. Access by others appears straight-forward. Products are likely to withstand peer review.

Capabilities

The project team is well-qualified, with an appropriate mix of disciplines and a good track record.

Budget

The budget appears sufficient for the work proposed.

Additional Comments

The project does not clearly identify how the resulting data - juveniles per spawner - will be analyzed once the project is completed. If other proposals describe this, then the project should identify them. If not, and it is beyond the bounds of the project, then a brief description of this would be useful. In addition, a map of the study area and a glossary of acronyms would also be useful for reviewers. Finally, to judge whether or not a before-after approach is likely to detect effects on juveniles per spawner, a figure or table on past results would be useful - if this nearly constant over time, then changes should be readily detectable within a few years, and vice versa.

Goals And Justification

This proposal seeks to enhance understanding of gravel augmentation projects by monitoring production of outmigrating fish, pre- and post- restoration action, with rotary screw traps. The proposal begins by identifying three restoration actions to be monitored, but the remainder of the proposal seems largely focused on the Lover's Leap Restoration (hereafter LLR) actions with only minimal reference to the other two projects outlined in the initial project description (A.1.). The goals and objectives are clearly stated for the LLR project. However, for the Knights Ferry project the goals are somewhat vague, and there are no goals stated for the Goodwin Canyon project. The conceptual model is explicit in explaining the underlying basis for the restoration actions, but as noted above, the connection between the conceptual model and two of the restoration projects could have been explained better. The proposal has one clear hypothesis (third paragraph under A.2.) to test if juvenile and adult abundance will be significantly greater following restoration implementation as compared to pre-restoration conditions. This hypothesis is justified and potentially valuable given that there are many gravel augmentation projects being implemented, but relatively few studies assessing the impacts of these projects (but see Merz and Sedka, 2004).

Approach

The approach seems generally well designed. The proposal outlines in great detail the overall plan that will adequately meet the project's objectives. However, there is one area of the project that remains unclear and should be noted. Where the LLR and other gravel augmentation projects are in relation to the rotary screw traps is not specified (although river mile is specified for some sites). Because of this, it is somewhat difficult to be sure whether correlations can be drawn from the work of individual projects. From the way the project is described, it seems possible to draw correlations

between changes in juvenile and adult abundance estimates and the cumulative effects of all three restoration projects. It does not seem likely that this effort would have the ability to isolate the effects resulting from individual projects or from gravel augmentation alone. In addition, the proposal mentions that the LLR project also involves, "increasing the functional floodplain habitat." If this floodplain habitat improvement includes actions other than gravel augmentation, then it will not be possible to distinguish the effects of gravel augmentation alone, unless the monitoring effort has some sort of control that is not mentioned within this paper. The proposal could have been more explicit by clarifying how correlations could be reasonably drawn from data obtained with the monitoring design. Another area that could have been improved was Task 2.2 (relating to objective 3). It was unclear how the authors planned to draw correlations between environmental variables and trap efficiency. The proposal builds on previous monitoring in that the authors plan to analyze the data, comparing pre- and post-project abundance estimates. The proposal also incorporates knowledge gained from previous monitoring efforts using rotary screw traps during high flow periods and freshets. This proposal could contribute to the gravel augmentation knowledge base if the data are analyzed effectively and if the design allows for correlations to be drawn (see preceding paragraph as to why this could be problematic). There are relatively few efforts that have studied the impacts of gravel augmentation, but increasingly augmentation is used as a way to improve habitat for salmonids. This work could result in important information to enhance our understanding of gravel augmentation as a restoration tool.

Technical Feasibility

The project is technically feasible and the proposal outlines a clear agenda for managing the project, monitoring the sites, and reporting findings. In addition, the scale of the project seems appropriate for the objectives.

Performance Measures

As mentioned previously, the proposal would have been improved by clearly identifying where the monitoring sites were in relation to the restoration projects. The way the proposal is written, it is unclear whether the monitoring will result in data that can reliably be correlated to the gravel augmentation restoration actions. It appears that the data will result in an evaluation of cumulative effects from several restoration projects, which could be interesting, but may not meet the proposal objective. It is possible that the authors have worked this out in great detail, but failed to explicitly communicate the plan within the proposal outline. However, if the monitoring will be able to isolate the effects of gravel augmentation, then the performance measures (using changes in juvenile and adult abundance and production per spawner estimates as a means for evaluating the effects of restoration actions) are appropriate. The rationale for the performance measures was clearly demonstrated.

The conceptual model in the proposal was complex and identified several restoration actions that could result in increased spawning habitat, egg-to-emergence success, and salmonid production. Many of the concepts are closely related and no doubt contribute to the overall success of salmonid populations. The results from this monitoring project would not be able to evaluate many of the ideas in the conceptual model, but could support the hypothesis that salmon production could increase with gravel augmentation. The other identified concepts would require a different monitoring approach.

The proposal could also have been improved by identifying the statistical methods planned for data analysis. The proposal outlines how trap efficiency and abundance estimates will be made. However, with the exception of mentioning "correlative statistics", the proposal does not indicate how the data will be analyzed among the pre- and post- restoration actions. The comparison between pre- and post-restoration is the main objective of the project and detailed explanation of the data analysis plan would have improved the proposal.

Products

The project will produce annual reports, real-time data accessible on the web, and a final report analyzing the data. All of this information would be useful for resource managers, restoration/conservation scientists and water district operators interested in population dynamics as well as restoration ecology. The proposal specifically outlines how the data will be disseminated, so that interested parties can easily access the data in a timely manner. In addition, data handling and storage measures are well thought out. Due to the lack of clarity in two key aspects of the proposal (namely data analysis and how monitoring will evaluate only gravel augmentation impacts), it is difficult to know if the results would stand up to peer review.

Capabilities

The project team seems well qualified to manage the project and conduct monitoring. S.P Cramer and Associates have been conducting salmonid research for many years, and have monitored the project site with rotary screw traps for some time. The team consists primarily of a senior consultant, two biologists, and technicians. The senior consultant has extensive fisheries research and management experience and the biologists have a mix of field monitoring, rotary screw trap operation, and data analysis skills. The combination of skills is appropriate to complete the project successfully, and the team's past experience indicates that they will. However it is important to keep in mind comments mentioned in previous sections regarding final data analysis and interpretation. While the senior consultant likely has the skills to adequately analyze the data (given past experience with fisheries research), none of the statistical procedures were elaborated on in detail. This makes it difficult to assess whether the team has the skills to do the analysis successfully.

Budget

The budget seems reasonable and adequate for the work proposed. Tri Dam will be sharing a large portion of the cost burden for this project (49% of total cost). There are two items worth noting: • Table I (in the budget section) notes that the senior consultant will need 60 hours to "sample outmigrating salmon". Given that there are 1220 hours for technicians and biologists to do this sampling work and given that the senior consultant should be largely in charge of data analysis and project management (per their description), this amount of time seemed odd. Perhaps there is reasonable explanation for this, but it was not clear within the proposal; and • The proposal asks for \$24, 162 for costs to participate in workshops.

Additional Comments

The importance of continued long-term monitoring is increasingly recognized among resource managers and scientists as they attempt to curtail population declines of native fish. In addition, there are relatively few projects that evaluate the impacts of restoration actions involving gravel augmentation in California streams. This project could contribute to both efforts, as it would continue long-term monitoring and potentially enhance our understanding of gravel introduction as a restoration tool. Overall this project is well thought out and the proposal is generally specific in approach and methods. Where it falls short is in clearly outlining data analysis and making a convincing argument that the monitoring will be correlated specifically to gravel augmentation. There are a few other minor ways this proposal could be improved as well: • Explaining the Goodwin Canyon Restoration project in more detail; · Continuing to reference the two other restoration sites (other than LLR) throughout the proposal, and explaining how they relate to the monitoring project; · Making sure to explain abbreviations before using them (i.e. CAMP was never put in parentheses after Comprehensive Assessment and Monitoring Program in 2.1, but was used three pages later. OCAP was another); . There are two Table 1s (one for a conceptual model and one for a budget),

this was slightly confusing; and · Citations from Table 1 (conceptual model) were missing from the literature cited.

Budget Review

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

If no, please explain:

Recommend more detail budget information from primary subcontactor.

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

If no, please explain:

Recommend more detail information on task and deliverables.

Budget Detail/Administrative Overhead Fees - Budget detail combines the labor rates with the direct overhead rate. The labor rate, benefits and indirect rate should be itemized in the format provided by the PSP to enable reviewers to better evaluate and ensure that proposed labor rates are comparable to state rates.

If proposal is funded, a detailed list of items included in the indirect cost rate should provided by the grantee. Grantee must provide itemized and detailed information included and charged as part of Indirect Rates (IDC) charges.

Note: No overhead or indirect rate charges on the equipment purchases should be allowed as part of the budget that shall be funded as a result of this PSP.

3. Are project management expenses appropriately budgeted?

If no, please explain

Most of the project management costs are in-kind match. Unable to determine the actual costs for project management expenses.

Budget Review

4. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs? Are indirect rates, if used, appropriately applied?

No.

If no, please explain

Indirect rates appeared to combined with labor rates on the subcontractor budget detail. Unable to determine the actual rate.

5. Does the budget justification adequately explain major expenses? Are the labor rates and other charges proposed reasonable in relation to current state rates?

No.

If no, please explain:

No major expenses were indicated on the budget detail. Labor rates were provided for subcontractor. However, it appears that labor/staff benefit rates and indirect rates were combined on the spreadsheet. A comparison analysis based on the max of the state classifications pay scale including benefits rates (32.02%) and overhead rate (28%. The labor rates were on average 33-43% higher than the state rate for similar classifications (e.g. Biologist-Program Manager, Biolgist 1/\$56.65 hr vs. 38.10 hr, Biolgist II/\$89.11 vs. \$50.87)

6. Are other agencies contributing or likely to contribute a share of the projects costs? **Yes.**

If yes, when sufficient information is available, please sum the amount of matching funds likely to be provided:

The total amount of matching funds from Tridam is \$452,177. However, sufficient information regarding cost share budget detail was not provided. Difficult to determine the cost share estimates. Recommend budget detail to include what cost share task and deliverables will be provided by the grantee.

7. Does the applicant take exception to the standard grant agreement's terms and conditions? If yes, are the approaches the applicant proposes to address these issues a reasonable starting

Budget Review

point for negotiating a grant agreement? **Yes.**

8. Are there other budget issues that warrant consideration? **Yes.**

If yes, please explain:

Recommend detail breakdown of subcontractor labor/benefit/overhead rates to determine if state rates are comparable.

Other comments:

Subcontractor is completing 100% of the task and deliverables in the proposal. Subcontractor appears to be a for-profit entity. Requesting clarification on grant requirements for pre-selected subcontractors. Sufficient information was not provided on how the subcontractor was selected. Performance evaluation is recommended for Sub. See comments.

Environmental Compliance Review

1. Is compliance with California Environmental Quality Act (CEQA) required for this project?

No.

- 2. Is compliance with National Environmental Policy Act (NEPA) required for this project? No. $\,$
- 3. Does this project qualify for an Exemption or Exclusion under CEQA and NEPA, respectively?

Does not apply.

- 4. Did the applicant correctly identify if CEQA/NEPA compliance was required? **Yes.**
- 5. Did the applicant correctly identify the correct CEQA/NEPA document required for the project?

Does not apply.

- 6. Has the CEQA/NEPA document been completed? **Does not apply.**
- 7. If the document has not been completed, did the applicant allot enough time to complete the document before the project start date?

Does not apply.

8. If the document has not been completed, did the applicant allot enough funds to complete it?

Does not apply.

9. Did the applicant adequately identify other legal or regulatory compliance issues (Incidental Take permits, Scientific Collecting permits, etc.) that may affect the project? **Yes.**

Comments:

Verify that Scientific Collecting Permits held by S.P. Cramer staff are valid for the stretch of river they will be working on for this project.

Environmental Compliance Review

10. Does the proposal include written permission from the owners of any private property on which project activities are proposed or, if specific locations for project activities are not yet determined, is it likely that permission for access can be obtained?

Yes.

Comments:

Applicant has permission to access a private landowners orchard to get to their site, have had permission since 1995. Copy of permission letter not included with proposal.

11. Do any of these issues affect the project's feasibility due to significant deficiencies in planning and/or budgeting for legal and regulatory compliance or access to property?

No.

Prior-Phase Funding Review

List the CALFED or CVPIA funded phases of this project for which your agency manages contracts:

| Project Title | 2004 Outmigrant Trapping of Juvenile Salmonids in the Lower Stanislaus River |
|--------------------------------------|--|
| CALFED Contract Management Agency | USFWS |
| Amount Funded | 135,693.78 |
| Date Awarded | 2004/01/01 |
| Lead Institution | S.P. Cramer &Associates |
| Project Number | 101811C024 |

List the other CALFED or CVPIA grants received by this applicant for which your agency manages contracts:

| Project Title | Test and Demonstrate a Portable Alaskan Weir to Count and Characterize Runs of Anadromous Salmonids in the Stanislaus River |
|--------------------------------------|---|
| CALFED Contract Management Agency | USFWS (AFRP) |
| Amount Funded | \$659,590 |
| Date Awarded | 2002/01/01 |
| Project Number | 176 |

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

Yes.

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

N/A

5. Has this organization made adequate progress towards these project(s)' milestones and outcomes, without unreasonable divergences from project schedules or poor–quality deliverables?

Prior-Phase Funding Review

Yes.

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

Yes.

7. If this application is for a next phase of a project whose contract your agency currently manages, will the project(s) be ready for next-phase funding to monitor and evaluate project outcomes in fiscal year 2005/6, based on its current progress and expenditure rates?

Yes.