

Calaveras River: Bellota Fish Ladder Passage Evaluation

Chrissy L Sonke

Initial Selection Panel Review

Not Recommended

Amount Sought: \$144,051

Fund This Amount: \$0

Brief explanation of rating:

The project proposes to evaluate the effectiveness of temporary fish ladders at the Bellota Weir on the Calaveras River with an infrared scanner. The Technical Panel ranked the proposal as "adequate". However the Regional Panel gave it a "low" rating. The Selection Panel recommendation is to not fund the proposal. This recommendation is based on the narrow focus of the proposal (in comparison to other proposals that address more than one previously funded project). In addition, both the proposal itself and the Technical Review note that a permanent ladder will be constructed in the near future and replace the existing temporary ladders that only allow passage at low flows. This would severely limit the value of the information collected as proposed.

Technical Panel Review

Technical Review Panel's Overall Evaluation Rating:

Adequate

Explanation Of Summary Rating

This is a very good proposal within the narrow scope of evaluating the functioning of the fish ladders at low flow conditions, but lack of more detailed sampling upstream and downstream of the weir limits the insight on the implications of the fish ladder functioning for salmonids' use of the river. Although the regional review ranked this proposal as "low", the technical review panel did not agree with some of the problems identified by the regional panel. For example, differences in timing of migration between steelhead and the Chinook in this system would allow a general discrimination between these two species' use of the fish ladders. In addition, the results would be transferable to other systems with similar fishways. While the fish ladders are a temporary solution, modifications such as the installation of a permanent solution tend to take longer than anticipated.

Goals And Justification

The monitoring is clearly tied to an earlier restoration action (the seasonal installation of a denil fish ladder). The goal of evaluating fish use of the ladder and migration of fish up to the weir, and relating these to flow conditions, is clear and consistent throughout the proposal. Hypotheses are stated and the project is properly justified by the lack of information on the effectiveness of a recently installed ladder. The additional goal of investigating flow conditions preceding fish passage justifies the installation of a gaging station downstream. Justification is somewhat less convincing if the project is placed in the wider context of assessing steelhead and Chinook salmon use of the upper Calaveras River or towards

Technical Panel Review

the goal of increasing these populations in this river (which would make it important to include other factors such as juvenile outmigration and conditions downstream in the Stockton Diverting Canal and Mormon Slough).

Approach

The approach is well-designed and very appropriate for meeting the project's objective of evaluating fish ladder use at low flow conditions and to evaluate passage conditions downstream as a function of river flow. The same scanner has been used in the Stanislaus River by this group, so the project builds on previous monitoring and includes evidence of building on lessons-learned (e.g. frequent cleaning during high flow). It would have been beneficial to see some of the data collected on the Stanislaus River (including ground-proofing and QA/QC data), as well as some evaluation of the broader literature on fish use of this type of fish ladder. The project's results will make contributions to the local knowledge base, especially as related to this specific fish ladder use and to similar situations. The approach is less satisfying when placed in a wider context. For example, passage conditions through the two reaches downstream may be dependent on factors other than flow rate. Various components should be added to the work: 1) Timing of fish arrival in the pool should be documented. 2) The period of delay caused by the dam (e.g. assessed by snorkeling in the pools below the dam and identifying individual fish) 3) Estimate the rate of fall-back of the fish at the ladder (i.e. is an individual fish counted more than once by the scanner). Also, downstream sampling of the fish is needed in order to provide more insight into potential reasons for fish being absent at the weir (e.g. no run of Chinook salmon that year). In addition, the fish get across the weir at high flow conditions, so one can not fully evaluate the use by salmonids of the upper Calaveras River without monitoring the upper watershed.

Feasibility And Likelihood Of Success

The project is technically feasible. The subcontractor has experience in a similar situation with the same equipment.

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They know the potential shortcoming of the methods (e.g. inability to identify fish sex under certain conditions), but these shortcomings would not affect the essential data. The scale of the project is well matched to the objectives. The study is not fully documented. Important omissions include the methodology for the monitoring of the pool below the weir (the data on presence of fish there are critical for interpreting results on ladder use). The regional and environmental compliance reviews did not identify local circumstances or other obstacles affecting project feasibility.

Performance Measures

The data collected in the project will allow evaluation of the use of the temporary fish ladders and to correlate this use with flow conditions at (and downstream from) the weir. The proposed monitoring directly addresses the issue of fish ladder use. The rationale for the performance measures (number of fish using the ladder, flow conditions) is clearly demonstrated. The performance measures work well if fish make it to the pool below the weir, but the limited data collected on downstream river conditions makes it impossible to exclude factors other than river flow if the fish do not make it to the ladder.

Products

The information generated will be useful to resource managers and scientists working with this section of the river and with this type of fish ladder in similar situations. However, the project will provide only a small component of much-needed information of the use of the upper Calaveras River by salmonids. It appears that data will be readily accessible by people outside the project (near-real-time reports, web site). The project is expected to yield results that would hold up to peer-review if ladder use is related to data from the more elaborate monitoring recommended by this panel.

Capabilities

The group has prior experience with identical instrumentation in a similar situation and seem quite capable of doing the proposed work.

Budget

The budget is reasonable and appropriate for the proposed work. One potential problem is that the proposal states that ladder configuration will be modified if it is determined that the ladders are not functioning properly. No costs are budgeted for this, and it is unclear who would pay for this.

Regional Review

The Delta regional review found that the project will contribute to an improved understanding of the ability of salmonids to reach favorable upstream habitats. The proposed technique is unlikely to discriminate between species and thus yield data on species-specific effectiveness. It also does not look at fish passage at high flow conditions, thus not providing complete enumeration of fish passage. The regional panel felt that results will probably not be transferable to other areas of the delta. And lack of measurement of physical and hydraulic conditions at the fishways would make it difficult to decide on how to improve fish passage. Moreover, since a more-permanent fishway would be installed in the near future, the information gained in this project may soon become irrelevant. Overall ranking: low

Administrative Review

The budget review indicated several problems (including high rates for consultant, lack of some budget detail, indirect cost rate, insufficient detail on equipment purchases, justification on subcontracting). The environmental compliance review identified some minor issues. The prior-phase funding review noticed a lack of description of a previous project and no clarification of its relation to the current proposal.

Additional Comments

A description of typical flow conditions at the weir and in the different reaches of the system would have been very helpful, as would have been information on fish use of the system. It was felt that a thorough evaluation of the functioning of the fish ladders should have been part of the initial installation project. In order to evaluate whether it would be a worthwhile investment to determine the effectiveness of a temporary solution, information is needed on the time-frame of the planned replacement of the fish ladders with a permanent solution.

Delta Regional Review

Delta Regional Panel's Overall Ranking:

Low

Summary:

The Regional Panel ranked this proposal as low for several reasons. The technique proposed is unlikely to discriminate between species and its species-specific effectiveness will not be determined. Because fish passage at the weir occurs during high-flow conditions, complete enumeration of fish passage will not occur, significantly limiting the benefits of this project. The monitoring project will be site-specific and not comprehensive; any information derived from the project would not be applicable or transferable to other areas of the Delta or Central Valley. The proposal does not include an evaluation of the physical and hydraulic conditions at the fishways; without those data, it is unclear how management decisions can be made to improve fish passage. The monitoring is limited in scope and value to the Ecosystem Restoration Program because the monitoring design will not provide for information on potential fish delay and partial blockage at the weir and the conditions that may create that delay and blockage.

1. Applicability To ERP Goals And Regional Priorities.

This monitoring project is intended to enumerate fall-run Chinook salmon and steelhead passage at Bellota Weir on the Calaveras River in the eastern Delta. The project plan calls for the installation and operation of an infrared scanner ("Vaki RiverWatcher") at the upstream end of one of two Denil fishways installed at Bellota Weir. One of the fishways was funded in 2003 by the CVPIA AFRP program. The project proponents state that their intent is to assess the effectiveness of that action. As such, the monitoring program will determine, in part, fish passage at the weir under low-flow (but not high-flow) conditions and will, therefore,

Delta Regional Review

partially contribute to an improved understanding of the ability of the two salmonid species to reach favorable upstream habitats. This knowledge would contribute to evaluation of an AFRP restoration measure. However, the Vaki system may not discriminate between species, so its species-specific effectiveness will likely not be determined. Because fish passage at the weir occurs during high-flow conditions, complete enumeration of fish passage will not occur, significantly limiting the benefits of this project. The monitoring project will be site-specific and not comprehensive; any information derived from the project would not be applicable or transferable to other areas of the Delta or Central Valley.

2. Links With Other Restoration Actions.

By itself, the monitoring program is not linked to other restoration programs in the region and is only focused on the fishways. However, to the extent that any restoration actions are planned for the Calaveras River upstream of Bellota Weir, the project could provide information beneficial to those actions. The monitoring effort could also be integrated with an ongoing evaluation of fish passage conditions elsewhere in the Calaveras River. The monitoring will provide some useful information for the Comprehensive Assessment and Monitoring Program by providing some data on salmonid escapement to upstream areas. The Regional Panel believed the project would not provide linkage to other interrelated important issues in the river such as flows that may cause stranding and flows for both upstream and downstream fish passage.

3. Local Circumstances.

There are no local circumstances that may affect the project's feasibility and there are no local constraints on the project's ability to move forward in a timely manner. There are no significant permitting issues associated with the proposed monitoring project and the applicant owns the site. The project is feasible, but only in a narrow scope. Although the project proponents purport to evaluate the effectiveness of the two Denil fishways, fish delay and partial blockage

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cannot be determined from the experimental design because the Vaki system will only count fish successfully ascending the ladder, and not assess conditions below the weir. The project proponents state that potential build-up of fish downstream of the weir will be visually monitored (independent of this proposed monitoring effort), thereby partially negating the purpose of the project. The proposal indicates that they will modify the fishways if fish are blocked, but do not describe how the physical and hydraulic conditions will be evaluated and altered to improve fish passage. The proposal states that a more-permanent fishway would be installed at the weir in the near future which suggests that the proposed monitoring program may be irrelevant.

4. Local Involvement.

The project proponents have an adequate outreach program for the monitoring through the Calaveras River Watershed Stewardship Group and postings on the internet. The landowner is the applicant so no landowner permission is necessary. The project applicant is Stockton East Water District, which would subcontract to a private firm (SP Cramer & Assoc.) to conduct the monitoring.

5. Local Value.

There is some local value to the proposed monitoring project. However, the monitoring is limited in scope and value to the Ecosystem Restoration Program because the monitoring design will not provide information on potential fish delay or partial blockage at the weir and the conditions that may create that delay and blockage. Additionally, total measurement of anadromous salmonid escapement to upstream areas would not occur under high-flow conditions. Design criteria for Denil fishways are already known; this proposal does not describe why and how those criteria should be altered.

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6. Other Comments:

Periodic visual observations at the fishways and spawning ground surveys in upstream areas would provide an alternative means of determining if the fishways provide fish passage. Radio-tagging and releasing salmon downstream of the weir and monitoring their behavior at the fishways would provide more useful information than that proposed.

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Goals And Justification

The proposal clearly identifies the existing and ongoing seasonal installation of a denil fish ladder (funded by CVPIA Anadromous Fish Restoration Program) at the lower end of Bellota Weir as the restoration action to be evaluated. The proposal's intent to enumerate the number of fish using this ladder and correlate this with flow data is clear and consistent throughout. Additionally, the flow conditions preceding recorded fish passages will be monitored at two existing and one additional proposed gaging station in order to correlate use of the ladder with overall stream usage in the area. A model of spawning of Chinook salmon and steelhead and the potential benefits of assisted passage at the Bellota Wier is clearly presented. This ladder currently exists and it is not known whether it is effective or not, so the proposed monitoring will directly address this issue.

Approach

One of the strengths of the proposal is that the proposed approach is well-designed and has been used (by the same group) in very similar application in the Stanislas river. In this way, it certainly builds upon previous monitoring studies. While specific "lessons learned" from prior monitoring are only mentioned briefly on in the proposal (1-the system will have to be visited more regularly during high flow to keep sensor window clean 2-interpretation of recorded images will benefit from prior experience), I'm certain that installation of the instrumentation and execution of the current proposal would benefit from the previous work of this group with same sensor. The proposal directly addresses the effectiveness of a fish ladder that has been used for several years and is planned to be used for several more. The evaluation of the effectiveness of this over a range of flow conditions speaks directly to both 1-the effectiveness of this specific restoration effort and 2- the effectiveness of this type of this fish ladder in other applications. The

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data relevant to the former may be used by decision-makers and from the latter in designing future restoration efforts. The additional objective of evaluating flow conditions preceding recorded fish passage will increase knowledge of spawning patterns in this particular stretch of river and will be available for evaluate existing models of these patterns.

Technical Feasibility

The proposed project is well documented and technically feasible. Any technical concerns are further alleviated by the group's previous experience with all of the proposed methods. The proposers are straightforward about possible shortcomings of the methods (such as being able to sex passing fish from the aquired images). All of these shortcomings will not affect data essential to the proposal's objectives making, making the project very feasible and likely to achieve to proposed objectives. The scale of the project is well matched to the objectives. The proposal will evaluate the effectiveness of fish ladder being studied while correlating this to flow data. The additional goal of investigating flow conditions preceding fish passage justifies the requirement of an existing gaging station at the intersection of Mormon Slough and the Diverting canal is justified in the proposal.

Performance Measures

The data collected by the proposed monitoring will directly address the restoration action being monitored. Either the ladder is not used at all or it is used. If it is not used at all, data relating from the existing and proposed gaging station will show if flow conditions are allowing spawning fish access to the ladder. If the ladder is used, the flow conditions during which it is used and quantification of its use will be investigated. Specific performance measures (number of fish using the ladder and correlation of this to flow data) are clearly proposed and discussed. The rationale for this is clearly discussed in addition to being an obvious metric of the effectiveness of the fish ladder. This data could be used to address the conceptual model of the restoration effort (the fish ladder and flows between Belotta

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and the diverting canal). The proposed monitoring is very specific and focused on efficacy of the proposed fish ladder and directly addresses this issue.

Products

The data will be directly useful to resource managers, decision makers and scientists working with this section of river. Further, the data will lend insight into the effectiveness of restoration efforts and accuracy of models for similar systems, which are abundant. The proposal explicitly states the web site and format of data for making the information available to other people. The available data will include both raw acquired numbers, images, etc. in addition to bi-weekly summaries and yearly synthesis and reporting of the acquired data. This project is likely to produce results that will stand up to peer review. If the data is analyzed and presented as it is proposed, I believe that it is also likely to be adequate for use by those interested and to influence future decision making.

Capabilities

As I wrote earlier, one of the strengths of this proposal that makes it likely to succeed is the team's prior experience with identical instrumentation in a very similar installation.

Budget

The budget is reasonable and adequate for the work proposed. Initial year costs include installation of equipment and subsequent year costs are limited to monitoring and data analysis, which is seasonal, but frequent during periods of migration.

Additional Comments

I find this proposal to be strong and convincing because it is an excellent fit to the solicitation priorities. It has limited scope and a high chance of success at a reasonable cost. A priority of this solicitation was "monitoring and

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evaluation of restoration actions..." The proposed monitoring is of a ladder funded by the CVPIA Anadromous Fish Restoration Program used by at risk species (Chinook salmon and steelhead) seems to me to identically fit the priority of this solicitation. One objective (evaluating the efficacy of a particular fish ladder at low stream flows) along with a related additional objective (evaluating flow conditions that allow fish access to the ladder) are clearly stated and methods to directly address this is proposed. The team proposing the work has experience with all methods proposed and has been effective using them in similar applications.

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Goals And Justification

The goal of the project "Calaveras River: Bellota Fish Ladder Evaluation", are somewhat confusing. The goal of the initial AFRP-funded project was to increase fish passage opportunities above Bellota, with the hopes of increasing fall-run Chinook salmon and steelhead populations within the Calaveras River. Surprisingly, this original project goal did not have, as an objective, evaluation of the temporary fish ladders that were installed. The goal of the current proposal is to determine whether the fish ladders installed as part of the AFRP-funded work are functional, particularly at low flows (a term that they never provide actual values for), and to determine what flow conditions are conducive to fish migration (assuming that fish attempt to negotiate the ladders). The justification for the proposal is sound, though one might question whether merely improving fish passage is going to help, given that any adult salmonids trying to enter the Calaveras system must cope with conditions in the Stockton Diverting canal and Mormon Slough. Some discussion of the other factors that might influence the migratory success, such as water temperature or the presence of low-oxygen zones, would have been helpful. The project also neglects the equally important area of juvenile outmigration...even if conditions allow adults to return to spawn, it is possible that conditions in the Calaveras River, the Stockton Diverting Canal, and/or Mormon Slough are not suitable for the juveniles. Some mention of this would have been appropriate. One aspect of the project that is unclear is the following statement "If we determine that the ladders are not functional as currently configured, we will modify the configuration until a functional configuration is achieved to ensure that passage opportunities are maximized." This implies that CalFed could incur a cost to repair or modify the ladders, yet no mention of this is found in the budget, nor is there any description of how the ladders might be modified.

Approach

The approach for objective 2 is fairly simple...use an infra-red monitoring system, similar to one that has been used successfully on the Stanislaus River, to determine what sizes, species, and perhaps sexes of salmonids are successfully moving past the installed ladders. Though the system has worked well on the Stanislaus, and the sub-contractor (SP Cramer and Associates) do have considerable experience with it, it would have been nice to see some kind of ground-proofing, back-up, or QA/QC built into the monitoring section so that they can state with a certain level of confidence that fish x, y, and z were passing at these times. Unlike in Objective 3, the investigators (or sub-contractors) do propose to monitor the usual suite of water quality parameters, including temperature, so they may be able to draw useful inferences from their data, even during period where fish do not successfully pass the ladder. The approach for objective 3 is adequate for the stated goal of collecting more flow information on the Stockton Diverting Canal and Mormon Slough, but, as mentioned in the goals & justification section, this reviewer feels that solely collecting flow data will not provide managers with enough information on passage conditions through those two reaches.

Technical Feasibility

The proposed project does not use any new technology, and the investigators have significant experience with the proposed technologies. The description of the techniques that will be used were briefer and less detailed than expected, and there was little discussion of the types of data analysis routines that would be used to identify relationships among key variables. Additionally, no obvious QA/QC methods were included in the proposal, so there was no way to evaluate whether the investigators are aware of possible sources of bias or instrument error.

Performance Measures

The data collected by the proposed monitoring will allow the investigators to determine whether fish can use the temporary fish ladders at Bellota Weir, and correlate the passage success to conditions at the weir, and by inference, flow conditions at critical points of the Calaveras River system. Because of the limited scope of the data that are being collected on river conditions (with the exception of those right at the weir), it is possible that false conclusions about the correlation between river flow and adult salmonid migration will be made...without additional water quality data, it will not be possible to categorically exclude factors other than flow if fish do not make it to the weir.

Products

The products are adequate for a project of this scope, though it would have been nice if the project had been designed with the ultimate goal of producing a publication in a peer-reviewed scientific journal. Not only would this lend further credibility to CalFed and AFRP funded work, it would also provide managers with valuable information that has passed the rigorous peer-review process.

Capabilities

The project team appears quite capable of doing the proposed work.

Budget

The budget is reasonable for a project of this scale, with the caution about attempting to modify the barrier using project funds. Further detail about the possible modifications, and their cost, should have been included in the proposal.

Additional Comments

This project, unfortunately, appears to be an after-thought to

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the AFRP-funded weir installation. A number of variables, such as downstream river conditions and the flows under which the fish ladders would function, should have been determined before the fish ladders were ever installed, not after funds were spent to install them. Even more surprising was the perceived lack of a monitoring program for the weir, hence the need for this proposal. Overall, this reviewer feels that the proposal, while likely to provide useful data regarding the function of the temporary fish ladders, will not provide managers with answers about conditions conducive to the upstream and downstream migration of anadromous salmonids.

External Technical Review #3

Goals And Justification

This proposal does clearly state/identify the restoration actions whose outcomes will be monitored. The goals and objectives are also clear, although they may not be complete enough to further our overall understanding of the ecology of the subject species (anadromous salmonids). The conceptual model is not directly identified, although it is alluded to in the text (without fish passage, fish cannot navigate/ascend to potential spawning areas upstream of the Bellota Weir under certain flow conditions). The hypotheses are clearly stated, although they may not directly address the most important questions at hand. The hypotheses are justified, although little supporting data is presented. The authors allude to some studies that have been conducted in the area (assessments of fish in pool below Bellota Weir and carcass surveys in Mormon Slough). It would have been useful to know exactly what is known about anadromous salmonid use of the Calaveras system or even the nearby Stanislaus system when evaluating this proposal. That information was not provided.

Approach

The stated approach will provide enough information to address the main objective, "Do anadromous salmonids use the Bellota Fish ladder under low flow conditions", but will do little more to solidify our understanding of salmonid use of the upper Calaveras system given its narrow focus. It is not clear if the project adequately builds upon previous monitoring data, since the results from the nearby Stanislaus and from the system of interest are only mentioned in passing with no data presented. The monitoring and evaluation activities will likely make considerable contributions to our knowledge base, although this study design will stop short of providing some important and interesting ecological information on salmonid access and use of upstream reaches of the system. However, given the basic lack of understanding on the use of the facilities constructed in 2003 (fish ladder) this project takes

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the first step toward improving the general understanding of whether or not the facilities are used by anadromous salmonids as was intended. Something that should have been required as part of the initial project design and implementation (fish ladder construction). The contributions will be useful to decision makers, but again, they stop short of providing critical information on successful salmonid migration into the upper Calaveras. I keep making this point, because the authors state that fish can navigate past the barrier without the use of the fish ladder under certain flow conditions, so a non-use result for fish using the ladder does not necessarily translate to fish cannot access the upper watershed. A simple survey or companion study in the upper watershed is needed to coincide with this proposed study to address this limitation.

Technical Feasibility

The project as stated is technically feasible. This study is however not fully documented. One major omission from the methods section is how often and more specifically how the pool below Bellota Weir will be surveyed. This is a critical piece of the study since if no salmonids are found in the pool below the ladder, it is possible that no salmonids were in the vicinity of the ladder. If this was the case, then the finding that [no fish moved through the ladder] would mean nothing more than no fish were present to actually move through. However, if fish were consistently and accurately sampled in the pool below the facility and at sites throughout mormon slough and still no fish used the ladder facility then there would be some basis for the conclusion of the null hypothesis that adult salmonids are not capable of successfully migrating through the Bellota fish ladders. It is important to point out that alternative hypotheses also exist to describe non use including 1) fish behaviorally avoid the ladder although they could ascend through it; 2) the run didn't occur in the year or across the years of the proposed study (a highly probably H_a given the cyclic nature of at least chinook salmon and to some extent steelhead trout) etc.... Given the above comments, I need to answer in part that the project is consistent with the stated objectives, but the scope needs to be expanded in order to maximize the return for this project. At a minimum a

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more detailed downstream assessment should be made in the pool below Bellota Weir and in Mormon Slough.

Performance Measures

The performance measures are not well detailed and are not clearly stated, nor are the conceptual models. Both can be inferred from the text under Approach and Scope of Work. The study design as stated is basic and can be evaluated using the collected (to be collected data) data, however given the comments first stated above, there are considerable gaps in the study design that prevent a clear determination of salmonid use of the upper Calaveras.

Products

The project results will provide information that is useful to resource managers, decision makers and scientists, but it will only provide a small component of much needed information on how anadromous salmonids use the upper Calaveras River. It appears as if the data will be available to others through "near real time reports" and through electronic databases. The study design of the project is sufficient to provide an answer to a very simple question of do fish use the fish ladder under low flow conditions. This question however is not sufficiently complex to include a more relevant question of do salmonids use the upper Calaveras watershed and if so is the ladder an important tool in salmonids gaining access to the habitats upstream of the Bellota Weir. Although the results will be interesting, relevant and capable of passing peer review, the stated findings will fall short of the author's suggested benefit to managers of greatly improving our understanding of population limitations in the Sacramento San Joaquin system.

Capabilities

Given the groups previous experiences with similar equipment and technologies in the Stanislaus River, the authors appear to be capable of carrying out the described study. The performance record is a bit vague and consists primarily of casual discussion of the members qualifications, so it is

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difficult to determine definitively their ability to carry out the proposed study. A list of publications and reports would have been useful in determining the participants qualifications.

Budget

The budget is reasonable for the proposed work, but may be insufficient if the study were expanded to better address some major limitations that I have mentioned in the previous sections including more detailed and regular downstream sampling/surveys and upstream sampling/surveys to nest the given results of fish use of the ladder into a how do fish use the Calaveras River watershed. If the ongoing studies in the Calaveras River, as mentioned by the authors, complement and fill in the blanks of this proposal, then the authors should have more clearly identified those relationships. This unfortunately was not done.

Additional Comments

This study is good in that it will examine anadromous fish use of the fish ladder on the Calaveras River, which should have been included as part of the initial fish ladder project. Unfortunately, this study design may not allow us to obtain a sufficiently detailed picture of anadromous salmonid use of the Calaveras River above the Bellota Weir. It is one thing to learn if fish will use a fish ladder under certain conditions, it is another to learn that fish are excluded from a reach of river specifically because of a poorly functioning ladder.

It will be very useful to know which anadromous fish, how many and under what conditions will utilize the Bellota fish ladder. However the ecological value of the proposed study, in terms of estimating run timing, run size, and corresponding environmental correlates will be limited given that the river above the fish ladder and below in Mormon Slough will not be sampled very thoroughly (at least that is the appearance). This is especially the case given that fish have been observed ascending the river past the Bellota Weir without the aid of the fish ladders under certain flow conditions, as mentioned

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by the authors.

Several areas of information appear to be lacking in my assessment of this proposal. First there is a general lack of information on the typical flow conditions in Mormon Slough and Bellota Weir. Second, there is a noticeable lack of fish information from the system. Furthermore, is there conclusive evidence that spawning in Mormon Slough would lead to increased mortality of offspring as compared to fish spawning in the main River as the authors suggest?

Budget Review

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

Yes.

If no, please explain:

yes

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

No.

If no, please explain:

Every cost is rolled into Services and Consulting in the CBDA tables. But, in the text there is indirect costs and overhead costs. Also, there is travel identified in the text but not in the table. The same applies to supplies and expendables. In the text they talk about the purchase of a Vaki RiverWatcher for \$30,000. This is not identified in the equipment column of the table.

The proposer provided for these costs in a separate table in the SOW. But, this table doesn't breakout the indirect or overhead costs.

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.

3. Are project management expenses appropriately budgeted?

Yes.

If no, please explain

An average of 3.33 hrs per month. Seems a liittle low.

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?

Yes.

If no, please explain

yes

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:

The consultants rate including profit, benefits, overhead, and indirect are high.

Major Expenses - If the grantee is awarded a detailed list of equipment purchases should be provided by the grantee so reviewers can better evaluate whether it is more cost effective for the state to purchase large dollar equipment items through the state procurement process. If the equipment list is available within the State inventory or stock, then purchase of some or all of the listed items may be provided, loaned, or leased by the state to the grantee. In the event, that the equipment is purchased by the grantee, the grantee shall maintain an inventory of major equipment for auditing purposes and potential use for future projects. Grantee shall follow State Contracting Manual [SCM] Section 7.61 thru 7.62 rules pertinent to equipment purchase, lease, etc.

Subcontracting - Proposals for work to be performed by subcontractors or other entities in excess of the 25% of the total project dollars the grantee is required to provide a justification for subcontracting services. If subcontractors are pre-selected and identified in the proposals as part of the project team, the grantee should provide a justification on how each subcontractor was selected. Grantee shall identify labor rates and indirect costs rates paid to each identified subcontractor to ensure that labor rates are comparable to State rates.

Budget Review

The Subcontracted work should be identified with a rate and hours and attributed to each task and deliverable for each year. A performance evaluation is also recommended for subcontractors that receive more than 50% of the grant funds. If the subcontractor has not been identified, a position description complete with education level, experience, and abilities be submitted and the rate and hour associated with that position will be attributed to a task, and deliverable. The grantee must also comply with the State competitive bidding process as stated in the PSP.

The Grantee should charge a reduced indirect cost rate to the state for services that will be subcontracted by the grantee. (Researching SCM Section 3.06 B).

6. Are other agencies contributing or likely to contribute a share of the projects costs?
No.

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 point for negotiating a grant agreement?
No.

If no, please explain:

Standard T's and C's were accepted. No objection.

8. Are there other budget issues that warrant consideration?
No.

If yes, please explain:

no

Environmental Compliance Review

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

Yes.

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?

Yes.

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?

Yes.

6. Has the CEQA/NEPA document been completed?

No.

7. If the document has not been completed, did the applicant allot enough time to complete the document before the project start date?

Yes.

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

No.

Comments:

The applicant did not specify any funds being allotted for environmental compliance but I do not anticipate the cost to be great.

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

No.

Environmental Compliance Review

Comments:

The applicant needs to consult with the State Lands Commission to determine if a Land Use Lease will be required. The applicant did not check off on the Environmental Checklist that a 1602 was required but did state in the text of the proposal that they would need a Streambed Alteration Agreement.

Identify those additional permits that may be needed by this project:

Please see above: a Land Use Lease, a Streambed Alteration Agreement

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?

Does not apply.

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

Project Title	Stockton East Water District and Calaveras County Water District Fish Screen Facilities–Calaveras River
CALFED Contract Management Agency	National Fish and Wildlife Federation
Amount Funded	670,000
Date Awarded	2001/01/01
Project Number	2001–L212

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?

No.

There is no mention of the status, progress or accomplishments of the previous CALFED-funded project 01-N59 mentioned in the proposal text.

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

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?

N/A

Tasks are on schedule for 01-N59, but it is unclear how 01-N59 relates to this new proposal.