# **Proposal Reviews**

## **#55: Central San Joaquin Floodplain Restoration**

Ducks Unlimited, Inc.

Research and Restoration T	<b>'echnical</b>	Panel	Review
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San Joaquin Regional Review

External Scientific Review #1 #2

#1

**Prior Performance/Next Phase Funding** #2

#3

**Environmental Compliance** 

**Budget** 

#### Research and Restoration Technical Panel Review:

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

**Proposal Number: 55** 

Applicant Organization: Ducks Unlimited, Inc.

Proposal Title: Central San Joaquin Floodplain Restoration

**Review:** 

Please provide an overall evaluation summary rating:

**Superior:** outstanding in all respects;

Above Average: Quality proposal, medium or high regional value, and no significant

administrative concerns;

Adequate: No serious deficiencies, no significant regional impediments, and no significant

administrative concerns;

Not Recommended: Serious deficiencies, significant regional impediments or significant

administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	
-Above average	The project concept is good and could produce, effectively and efficiently, self-sustaining aquatic ecosystems. The applicant should be encouraged submit
-Adequate	a proposal for the planning and design components. The submittal should be a good deal more specific about the restoration site locations, design methods and
XNot recommended	alternative hydrologic/hydraulic controls and construction techniques.

1. <u>Goals and Justification.</u> Does the proposal present a clear statement of goals, objectives and hypotheses? Does the proposal present a clear justification and conceptual model for the project?

The goals and objectives are commingled but clearly stated. The hypotheses are listed. They need to be reformed to make the correct statement. The proposed work is important. The water quality objectives are not likely to be met or measured due to the relative size of the project vis-à-vis the watershed. BOD, by the way, is not a good parameter to measure. Suspended solids, bed load, nutrients and metals are better measures. The authors clearly state the need for the project and construct a creditable restoration model. They acknowledge that restoration will be limited to the extent the levees can be moved back from the stream's edge. Full-scale implementation is not justified at this time due to the lack of site information and specific design procedures.

2. <u>Likelihood of Success (Approach, Feasibility, Capabilities and Performance Measures).</u> 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 approach is reasonable. In the design phase of the project, careful attention should be given to the hydraulic effects of armoring stream banks as opposed to grade control. If an analysis of grade control alternatives and bank stabilization techniques is undertaken, some very useful information will be produced. The proposed design methods are appropriate but their broader use was not explored. The proposed design and restoration work is feasible. The probability of success depends on the extent to which the appropriate hydrology is created and the desired floodplain habitats develop.

3. <u>Outcomes and Products.</u> 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 measures of performance are the design and plan products: conceptual, preliminary and final designs; implementation and monitoring plans. The products are numerous: feasibility study, restoration design, reformed and replanted landscape, monitoring data and topographic map. The production sequence seems reasonable except for the mapping component. This is to be done after all of the restoration work has been done. It should be done before and after. The schedule of events needs to be put into a time line figure.

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

The overall budget seems high but the unit cost for grading (\$375/acre) and plant establishment (\$1,000/acre) are reasonable. Still, the cost could be reduced if natural regeneration of plant communities were relied upon or used to some extent. The mapping cost is very reasonable. This item should be doubled so that a pre-project map could be produced. Lacking design and construction details, the project should be divided into two phases. Planning (including mapping) and design should be undertaken first and then monitoring and construction.

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

The San Joaquin Regional Review was medium. It cited the need to coordinate with other floodplain conservation actions. More specificity suggested on the subjects of where, what and how the work was to be done.

6. <u>Administrative Review.</u> Were there significant concerns about the proposal with regard to the prior performance, environmental compliance and budget administrative reviews? What were they?

The administrative reviewed noted that the proposal did not give the status for three contracts with CALFED and CVPIA.

**Miscellaneous comments:** 

None

## San Joaquin Regional Review:

**Proposal Number: 55** 

**Applicant Organization:** Ducks Unlimited, Inc.

Proposal Title: Central San Joaquin Floodplain Restoration

Overall Ranking: -Low XMedium -High

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

The Committee agreed that this reach of the San Joaquin needs coordination and floodplain conservation actions indicated in the proposal. Concerned about lack of specificity on where, what, and how work would be done. Specific tasks not clearly identified for floodplain conservation projects. Proposal appeared to be more of a watershed planning and coordination program, more appropriately funded through the Watershed Program.

1. Is the project feasible based on local constraints?

XYes -No

How?

Proposal indicates cooperation from landowners in reach, coordination with agencies, SJRMP, etc., stakeholder group.

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

XYes -No

How?

Good nexus with floodplain related goals and objectives. Some potential to have riparian brush rabbit/riparian wood rat benefits, given acreage and geographic scope.

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

XYes -No

How?

Good nexus with floodplain acquisitions/easements on SJRNWR, Tuolumne River; this reach needs this coordinated approach.

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

XYes -No

How?

Project acknowledges appropriate local interest groups and agency. Indicates relationship with groups, only concern is no listing of individuals as POC for groups indicating specific involvement in development of this proposal or commitment to successful implementation. Proposal did not indicate awareness of SR-SJR Comprehensive Study Program which could affect floodplain actions.

Concerned about lack of specificity on where, what, how work would be done.

### Other Comments:

Would like to see targeted coordination with Comprehensive Study Program.

Concerned about lack of specificity on where, what, how work would be done.

## **External Scientific: #1**

#### Research and Restoration External Scientific Review Form

Proposal Number: 55

Applicant Organization: Ducks Unlimited, Inc.

Proposal Title: Central San Joaquin Floodplain Restoration

#### **Conflict of Interest Statements:**

I have no financial interest in this proposal.

XCorrect
-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  XGood -Poor	The feasibility study should be funded first. Construction and monitoring steps would then be resubmitted and based on the finding of the feasibility study.

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

The goal is to restore function to a floodplain along 2.5 miles of the Central San Joaquin River. The hypothesis is that this restoration will improve water quality and increase woody riparian vegetation resulting in improved fish and bird habitats. If the actions improve the habitat it may be important, however the quantitative impacts on fish stocks cannot be identified from this 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?

The importance of floodplains for ecosystem function is well established. This project would provide additional ecosystem functions such as increased habitat for birds and salmon, increased filtration, reduced sedimentation and retarded flooding. A conceptual model for how the restoration would evolve over time is missing. Literature citations establishing the project in terms of other floodplain projects are sparse. The full-scale implementation is not justified.

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 sequential: 1) hydrologic modeling of the system, 2) levee design, 3) construction, 4) riparian planning, 5) monitoring. Of these steps hydraulic modeling and an analysis of the expected ecosystem response are the most valuable and must be done prior to the other steps. When the project is completed monitoring will be important to document the evolution of the floodplain. The complete project will be of value in designing other floodplain restoration efforts.

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 may be feasible, but there is insufficient information without the first year of study. From information in the proposal the projects success in terms of significant and quantifiable improvement in water quality and increased fish habitat is uncertain. A 2.5 mile reach seems fairly significant. To assess if it is adequate though, an analysis could be done using concepts developed for biological reserves. Such an analysis could be included in a one year feasibility study.

5. <u>Project-Specific Performance Measures.</u> Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

Performance measures are mainly project completion, including construction and plantings. Monitoring for birds fish and water quality is to be determined from Monitoring Plan, which is not developed.

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?

Main product of importance is the initial study/environmental assessment. Outcomes such as increased ecosystem functioning and habitat are uncertain, so products of value from the project are not likely with the limited information available.

7. <u>Capabilities.</u> 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?

DU has significant experience in engineering passage system as given in Table 2. The table does not include habitat restoration projects, which is noteworthy. However, personnel have varied experience in habitat research and restoration and their individual experience seems

adequate.

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

The proposal requests funds for a feasibility study, construction, and monitoring. The steps should be separately funded. The feasibility should be funded and from it a construction/monitoring proposal should be prepared and resubmitted.

#### **Miscellaneous comments:**

The value of the restoration is difficult to assess without first completing a feasibility study that quantifies the ecological significance of the site and developed specific construction and monitoring plans. The feasibility study would include a hydraulic study, gather information on the current and historical status of the habitat, and develop a conceptual and if possible semi-quantitative model of the ecosystem evolution of following floodplain restoration.

## External Scientific: #2

#### Research and Restoration External Scientific Review Form

Proposal Number: 55

Applicant Organization: Ducks Unlimited, Inc.

Proposal Title: Central San Joaquin Floodplain Restoration

#### **Conflict of Interest Statements:**

I have no financial interest in this proposal.

XCorrect
-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	Pushing back levees and opening the stream corridor is perhaps the most
XGood	effective and efficient way to improve stream and floodplain habitat. The design process seems reasonably open, which should allow for innovative ideas to come
-Poor	forth.

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

The goals and objectives are commingled but clearly stated. The hypotheses are listed. They need to be reformed to make the correct statement. The proposed work is important. The water quality objectives are not likely to be met or measured due to the relative size of the project vis-à-vis the watershed. BOD, by the way, is not a good parameter to measure. Suspended solids, bed load, nutrients and metals are better measures.

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 authors clearly state the need for the project and construct a creditable restoration model. They acknowledge that restoration will be limited to the extent the levees can be moved back from the stream's edge. Full-scale implementation is justified.

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 okay but through the design phase of the project careful attention should be given to the hydraulic effects of armoring stream banks as opposed to grade control. If an analysis of grade control alternatives and bank stabilization techniques is undertaken, some very useful information will be produced. The proposed methods are appropriate but their broader use was not explored.

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 design and restoration work is feasible. The probability of success depends on the extent to which the appropriate hydrology results and the long-term stability of the floodplain habitats.

5. **Project-Specific Performance Measures.** Does the project include appropriate performance measures to measure success relative to the project's goals and objectives? Is there enough detail as to how the performance measures will be quantified? For restoration projects, are monitoring plans explicit and detailed enough to determine if performance measures will be adequately assessed?

The test measures for the various hypotheses are presented and briefly explained. Except for certain water quality parameters, the measures seem reasonable.

6. **Products.** Are products of value likely from the project? Specifically for restoration projects, are products of value also likely from the monitoring component? Are interpretative outcomes likely from the project?

The products are numerous: feasibility study, restoration design, reformed and replanted landscape, monitoring data and topographic map. The production sequence seems reasonable except for the mapping component. This is to be done after all of the restoration work has been done. It should be done before and after. The schedule of events needs to be put into a time line figure.

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

The staff seem technically competent and well suited to the proosed work.

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

The overall budget seems high but the unit cost for grading (\$375/acre) and plant establishment (\$1,000/acre) are reasonable. Still, the cost could be reduced if natural regeneration of plant communities were relied upon or used to some extent. The mapping cost is very reasonable. This item should be doubled so that a pre-project map could be produced.

**Miscellaneous comments:** 

## Prior Performance/Next Phase Funding: #1

**New Proposal Number: 55** 

New Proposal Title: Central San Joaquin Floodplain Restoration

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

**Engineering and Environmental Analysis for Butte Sink Structural Modifications and Flow-Through System.** 

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

USBR #99-FC-20-0055, Lower Butte Creek Project, Phase II - Preliminary Engineering and Environmental Analysis for Butte Sink Structural Modifications and Flow-Through System.

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

XYes -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 XNo -N/A

If no, please explain any inaccuracies:

Status, No! Progress, Yes. Accomplishments, N/A.

Financial Status of the 99-B02 currently shows \$750,000 obligated towards the CALFED portion and \$250,000 obligated towards the CVPIA portion of the USBR Agreement 99-FC-20-0055. Amount stated by applicant as income (\$531,850.58) may reflect actual expenditures from the CALFED portion of the Agreement at the time of proposal submission.

5. Is the applicant's progress towards these project(s)' milestones and outcomes to date satisfactory?

XYes -No -N/A

If no, please explain deficiencies:

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

XYes -No -N/A

If no, please explain deficiencies:

## Reporting, Yes! Record keeping, N/A. Financial management, N/A

7. Will the project(s) be ready for next phase funding in 2002, based on its current progress and expenditure rates?

-Yes -No XN/A

If no, please explain:

### Other Comments:

Ducks Unlimited, Inc. has been able to enlist other fund sources to add to and maximize the work effort concerning the Lower Butte Creek Project, Phase II. They are very well organized and forthcoming with all of the paper work and reports required under the current Agreement.

## Prior Performance/Next Phase Funding: #2

**New Proposal Number: 55** 

New Proposal Title: Central San Joaquin Floodplain Restoration

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

97-N18, Cullinan Ranch Restoration 97-N19, Tolay Creek Restoration 01-N19, Ecological Monitoring of Tolay Creek and Cullinan Ranch Tidal Wetlands Restoration Ecosystem Restoration

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

N/A

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

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?

If no, please explain any inaccuracies:

Applicant did not list status of 97-N18, 97-N19 or 01-N19.

5. Is the applicant's progress towards these project(s)' milestones and outcomes to date satisfactory?

If no, please explain deficiencies:

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

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:

This is not a next phase project.

Other Comments:

## Prior Performance/Next Phase Funding: #3

**New Proposal Number: 55** 

New Proposal Title: Central San Joaquin Floodplain Restoration

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

96-M22 Gorrill Dam Fish Screen and Ladder

#### 95-MO5 M&T/Parrott Pumping Station and Fish Screen

96-M21 Rancho Esquon/Adams Dam Fish Screen and Ladder

- 2. Prior CVPIA project numbers, titles, and programs: (*list only projects for which you are the contract manager*)
- 3. Have negotiations about contracts or contact amendments with this applicant proceeded smoothly, without persistent difficulties related to standard contract terms and conditions?

XYes -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?

XYes -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?

XYes -No -N/A

If no, please explain deficiencies:

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

XYes -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?

XYes -No -N/A

If no, please explain:

Other Comments:

## **Environmental Compliance:**

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Proposal Number: 55
Applicant Organization: Ducks Unlimited, Inc.
Proposal Title: Central San Joaquin Floodplain Restoration
1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?
-Yes XNo
If no, please explain:
Land use change may require local approval; Project would require State Lands Commission land use lease.
However, all necessary environmental compliance requirements not identified in the Environmental Compliance Checklist are itemized on pages 3-5 of the project description
2. Does the project's timeline and budget reflect adequate planning to address legal and regulatory issues that affect the proposal?
XYes -No
If no, please explain:
If environmental compliance requirements are accounted for under Project Management tasks.
3. Do the legal and regulatory issues that affect the proposal significantly impair the project's feasibility?
-Yes XNo
If yes, please explain:
Other Comments:

Budget:
Proposal Number: 55
Applicant Organization: Ducks Unlimited, Inc.
Proposal Title: Central San Joaquin Floodplain Restoration
1. Does the proposal include a detailed budget for each year of requested support?
XYes -No
If no, please explain:
2. Does the proposal include a detailed budget for each task identified?
XYes -No
If no, please explain:
3. Does the proposal clearly state the type of expenses encompassed in indirect rates or overhead costs?
XYes -No
If no, please explain:
4. Are appropriate project management costs clearly identified?
XYes -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?
XYes -No
If no, please explain (for example, are costs to be reimbursed by cost share funds included in th budget summary).
6. Does the budget justification adequately explain major expenses?

XYes -No

If no, please explain:

Other Comments:		

7. Are there other budget issues that warrant consideration?

-Yes XNo

If yes, please explain: