

**Panel Scientific and Technical Review Form**  
(Note: Review comments will be anonymous, but public.)

**Proposal number: 2001-B202**

**Short Proposal Title: *Arundo donax*: Survey and  
Eradication**

This project proposes to identify areas impacted by *Arundo donax* and to work with landowners to eradicate *Arundo* along eight creeks in Tehama, Butte and Glenn Counties. The research would evaluate if planting of native plants is necessary in order to revegetate areas following eradication. In addition, the project proposes to evaluate impacts of removal on channel geomorphology.

**1a) Are the objectives and hypotheses clearly stated?**

***Summary of Reviewers comments:***

The objectives are clearly stated but there is little support for the objectives and hypotheses from previous literature.

***Panel Summary:***

The objectives are stated clearly in the executive summary. Hypotheses are also stated clearly; however, the general objectives and specific hypotheses are not well connected. The proposal focuses almost exclusively on the objectives and appears to have forgotten the specifics of the hypotheses (how will planting affect revegetation and how will removal affect channel geomorphology).

**1b1) Does the conceptual model clearly explain the underlying basis for the proposed work?**

***Summary of Reviewers comments:***

The conceptual model is straightforward and clear, and it provides the basis for the proposed research.

***Panel Summary:***

The conceptual model is simple but vague. The progression of habitat change that is described is clear, and impacts of this invasive species are substantial.

**1b2) Is the approach well designed and appropriate for meeting the objectives of the project?**

***Summary of Reviewers comments:***

One reviewer stated that the approach was well designed; the second reviewer felt this was mixed, with some aspects of the research well covered and some very light on details. The second reviewer also points out that eradication is not proven, and that little information is provided on monitoring and assessment.

***Panel Summary:***

As noted above, there is no mention of the hypotheses in the outline of the proposed approach. The focus of the research that is described is on mapping and eradication. These components definitely merit attention, but it is not clear how the proposed research will evaluate vegetation reestablishment or channel impacts. The proposal would be much stronger with details concerning these aspects of the proposal.

**1c1) Has the applicant justified the selection of research, pilot or demonstration project, or a full-scale implementation project?**

***Summary of Reviewers comments:***

There is justification for full-scale implementation.

***Panel Summary:***

This is not clearly identified in the proposal. Without some evidence to support that eradication of *Arundo* is a “proven science,” it is not clear that this should be a demonstration or full-scale implementation project. The panel felt that the proposal would be much stronger if it were done as a demonstration project (see below).

**1c2) Is the project likely to generate information that can be used to inform future decision making?**

***Summary of Reviewers comments:***

Yes, this research will generate important data. This type of experimentation is clearly needed.

***Panel Summary:***

*Arundo* is certainly a species of concern. More knowledge about how to control it, how to revegetate areas, and how removal impacts habitat would be very useful.

**2a) Are the monitoring and information assessment plans adequate to assess the outcome of the project?**

***Summary of Reviewers comments:***

One reviewer thought that the monitoring and assessment details are well thought out and provided in detail. The second reviewer felt that some aspects of the monitoring were short on details and that the criteria for restoration were not identified.

***Panel Summary:***

Details for the monitoring are vague. As with the approach, little is outlined for how the hypotheses will be evaluated. Data collection is not described, as it appears that these details are still being worked out. We have to assume that appropriate measures will be established.

**2b) Are data collection, data management, data analysis, and reporting plans well-described, scientifically sound and adequate to meet the proposed objectives?**

***Summary of Reviewers comments:***

Yes, sufficient details are provided.

***Panel Summary:***

Very few details are provided in this regard.

**3) Is the proposed work likely to be technically feasible?**

***Summary of Reviewers comments:***

One reviewer stated that the project was feasible; the second reviewer felt this was difficult to evaluate given the minimal detail provided.

***Panel Summary:***

The proposal states that removal of *Arundo* is a “proven science,” but little information is provided to support this statement. It would seem that there are still many details to work out concerning removal (e.g., if the plant is not removed upstream, will it easily reestablish in treated sites? How long do roots remain

viable after treatment? Is there a seedbank?, etc.) Obviously the research will address some of these issues, but specifics are not provided.

**4) Is the proposed project team qualified to efficiently and effectively implement the proposed project?**

*Summary of Reviewers comments:*

Yes, the researchers are well qualified.

*Panel Summary:*

The project team appears to be well qualified for this research. They have substantial experience in this area and are already involved in *Arundo* removal projects.

**5) Other comments**

*Summary of Reviewers comments:*

Need for budget oversight given the large amount of service contracts. Eradication of *Arundo* should be a priority given its impacts on habitat.

Overall, one reviewer rated the proposal very good and one excellent.

**Overall Evaluation  
PANEL SUMMARY COMMENTS**

The eradication of *Arundo* is definitely an area of interest. It would increase habitat value and should be done. However, the panel felt that it was not clear that the proposed research would fill the most important gaps in knowledge in this area. Significant particulars detailing how the work will be completed are lacking from the proposal as it is written, including how the specific hypotheses that were presented in the proposal would be addressed. Furthermore, no support is provided to substantiate the ability to eradicate *Arundo*.

Given these substantial shortcomings, the panel recommends that the proposal be resubmitted as a demonstration project with a more defined focus. From a scientific standpoint, the proposal would be much stronger if it focused on one or two tributaries and provided more detail on the eradication, revegetation, and monitoring efforts. Specifics should be provided concerning revegetation methods, monitoring efforts, wildlife response to restoration efforts, etc. Impacts to non-target species from eradication efforts should definitely be addressed as a component of this research. In addition, the proposal should address the long-term issues of *Arundo* eradication. If *Arundo* is eradicated, will it easily re-establish at a later date, given the disturbed nature of these habitats. Without some assurance that eradication will be successful over the long-term, these efforts may not be a wise use of CALFED funds.

**Summary Rating**

- Excellent
- Very Good
- Good
- XX  Fair
- Poor