Individual Review Form

Proposal number: 2001-D201-2 **Short Proposal Title: Habitat Acquisition for Riparian Brush Rabbit and Riparian Woodrat**

1a) Are the objectives and hypotheses clearly stated?

The proposal clearly states its objective is to acquire, in-fee or through easement, existing riparian or potentially restorable areas adjacent to known brush rabbit and riparian woodrat populations at Caswell State Park on the Stanislaus River. This phase will set the stage for future stages to significantly expand habitat for these two endangered species.

The hypothesis stated on page 3 of the proposal is unclear, likely suffering from a simple typographically error. However, after reading the full proposal, it's clear that the hypothesis being tested is that restoration of fully functioning riparian areas and other areas of the Delta followed by the reintroduction of the listed brush rabbit can successfully contribute to backing the brush rabbit away from the brink of extinction.

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

This proposal includes a clearly articulated conceptual model for all five phases of the project. It explains the underlying scientific basis for the proposed work by presenting how levees and flood control projects have reduced suitable habitat for the brush rabbit and hindered the ecological processes that sustain that habitat. By referencing CALFED's ERPP, the proposal describes the causal interconnections among key ecosystem components of their project. The model demonstrates how physical and biotic system components will likely respond when larger areas of riparian are restored and adjacent suitable upland refugia is present to ensure the brush rabbit can withstand future stressors such as catastrophic flooding or other threats to the limited habitat of this species. The conceptual model, while not supported by extensive scientific literature citations, is consistent with the ERPP and general ecological and ecosystem restoration principles. The proposal's model does not fully articulate the relevant unknowns. Nevertheless, the recognition and integration of adaptive management into the proposal should address any uncertainties that may be identified.

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

The approach described is well designed for this stage of the proposal. Starting with acquisitions of existing and restorable habitats in the proximity of the main know population of the brush rabbit is a sound strategy. Depending on the quality of the ultimate restoration and its successful implementation (phases 3 and 4) the proposal has a high probability of success in meeting its objectives.

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

The proposal has characteristics of both a full-scale implementation and demonstration project. In my view, the applicant has and is justified in how the project is characterized. Given the

precarious status of the brush rabbit's population, full-scale implementation is in order. Furthermore, there is reasonable confidence that the objective will be achieved. In addition, the scope of the project is realistic given the need to work collaboratively with stakeholders in this area and throughout the south Delta and to integrate future phases with a more comprehensive restoration strategy for the entire Delta that addresses multiple species needs. This ecosystem restoration project will inform future restoration and management actions. The proposal provides little reference to related research and demonstration projects.

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

There is a high probability that the proposal will inform future decisions from at least two perspectives. One, experience gained from the acquisition, in-fee or easement, of potential new riparian brush rabbit habitat will help guide decisions regarding future acquisitions for other restoration efforts in the Delta. Two, feed back from efforts to restore habitat and then reintroduce the rabbit into those habitats will guide future efforts to recover the brush rabbit and woodrat.

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

The proposal does not clearly describe a monitoring component and how the monitoring results will be used to assess the outcome of the project. I expect that the monitoring, which will begin to focus on tracking relocated brush rabbits and their offspring, will be expanded as a part of future phases. At this stage very little detail is offered about this approach and how it may be linked to assessing the vegetative characteristics of suitable brush rabbit habitat. As it is now, we could not conclude that monitoring would be adequate to allow determination of the success of the project in relation to its objectives.

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

Consistent with my observations listed above, the data collection, data management, data analysis, and reporting plans are not well described. The general data collection strategies that are presented are scientifically sound and likely to be adequate to meet the proposed objectives when more specificity is provided in future phases.

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

The proposal outlines an approach, particularly for the first two phases, that is both feasible and appropriate. Furthermore, based on the scope of the effort outlined, the probability is very high that those phases can be completed in the time allotted. Implementation of future phases that entail actual riparian restoration are likely not to be completed as projected. Allowance should be made to address likely delays in preparing a restoration plan and implementing it.

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

The project team has the training and experience to conduct the proposed work. Specifically, the U.S. Fish and Wildlife Service and the Center for Natural Lands Management have the ability to efficiently and effectively implement the proposal by demonstrating that ability through the

successful implementation and management of other restoration efforts in California. Researchers with the Endangered Species Recovery Program have considerable experience with and knowledge of special status wildlife found in the San Joaquin Valley.

Miscellaneous comments

Overall Evaluation Summary Rating	**Provide a brief explanation of your summary rating**
☐ Excellent	The proposal overall is very well done. The deficiencies are relatively minor and can be corrected as part of future proposals for additional phases. The action, as proposed, is one that addresses a critical need in the Delta and has a high probability of success.
X Very Good	
☐ Good	
☐ Fair	
☐ Poor	