## **Proposal Reviews**

## **#102:** Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

Northern California Regional Land Trust

Final Selection Panel Review	
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## **Final Selection Panel Review:**

### CALFED Bay-Delta 2002 ERP PSP Final Selection Panel Review

**Proposal Number:** 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

Please provide an overall evaluation rating.

Fund	
As Is	-
In Part	-
With Conditions	-
Consider as Directed Action	-
Not Recommended	X

Amount: **\$0** 

Conditions, if any, of approval (if there are no conditions, please put "None"):

None.

Provide a brief explanation of your rating:

The Fish and Wildlife Service's comments on the panel's recommendation note the importance of protecting this vernal pool species, and encourage partial funding of the proposal. The Selection Panel recognizes the importance of habitat acquisition in the conservation of Butte County meadowfoam and surrounding vernal pool areas as recognized in the Habitat Restoration Program. However, the panel agrees with reviews that this proposal is deficient and should be substantially revised to justify funding either by CALFED or the HRP.

## **Research and Restoration Technical Panel Review:**

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

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

**Review:** 

Please provide an overall evaluation summary rating:

**Superior:** outstanding in all respects;

<u>Above Average:</u> Quality proposal, medium or high regional value, and no significant administrative concerns;

<u>Adequate:</u> No serious deficiencies, no significant regional impediments, and no significant administrative concerns;

<u>Not Recommended:</u> Serious deficiencies, significant regional impediments or significant administrative concerns.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Superior	This is a poorly conceived project that does not effectively describe the conceptual context nor the procedures of the monitoring and research activities
-Above	proposed. It proposes to acquire a parcel of vernal pool habitat before assessing
average	the conservation value of the acquisition. Because the monitoring and research
-Adequate	portions are so poorly described, it is impossible to judge the potential for these activities to generate useful scientific information and management guidelines.
XNot recommended	Finally, although education is suggested as an important goal of this project, there are no educational activities planned nor is there any allocation in the budget for education.

1. **Goals and Justification.** 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?

This proposal fails to develop a coherent statement of goals other than focusing on the acquisition of a 264 acre parcel of vernal pool habitat of unknown quality. Justification for the purchase of the parcel is not based on a solid understanding of the biological and conservation value of the site. In fact, the applicants propose to assess the value of the parcel after it has been purchased. The monitoring, research and educational goals are only vaguely described and never well justified.

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?

Because the approach and rationale for the monitoring and research portions of the project are so poorly described, it is difficult to judge the feasibility of the project. This is especially true because it is not at all clear that the participants in this project has sufficient expertise in the ecology, conservation or restoration of vernal pool species and habitat. It is not even clear if acquisition of the parcel would be considered a success because the conservation value of the parcel is unknown. Finally the proposed educational aspect of this project is not funded by the project budget nor is their any plan for educational activities put forward. As a result, it would seem there is little chance that the educational opportunities alluded to in the proposal will be developed.

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?

It is very unlikely that this proposal will provide significant contributions to the basic knowledge base on vernal pools or to guidelines on their conservation and restoration. This is because the entire monitoring and research program is so poorly defined in terms of scope, hypotheses tested, and procedure.

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

Given that the conservation value of the parcel targeted for acquisition is largely unknown, funding of this acquisition would be risky. Another failing of the budget is that there is no allocation for educational activities; a supposed goal of the project.

5. **<u>Regional Review.</u>** 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 Sacramento Regional panel ranked this proposal Low. Although several panel members felt the need for this project was very high, others were hesitant to endorse land acquisition projects, particularly where there might be controversy. The panel also felt the education and restoration components of the project should be better developed. The panel thought the project might contribute to the restoration of Butte Creek being implemented by numerous local conservation organizations. It could also contribute to the FWS vernal pool recovery plan and local conservation planning efforts for Butte County meadowfoam. This project would also complement the Watershed Education Program developed by the City of Chico.

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?

#### No significant problems in Administrative review.

#### Miscellaneous comments:

None

## Land Acquisition:

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

1. Is the site's ecological importance documented in the proposal?

XYes -No

If yes, please import relevant text and citations here:

The Butte County meadowfoam (BCM) is one of the most critically endangered plant species in the Central Valley of California. The species was federally-listed as endangered on June 8, 1992 (USFWS 1998) and State-listed as endangered in 1982 (California Fish and Game 2000). BCM is a very rare plant with a naturally limited range entirely within Butte County. BCM exhibits a high degree of genetic diversity between populations with little variation within populations Dole and Sun 1992). As a result, the loss of any of the populations will greatly reduce the genetic diversity remaining in the species.

The plant is found in 9 populations in the Chico area in northern California. Residential and commercial development has fragmented the already limited habitat of BCM and continues as the primary threat to this species. Nearly all sites where the plant is found are proposed for development. Acquisition and restoration of habitat is needed to protect and enhance the remaining occupied habitat of this species.

The Schmidbauer property located in the southeast portion of the City of Chico in Butte County, California, contains one of the largest BCM populations. The property consists of two contiguous parcels of land that total 264 acres. The site contains an extensive vernal pool and swale system, rolling annual grassland, and riparian habitat. The property has not been significantly altered by leveling or plowing and has been used as pastureland in the past. Two vernal pool crustaceans, the endangered vernal pool tadpole shrimp and the threatened vernal pool fairy shrimp, are found on the property. The Butte Creek Diversion Channel, which connects Little Chico Creek to Butte Creek, bisects the property. Two federally-listed fish are found in Butte Creek and may have access to Little Chico Creek through the diversion: the threatened spring-run chinook salmon and the Central Valley steelhead. Butte Creek and its tributaries were designated by National Marine Fisheries Service as critical habitat for both fish species. The site presents a variety of outdoor education opportunities for local students and adult education programs. The locally-based Watershed Education Project has indicated a great interest in facilitating the development of the educational field study opportunities for the site.

An existing 15-acre preserve owned by the City of Chico was created to protect BCM and is contiguous with the Schmidbauer site.',

2. Is the owner's willingness to sell the site documented in the proposal?

If no, please explain:

# The applicant asserts that the landowner wishes to sell the property in fee title to a land trust or other conservation entiity.

3. Is evidence of local government support for the purchase included in the proposal?

-Yes XNo

If yes, please explain:

The proposal does not include any information about local government attitudes about the project. Vernal pool protection in Chico has been controversial, so care should be excercised to understand the city's attitude.

4. Is the use proposed for the site after its purchase clearly consistent with the site's general plan designation and zoning?

-Yes XNo

If no, please explain:

The site is zoned for residential + commercial use, according to the applicant, with a resource management overlay indicating that there are contraints on the property for protection of natural resources. Its general plan designation is not provided, although the applicant asserts that retention of the property for open space is consistent with the general plan. It is unclear, however, whether the site's protection as a nature reserve might conflict with planned use of surrounding properties or improvement of infrastructure to support development consistent with city plans + zoning for this area.

5. Is the land mapped as prime farmland, farmland of statewide significance, unique farmland, or farmland of local importance?

-Yes XNo

If yes, please explain the classification:

X

Is the site under a Williamson Act contract?

-Yes XNo

Will use of the site change from agriculture after its purchase?

-Yes -No XNot Currently in Agriculture

6. Is this a time-sensitive acquisition opportunity, according to the proposal?

XYes -No

If yes, please import relevant text here:

According to the proposal, the applicant has agreed to sale of the property in 2002, but may consider other options if the land is not purchased by the end of the year.

Other Comments:

According to the proposal, preservation of this site will allow the landowner to expedite development of other property west of the project site.

## Sacramento Regional Review:

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

Overall Ranking: XLow -Medium -High

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

Although several panel members felt the need for this project was very high, others were hesitant to endorse land acquisition projects, particularly where there might be controversy. The panel also felt the education and restoration components of the project should be better developed.

1. Is the project feasible based on local constraints?

XYes -No

How?

The project would purchase land from a willing seller who has agreed to sign an option with the Northern California Regional Land Trust. The protection of this land would be consistent with the Chico General Plan. The development and implementation of management and monitoring plans for this property is well within the qualifications of the project applicants and their partners.

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

XYes -No

How?

The project addresses PSP regional priority 1, to develop and implement habitat management and restoration actions in collaboration with local groups, and multi-region priority 3, to implement environmental education actions, and priority 6, to ensure recovery of at-risk species by developing conceptual understanding.

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?

The project would contribute to the restoration of Butte Creek being implemented by numerous local conservation organizations. It would also contribute to the FWS vernal pool recovery plan and local conservation planning efforts for Butte County meadowfoam. This project would also directly complement the Watershed Education Program developed by the

### City of Chico.

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

XYes -No

How?

The project involves local people and institutions, including the Butte Environmental Council, public schools at all levels throughout the city of Chico, California State University Chico, Friends of Butte Creek, and the Butte Conservation Foundation.

Other Comments:

This project could contribute significantly to the recovery of a critically threatened species.

## **External Scientific: #1**

## **Research and Restoration External Scientific Review Form**

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

#### **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; <u>Good:</u> quality but some deficiencies; <u>Poor:</u> serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	There is no question that the goal of protection of vernal pools and their endemic species is of the highest priority, or that Butte County Meadowfoam is in need of habitat protection. However, this proposal does not include the information needed to support the idea that the proposed purchase of the Schmidbauer property would contribute significantly to this goal. A regional approach to vernal pool conservation in the Chico area is needed to identify the highest priority sites for conservation.
	Another weakness in this proposal is the lack of specific information regarding the biological values and management needs of the property. The presence of
-Good	endangered species is noted, however, no site-specific data, distribution maps, or census results, that would provide an indication of the regional significance of the property, are included. The proposal includes no maps of the property. Non-native species are mentioned as possibly limiting to BCM, but no details are given.
	The approach is too general to permit evaluation. No specific inventory, restoration, monitoring, performance criteria or outdoor education plans are presented.
XPoor	Also contributing to the poor rating given to this proposal is the lack of staff with expertise in vernal pool and endangered species management and protection. A proposal of this type requires the participation of senior-level biologists trained and experienced in these disciplines.
	There is a "cart before the horse" aspect to this proposal, in that it proposes to acquire the property first, then figure out all the details later. The proper allocation of scarce conservation funding requires that a site's values and management needs be known in reasonable detail up front, before committing millions of dollars to site acquisition.

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

The proposal does not do a very good job of stating the goals and objectives clearly and in a way that is internally consistent. The goal is not clearly stated in the Executive Summary, but the inferred goal of this project is to protect and restore vernal pool habitat that supports at-risk species, including especially the locally endemic and rare Butte County Meadowfoam (Limnanthes floccosa subsp. californica), which is state and federally-listed as endangered. The only specific location that is proposed for acquisition under this proposal is the 264-acre Schmidbauer property. The property also supports populations of two federally-listed crustaceans, and may provide habitat for two federally-listed fish.

Protection of vernal pool habitats and species is very important because of their biological significance and previous losses. Protection of Butte County Meadowfoam is especially important due to its level of endangerment and its scientifically significant pattern of genetic diversity, however, there are important questions with regard to whether acquisition of the

Schmidbauer property is the best way to achieve this goal. See question 2 for further detail.

The executive summary does not include a precisely stated goal, but the inferred goal is expressed as a single objective: to acquire and restore land needed to protect and enhance the remaining occupied habitat of BCM. No data is presented in the proposal to indicate how much of the remaining occupied habitat is found on the Schmidbauer property.

The Project Description includes overlapping and therefore confusing goals, objectives, hypotheses and elements of a conceptual model. The goals/objectives include 1) acquisition of the Schmidbauer property, 2) management of the property, 3) riparian restoration of Little Chico Creek (not clear how this relates to vernal pool protection), 4) improve habitat quality and 5) maximize the amount of suitable BCM habitat (without stating how this would be accomplished).

The Conceptual Model includes 4 tasks that are restatements of the project's objectives (See question 2, below.) Therefore, goals, objectives and the conceptual model are not distinct in this proposal.

Furthermore, the proposal's title begins with "Wetlands Outdoor Classroom," followed by "Habitat Acquisition ...," yet it is clear that the major focus of money and effort is on purchase of land. The proposal states that local groups will be "given the opportunity" to develop education programs based on the property. The Budget Summary does not include itemized funding for developing education programs.

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 proposal states that protection of BCM is one of the major goals of the project, but the proposal does not present a convincing argument that acquisition of the Schmidbauer property will contribute substantially to the protection of existing BCM populations. The proposal includes no specific data on numbers or extent of BCM, or of amount of potential habitat suitable for BCM on the property. Reference citations included in the proposal are not complete, making it impossible for the reviewer to determine whether supporting information is found in the literature. The reviewer used the following reference as a source for the following paragraphs:

Dole, J. and M. Sun, 1992. Field and genetic survey of the endangered Butte County meadowfoam -Limnanthes floccosa subsp. californica (Limnanthaceae). Conservation Biology 6(4):549-558

Fewer than 15 locations for this plant are known (CNPS Inventory, 2001), all in the vicinity of Chico and are therefore subject to development pressure. Dole and Sun (1992) present isozyme and other data showing that 1) Butte County Meadowfoam (BCM) is genetically distinct from other subspecies of L. floccosa, 2) the rate of gene flow between populations is extremely low, and therefore, 3) genetic diversity between local populations is high. They recommend saving representatives of as many populations as possible within 3 "centers of diversity" to preserve genetic diversity within the taxon. They censused 8 BCM populations (of 9 known) in 1988. While it is known that populations of annual vernal pool plants are subject to large variations in size from year to year, it is significant to note that the Schmidbauer population was the second smallest of the 8 populations censused, with just 354 individuals. This compares with 45,000 individuals at the North Enloe population in 1988, which is located in the same "center of diversity" as Schmidbauer, the Southeast Center of Diversity. The proposal does not update these figures, nor present any information about the current status of other populations within the

Southeast Center of Diversity, or the other two centers of diversity.

The proposal identifies the Schmidbauer population as "one of the largest populations of BCM," but does not provide any data to support this statement. This reviewer questions whether this proposal statement results from a misreading of Dole and Sun (1992) which, in the Results section, states "the southeast center, including populations Church, North Enloe, Bruce-Stilson, Doe Mill and Schmidbauer, contained the largest number of individuals ..." One question that must be answered before the vernal pool and BCM conservation value of the purchase of the Schmidbauer property can be determined, is the current status of vernal pool habitat and BCM on the Schmidbauer property.

The proposal includes no information about the specific distribution and numbers of BCM on the Schmidbauer property. One of the objectives is to "maximize the amount of suitable BCM habitat." It isn't clear what this means. Vernal pool creation, while shown to be technically feasible and successful (by some criteria) in other areas of California, is nevertheless a controversial technique opposed by the California Native Plant Society and others.

A regional approach to vernal pool and BCM conservation would be very useful in identifying the properties with the highest conservation values. A draft conservation plan for BCM was prepared by Jokerst in 1989. The proposal does not cite this plan and does not indicate how acquisition of the Schmidbauer property would contribute to the protection goals outlined in Dole and Sun (1992) and the Jokerst plan.

The conceptual model included in the proposal includes 4 tasks, which are written in the manner of objectives. The conceptual model does not explain the underlying basis for the proposed work, however, that information can be gleaned from other sections of the proposal.

In the Project Information outline at the beginning of the proposal, the project type is identified as full-scale implementation, which seems appropriate for an acquisition and management project. However, in the Project Description text under Justification, the acquisition is identified as a pilot project. Later, experimental manipulations of thatch are identified as a pilot project.

3. <u>Approach.</u> 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 presented in the proposal does not include enough specifics to determine whether the objectives of the project are likely to be met.

The Approach section of the proposal identifies 3 Phases with subtasks. (These phases read like objectives, a further point of confusion.) None of the 3 phases identifies specific actions other than negotiating to purchase the property. Land management tasks, other than initial limiting of access to the property, will be based on site surveys and later development of a management plan.

The approach used by most land management agencies and conservation organizations is to develop a detailed and accurate species and habitat baseline, prior to acquisition, to support the idea that acquisition of the property is an appropriate use of funds. This proposal states that survey data will be collected in Phase 3, after acquisition has been completed. It is unclear how the data will be collected. The project team does not appear to include biologists with the required expertise for collecting such data.

While putting off development of a detailed management plan may be appropriate, the proposal should, at a minimum, provide an outline of such a plan and discuss areas that will be emphasized. Since no outlines, discussion or details are included here, it cannot be determined with certainty whether the project is likely to generate new information, methodology or approaches.

The hypothesis stated in the proposal is that "BCM is in danger of extinction from habitat loss, fragmentation, inappropriate management, and degradation of habitat." This hypothesis will be tested by "removing the stressors on the population", without clearly stating what the stressors are or how they will be removed. Adaptive management is proposed, without specifying methods, or how they will be implemented or monitored.

The proposal states that "no systematic study of monitoring and management of meadowfoam has been done," and proposes a pilot study to investigate the response of BCM to three non-native grass/thatch control methods: grazing, burning and mowing. Important information could result from this study, but no specific details are provided. The proposal states that results of experimental treatments on non-native plants will be monitored by "mapping changes in the area occupied and looking for a shift in dominance from one species to another." More quantitative methods will need to be used if results are to be subjected to scientific interpretation.

(The project proponents may not be aware that a study similar to the one proposed is currently underway in Sonoma County involving the endangered Sebastopol meadowfoam. The study is supported by the CA Dept. of Fish and Game, and no results have been published yet.)

The proposal to conduct a study on BCM again raises the question of who would plan and conduct this study, since none of the named participants in this project have identified expertise in vernal pools or endangered species. State and federal permits required to conduct such studies generally require that the principal investigator have such expertise. (See response to question #7.)

Regarding the value of information generated by this project: One viewpoint is that all information is useful to decision-makers, even information about less-than-successful projects, because it indicates what not to do in the future. However, this may not be the best use of public funds.

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 approach does not include specifics, therefore its technical feasibility cannot be evaluated. (See question 3, above.) The likelihood of success cannot be estimated without more detailed information on the site proposed for acquisition, including current distribution and abundance of vernal pools, endangered species and other natural resources, and the proposed methods to enhance and protect these resources.

The regional significance of the Schmidbauer property must be known before it can be determined whether the scale of the project (acquiring and protecting one 264-acre parcel) is consistent with the objectives (not clearly stated, but including improving site habitat quality and maximizing the amount of suitable BCM habitat.)

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 proposal does not include any specific performance criteria for any aspect of the project. It states that a monitoring plan will be developed as part of the management plan, and that the plan will include criteria for measuring the status of the listed species on site, and the effects of management activities on invasive species and riparian vegetation. There is no mention of monitoring the effects of management activities on listed species, an aspect of monitoring that would seem to be essential to the evaluation of the overall success of this project.

For monitoring the impacts of management actions, no information is provided to indicate 1) specific performance criteria or how they will be developed, 2) specific monitoring methods and how they will determine whether performance standards are being met.

As previously noted, no monitoring plan is included.

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 one product that is most likely to result from this project is acquisition of the 264-acre Schmidbauer property for 2.5 to 3 million dollars. The value of this to BCM, other species, and vernal pool habitat is not clear from information in the proposal. There is not even assurance that the acquisition will take place, since it is dependent on a successful negotiation over price with the landowner. However, the landowner is identified in the proposal as a willing seller.

The proposal does not include any specifics on monitoring, so the value of monitoring results cannot be estimated.

Although no details are provided, the proposal states that a study will be conducted on thatch management, comparing three different forms of thatch control. Similar studies have been done for other systems and this question is currently being investigated for vernal pools that support Sebastopol meadowfoam in Sonoma County. Results of the proposed study on BCM could be used to determine the best management techniques for thatch reduction, but will require quantitative monitoring and methods of analysis not included in the current proposal.

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?

A major concern with this proposal is that none of the staff of the Northern California Land Trust identified in the proposal has any stated expertise in vernal pool protection and management, working with endangered species, preparing and implementing restoration plans, or developing environmental education programs, yet all of these are important components of this proposal. No other individuals are identified as participants. The Butte Environmental Council is listed as participating in several tasks, but no specific personnel or qualifications for the organization are included. Working with endangered species and habitats requires specialized knowledge of their biology and ecology, and of the legally-mandated procedures for working with such species and their habitats, including obtaining the required permits.

Based on the information provided in the proposal, it does not appear that the applicant/project team has the qualifications needed to complete the project's objectives.

The project applicant has received funding for one prior CALFED project, the Virgin Valley Butte Creek Ecological Preserve. No details are provided on this project.

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

The estimated total cost of the 264-acre Schmidbauer property is 2.5 to 3 million dollars. At 2.5 million, this is approximately \$9,500 per acre. This reviewer is not familiar with land prices in the Chico area, however, in more developed parts of northern California, properties containing wetlands (therefore with limited development potential) are valued at \$500 to \$10,000 per acre, depending on habitat quality, potential use in mitigation banking, and other factors.

The costs for management planning (\$88,000 total for 3 years) seem excessively high, and the costs for management implementation (\$69,600 for 3 years) may be too low, but this is difficult to evaluate without knowing specific management actions. The costs of monitoring (\$91,300 for 3 years) are also difficult to evaluate without knowing the factors that will be monitored, the techniques used and the frequency of monitoring and reporting. None of this is specified in the proposal.

Miscellaneous comments:

Total project cost is stated in the Project Information outline (beginning of proposal) as \$2,000,000 and in the Budget Summary as \$1,890,960.

The Project Information outline indicates this is a 2-year project, while the text and budget summary describe a 3-year project.

## External Scientific: #2

### **Research and Restoration External Scientific Review Form**

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

#### **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; <u>Good:</u> quality but some deficiencies; <u>Poor:</u> serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
XExcellent	
-Good	Proposal is excellent, with a slight deficiency in the monitoring and performance measures following acquisition.
-Poor	

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

Yes, the goals, objectives, and hypotheses are clearly stated and consistent. Based on the information in the proposal, the acquisition is very timely and important.

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?

#### Great justification at all levles.

3. <u>Approach.</u> 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 well designed and results from the management plan and implementation plan are highly likely. The information on the management for this rare species will be very useful and may even generate new approaches for managing exotics in vernal pool settings.

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?

Highly feasible. The likelihood of success will rest on the ability of the organization to get addition funds from other organizations for acquisition of the property. I have no way to rate the likelihood of acquisition, except to say that the proposal lists the usual suspects. The scale of the project is consistent with the objectives and benefits from an adjacent parcel being managed for the same purpose.

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 proposal states that monitoring will be done in accordance with a standard reference, which is a broad statement, but realistic. The inclusion of this citation (Elzinfa et al.) with permanent photo points and GPSed locations is also realistic. Since quantitative performance measures are not stated, and since the monitoring plan (statement) is broad, it is not possible to determine if the monitoring plans are detailed enough to measure performance. However, since the main object of this proposal is acquisition, this is of less importance.

6. <u>Products.</u> 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?

Acquisition will be determined by the proposers ability to fully fund the project. Once fee title is obtained, products of value are likely. The opportunity for interpretative outcomes is very high, with the proximity to a state university and high school.

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?

# From the proposal, it appears that the project proponent has the infrastructure and background to implement the project.

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

The budget is reasonable and adequate

Miscellaneous comments:

## **External Scientific: #3**

### **Research and Restoration External Scientific Review Form**

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

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

I have no financial interest in this proposal. **X**Correct -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; <u>Good:</u> quality but some deficiencies; <u>Poor:</u> serious deficiencies.

Overall Evaluation Summary Rating	Provide a brief explanation of your summary rating
-Excellent	This proposal fails on several fronts. First, it does not develop a solid justification for the proposed acquisition; instead it proposes to assess the biological value of
-Good	the parcel after it has been purchased. The monitoring and research portions of the proposal are so poorly described that it is impossible to judge their value.
XPoor	Finally, the education portion of the proposal has no plan at all and no funding to support it even if it did have a plan.

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

5 - Poor Beyond the goal of acquiring a 264 acre parcel of vernal pool habitat in Butte County, the conservation, restoration and educational goals of this project are completely unclear. Description of proposed experiments, monitoring and educational programs are vague to non-existent.

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?

5 - Poor The proposal does not justify the purchase of the parcel based on solid assessment of the biological resources contained on the site. In fact, the proposal apparently (and hopefully unwittingly) mis-represents the value of the parcel for conserving Butte County Meadowfoam (BCM). The proposal states that the site contains the one of the largest populations of BCM apparently citing work by Dole and Sun (1992, Biological Conservstion 6:549-558) to support their claim while in fact a reading of that study indicates that the population at this parcel is one of the smallest. The monitoring and experimental programs are only briefly described without any details so it is impossible to judge the value of these activities. Finally the educational program is not described or developed at all and apparently will depend on the efforts of local educators.

3. <u>Approach.</u> 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?

5 - Poor As noted above, the research and monitoring aspects of this proposal are so vague that it is not possible to judge the validity of design or the efficacy of the approaches contemplated. The educational program will apparently be developed by someone else because there is no plan given nor any funding support allocated for this effort.

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?

**5** - Poor As noted above the approach is so poorly documented that a reasonable assessment of feasibility is not possible. Even if the parcel is acquired, it is not possible to judge whether this would be a success because the biota has not been characterized sufficiently at the site to know if this is a valuable parcel.

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?

**5** - Poor No specific performance measures for the monitoring, research or education program were provided. Acquisition of the parcel would be an index although the value of this parcel is unknown.

6. <u>Products.</u> 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?

# **5** - Poor Given that it is not possible to judge performance (see above) it is unlikely that products of value will emerge from this project.

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?

4 - Fair It is not clear that any of the applicants or participants have significant experience in the floristics, ecology or management of vernal pool species.

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

**5** - Poor The biological value of the parcel should be assessed carefully before acquisition. This project is doing exactly the opposite. There is no budget at all for education; a supposed goal of the project.

**Miscellaneous comments:** 

## **Environmental Compliance:**

Proposal Number: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

1. Are the legal or regulatory issues that affect the proposal identified adequately in the proposal?

XYes -No

If no, please explain:

## No compliance is necessary for this phase of the project.

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:

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: 102

Applicant Organization: Northern California Regional Land Trust

Proposal Title: Wetlands Outdoor Classroom, Habitat Acquisition for Butte County Meadowfoam

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?

-Yes XNo

If no, please explain (for example, are costs to be reimbursed by cost share funds included in the budget summary).

## Funding carried forward does not match funding requested.

6. Does the budget justification adequately explain major expenses?

XYes -No

If no, please explain:

7. Are there other budget issues that warrant consideration?

-Yes XNo

If yes, please explain:

Other Comments: