Mill and Deer Creeks Protection and Stewardship

Project Information

1. **Proposal Title:**

   Mill and Deer Creeks Protection and Stewardship

2. **Proposal applicants:**

   Jake Jacobson, The Nature Conservancy
   Jennifer Martin, The Nature Conservancy
   Wendie Duron, The Nature Conservancy

3. **Corresponding Contact Person:**

   Jake Jacobson
   The Nature Conservancy
   958 Washington Red Bluff, CA 96080
   530 527-3835
   jjacobson@tnc.org

4. **Project Keywords:**

   Anadromous salmonids
   Natural Resource Management
   Wildlife-friendly Agriculture

5. **Type of project:**

   Implementation_Full

6. **Does the project involve land acquisition, either in fee or through a conservation easement?**

   Yes

   If yes, is there an existing specific restoration plan for this site?

   No

7. **Topic Area**:

   Uplands and Wildlife Friendly Agriculture

8. **Type of applicant:**

   Private non-profit

9. **Location - GIS coordinates:**

Latitude: 40.260

Longitude: -122.000

Datum:

Describe project location using information such as water bodies, river miles, road intersections, landmarks, and size in acres.

The project is located within the Mill Creek and Deer Creek watersheds in Eastern Tehama County, in the Northern Sacramento Valley Ecological Management Zone.

10. **Location - Ecozone:**

    3.2 Red Bluff Diversion Dam to Chico Landing, 7.3 Mill Creek, 7.4 Deer Creek

11. **Location - County:**

    Tehama

12. **Location - City:**

    Does your project fall within a city jurisdiction?

    No

13. **Location - Tribal Lands:**

    Does your project fall on or adjacent to tribal lands?

    No

14. **Location - Congressional District:**

    3

15. **Location:**

    California State Senate District Number: 4

    California Assembly District Number: 2

16. **How many years of funding are you requesting?**

    3

17. **Requested Funds:**
    a) Are your overhead rates different depending on whether funds are state or federal?

       No

       If no, list single overhead rate and total requested funds:

Single Overhead Rate: 22

Total Requested Funds: $4,700,000

b) Do you have cost share partners already identified?

No

c) Do you have potential cost share partners?

Yes

If yes, list partners and amount contributed by each:

Wildlife Conservation Board (WCB) 0

Private Sources 0

d) Are you specifically seeking non-federal cost share funds through this solicitation?

No

If the total non-federal cost share funds requested above does not match the total state funds requested in 17a, please explain the difference:

18. **Is this proposal for next-phase funding of an ongoing project funded by CALFED?**

No

Have you previously received funding from CALFED for other projects not listed above?

Yes

If yes, identify project number(s), title(s) and CALFED program.

1997-NO8 Lower Mill Creek Riparian Restoration ERP

1998-F20 Deer and Mill Creeks Acq. and Enhance. ERP

ERP-01-N24 Battle Creek Riparian Protection ERP

19. **Is this proposal for next-phase funding of an ongoing project funded by CVPIA?**

    No

    Have you previously received funding from CVPIA for other projects not listed above?

    Yes

    If yes, identify project number(s), title(s) and CVPIA program.

    00FG200003 Foor Ranch BuRec (b)(1)"other"

    14481133297G030 L&L / Hamilton AFRP

    11332-8-G124 Birkes AFRP

    113328G048 Dana AFRP

    a4481133298J Latimer AFRP

    113300G104 Eagle Canyon (Pelton) AFRP

20. **Is this proposal for next-phase funding of an ongoing project funded by an entity other than CALFED or CVPIA?**

    No

    Please list suggested reviewers for your proposal. (optional)

21. **Comments:**

Environmental Compliance Checklist

Mill and Deer Creeks Protection and Stewardship

1. **CEQA or NEPA Compliance**
   a) Will this project require compliance with CEQA?

      No
   b) Will this project require compliance with NEPA?

      No
   c) If neither CEQA or NEPA compliance is required, please explain why compliance is not required for the actions in this proposal.

      This project is for conservation easement acquisition, stewardship and monitoring.

2. **If the project will require CEQA and/or NEPA compliance, identify the lead agency(ies).** *If not applicable, put "None".*

   CEQA Lead Agency:
   NEPA Lead Agency (or co-lead:)
   NEPA Co-Lead Agency (if applicable):

3. **Please check which type of CEQA/NEPA documentation is anticipated.**

   CEQA
   -Categorical Exemption
   -Negative Declaration or Mitigated Negative Declaration
   -EIR
   Xnone

   NEPA
   -Categorical Exclusion
   -Environmental Assessment/FONSI
   -EIS
   Xnone

   If you anticipate relying on either the Categorical Exemption or Categorical Exclusion for this project, please specifically identify the exemption and/or exclusion that you believe covers this project.

4. **CEQA/NEPA Process**
   a) Is the CEQA/NEPA process complete?

      Not Applicable

   b) If the CEQA/NEPA document has been completed, please list document name(s):

5. **Environmental Permitting and Approvals** (*If a permit is not required, leave both Required? and Obtained? check boxes blank.*)

LOCAL PERMITS AND APPROVALS

Conditional use permit

Variance

Subdivision Map Act

Grading Permit

General Plan Amendment

Specific Plan Approval

Rezone

Williamson Act Contract Cancellation

Other Required

STATE PERMITS AND APPROVALS

Scientific Collecting Permit

CESA Compliance: 2081

CESA Compliance: NCCP

1601/03

CWA 401 certification

Coastal Development Permit

Reclamation Board Approval

Notification of DPC or BCDC

Other

FEDERAL PERMITS AND APPROVALS

ESA Compliance Section 7 Consultation

ESA Compliance Section 10 Permit

Rivers and Harbors Act

CWA 404

Other

PERMISSION TO ACCESS PROPERTY

Permission to access city, county or other local agency land.
Agency Name:

Permission to access state land.
Agency Name:

Permission to access federal land.
Agency Name:

Permission to access private land.
Landowner Name: See landowners in proposal — Required, Obtained

6. **Comments.**

If prescribed burns are implemented for invasive weed control, TNC works cooperatively with the California Dept. of Forestry (CDF) and obtains air quality permits. Any CEQA requirements associated with an air quality permit are met by CDF.

Land Use Checklist

Mill and Deer Creeks Protection and Stewardship

1. **Does the project involve land acquisition, either in fee or through a conservation easement?**

   Yes

   If you answered yes to #1, please answer the following questions:

   a) **How many acres will be acquired?**

      Fee: 0
      Easement: 36,000
      Total: 36,000

   b) Will existing water rights be acquired?

      No

   c) Are any changes to water rights or delivery of water proposed?

      Yes If yes, please describe proposed changes.

      Some owners we are negotiating with are considering having the easements restrict the use of water for in-stream dedication for fish habitat.

2. **Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal?**

   Yes

3. **Do the actions in the proposal involve physical changes in the land use?**

   Yes

   If you answered yes to #3, please answer the following questions:

   a) How many acres of land will be subject to a land use change under the proposal?

      Undetermined at this time

   b) Describe what changes will occur on the land involved in the proposal.

      Where appropriate, riparian fencing of livestock, invasive weed control and restoration of natural plant communities will be implemented.

   c) List current and proposed land use, zoning and general plan designations of the area subject to a land use change under the proposal.

Category	Current	Proposed (if no change, specify "none")
Land Use	Rangeland, riparian habitat, woodland, ranching, grazing.	None
Zoning	Upland Ag - Ag Preserve & Primary Floodplain	None
General Plan Designation	Grazing & Primary Floodplain	None

d) Is the land currently under a Williamson Act contract?

Yes

e) Is the land mapped as Prime Farmland, Farmland of Statewide Importance, Unique Farmland or Farmland of Local Importance under the California Department of Conservation's Farmland Mapping and Monitoring Program?

No

f) Describe what entity or organization will manage the property and provide operations and maintenance services.

The private landowners in partnership with The Nature Conservancy.

4. Comments.

4 of the 5 targeted properties are under Williamson contracts.

Conflict of Interest Checklist

Mill and Deer Creeks Protection and Stewardship

Please list below the full names and organizations of all individuals in the following categories:

- **Applicants listed in the proposal who wrote the proposal, will be performing the tasks listed in the proposal or who will benefit financially if the proposal is funded.**
- **Subcontractors listed in the proposal who will perform some tasks listed in the proposal and will benefit financially if the proposal is funded.**
- **Individuals not listed in the proposal who helped with proposal development, for example by reviewing drafts, or by providing critical suggestions or ideas contained within the proposal.**

The information provided on this form will be used to select appropriate and unbiased reviewers for your proposal.

Applicant(s):

Jake Jacobson, The Nature Conservancy
Jennifer Martin, The Nature Conservancy
Wendie Duron, The Nature Conservancy

Subcontractor(s):

Are specific subcontractors identified in this proposal? Yes

If yes, please list the name(s) and organization(s):

None	**Point Reyes Bird Observatory**

None	**None**
None	**None**
None	**None**
None	**None**

Helped with proposal development:

Are there persons who helped with proposal development?

Yes

If yes, please list the name(s) and organization(s):

Peggy McNutt	**The Nature Conservancy**

Rich Reiner **The Nature Conservancy**

Peter Hujik **The Nature Conservancy**

Brian Burke **The Nature Conservancy**

Wendie Duron **The Nature Conservancy**

Jennifer Martin **The Nature Conservancy**

Comments:

There are no known conflicts of interest for this project.

Budget Summary

Mill and Deer Creeks Protection and Stewardship

Please provide a detailed budget for each year of requested funds, indicating on the form whether the indirect costs are based on the Federal overhead rate, State overhead rate, or are independent of fund source.

Independent of Fund Source

Year 1												
Task No.	Task Description	Direct Labor Hours	Salary *(per year)*	Benefits *(per year)*	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
1	Acquisition	630	19735	7302		1299	43895		1000000	1072231.0	15891	1088122.00
2	Stewardship&Monitoring	80	2394	886		580	25770		200	29830.0	6562	36392.00
		710	22129.00	8188.00	0.00	1879.00	69665.00	0.00	1000200.00	1102061.00	22453.00	1124514.00

Year 2												
Task No.	Task Description	Direct Labor Hours	Salary *(per year)*	Benefits *(per year)*	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
1	Acquisition	730	23714	8774		2110	71273		2814000	2919871.0	23291	2943162.00
2	Stewardship&Monitoring	565	13754	4868		1290	69201		450	89563.0	19702	109265.00
		1295	37468.00	13642.00	0.00	3400.00	140474.00	0.00	2814450.00	3009434.00	42993.00	3052427.00

Year 3												
Task No.	Task Description	Direct Labor Hours	Salary *(per year)*	Benefits *(per year)*	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
1	Acquisition	330	10942	4049		1280	31068		400000	447339.0	10414	457753.00
2	Stewardship&Monitoring	415	8053	2670		1110	41247		450	53530.0	11776	65306.00
		745	18995.00	6719.00	0.00	2390.00	72315.00	0.00	400450.00	500869.00	22190.00	523059.00

Grand Total=4700000.00

Comments.
Purchase prices of conservation easements are shown in Task 1 under "Other Direct Costs." The indirect cost rate of 22% is not applied to conservation easement acquisition costs.

Budget Justification

Mill and Deer Creeks Protection and Stewardship

Direct Labor Hours. Provide estimated hours proposed for each individual.

Position Hours Program Director II 140 Field Representative II 1430 Science Specialist II 650 Land Stew I 85 Operations Manager 65 Fellow 140 Intern 120 Intern 120

Salary. Provide estimated rate of compensation proposed for each individual.

Position Hrly Rate Program Director II $48 Field Representative II $32 Science Specialist II $18 Land Stew I $30 Operations Manager $27 Fellow $12 Intern $8

Benefits. Provide the overall benefit rate applicable to each category of employee proposed in the project.

37% for all categories except Intern which is 8.5%

Travel. Provide purpose and estimate costs for all non-local travel.

Only local travel is proposed and is included in "Supplies & Expendables," below.

Supplies & Expendables. Indicate separately the amounts proposed for office, laboratory, computing, and field supplies.

Communications (postage, printing, photo, etc.): $1,290 Office supplies: $930 Vehicle fuel, vehicle operation & field supplies: $5,450

Services or Consultants. Identify the specific tasks for which these services would be used. Estimate amount of time required and the hourly or daily rate.

Services/consultants: real estate appraisers (to analyze comparable sales/market conditions and determine fair market values), environmental consultants (to perform hazardous materials assessments, etc.), wildlife biologists (to prepare baseline easement documentation reports), surveyors (as needed), outside legal counsel (as needed), GIS specialists (to prepare maps), title insurance company staff including escrow officers (to provide title info. re: properties and to effectuate property closings), fencing contractors (to install livestock fencing of riparian areas), weed control crews including prescribed burn specialists (to control invasive exotic plants), restoration specialists (to design and oversee restoration of native plant communities), irrigation specialists (to provide irrigation to restoration sites) and planting crews (to perform planting of native trees and shrubs at restoration sites). Time required: variable. Hourly/Daily rates range from $7/hour to $60/hour.

Equipment. Identify non-expendable personal property having a useful life of more than one (1) year and an acquisition cost of more than $5,000 per unit. If fabrication of equipment is proposed, list parts and materials required for each, and show costs separately from the other items.

No equipment within the specified parameters is proposed.

Project Management. Describe the specific costs associated with insuring accomplishment of a specific project, such as inspection of work in progress, validation of costs, report preparation, giving presentatons, reponse to project specific questions and necessary costs directly associated with specific project oversight.

Project management will include contractor and consultant oversight, TNC staff oversight, inspection of work in progress, validation of costs, negotiations with property owners, preparing reports, giving presentations, etc. Total project management expenses: $52,240

Other Direct Costs. Provide any other direct costs not already covered.

All of the funds for Task 1 in the "Other Direct Costs" category are for the purchase prices of conservation easments. Task 2 "Other Direct Costs" include the costs of permits and fees for stewardship activities.

Indirect Costs. Explain what is encompassed in the overhead rate (indirect costs). Overhead should include costs associated with general office requirements such as rent, phones, furniture, general office staff, etc., generally distributed by a predetermined percentage (or surcharge) of specific costs.

The Nature Conservancy (TNC) has a Negotiated Indirect Cost Rate (NICRA) of 22% which was negotiated and approved by TNCs cognizant agency, USAID, and calculated in compliance with the requirements of OMB Circular A-122, and bound into our annual OMB Circular A-133 audit reports. TNCs indirect cost per the NICRA includes salaries, fringe benefits, fees and charges, supplies and communication, travel, occupancy, and equipment for general and administrative regional and home office staff. These costs are reflected in the Indirect Costs category of this proposal and are not reflected anywhere else in the proposal budget. Direct staff costs are reflected in the salary and benefits categories of the proposal budget.

Executive Summary

Mill and Deer Creeks Protection and Stewardship

In this proposal, The Nature Conservancy (TNC) is requesting funds to help protect water quality and quantity, salmon habitat and existing wildlife-friendly agriculture on Mill Creek and Deer Creek. The primary tool will be to acquire conservation easements from willing sellers to help protect habitat lands; and where appropriate employ: riparian fencing to help preclude livestock access to streamside areas, invasive weed control, restoration of natural plant communities and on-going monitoring of all of the above. This is a full scale implementation project located in the Mill Creek and Deer Creek watersheds in eastern Tehama County. These creeks support a genetically distinct strain of Spring-run Chinook salmon. Mill Creek supports the highest elevation spawning grounds for salmon in North America. The proposed project expands the efforts of The Nature Conservancy, the Mill Creek Conservancy, the Deer Creek Watershed Conservancy, CALFED, CVPIA and others to improve these important Sacramento River tributaries. The intended goals and objectives of this project are: to limit future impacts of landscape fragmentation, instream physical disturbance, and the addition of new wells, septic systems and impervious surfaces; and to preserve high quality riparian habitat adjacent to wildlife compatible agriculture. We hypothesize that the purchase of conservation easements in these watersheds with at-risk native species will help maintain and enhance functional riparian habitat and streambank conditions and will help minimize threats which stem from extensive human impacts, including water use. Easements obtained on over 36,000 acres within these watersheds are expected to protect quality habitat while maintaining the current land use and provide protection from urban development while supporting compatible economic productivity. CALFED goals 1 (At-risk species) and 4 (Habitats) and CVPIA goals of supporting species in the greatest decline while protecting riparian and shaded riverine aquatic habitat are intended to be met by this project.

Proposal

The Nature Conservancy

Mill and Deer Creeks Protection and Stewardship

Jake Jacobson, The Nature Conservancy
Jennifer Martin, The Nature Conservancy
Wendie Duron, The Nature Conservancy

Mill and Deer Creeks Protection and Stewardship

A. Project Description: Project Goals and Scope of Work

1. Problem.

Introduction:
Mill Creek and Deer Creek are unique among Sacramento River tributaries because they each support a genetically distinct strain of Spring-run Chinook salmon. Mill Creek is noteworthy because it supports the highest elevation spawning grounds for salmon in North America at over 5,000 feet above sea level.

The Deer Creek watershed was the home of Ishi, the well-known member of the Yahi tribe**.** Deer Creek supports Spring-, Fall- and Late Fall-run Chinook salmon, Steelhead trout and resident native fish. The creek contains 25+ miles of critical spawning and holding habitat for all of these species. With assistance from CALFED, The Nature Conservancy (TNC) has already acquired conservation easements on properties with frontage on Deer Creek to protect riparian habitat.

Mill Creek supports Spring- and Fall-run Chinook salmon, Steelhead trout and resident native fish. In the lower watershed, Mill Creek has experienced significant residential encroachment in the riparian area. With assistance from CALFED, The Nature Conservancy has already acquired tracts with creek frontage along Mill Creek to preserve and restore riparian habitat.

In this proposal, TNC is requesting funds to use the following methods to help protect existing wildlife-friendly agriculture on Deer Creek and Mill Creek: acquire conservation easements to protect habitat lands; and where appropriate employ: riparian fencing to preclude livestock from streamside areas, invasive weed control, restoration (revegetation) of natural plant communities and on-going monitoring of all of the above.

The Problems:
The main threats to the integrity of the creeks' fisheries and water quality are conversion of existing land uses to intensive agriculture and residential development. Intensive agricultural development, particularly orchards and vineyards that divert creek water for irrigation, threatens the future of the once abundant salmon runs in the watersheds.

Much of the land along Mill and Deer Creeks remains relatively undeveloped, however development trends in the area point to increased loss of agricultural lands, as residential demands from Chico, Red Bluff and Los Molinos grow. Already there have been purchases of land along the creeks for speculative purposes, and subdivisions have occurred. Groundwater extraction, well development, and septic tank use are increasing in this region and could eventually have devastating effects on in-stream flows and water quality.

Urbanization significantly influences hydrologic process, increasing the magnitude of peak discharges and reducing summer base flows (Booth 1991). Proliferation of groundwater wells in a stream's watershed also has the effect of degrading wetlands and reducing stream base flows (Mitsch and Gosselink 1993).

Another major threat is riparian conversion to residential uses or intensive agriculture that reduce quality and quantity of suitable aquatic habitat by decreasing shaded riverine habitat and associated organic inputs, water quality, water temperature control, and habitat structure. Habitat for threatened bird species, including eagles, is also reduced when streamside vegetation is removed. Logging, mining and road construction can also reduce habitat quality and quantity.

Timber harvesting substantially modifies the physical characteristics of stream habitats, and there is substantial literature on the effects of logging on aquatic biota (Gregory et al 1987). Some of the change caused by forestry and woodcutting is the result of decreased recruitment of large woody debris from the riparian zone (Bisson et al 1987). Building new roads also affects aquatic habitats by causing increased erosion and sedimentation of salmon spawning gravels (Bilby 1985).

Non-native invasive weed species, and fire suppression, threaten the health of riparian and upland habitats. Invasive species are now recognized worldwide as posing threats to biological diversity second only to habitat loss and fragmentation (Bassard et al 2000). Additionally, invasive weeds have severe economic impacts, costing ranchers six billion dollars annually (Mack 2000; Pimentel 1998). Fire, like flooding, is a natural process important for sustaining the ecological health of watersheds in California. Several recent studies have established a link between fire and aquatic habitat (Minshall et al 1981; Robinson & Minshall 1996). However, inappropriate fire management, including indiscriminate fire suppression and lack of broad-scale use of prescribed fire, has altered the age/size structure of oak woodlands and foothill chaparral. Increased fuel loading resulting from fire suppression can lead to catastrophic wildfires that may impact water quality (La Point et al 1983). The lack of prescribed fire has allowed invasive species, like medusa-head grass (*Taeniatherum capute-medusae*), to dramatically alter the composition of the grasslands matrix among oak woodlands and foothills chaparral on a significant spatial scale. Hot, spring burns have been used to effectively control medusa-head grass (Furbush 1953; McKell et al 1962).

Poaching and other physical disturbances can kill or injure fish and force excess expenditure of energy critically needed for holding and spawning. A study of the Middle Fork of the Eel River in 1987 (Ward 1988) indicated that migratory patterns of adult summer Steelhead were dramatically affected by human presence. The study looked at impacts of human disturbance on Steelhead in holding pools and found that within 18-48 hours of disturbance, the number of Steelhead decreased in preferred holding pools. The study concluded, "…. as human development continues to encroach into wilderness areas and watersheds containing summer Steelhead, fishery managers will have to be even more cautious about the conflicts between humans and summer Steelhead. In order to maintain a healthy riparian system, it is important to protect habitat directly within the riparian corridor as well as the uplands that effect the corridor. The effects of upslope activities such as sedimentation from logging and road construction, nutrient and sediment input from overgrazing and pollution from the application of pesticides and herbicides degrade aquatic systems. Preservation of adjacent upland areas also helps to maintain a more functional ecosystem that complements and enhances the riparian system. This is why part of this proposal involves protecting contiguous upland areas, as well as riparian areas, with conservation easements while limiting intensive agriculture and promoting wildlife-friendly agriculture.

The encroachment of intensive agriculture on streams can have negative impacts on aquatic habitats (McBride 1988). The application of agricultural and forestry herbicides (Norris et al 1991) and insecticides (Beschta et al. 1995) near the streamside reduces available food and pollutes aquatic habitats. The conservation easements The Nature Conservancy is negotiating on the

properties described in this proposal will have restrictions on the application of pesticides and herbicides.

The negative effects of intensive land use, which can be limited by conservation easements, have been documented in numerous studies. Streamside livestock grazing of riparian vegetation has been shown to reduce aquatic shade and invertebrates for fish (Platts 1981, Heady and Child 1994). The removal of riparian vegetation along rangeland streams by livestock grazing can also result in increased stream temperatures (Li et al. 1994).

To benefit salmon and Steelhead in Mill and Deer Creeks, TNC proposes protecting the relatively pristine riparian habitat along the stream from degradation and preventing the loss or degradation of riparian and adjacent upland habitats by development. In this project, The Nature Conservancy , working in partnership with the Mill Creek Conservancy (MCC) and the Deer Creek Watershed Conservancy , plans to acquire conservation easement interests from willing landowners on resource-rich creek properties that have potential for future development.

The Hypothesis:
TNC hypothesizes that the purchase of conservation easements in the Mill Creek and Deer Creek watersheds will reduce the threat of water quality degradation for salmon and Steelhead by limiting the negative impacts that are generated by residential development and intensive agricultural conversion. Specifically, easements which limit development, overgrazing, logging, mining, and expansion of orchards and vineyards are expected to result in the following:

- Reduced increases in nutrient load due the effects of septic, lawn and street runoff;
- Reduced increases in nutrient load due to overgrazing;
- Reduced increases in pesticide runoff from orchard and vineyard development;
- Reduced sedimentation due to grazing impacts, rock harvesting and new road construction; and
- Reduced threat of point source pollution from mines.

Goals/Objectives:
The intended goals of this project are to:
- Protect long-term sustainability of freshwater fish habitat that supports various life cycle stages of Pacific Lamprey, Chinook salmon and Steelhead trout by purchasing conservation easements from willing sellers on over 36,000 acres of habitat lands;
- Limit future impacts of landscape fragmentation, habitat loss, logging, mining, agricultural conversion, in-stream physical disturbance, and the addition of new wells and septic systems that would degrade water quality and quantity;
- Preserve streamside vegetation adjacent to wildlife-friendly agriculture;
- Protect and restore natural riparian, aquatic, and terrestrial habitats in order to maintain continuous habitat corridors on key tributaries and at their confluences with the upper Sacramento River;
- Foster wildlife-friendly agricultural land uses which are in harmony with the protection and preservation of ecological and species health;
- Support local community efforts for habitat protection and enhancement;
- Where applicable, implement livestock fencing measures, invasive weed control actions and/or restoration (revegetation) projects; and
- Implement monitoring programs to collect data, enforce easement provisions and measure success.

If such goals are not achieved, the efforts of CALFED, TNC, MCC and DCWC could be compromised and costly large-scale restoration could be necessary in the future. "An ounce of prevention is worth a pound of cure" is a notion that is inherent to this proposal.

The conservation easements will typically allow limited cattle grazing as a compatible (wildlife-friendly) use. Monitoring is expected to verify whether residual dry matter requirements have been met, thereby preventing overgrazing. The easement restrictions are expected to protect the conservation values of the properties by prohibiting further subdivision of the property, limiting timber harvest to minor personal use only or for forest health, significantly limiting residential development by only allowing an appropriate number of homesites to service the ranching operations, protecting riparian areas and other water resources, and limiting the use of pesticides and herbicides.

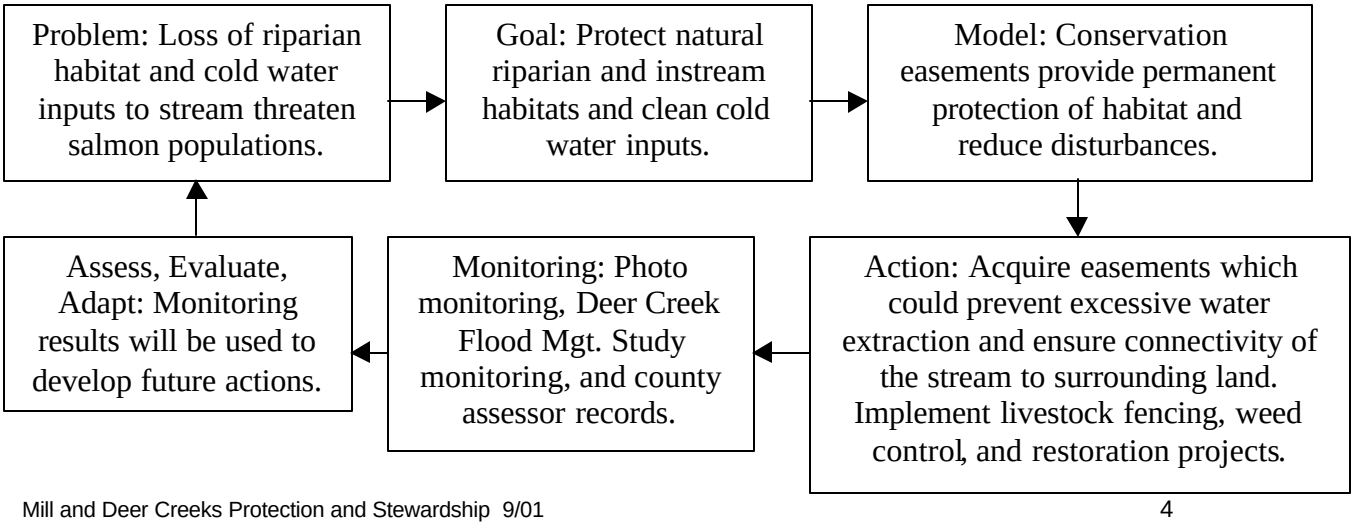
The properties described in this proposal are located in the watersheds of Mill Creek and Deer Creek in eastern Tehama County in the Northern Sacramento Valley Ecological Management Zone. These parcels are all identified as high priority for protection because of their strategic location in the Mill Creek and Deer Creek watersheds, which support various life cycles of at-risk native species, including a genetically distinct strain of Spring-run Chinook salmon, Fall and Late Fall-run Chinook salmon and Steelhead trout, and because they include properties at risk of incompatible development and habitat degradation.

Figure 1 shows the Mill Creek and Deer Creek watersheds and the locations of the properties within the watersheds. (See page 21.)

2. Justification (including conceptual model, hypotheses and selection of project type).

Conceptual Model: At-risk species require healthy in-stream and riparian habitat. Riparian and upland habitats are increasingly being degraded or destroyed, and conservation easements could help protect these habitats. By limiting development through easements, intrusions into the creeks as well as groundwater extractions can be limited while protecting riparian vegetation and compatible agriculture.

Our model is built around the extensive and well accepted literature on the need by salmon for cold water and limited disturbance. TNC presumes that conservation easements on developable properties in the watershed are a preventive action that will help maintain shaded riverine habitat and will help limit negative impacts of increased water extraction and in-stream disturbance.



Conservation easements have been demonstrated as an effective method of maintaining existing wildlife-compatible land uses (especially limited cattle grazing) and discouraging intensive development within a landscape. Mill Creek and Deer Creek, with their important runs of Chinook salmon and Steelhead, are particularly critical to achieving CALFED Goal 1, At-Risk Species, and Goal 4, Habitats, as well as achieving the CVPIA priority of focusing on species and habitats determined to have the highest biological priority at this time and believed to contribute most to achieving fish and wildlife restoration goals.

The Nature Conservancy, and its partners, intend to monitor the conservation easement properties not only during the three-year grant agreement but far beyond the life of the grant in order to help ensure that the objectives of the conservation easements and restoration activities are met.

Key uncertainties for this project include biological uncertainties that will be addressed through on-going monitoring and adaptive management. Although all of the owners of the properties described in this proposal are willing sellers, there are always uncertainties that are part of any real estate negotiation. TNC will endeavor to minimize these uncertainties and we will assess, evaluate and adapt our strategies. Other uncertainties include catastrophic events, like floods, that are beyond the control of the applicant.

Adaptive Management: As a Full Scale Implementation Project, the acquisition of conservation easements on the five properties described below is expected to protect substantial agricultural lands directly adjacent to quality habitat that is at risk of development. Our model rests on a foundation of over 50 years of research on the habitat requirements of salmon and Steelhead. The research literature indicates that protection of riparian and upland integrity is paramount to preserving an intact aquatic ecosystem (Spence et al. 1996).

TNC maintains an ongoing adaptive management approach within its planning and acquisition programs. Parcels to be considered for protection are prioritized through an analysis of the current and near future threats to a creek's salmon fisheries. Parcels are ranked on a variety of indices, including their proximity to the creek, spring input to the creek, their suitability for development and the level of development threat. The parcel priority system is adaptive in the sense that it is periodically revised as TNC learns more about parcels, local hydrology, and new threats. TNC will consider in-stream information collected pursuant to private, State and Federal data collection efforts in the watersheds, including flow records and fish number counts, as well as county assessor records (indicating fragmentation) when measuring overall success and developing additional actions. TNC intends to monitor easement properties annually for compliance, record residual dry matter on rangelands and conduct photo monitoring of the riparian areas. We also intend to fence certain areas of the creek frontage in order to help limit livestock intrusion into Mill and Deer Creeks. Additionally, we intend to perform invasive weed control measures as necessary including prescribed burns. Fire is very much a part of the natural process in these watersheds, and TNC has been successful in using prescribed burns to control exotic plants and help reestablish native plant communities. Given the preventive rather than corrective nature of the conservation easements, there may be limited adaptive management actions required.

3. Approach.

As described in the Adaptive Management section, above, TNC maintains an on-going adaptive approach within its acquisitions programs. The approach is both science-based and threat-based:

that is, acquisition priorities must be biologically rich, biologically important (e.g., provide value for at-risk species), functionally important to the larger ecosystem, and in danger of development or other threats. During a scoping process, the five properties in this proposal were identified by our science and planning staff as high priority acquisitions based on scientific and strategic criteria. As a result, these acquisitions are important components in achieving the mutually shared goals of CALFED, The Nature Conservancy and other stakeholders.

The Nature Conservancy is working in cooperation with willing landowners, the Mill Creek Conservancy and the Deer Creek Watershed Conservancy to acquire conservation easement interests on key properties along the two creeks. The protection of these properties would complement other acquisitions that have been made or are being made by The Nature Conservancy (see purchased and proposed easement properties -- Figure 1 on page X). Additionally, the on-going monitoring that is part of this proposal is expected to provide important data to the scientific community and decision makers.

Conservation easement acquisition under this proposal will focus on five key properties, three on Mill Creek and two on Deer Creek, in order to provide protection of natural processes while maintaining land in wildlife-friendly agricultural use and private ownership. It is intended that the terms of the easements will help ensure protection of the riparian habitat, will help prevent excessive water extraction and use, and will help ensure connectivity of the stream to the surrounding land, but may vary slightly to fit a particular property.

Mill Creek

Pfendler Ranch (approx. 26,000 acres) has approximately 12 miles of frontage on Mill Creek. To the north of this ranch, most of the land is in the Gray Davis Dye Creek Preserve, an approximately 37,000 acre preserve owned by the State and managed by The Nature Conservancy. The Pfendler Ranch is also contiguous to the 1,629-acre Latimer property which was protected by an easement held by TNC. The riparian habitat along Mill Creek is relatively undisturbed. The ranch has blue oak woodlands, vernal pools, swales, and other wetlands, other natural stream courses and waterways, unfragmented open space, corridors for unimpaired passage of wildlife, and natural communities that provide critical habitat for native wildlife species including migratory waterfowl, yellow-legged frog and fairy shrimp. The ranch also provides habitat for the largest migratory deer herd in California. Protection of this property is considered a high priority by The Nature Conservancy. This conservation easement acquisition represents a rare opportunity to protect a major portion of an important watershed.

Droz Ranch (approx. 470 acres) has approximately 0.6 mile frontage on Mill Creek. The property is strategically situated between the Pfendler Ranch and the Gray Davis Dye Creek Preserve. The ranch has blue oak woodlands, grasslands and riparian habitat along the creek. Most of the riparian vegetation along the creek is in good condition, however there is one area (approx. 5 acres) that had been cleared to the edge of the creek by a previous owner. The current owner is interested in the possibility of fencing and restoring this portion of the riparian corridor. This property features a substantial riparian water right on Mill Creek. The water is used to irrigate pastures. The owner is willing to consider having the conservation easement restrict the use of water to either the current use or for in-stream dedication for fish habitat.

Schnapp Property (approx. 19 acres) is located at the confluence of Mill Creek and the Sacramento River. This property features a mature riparian forest with approximately 1,200 feet of frontage on Mill Creek and approximately 1,400 feet of frontage on the Sacramento River. Being at the confluence, Spring-run and Fall-run salmon must migrate along this property to enter and move up Mill Creek. Being located at a tributary confluence, the project area inherently holds increased ecological value relative to other river floodplain. TNC has determined that the flood-prone lands associated with tributary confluences of the Sacramento River are significant for their biological and ecological values (TNC, 2000). The key threats to this property include stream channelization, habitat fragmentation and loss of riparian habitat. This property is contiguous to a property owned by The Nature Conservancy on Mill Creek (Dana). This property was purchased with CVPIA funds. The Dana property is being revegetated under a CALFED grant (#113328G048). Although we have been discussing conservation easement options with the owner, it is possible that this property may be acquired in fee.

Deer Creek

Tod and Elizabeth Leininger Ranch (approx. 10,000 acres) is a key conservation easement acquisition in the Deer Creek watershed. The ranch has over 3 miles of frontage on the south and east side of Deer Creek and also includes numerous associated draws and ephemeral tributaries. Most of the ranch is made up of thousands of acres of complex topography and pristine habitat. To the east, the property is in close proximity to the Lassen National Forest's Ishi Wilderness. The ranch has blue oak woodlands, chaparral, grasslands and canyon lands. A small buffer along the main stem of Deer Creek has been protected on this property with a previous TNC easement (funded by CVPIA #14481133297G030). CVPIA also provided funding for some riparian fencing on this ranch (#113320G016). Additional riparian fencing will be needed and is included in this proposal. This deal proposes to expand on the previously secured easement by purchasing an easement on the balance of the property (approximately 10,000 acres) which includes some additional riparian areas. The new easement could "overlay" the existing easement area resulting in more restrictive easement language that will provide better protection of riparian functions and values including the exclusion of cattle from the streamside area.

Lazy Y Ranch (approx. 370 acres) has 1.6 miles of frontage on the south bank of Deer Creek just upstream of the Highway 99 crossing. The land is generally flat and is entirely within the 100 year floodplain of the creek. The creek frontage is lined with continuous riparian vegetation that extends back more than 200 feet from the bank in several reaches. The riparian forest is composed of mature sycamore as well as Valley oak and willow species. The riparian landscape is dissected by several cobble filled distributory channels from Deer Creek and it is evident that the creek fills these channels during high water events. A fall visit confirmed the importance of the riparian forest for migrating montane forest birds from upper Deer Creek Canyon such as black headed grosbeaks and western tanagers. The remainder of the property is in irrigated pasture which is hayed in the spring and supports cattle in the late summer and fall.

4. Feasibility.

TNC has been actively working to protect and restore habitat in the Lassen Foothills for almost 20 years. Over the years, TNC has gained broad support within the community. Using tools such as acquisition of conservation easements or fee-simple land, restoration and land management, land-use planning and conflict resolution, and community education and outreach, we have protected

over 50,000 acres of habitat in the Lassen Foothills area and we manage an additional 37,500 acres (the Gray Davis Dye Creek Preserve). Our selection of the five properties described in this proposal and our approach towards their protection will be handled with the same policy and practice of applying the best conservation science available and of building partnerships with local communities, private organizations, and public agencies to achieve mutual conservation goals.

Although negotiations with landowners on conservation easements can be lengthy, it is anticipated that this project will be completed within the required three-year period. The proposed project represents what TNC considers to be the best alternative for protection of pristine habitat along Mill Creek, Deer Creek and their tributaries. One of the expected benefits of the proposed project is providing ecological protection while retaining land in private ownership. This approach is cost-effective and is already fostering community support for watershed protection. The alternative of inaction would provide no protection and could allow changes in land use that result in negative impacts that could eventually require costly restoration and loss of water quality.

No permitting or environmental clearance is required to implement the proposed acquisitions. All easements to be acquired will be reviewed regarding the condition of the title (e.g., liens, encumbrances, or other factors which might limit enforcement of the conservation restrictions) and the condition of the property (e.g., Phase I inspection for hazardous materials). For prescribed fires, TNC cooperates with the California Department of Forestry and obtains all necessary air quality permits.

This proposal includes budgeted items necessary to complete an Environmental Impact Report under CEQA and an Environmental Assessment under NEPA, as well as obtaining required local, state or federal permits and approvals. As a non-governmental agency, TNC does not typically submit CEQA/NEPA documentation. The scope of work contemplated by this proposal and budget assumes the funding agency will be the lead agency for CEQA/NEPA documentation; TNC will work with the lead agency and provide information as needed. If CEQA/NEPA documentation in addition an Environmental Impact Report and an Environmental Assessment, respectively, is required, additional funding will be necessary..

All of the landowners involved are willing cooperators. Once funding is secure, this project is ready to proceed.

5. Performance Measures.

As a Full Scale Implementation Project, success will be measured by securing conservation easements on the targeted properties. Additionally, implementation of stewardship activities (e.g., riparian fencing, invasive weed control) will be outcomes that are easily quantifiable. Lastly, baseline easement documentation reports and subsequent monitoring reports will provide a definitive way of measuring project success on a number of different levels. Success of TNC's land protection programs are measured and evaluated on three levels. First, the progress of conservation actions (acquisitions) are assessed in relation to set goals. The acquisitions described in this proposal will support the long term goals set for Battle Creek. Secondly the ability of the acquisitions to abate threats are monitored by annual easement compliance monitoring. Lastly, the assumptions regarding the foundations of our conceptual models (for example, moderate livestock grazing as a compatible use) are evaluated by both research and long term vegetation monitoring. All of the above data is archived and periodically assessed within the Lassen Foothills GIS.

6. Data Handling and Storage.

Data collected as a result of this project will stored in the Lassen Foothills GIS and will be presented as reports, documents and photos. TNC intends to maintain the collected data in its offices and intends to provide documents upon request and as appropriate. Appraisals, surveys, and other necessary documents related to real estate transactions are confidential and will be used by TNC without CALFED's prior approval to negotiate acquisition of the conservation easement interests. Of course, once an easement has been successfully negotiated, appraisals and other appropriate documents will be shared with CALFED. See also Paragraph below titled "Compliance with Standard Terms and Conditions."

7. Expected Products/Outcomes.

It is expected that this project will result in the protection of over 36,000 acres of critical habitat lands that will benefit the Sacramento River, Deer Creek, Mill Creek and Bay-Delta systems. TNC intends to monitor each easement on at least an annual basis and intends to prepare a monitoring report (it is anticipated that these reports would not be public information because the lands are still privately owned but will be shared with agencies on an as-needed and confidential basis). In addition to the annual monitoring reports, other deliverables for each property are expected to include maps, appraisals, recorded closing documents, extensive baseline easement documentation reports and quarterly and annual reports to CALFED describing acquisition and stewardship activities. Staff has already participated in many public forums concerning conservation easements.. TNC is working cooperatively with the Deer Creek Watershed Conservancy and the Mill Creek Conservancy on talking with landowners about conservation easements, and these forums and efforts are expected to continue. TNC will continue to participate in these types of activities to further promote conservation and community involvement.

8. Work Schedule.

The tasks for the proposed project are as follows:

Task 1. Acquisition. This task includes all reasonable and necessary due diligence steps that are related to completing the acquisition of a conservation easement, including but not limited to: appraisals, hazardous materials assessments, preparation of baseline easement monitoring reports, surveys (if necessary), title reports, title insurance, escrow and closing fees, travel, supplies, salaries and benefits, professional, legal and accounting services and other miscellaneous and direct costs, including photographs. This task also includes the costs of acquiring the conservation easement interests on up to five properties in the Mill and Deer Creek watersheds. TNC is currently working with the owners of the five properties and plans to complete the following key milestones: acquisition of the Tod and Elizabeth Leininger Ranch within the first year of the grant and the acquisition of the other four easements is anticipated in the second year of the grant. It is anticipated that appraisals will be provided to CALFED for review approximately 4 months prior to the closing of each acquisition. Given the sometimes extensive negotiations associated with conservation easements, it is quite likely that one or two of the acquisitions could continue into the third year.

Task 2. Stewardship and Monitoring. Conservation easement purchases require initial and on-going stewardship activities. The Nature Conservancy conducts extensive surveys of the property documenting both biological and physical characteristics. Long-term vegetation monitoring

transects are installed and the information is archived in a GIS database. Initial stewardship activities may include:

- Extensive surveys to document biological and physical characteristics;
- Rare species and weed populations mapping;
- Fencing of sensitive habitats ;
- Weed mapping, exotic weed control including prescribed burning;
- Fencing and sign posting to reduce trespass; and
- Establishment of permanent long term vegetation transects (GPS locations established and species composition entered in a GIS).

All easement properties are monitored annually for compliance with the easement terms. The compliance monitoring protocol includes annually notifying the landowner, surveying the property either on the ground or by air for easement term infractions, photographing sensitive habitats, and the measurement or estimation of residual dry matter on grazed grasslands.

TNC intends to subcontract with Point Reyes Bird Observatory to conduct bird monitoring of neotropical migrants in the Mill and Deer Creek watersheds in each year of the grant agreement. TNC also intends to conduct initial easement monitoring with grant funds. The initial monitoring will include: 1) an Easement Documentation Report for each property, which will provide an extensive baseline of the physical and biological condition of the property; and, 2) subsequent annual monitoring reports that will track changes in the condition of the property.

Project Management. During the three years of the grant agreement, TNC will oversee all phases of the project, including easement interest acquisition and contracts for professional services. TNC will continue to participate in local landowner meetings regarding land protection strategies in the region and to cooperate with local watershed organizations and other private and public agencies.

B. Applicability to CALFED ERP and Science Program Goals and Implementation Plan and CVPIA Priorities

1. ERP, Science Program and CVPIA Priorities.

The proposed project supports the objectives of the CALFED Ecosystem Restoration Program Plan, 'B1 Other' and the CVPIA AFRP programs by focusing on at-risk native species (CALFED Goal 1) and riparian and fish habitats (Goal 4) and by supporting species in the greatest decline while protecting riparian and shaded riverine aquatic habitat (CVPIA goals). The project's intended primary biological/ecological objectives are to:

- Protect long-term sustainability of freshwater fish habitat that supports various life cycle stages of Pacific Lamprey, Chinook salmon and Steelhead trout by purchasing conservation easements from willing sellers on over 36,000 acres of habitat lands;
- Limit future impacts of landscape fragmentation, habitat loss, logging, mining, agricultural conversion, in-stream physical disturbance, and the addition of new wells and septic systems that would degrade water quality and quantity;
- Preserve streamside vegetation adjacent to wildlife-friendly agriculture;
- Protect and restore natural riparian, aquatic, and terrestrial habitats in order to maintain continuous habitat corridors on key tributaries and at their confluences with the upper Sacramento River;

- Foster wildlife-friendly agricultural land uses which are in harmony with the protection and preservation of ecological and species health;
- Support local community efforts for habitat protection and enhancement;
- Where applicable, implement livestock fencing measures, invasive weed control actions and/or restoration (revegetation) projects; and
- Implement monitoring programs to collect data, enforce easement provisions and measure success.

Protection of riparian habitat along Mill Creek and Deer Creek could also support CALFED goals of protecting watershed health as well as threatened species including neotropical migrant bird species.

Priority Species and Habitats

Sacramento Spring-run Chinook salmon and Steelhead trout. The proposed project could help benefit these first-tier at-risk species by protecting their natal rearing areas, holding areas, migratory pathways, and spawning grounds in Mill Creek and Deer Creek.

Sacramento Fall-run and Late Fall-run Chinook salmon. The proposed project could help benefit Late Fall-run and Fall-run Chinook salmon by protecting spawning habitat from degradation and human disturbance and by protecting shaded riverine aquatic habitat. In addition, the project could provide critical habitat for the Pacific Lamprey, other native resident fish and neotropical migratory birds.

In-stream and shaded riverine aquatic habitat. The proposed project could help protect shaded riverine habitat that exists largely in its natural state. Protecting extensive shoreline vegetation could provide woody debris and leaf and insect drop and could support the survival and health of juvenile salmon and resident fishes. Protecting spring-fed and cold water inputs to creeks could provide an important temperature reducing function that is critical to Spring-run salmon. The proposed project is also expected to protect and enhance water quality.

Key Stressors

The proposed project seeks to address key stressors affecting the Mill Creek and Deer Creek ecosystems:

Channel form changes: Loss of existing riparian habitat. Loss of riparian habitat acts as a stressor by reducing food supplies for fish and wildlife, eliminating shaded riverine aquatic habitat, reducing channel complexity, and eliminating cover and nesting habitat. The proposed project seeks to address these stressors through the acquisition of easement interests on key riparian parcels thereby protecting existing habitat.

Land use: Intensive agriculture and development. Intensive agriculture and development impacts can include loss of riparian habitat, increased erosion, and decreased water quality. New development and its associated impervious surfaces, wells and septic systems would likely cause increased sedimentation in the creeks and interrupt and degrade underground water flows that feed freshwater springs and the creeks. The proposed project intends to address these stressors by providing habitat protection through restrictions in the conservation easements that will limit some types of agriculture and development in the riparian areas, which could reduce the adverse impacts on the riparian and aquatic habitat areas.

Invasive exotic plants: Invasive species are now recognized worldwide as posing a threat to biological diversity second in importance only to habitat loss and fragmentation (Bassard et al

2000). Invasive non-native plants alter ecosystem functions such as nutrient cycles, hydrology, and wildfire frequency, and out-compete and exclude native plants and animals. The invasion of yellow starthistle *Centaurea solstitialis* and medusa-head *Taeniatherum caput-meduse* are problematic in the Mill Creek and Deer Creek watersheds. Medusa-head changes the fire frequency in the watershed by creating thick mats of thatch that persist into the dry fire season. Starthistle, being a warm season grower with deep taproots, alter the soil water balance and runoff characteristics. Our conservation easements require that the owner keep non-native noxious weeds from increasing above current levels as defined in the baseline easement documentation report. They also give TNC the right to control those weeds if the landowner is unable to do so.

2. Relationship to Other Ecosystem Restoration Projects and
5. System-Wide Ecosystem Benefits.

The project meets multiple objectives of both the CALFED Ecosystem Restoration Program Plan and the CVPIA Anadromous Fish Restoration and 'B1 Other' Programs by seeking to protect important riparian and freshwater fish habitat. In particular, this project complements and builds on other work being performed in the watersheds by TNC, the Mill Creek Conservancy and the Deer Creek Watershed Conservancy. With funding support from CALFED and others, a number of easements and restorations have already occurred – funding of this proposal will add significantly to the initial success within these critical watersheds.

The proposed project is part of TNC's Lassen Foothills Project, a comprehensive effort to restore and protect a continuous corridor of riparian, aquatic, and upland habitat along key tributary streams of the Sacramento River, including Deer, Mill, and Battle Creeks. TNC is working closely with the Deer Creek Watershed Conservancy, the Mill Creek Conservancy and the Battle Creek Watershed Conservancy to implement a conservation easement strategy with private landowners in the watersheds.

TNC's efforts in the Mill and Deer Creek watersheds have been supported by previous grants from CALFED and CVPIA. To date, TNC has protected through conservation easements almost 15,000 acres along Deer and Mill Creeks. In addition, TNC has initiated certain restoration projects on Deer Creek, Mill Creek and Dye Creek in coordination with the Mill Creek Conservancy and the Los Molinos Unified School District and a private farmer. With respect to the latter, CALFED #1998-F20 funded the Porter property conservation easement on Deer Creek which is scheduled to close in November 2001 with an 8.25 acre riparian restoration project scheduled to be implemented this Winter with private funds.

TNC is also working with the U.S. Fish and Wildlife Service and the Wildlife Conservation Board to acquire (approximately 16,000 acres to date) and restore (approximately 2,800 acres to date) lands along the Sacramento River. These efforts have been supported by many public and private agencies in order to create and maintain the natural channel and bank conditions necessary to achieve large, self-sustaining populations of anadromous fish.

Additionally, we understand the Deer Creek Watershed Conservancy is requesting that CALFED fund the Deer Creek Flood Management Study (to analyze the lower watershed). TNC supports this request and is coordinating with the Deer Creek Watershed Conservancy – anticipated outcomes of this proposal should be compatible with the Flood Management Study.

Perhaps the most important system-wide ecosystem benefit is that this proposal represents a key component in the preservation and restoration of the only two watersheds that support a genetically distinct strain of Spring-run Chinook salmon and a system that supports the highest elevation spawning grounds for salmon in North America. System-wide water quality benefits should also be realized, and it is hoped that this proposal will demonstrate the feasibility of on-the-ground conservation success that sets a good example for others to emulate.

3. Requests for Next-Phase Funding.

This is not a request for Next-Phase Funding.

4. Previous Recipients of CALFED Program or CVPIA funding.

The Nature Conservancy has received the following CALFED and CVPIA funding:

CALFED: Lower Mill Creek Riparian Restoration, # 1997-NO8, this project is nearing completion; Deer and Mill Creeks Acquisition and Enhancement, # 1998-F20, this project is underway with negotiations occurring with the landowners and the first easement (Porter property) is scheduled to close in November 2001).

CVPIA: Completed agreements: Foor Ranch (#00FG200003) protected over 9,500 acres in the Deer Creek watershed, with additional funding from WCB, CALTRANS, the Bureau of Reclamation and the Packard Foundation; (L&L/Hamilton (#14481133297G030), protected approximately 450 acres of Deer Creek habitat; Birkes (#11332-8-G124), protected approximately 9 acres of Mill Creek habitat; Dana (#113328G048), protected approximately 10 acres of Mill Creek property part of which is being restored with CALFED #1997-NO8; Latimer (#14481133298J), protected approximately 1,629 acres of Mill Creek habitat. Mill and Deer Creek Acquisition (#114209J113), see CALFED #1998-F20. Deer Creek Fencing is being completed with CVPIA assistance (#113320G016); Eagle Canyon (Pelton) Ranch (#113300G104) protected approximately 990 acres on the North Fork of Battle Creek.

Additionally, The Nature Conservancy successfully obtained a $1,000,000 award for Battle Creek riparian protection. CALFED awarded the grant to The Nature Conservancy on February 23, 2001 (ERP-01-N24). This award was for conservation easement acquisition, stewardship and monitoring for three properties in the Battle Creek watershed: The Miller Ranch, The Eagle Canyon (Pelton) Ranch and the Winning Ranch. The Nature Conservancy recently obtained a conservation easement on the Eagle Canyon (Pelton) Ranch (the deal closed on July 9, 2001). The Miller Ranch and Winning Ranch are currently in active negotiations.

6. Additional Information for Proposals Containing Land Acquisition.

Securing conservation easements on the targeted properties would complement adjacent lands already acquired with CALFED funds in prior years.

The owners of all five properties described in this proposal are willing sellers who are already actively negotiating conservation easements with The Nature Conservancy. The owners of the Leininger Ranch and the Lazy Y Ranch already have TNC-held easements on part of their ownerships. The Leininger easement was funded by CVPIA (#14481133297G030).

This project is consistent with the general plan of Tehama County. Peggy McNutt of The Nature Conservancy's Red Bluff office discussed this proposal with the Tehama County Supervisors on October 2, 2001. No concerns were raised, and, in the past, the Supervisors have supported land protection that helped maintain the existing land use and payment of property taxes.

Four of the five targeted properties (all but the Schnapp property) are currently cattle ranches, and may continue to operate as such in accordance with the wildlife-friendly agricultural provisions of the easements.

The targeted properties are in critical watersheds within an ecoregion of extraordinary biological richness. By means of a science-based scoping process, The Nature Conservancy determined that the Lassen Foothills area in general, and the Mill and Deer Creeks in particular, contain biological resources of statewide, and national, significance.

These acquisitions are time-sensitive opportunities. Although the owners of the targeted properties are currently willing sellers, they are considering other options including subdivision and/or development.

C. Qualifications

The Nature Conservancy is an international non-profit organization whose mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Founded in 1951, The Nature Conservancy and its approximately 1.1 million members have safeguarded more than 12 million acres in the United States. The Nature Conservancy has also worked with like-minded partner organizations to preserve more than 60 million acres in Latin America, the Caribbean, the Pacific, and Asia. The California Regional Office is TNC's largest state program and a leader in program development. Headquartered in San Francisco, The Nature Conservancy of California has approximately 120,000 members and has protected over one million acres in the state.

The Nature Conservancy uses a wide variety of tools to help forge solutions to conservation issues. The following four methods are most frequently employed: acquisition of land or conservation easements, land management and restoration, land-use planning and conflict resolution, and community education and outreach. Our strength and reputation are built on the policy and practice of applying the best conservation science available and of building partnerships with local communities, private organizations, and public agencies to achieve mutual conservation goals.

Several of The Nature Conservancy's landmark conservation projects have been supported by funding from previous grants from CALFED and the Central Valley Project Improvement Act (CVPIA) and its Anadromous Fish Restoration Program, as well as additional public and private funding sources. These projects include the following:

<u>Mill Creek, Deer Creek, Battle Creek — Butte, Tehama, Shasta Counties</u>

These tributaries of the upper Sacramento River provide critical habitat for healthy populations of high-priority anadromous fish species, including Steelhead trout and winter, spring, fall, and late fall run Chinook salmon. Protection of riparian parcels through the purchase of fee and easement interests is essential to ensuring connectivity of habitat to the mainstem of the Sacramento River. Active restoration has also begun on some of the protected parcels, with funding from CALFED and CVPIA and with the cooperation of local watershed conservancies.

Cosumnes River Project — Sacramento and San Joaquin Counties

Working with public agencies and private landowners, The Nature Conservancy has protected nearly 16,500 acres of floodplain habitat, created more than 1,000 acres of seasonal wetlands, restored approximately 850 acres of riparian forest habitat, and implemented innovative levee set-back projects to restore natural channel meander. The project enjoys broad public support and provides many opportunities for local involvement, including public visitation, research, and cooperative management with neighboring farmers. In recent years, The Nature Conservancy has begun working downstream, to include protection and restoration of key parcels near the confluence with the Mokelumne River that are critical to the Bay-Delta ecosystem.

Sacramento River Project — Butte, Tehama, Glenn, Colusa Counties

An active participant in the SB 1086 process, The Nature Conservancy is collaborating with local landowners and stakeholders to develop the Sacramento River Conservation Area. To date, approximately 16,000 acres have been protected and approximately 2,800 acres restored, supported by funding from many partners and sources, including CALFED, CVPIA, U.S. Fish and Wildlife Service, California Wildlife Conservation Board, Department of Water Resources, and others. Through the site-specific management planning process, TNC is focusing on key sub-reaches of the river that are central to the implementation of a limited meander corridor, a high-priority objective for SB 1086 and CALFED.

Easement acquisitions will be led by Jake Jacobson, Field Representative and Peggy McNutt, Project Director. Stewardship and monitoring activities will be led by Rich Reiner, Ph.D., Senior Project Ecologist and Peter Hujik, Grasslands Manager. All of the individuals listed above are full-time employees of The Nature Conservancy with extensive education and experience in their areas of expertise. Jacobson and McNutt both have significant experience with real estate in general and conservation easements in particular. Both worked at local land trusts prior to joining TNC. Reiner and Hujik are well-respected scientists who have published a number scientific papers. Dr. Reiner has over 30 years of experience in conservation biology and restoration. He and others pioneered ecological process restoration in California and was the first to implement large scale floodplain restoration by breaching levees on the Cosumnes River. In recent years he has focused on and published articles about landscape monitoring and the effects of livestock grazing on plant communities. Peter Hujik is a leading fire ecologist who directs a TNC fire program which annually conducts over 5,000 acres of targeted prescribed burns. Hujik is an accomplished grassland restorationist and is responsible for introducing the restoration technique of “hay seeding” into California. Additionally, he has successfully led the restoration of over seventy acres of streamside forest along Dye Creek in the Lassen foothills, where he pioneered the incorporation of native grasses in the forest understory.
There are no known conflicts of interest for The Nature Conservancy in implementing this project.

Other participants in this project include: 1) The Deer Creek Watershed Conservancy and the Mill Creek Conservancy -- both are active local conservancies; 2) The Point Reyes Bird Observatory conducting bird monitoring studies; and, 3) Public agencies (e.g., The California Department of Fish and Game, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, California Department of Water Resources) providing advice on how to best craft easement provisions for the benefit of fish, wildlife and water quality.

D. Cost

1. Budget.

Please see electronically-submitted budget forms.

2. Cost-Sharing.

TNC plans to supplement CALFED, CVPIA and 'B1 Other' funding with funds from other sources. If this request is fully funded, CALFED will cover approximately 60% of the total project costs. To secure the balance of the funds, TNC will pursue opportunities with private foundations and public agencies such as the California Wildlife Conservation Board (WCB). The vast majority of the targeted property acreage is part of a State-approved Conceptual Area Protection Plan. If the Conservancy is not successful in obtaining additional funds from WCB, a private fundraising effort will be initiated.

To date, acquisition and revegetation activities in the Dye, Deer, Mill, Paynes and Antelope Creeks project area have been supported by public and private funding totaling over $6,100,000. Funds have come from public and private sources including the Central Valley Project Improvement Act (AFRP), CALFED (Category III), Bureau of Reclamation, the National Fish and Wildlife Foundation, the David and Lucile Packard Foundation, the Mennen Foundation and the JL Foundation. The Nature Conservancy continues to work with landowners along Deer, Mill, and Battle Creeks to purchase conservation easements. Additional funds from CALFED and other sources may be sought for future acquisitions.

E. Local Involvement

Community support of and coordination with local watershed plans and other restoration programs are key aspects of the proposed project. The Nature Conservancy works cooperatively with landowners and the local watershed groups — the Mill Creek Conservancy, Deer Creek Watershed Conservancy and the Battle Creek Watershed Conservancy — to develop and encourage community support for watershed conservation. Acquisition and revegetation activities on Deer and Mill Creeks are coordinated with similar efforts by the local conservancies to protect and restore riparian habitat within the watersheds and along the mainstem of the Sacramento River. The Nature Conservancy is also working with the Battle Creek, Mill Creek and Deer Creek Conservancies and the Point Reyes Bird Observatory on monitoring studies of bird populations along the creeks. The Nature Conservancy has participated in local conservancy meetings and local landowner meetings concerning land protection strategies in Shasta, Tehama, and Butte Counties. The Deer and Mill Creek Conservancies support The Nature Conservancy's purchase of conservation easements.

Peggy McNutt of The Nature Conservancy's Red Bluff office generally discussed this proposal with the Tehama County Supervisors on October 2, 2001. No concerns were raised, and, in the past, the Supervisors have supported conservation easement land protection that helped maintain the existing land use and payment of property taxes.

TNC has met with the Deer Creek Watershed Conservancy Board, the Mill Creek Conservancy Board and individual landowners to discuss conservation easements on several occasions. The Nature Conservancy's staff has also participated in several land protection conferences in Tehama, Shasta and Butte Counties attended by landowners.

F. Compliance with Standard Terms and Conditions

Regarding Attachment D, Section 3 Performance Retention, TNC requests that the 10% retention not be required for capital costs.

For Section 4, Expenditure of Funds, TNC requests the following language currently being negotiated for the CALFED 2001 agreements with TNC:

"Contractor shall expend funds in the manner described in the approved Budget. As long as the total contract amount does not increase, the Contractor may adjust (1) the Budget between individual tasks by no more than 10% and (2) the Budget between individual line items within a task by no more than 10%. Any other variance in the budgeted amount among tasks, or between line items within a task, requires approval in writing by CALFED or NFWF. The total amount to be funded to Contractor under this Agreement may not be increased except by amendment of this Agreement. Any increase in the funding for any particular Budget item shall mean a decrease in the funding for one or more other Budget items unless there is a written amendment to this Agreement."

For Section 5, Subcontracts, TNC requests the following language currently being negotiated for the CALFED 2001 agreements with TNC:

"Contractor is responsible for all subcontracted work. Subcontracts must include all applicable terms and conditions as presented herein. An approved sample subcontract is attached as [an exhibit]. Contractor must obtain NFWF's approval prior to entering into any subcontract that will be funded under this Agreement, which approval shall not be unreasonably withheld if (1) contracted work is consistent with the Scope of Services and the Budget; and (2) the subcontract is in writing and in the form attached to this Agreement as [an exhibit]. Contractor must subsequently provide NFWF with a copy of the signed subcontract. Contractor must (a) obtain at least 3 competitive bids for all subcontracted work, or (b) provide a written justification explaining how the services are being obtained at a competitive price and submit such justification to NFWF with copy of the signed subcontract.

Notwithstanding the foregoing, the CALFED Program has acknowledged that the Contractor generally does not use a subcontract for routine land appraisals, surveys, and hazardous materials reports. For these one-time services, Contractor uses a group of vendors on a regular basis and pays no more than fair market value for such services by one-time invoice rather than written contract. Contractor will not be required to obtain competitive bidding for such services or to provide any further justification to NFWF."

For Section 9, Rights in Data, TNC requests the following language currently being negotiated for the CALFED 2001 agreements with TNC:

"All data and information obtained and/or received under this Agreement shall be publicly disclosed only in accordance with California law. All appraisals, purchase and sale agreements and other information regarding pending transactions shall be treated as confidential and proprietary until the transaction is closed. Contractor shall not sell or grant rights to a third party who intends to sell such data or information as a profit-making venture.

Contractor shall have the right to disclose, disseminate and use, in whole or in part, any final form of data and information received, collected, and/or developed under this Agreement, subject to inclusion of appropriate acknowledgment of credit to the State, NFWF, to the CALFED Program, and to all cost-sharing partners for their financial support. Contractor must obtain prior approval from CALFED to use draft data. Permission to use draft data will not be unreasonably withheld. CALFED will not disseminate draft data, but may make draft data available to the public upon request with an explanation that the data has not been finalized."

For Section 13, Termination Clause, TNC requests the following language currently being negotiated for the CALFED 2001 agreements with TNC:

"Default and Remedies.

1. In the event of Contractor's breach of any of Contractor's obligations under this Agreement, NFWF shall deliver to Contractor written notice which shall describe the nature of such breach (the "Default Notice"). If Contractor has not cured the breach described in a Default Notice prior to the expiration of the twenty (20) day period immediately following Contractor's receipt of such Default Notice, or, in the event the breach is not curable within such twenty (20) day period, Contractor fails to commence and diligently proceed with such cure within such twenty (20) day period, then Contractor shall be deemed to be in default under this Agreement, and NFWF shall have the right, after receiving approval from CALFED, to terminate this Agreement by delivering to Contractor a written notice of termination, which shall be effective immediately upon receipt by Contractor (the "Termination Date"). Upon and following the Termination Date, NFWF shall be relieved of the obligation under this Agreement to make any payments to Contractor for any work that has been performed prior to the Termination Date; however, NFWF shall continue to be obligated to make any payments to Contractor for work properly performed and invoiced in accordance with the terms and conditions of this Agreement prior to the Termination Date. In no event shall Contractor be required to refund to NFWF, CALFED, the Agency or DWR any of the funds that have been forwarded to Contractor under this Agreement, except as provided in Section 10.I.2 below.

2. In the event of any termination of this Agreement by NFWF pursuant to Section 10.I.1 above prior to close of escrow of Contractor's acquisition of any real property interest funded by this Agreement, NFWF's sole remedy shall be to obtain the return of those funds that have been forwarded to Contractor under this Agreement to fund Contractor's acquisition of the Property. "

Section 24, may require revision depending upon the nature of the interest acquired by TNC.

Section 25, Use, Management, Operation, and Maintenance, may require revision depending upon the nature of the interest acquired by TNC.

Section 26, may require revision depending upon the nature of the interest acquired by TNC.

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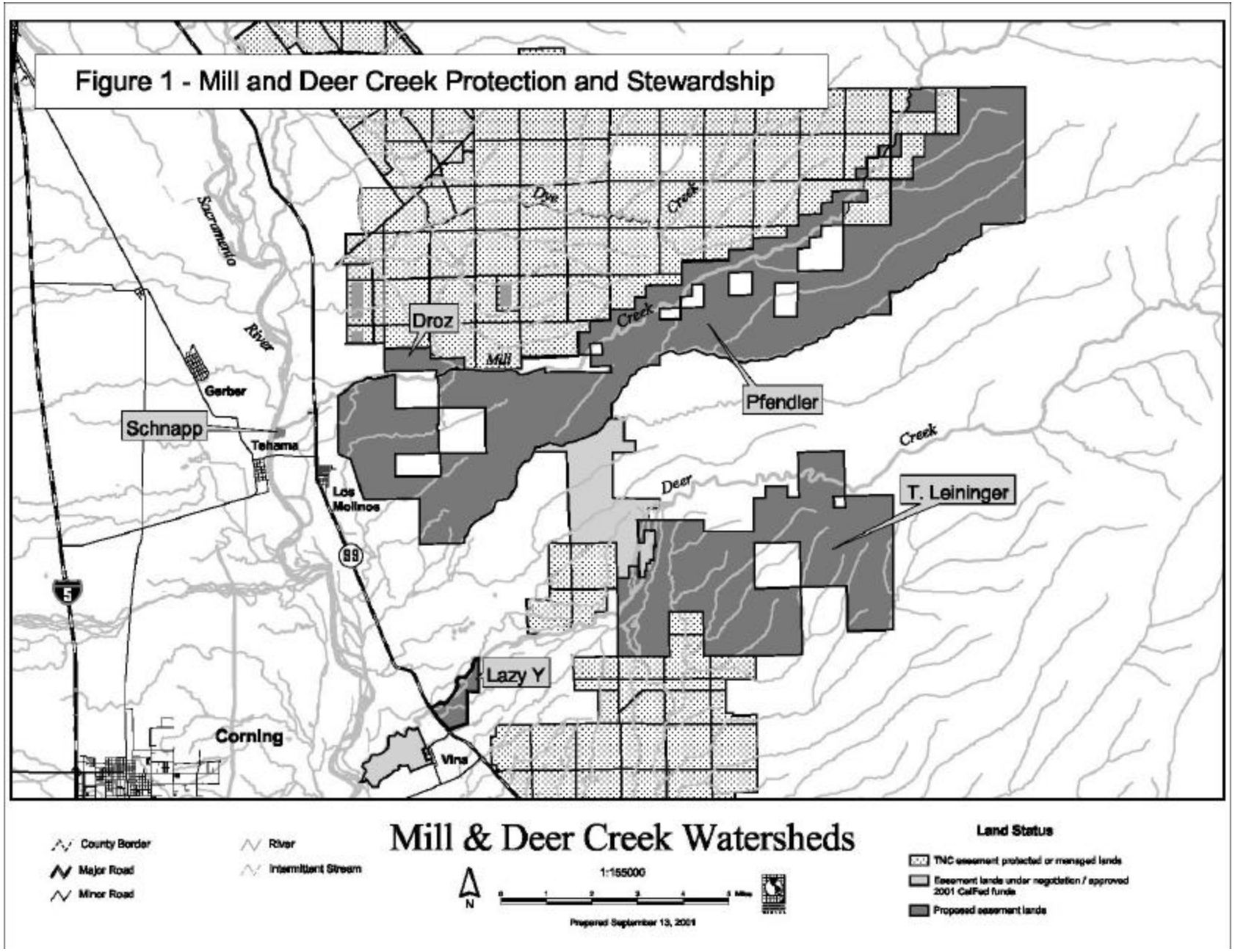
Figure 1 - Mill and Deer Creek Protection and Stewardship
Sacramento River
Deer Creek
Mill Creek
Droz
Pfendler
Deer Creek
T. Leininger
Schnapp
Gerber
Tehama
Los Molinos
99
5
Lazy Y
Corning
Vina
Mill & Deer Creek Watersheds
County Border
Major Road
Minor Road
River
Intermittent Stream
1:155000
N
Prepared September 13, 2001
Land Status
TNC easement protected or managed lands
Easement lands under negotiation / approved 2001 CalFed funds
Proposed easement lands