

# Battle Creek Protection and Stewardship

## Project Information

1. **Proposal Title:**

Battle Creek 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: 40.026

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 Battle Creek watershed in southeastern Shasta County and northeastern Tehama County in the Northern Sacramento Valley Ecological Management Zone.

**10. Location - Ecozone:**

4.4 Battle Creek

**11. Location - County:**

Shasta, 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: \$2,200,000

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?**

Yes

If yes, identify project number(s), title(s) and CALFED program (e.g., ERP, Watershed, WUE, Drinking Water):

**ERP-01-N24 Battle Creek Riparian Protection ERP**

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**

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.

00FG2000003 Foor Ranch BuRec (b)(1)"other"

14481133297G030 L&L / Hamilton AFRP

11332-8-G124 Birkes AFRP

113328G048 Dana AFRP

14481133298J 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

## Battle Creek 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 involves 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

**X**none

#### **NEPA**

-Categorical Exclusion

-Environmental Assessment/FONSI

-EIS

**X**none

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

## **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

## Battle Creek 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: 6,800

Total: 6,800

#### 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.



<b>Category</b>	<b>Current</b>	<b>Proposed (if no change, specify "none")</b>
<b>Land Use</b>	<b>Rangeland, riparian habitat, woodland, ranching, grazing.</b>	<b>None</b>
<b>Zoning</b>	<b>"Limited Ag." (40-acre min. bldg. lot) &amp; "Habitat Protection Zone"</b>	<b>None</b>
<b>General Plan Designation</b>	<b>"Natural Habitat-40" (40-acre min. bldg. lot &amp; "Residential"</b>	<b>None</b>

**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.**

**2 of the 3 targeted properties are under Williamson contracts.**

# Conflict of Interest Checklist

## Battle Creek 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

## Battle Creek 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	315	9958	3684		1030	18360		946000	979032.0	7267	986299.00
2	Stewardship&Monitoring	315	5193	1612		1125	24773		850	33553.0	7381	40934.00
		630	15151.00	5296.00	0.00	2155.00	43133.00	0.00	946850.00	1012585.00	14648.00	1027233.00

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	155	5097	1886		580	19151		590000	616714.0	5877	622591.00
2	Stewardship&Monitoring	420	6658	2022		1310	33448		450	43888.0	9655	53543.00
		575	11755.00	3908.00	0.00	1890.00	52599.00	0.00	590450.00	660602.00	15532.00	676134.00

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	180	2284	845		665	9600		420000	433394.0	2946	436340.00
2	Stewardship&Monitoring	525	8434	2590		1525	36422		450	49421.0	10872	60293.00
		705	10718.00	3435.00	0.00	2190.00	46022.00	0.00	420450.00	482815.00	13818.00	496633.00

**Grand Total=2200000.00**

### 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**

## **Battle Creek Protection and Stewardship**

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

**Position Hours** Program Director II 95 Field Representative II 495 Science Specialist II 335 Land Stew I 145 Operations Manager 55 Fellow 205 Intern 290 Intern 290

**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.): \$775 **Office supplies:** \$570 **Vehicle fuel, vehicle operation & field supplies:** \$4,890

**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 presentations, response 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: \$20,760

**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 easements. 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 TNC's 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. TNC's 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**

## **Battle Creek 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 Battle 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 Battle Creek watershed in southeastern Shasta County and northeastern Tehama County. Battle Creek is fed by critical cold water springs and is the only Sacramento River tributary capable of supporting all four runs of Chinook salmon. The proposed project expands the efforts of the Battle Creek Salmon and Steelhead Restoration Program, a program supported by CALFED and many other agencies and organizations, which will dramatically improve upstream fish passage on Battle Creek. 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 a watershed 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 6,800 acres within the watershed 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**

**Battle Creek Protection and Stewardship**

**Jake Jacobson, The Nature Conservancy**

**Jennifer Martin, The Nature Conservancy**

**Wendie Duron, The Nature Conservancy**



# Battle Creek Protection and Stewardship

## A. Project Description: Project Goals and Scope of Work

### 1. Problem.

#### Introduction:

Battle Creek is unique among Sacramento River tributaries because of its capability to support all four runs of Chinook salmon. Specifically, there are only two remaining suitable spawning habitats for winter run salmon: Battle Creek and the upper Sacramento River. Battle Creek is the only habitat that can consistently provide the cold waters that winter run salmon need for spawning success. Because Battle Creek is recognized as having the best potential for restoring all four runs of Chinook salmon as well as Steelhead trout populations, a historic agreement known as the Battle Creek Salmon and Steelhead Restoration Project (“Battle Creek Restoration Project”) was signed by the California Department of Fish and Game, National Marine Fisheries Service, U.S. Bureau of Reclamation and U.S. Fish and Wildlife Service, collectively, the “Resource Agencies” and PG&E to remove dams, restore in-stream flows and install fish ladders and screens. Significant financial support was provided by CALFED for that project.

In this proposal, The Nature Conservancy (TNC) is requesting funds to use the following methods to help protect existing wildlife-friendly agriculture on Battle Creek: acquire conservation easements to help protect habitat lands; and where appropriate employ: riparian fencing to help preclude livestock access to 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 creek’s fisheries are conversion of existing land uses to intensive agriculture and residential development. Intensive agricultural development, particularly vineyards that divert creek and spring water for irrigation, threatens the future of the abundant cold freshwater springs that support base flows and cool water temperatures in the creek.

Most of the land along Battle Creek remains relatively undeveloped, however development trends in the area point to increased loss of agricultural lands, as residential demands from Redding grow. Already there have been purchases of land along the creek 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 that reduces quality and quantity of suitable aquatic habitat by decreasing shaded riverine habitat and associated organic inputs, water temperature control, and habitat structure. Habitat for threatened bird species, including eagles, is also reduced when streamside vegetation is removed. A recent example of this potential loss occurred on the North Fork of Battle Creek when a landowner dynamited a road down a steep slope to the creek.

California Fish and Game is involved in restoring the damage caused by that activity. 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 and a five-year study by TNC in Tehama County).

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 up-slope 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 why part of this proposal involves protecting 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 Battle Creek, TNC proposes protecting the relatively pristine riparian habitat along the stream from degradation, protecting adjacent upland habitats from development, and preventing the loss or degradation of its cold spring water by well development. In this project, The Nature Conservancy (TNC), working in partnership with the Battle Creek Watershed Conservancy (BCWC), 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 Battle Creek watershed 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 over grazing, 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 6,800 acres of habitat lands;
- Limit future impacts of landscape fragmentation, logging, mining, agricultural conversion, in-stream physical disturbance, and the addition of new wells and septic systems that would degrade water quality;
- 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, the Battle Creek Watershed Conservancy and the Battle Creek Restoration Project could be compromised and additional 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 appropriate 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, prohibiting mining, 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.

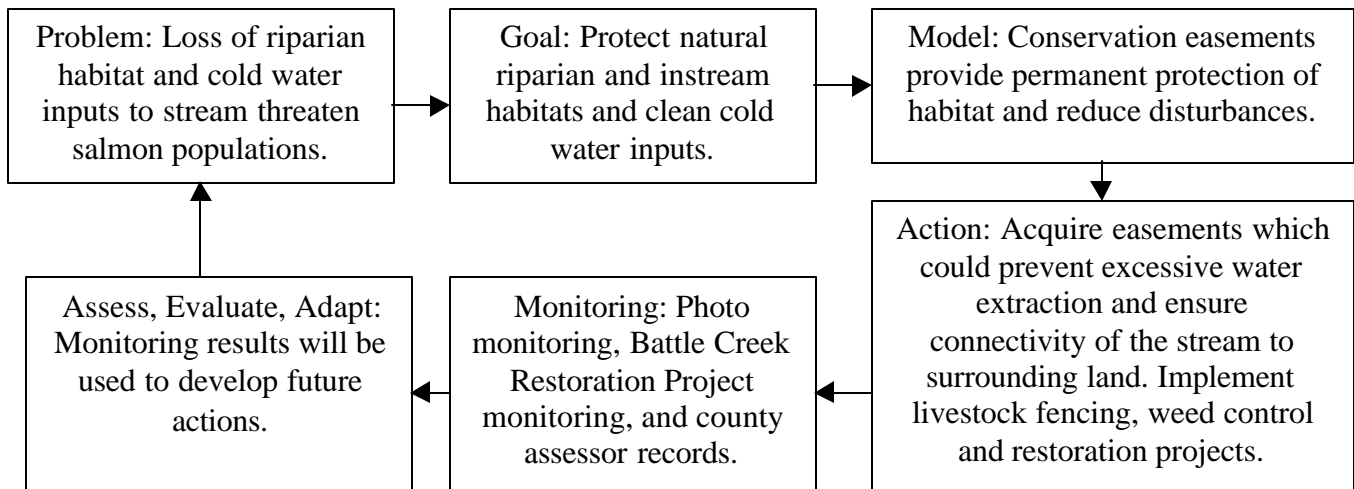
The properties described in this proposal are located in the Battle Creek watershed in southeastern Shasta County and northeastern Tehama County in the Northern Sacramento Valley Ecological Management Zone. These parcels are all identified as high priority for protection because of their strategic location on Battle Creek, which supports various life cycles of at-risk native species, including all four runs of Chinook salmon and Steelhead trout, and because they include properties at risk of incompatible development and habitat degradation.

Figure 1 shows the Battle Creek watershed and the locations of the properties within the Battle Creek watershed. (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. The Battle Creek Restoration Project was created to address adequate in-stream flows and passage. Riparian and upland habitats are increasingly being degraded or destroyed, and easements could help protect these habitats. By limiting development through easements, intrusions into the Creek 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 cattle grazing) and discouraging intensive development within a landscape. Battle Creek, as stated above, having the most potential to restore all four runs of Chinook salmon, is 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 intends 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 the restoration activities are met.

Key uncertainties for this project include biological uncertainties that will be addressed through ongoing 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 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 three 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 and other native plants and animals. 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 the provisions of the Battle Creek Restoration Project, 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. TNC also intends to fence certain areas of the creek frontage in order to help limit livestock intrusion into Battle Creek. Additionally, TNC intends to perform invasive weed control measures on certain properties including prescribed burns. Fire is very much a part of the natural process in the Battle Creek watershed, 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 three 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 like the Battle Creek Watershed Conservancy.

The Nature Conservancy is working in cooperation with willing landowners and the Battle Creek Watershed Conservancy to acquire conservation easement interests on key properties along Battle Creek. The protection of these properties would complement acquisitions being made by BLM in the lower reaches of the Creek and other acquisitions that have been made or are being made by The Nature Conservancy (see purchased and proposed easement properties -- Figure 1 on page 21). 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 three key properties, one on the mainstem, one on the North Fork and one on the South Fork of Battle 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.

**Lazy R Bahr Ranch (approx. 3,000 acres)** is located on the South Fork of Battle Creek near the community of Manton. The property is bisected by Ripley Creek which is a fish-bearing tributary to the South Fork. The riparian habitat along the South Fork and Ripley Creek is relatively undisturbed. This property is located in an area of Battle Creek considered to be critical spawning and holding areas for Steelhead trout and Chinook salmon (particularly Winter and Spring runs). This property surrounds PG&E's property containing the South Powerhouse and Inskip Dam and a portion of the property may be impacted by the installation of a fish screen and ladder at Inskip Dam. The ranch has blue oak woodlands, chaparral, and several important springs which feed the

South Fork. Over 2 miles of frontage on the north side of the South Fork would be protected. The ranch also provides habitat for the largest migratory deer herd in California. This property is considered a high priority by The Nature Conservancy and is adjacent to the recently protected Eagle Canyon (Pelton) Ranch (TNC closed conservation easement on July 9, 2001 as part of CALFED Award # 01-N24 and CVPIA Grant Agreement # 113300G104). The local Battle Creek Watershed Conservancy has been participating in all easement negotiations between The Nature Conservancy and the landowner.

**McCampbell Ranch (approx. 2,000 acres)** is on the mainstem of Battle Creek with over 2 miles of frontage on both sides of the creek. The ranch has blue oak woodlands, chaparral, grasslands and springs that benefit Battle Creek. This stretch of the creek serves as a spawning area for Fall-run and Late Fall-run Chinook salmon and as a holding area for Spring-run Chinook salmon. The riparian habitat along the creek is in a pristine condition. The ranch also has frontage on Baldwin Creek where restoration for Steelhead is being discussed. This high priority property is adjacent to the approximately 1,500 acre Miller Ranch (conservation easement negotiations currently under way as part of CALFED Award # 01-N24).

**Wildcat Ranch (a.k.a. Trans-Universal Property -- approx. 1,844 acres)** is located on the North Fork of Battle Creek. This property features pristine blue oak woodlands, springs, grasslands, chaparral and high-quality aquatic and riparian habitat including approximately 2 miles of frontage on the North Fork of Battle Creek. The riparian habitat along the North Fork is relatively undisturbed. This property is located in an area of Battle Creek that has critical Winter- and Spring-run Chinook salmon spawning and holding areas. The property includes a critical cold water spring that feeds the North Fork. The easement will help ensure that the spring is not diverted for other purposes. Additionally, the property surrounds PG&E lands containing Wildcat Dam which is scheduled for removal as part of the Battle Creek Restoration Project. TNC will cooperate with the Resources Agencies regarding Wildcat Dam. This tract is a high priority for protection as it is just downstream from another priority acquisition, the approximately 990-acre Eagle Canyon (Pelton) Ranch (conservation easement closed on July 9, 2001). The Nature Conservancy is acquiring fee-simple ownership of the Wildcat Ranch from the Trans-Universal development company (closing is scheduled for Oct. 3, 2001). TNC plans to re-sell the ranch subject to a conservation easement to ensure its protection and continued wildlife-friendly agricultural practices. The Wildcat Ranch is included in this proposal in order to pay for the easement and for stewardship activities (e.g., riparian fencing, invasive weed control). To secure this important ranch, The Nature Conservancy had to move quickly, and it was necessary to borrow funds to close the deal. If this proposal is funded, TNC expects to repay the loan with the awarded funds and with the sale of the underlying fee property.

#### **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, TNC has protected over 50,000 acres of habitat in the Lassen Foothills area and we manage an additional 37,500 acres on behalf of the State. Our selection of the three properties as described in the 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 landowners, 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 Battle Creek and its 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 potential loss of freshwater springs.

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 acquires 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 as part of the 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 be 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 perpetual protection of over 6,800 acres of critical habitat lands that will benefit the Battle Creek, Sacramento River 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 Battle Creek Watershed 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 and 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 three properties in the Battle Creek watershed. TNC is currently working with the owners of the three properties and plans to complete the following key milestones: acquisition of the Lazy R Bahr Ranch within the first year of the grant, the acquisition of the McCampbell Ranch in the second year of the grant, and transfer ownership of the Wildcat Ranch, subject to a conservation easement, during the third 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, the Lazy R Bahr and McCampbell acquisitions could continue into the second and third year respectively.

Task 2. Stewardship and Monitoring. Both easement and fee purchased lands 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. On fee purchases, 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 Battle Creek watershed 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 three 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 Chinook salmon and Steelhead trout by purchasing conservation easements from willing sellers on over 6,800 acres of habitat lands;
- Limit future impacts of landscape fragmentation, logging, mining, agricultural conversion, in-stream physical disturbance, and the addition of new wells and septic systems that would degrade water quality;
- 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; and
- 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 Battle 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 Winter-run and 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 along Battle 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 Battle Creek could provide an important temperature reducing function that is critical to Winter- and 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 Battle Creek ecosystem:

*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 creek and interrupt and degrade underground water flows that feed freshwater springs and the creek. 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 threats 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*, Klamath Weed *Hypericum perforatum* and medusa-head

*Taeniatherum caput-meduse* are problematic in the Battle Creek watershed. 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 the Battle Creek Restoration Project. With critical funding support from CALFED, the implementation of the Battle Creek Restoration Project is expected to increase in-stream flows along approximately 42 miles of Battle Creek, remove five diversion dams, install fish ladders and screens at the three remaining diversion dams, and establish an adaptive management plan. The proposed project also complements conservation efforts by the Bureau of Land Management downstream and adds to the corridor of protected habitat within the Battle Creek watershed.

Additionally, the Battle Creek Watershed Conservancy is in the midst of a Watershed Assessment to establish baseline conditions for the creek. The assessment will delineate hydrological processes and land uses and identify any links between the processes and land uses. This assessment will be useful in our development of conservation easements and the long term monitoring possibilities once the baseline is completed will assist in tracking changes in hydrological processes over time.

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. Regarding Battle Creek in particular, TNC is working closely with the Battle Creek Watershed Conservancy to implement a conservation easement strategy with private landowners in the watershed. In the past two years, TNC has acquired conservation easements on approximately 37,000 acres in the Battle Creek area, a portion of which is on the North Fork and a portion of which is within the Battle Creek watershed and includes Paynes and Antelope Creeks.

TNC's efforts in other watersheds have been supported by previous grants from CALFED and CVPIA. To date, TNC has protected 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 Deer Creek Watershed Conservancy, 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.

Perhaps the most important system-wide ecosystem benefit is that this proposal represents a key component in the preservation and restoration of the only Sacramento River tributary capable of supporting all four runs of Chinook salmon. 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.**

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 Ranch (the deal closed on July 9, 2001). The Miller Ranch and Winning Ranch are currently in active negotiations. Please see the attached summary which outlines the existing project status.

### **4. Previous Recipients of CALFED Program or CVPIA funding.**

CALFED has also funded two major projects that complement The Nature Conservancy's efforts on Battle Creek: 1) The Battle Creek Salmon and Steelhead Restoration Project for which The Nature Conservancy also raised \$3 million for adaptive management in support of the Project; and, 2) Funding of the Gover Ranch acquisition by The Trust for Public Land.

Additionally, 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; 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 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.

### **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 The Lazy R Bahr Ranch and the McCampbell Ranch are willing sellers who are already actively negotiating conservation easements with The Nature Conservancy. The Wildcat Ranch is being currently being acquired from a willing seller. Once the Conservancy owns the Wildcat Ranch, we intend to place a conservation easement on the property to ensure its protection and sell the underlying fee of the ranch to a private party. At this early stage, TNC has already been contacted by a number of parties who are interested in buying a protected Wildcat Ranch from us. We have even begun initial discussions regarding potential conservation easement provisions with some of these parties.

This project is consistent with the general plans of Shasta and Tehama Counties. 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. Peggy McNutt also spoke to Patricia Clarke, the Shasta County Supervisor representing the Battle Creek region of Shasta County. Clarke stated that she supports this proposal to CALFED.

All three of the targeted properties 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 a critical watershed 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 Battle Creek system 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:

Mill Creek, Deer Creek, Battle Creek — Butte, Tehama, Shasta Counties

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 Battle Creek Watershed Conservancy, an active local conservancy that is assisting with negotiations on the Lazy R Bahr Ranch; 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 and 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). Two of the three targeted properties are 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.

Previously, to support the ecosystem objectives of the Battle Creek Restoration Project, TNC raised \$3,000,000 from private sources for the adaptive management plan component of the Battle Creek Restoration Project. In addition, other costs associated with the proposed land acquisitions, including long-term monitoring of easements and any additional funds needed for the stewardship are planned to be raised by TNC from other public and private sources.

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, WCB, 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 Battle Creek Watershed Conservancy, Mill Creek Conservancy, and Deer Creek Watershed Conservancy — to develop and encourage community support for watershed conservation. In particular, The Nature Conservancy is working closely with the Battle Creek Watershed Conservancy and other stakeholders on an adaptive management strategy for the Battle Creek watershed and the upper Sacramento River. The Nature Conservancy has participated in the Battle Creek Working Group and in local landowner meetings on land



protection strategies in Shasta, Tehama, and Butte Counties. In addition, acquisition and revegetation activities on Deer and Mill Creeks are coordinated with similar efforts to protect and restore riparian habitat 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.

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. Peggy McNutt also spoke to Patricia Clarke, the Shasta County Supervisor representing the Battle Creek region of Shasta County. Clarke stated that she supports this proposal to CALFED.

The Battle Creek Working Group and the Battle Creek Watershed Conservancy are organizations interested in this project. The Battle Creek Watershed Conservancy supports the purchase of conservation easements.

TNC has met with the Battle Creek Watershed 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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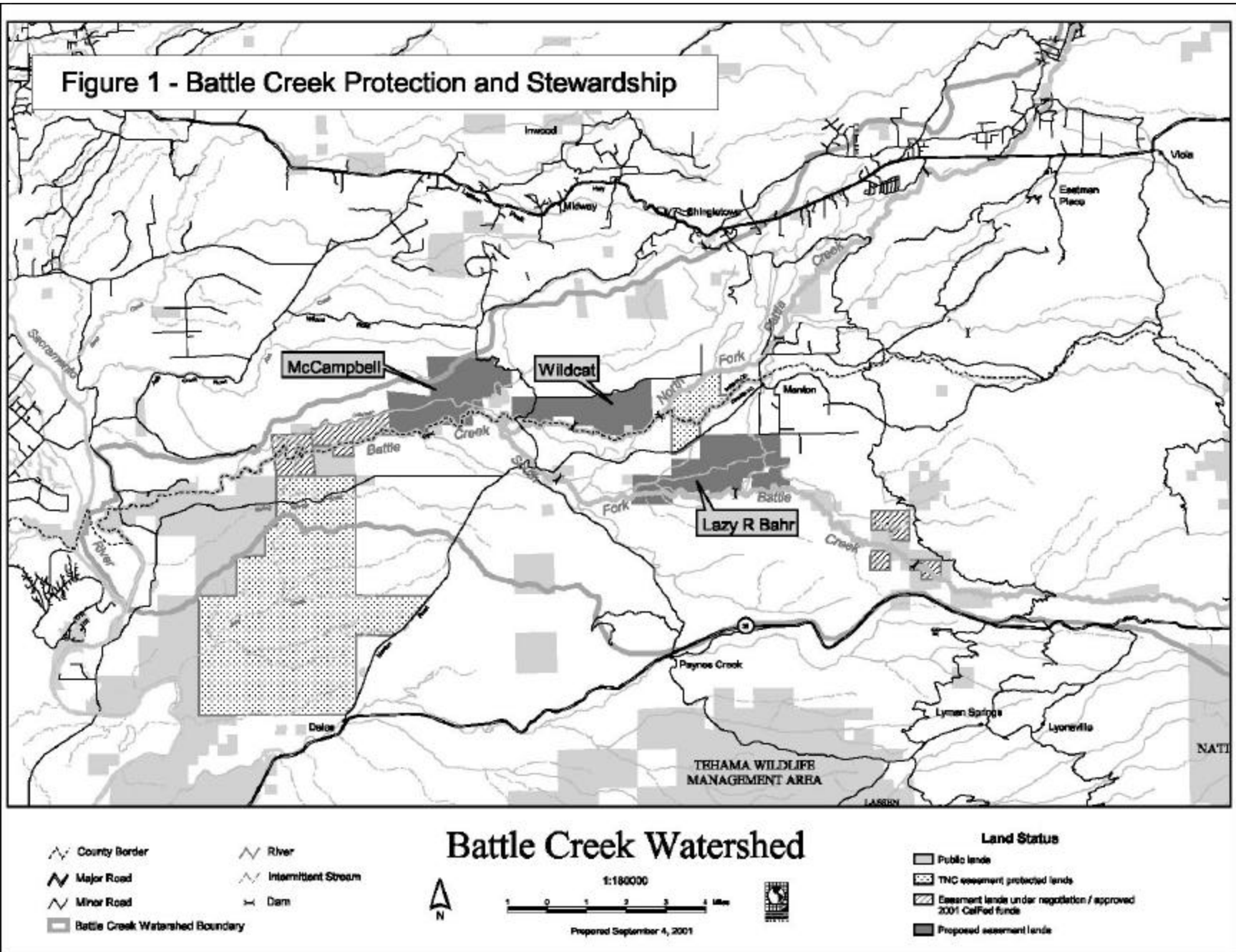
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Figure 1 - Battle Creek Protection and Stewardship



## G. The Nature Conservancy

### Battle Creek Protection and Stewardship

#### *Summary of Existing Project Status for Next-Phase Funding*

The Nature Conservancy (TNC) 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 Pelton (Eagle Canyon) Ranch and the Winning Ranch. A brief description of the three ranches and the project status for each property follows:

**Miller Ranch** (approximately 1,600 acres) is located on the main stem of Battle Creek above the Coleman Fish Hatchery and has frontage on both sides of Battle Creek. This stretch of the Creek serves as a spawning area for Fall-run and Late Fall-run Chinook salmon and as a holding area for Spring-run Chinook salmon. The ranch features springs, blue oak woodlands, chaparral and high-quality riparian habitat. It is intended that a conservation easement on this property would require that sections of the riparian habitat be fenced where needed to help keep livestock from entering the creek.

**Status: Conservation easement currently under negotiation with the land owner. Negotiations are proceeding very well and we expect to close on the easement during 2002.**

**Pelton (“Eagle Canyon”) Ranch** (approximately 990 acres) begins at the confluence of the North Fork and Digger Creek and includes significant frontage on the south side of the North Fork. The property also has riparian water rights on Digger Creek. A conservation easement on this property is intended to protect a significant portion of Winter-run and Spring-run Chinook salmon spawning and rearing habitat. Digger Creek, which bisects the property, also provides an additional source of cool waters for the North Fork.

**Status: Acquired conservation easement on July 9, 2001 with assistance from USF&W (AFRP) and WCB. An extensive baseline report has been prepared and TNC is monitoring the easement. Easement monitoring reports will be prepared annually to track changes from the baseline, verify easement compliance and measure residual dry matter on the property’s rangelands.**

**Winning Ranch** (approximately 700 acres) is on the South Fork of Battle Creek and is contiguous to several BLM properties. Although the property is in a remote part of the watershed, the ranch includes frontage on the South Fork, has springs and a critical cold water creek flowing through the property. In addition to the conservation easement, acquisition of some of the property's water rights for in-stream habitat purposes is being discussed with the landowner. Potentially, an alternative water source will be created for the landowner so that cold spring water can remain in the Battle Creek system.

**Status: Due to the lengthy process that is required to buy water rights, TNC recently arranged with landowner to put conservation easement negotiation and water acquisition on separate, parallel tracks. It is possible that the easement (and a signed option agreement to acquire the water rights) will be secured in 2002 and the actual water rights will be secured in 2003. Negotiations are currently underway and are going very well.**

The data collection and monitoring measures described in our proposal, and under "Pelton Ranch Status," above, are expected to be implemented on the Miller and Winning Ranches once conservation easements have been acquired on these properties.

The scientific merit, hypothesis, conceptual model and adaptive management framework of the project described above, which was funded by CALFED in 2001, is essentially identical to our 2002 project proposal.