

P1-307

DMR WATER DIVISION  
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## Cosumnes River Floodplain Acquisitions and Management

### I. Executive Summary

*a. Project title:* Cosumnes River Floodplain Acquisitions and Management

*Applicants:* The Nature Conservancy and the California Wildlife Conservation Board

*b. Project description and primary biological/ecological objectives*

The project proposes a block grant totaling \$20,670,000 for acquisition and enhancement of approximately 11,000 acres of fisheries, riparian, and wetland habitats along the lower Cosumnes River floodplain and adjacent Delta lands.

The primary use of the requested funds will be for the acquisition, initial restoration, and conservation stewardship of properties rich in actual or potential habitat value and important to the long-term health of this part of the Bay-Delta ecosystem. The applicants propose to buy some properties outright and add them to the Cosumnes River Preserve, and to acquire conservation easement interests in others.

Additional funds are requested for initial restoration and stewardship activities and for a proportional contribution to the Cosumnes River Preserve's endowment to assist with long-term management costs.

The primary biological/ecological objectives of this proposal are to:

- protect existing riparian, wetland, and aquatic habitats and associated species.
- reestablish riparian, wetland, and aquatic habitats through restoration of natural processes and expansion of the floodplain.
- facilitate population expansion of species associated with the Cosumnes, particularly eastside tributary fall-run salmon, splittail, sandhill cranes, neotropical migrant bird species, and waterfowl.

*c. Approach/tasks/schedule*

The proposed approach is to acquire fee or easement interests from willing sellers on properties that are contiguous to the Cosumnes River Preserve, have high habitat values, and/or offer conservation managers excellent opportunities to expand the floodway and restore the riparian corridor of the lower Cosumnes River.

The project will complete the acquisition of key properties currently under option to The Nature Conservancy and secure conservation easements or options on additional high-priority parcels. Initial restoration, stewardship, and management activities will be initiated as properties are acquired. New breaching of levees within the floodplain is not a part of this project; however, the successful completion of this project is a requirement for that restoration action to occur. We expect to complete the program proposed here within two years. The project will submit quarterly financial and programmatic reports to CALFED.

*d. Justification for project*

The land acquisitions and conservation management activities proposed here will protect and expand tidal wetlands, seasonally flooded wetlands, the riparian corridor, perennial grasslands and farmland of high habitat value. This proposal addresses at least seven priority stressors and

benefits numerous species of concern to CALFED. These activities will also improve water quality and will have broad ecosystem benefits.

***e. Budget costs and third-party impacts***

Total cost for the program described here is approximately \$28,470,000. Identified cost-sharing funds total approximately \$7,800,000. The net amount requested is \$20,670,000. More than \$30 million has been spent on the Cosumnes project to date.

There are no known negative third-party impacts from the activities for which we are requesting funding.

***f. Applicant qualifications***

The Nature Conservancy and the California Wildlife Conservation Board, have extensive experience in property acquisition, habitat restoration, and land management.

***g. Monitoring and data evaluation***

The project proposes to expand the extensive habitat evaluation and species monitoring programs already in operation at the Cosumnes River Preserve to these new properties as they are added to the Preserve. We will develop specific reporting requirements in consultation with CALFED staff.

***h. Local support/coordination with other programs/compatibility with CALFED objectives***

The Cosumnes River Preserve was dedicated in 1987. Preserve staff and volunteers have developed extensive community support in a decade of working with local and regional schools, community groups, and public agencies. The Sacramento County General Plan supports expansion of the Preserve, and the expansion proposed here will in turn help the county achieve some of the plan's objectives.

The activities proposed are compatible with the objectives of CALFED, the nine agencies and partners of the Cosumnes project, the Central Valley Project Improvement Act, the Central Valley Habitat Joint Venture, and the Wetland Reserve Program.

Several other organizations' proposals to CALFED in response to this RFP have been coordinated with this proposal, including proposals from the Sacramento Local Conservation Corps, Phil Williams and Associates, the Bureau of Land Management, and Ducks Unlimited. Their funding would assist us in implementing our program. However, our proposal is not contingent on funding of these proposals. Moreover, the elements of this proposal (with a few exceptions, detailed in Section IV-a of this proposal) can be funded separately or in phases.

## II. Title Page

*a. Title of Project:* Cosumnes River Floodplain Acquisitions and Management

*b. Applicants:*

**The Nature Conservancy**  
201 Mission Street, 4th floor  
San Francisco, CA 94105  
phone (415) 777-0487; fax (415) 777-0244  
Contact: Mike Eaton  
phone (916) 449-2857; fax (916) 448-3469  
e-mail: <mre@ns.net>

**California Wildlife Conservation Board**  
California Department of Fish and Game  
801 K Street Suite 806  
Sacramento, CA 95814  
Contact: John Schmidt  
phone (916) 445-8448;  
fax (916) 323-0280

*c. Type of organization and tax status:*

The Nature Conservancy is a District of Columbia non-profit corporation with a 501(c)(3) tax-exempt status.

The Wildlife Conservation Board is an agency of the State of California.

*d. Tax identification number and/or contractor license, as applicable:*

The Nature Conservancy's taxpayer identification number is 53-0242652.

*e. Technical and financial contact person(s), address, phone/fax/e-mail (if different from above):*

Same as above.

*f. Participants/collaborators in implementation:*

U.S. Department of Interior — Bureau of Land Management, and the other Cosumnes River Preserve partners.

*g. RFP project group types:* Acquisition and Other Services.

### III. Project Description

#### *a. Project description and approach*

The Nature Conservancy (TNC) and the Wildlife Conservation Board (WCB) request **\$20,670,000** to acquire, restore, and adaptively manage lands in the floodplain of the Cosumnes River. The activities proposed here will substantially complete the Cosumnes River Preserve, a 10-year old, multi-partner effort that has successfully protected and restored riparian forest, seasonal wetland, and tidal habitats along the lower Cosumnes. Conservation action on the Preserve has provided significant benefits for fish, wildlife, flood control, groundwater recharge, scientific research, and public education.

For this project The Nature Conservancy (TNC) has drawn up an integrated plan and budget which cover three primary aspects of our proposed conservation activities. These are:

- capital costs of **land acquisition** via fee and easement interests, as well as staff salaries and expenses related to land acquisition;
- **initial restoration and stewardship activities** (for example, installing and repairing fences, conducting baseline biological and archaeological surveys, writing management and monitoring plans); and
- **operations and management costs**, some of which will be covered by a management endowment fund, with the rest being paid for with funds from other sources.

These activities make up an ambitious program for addressing CALFED's high-priority stressors and for protecting and restoring key habitats. We have employed a rigorous biological analysis to identify crucial target properties. This analysis has aided us in designing strategies which, when applied, will result in:

- the protection of key riparian, wetland, native grassland, and aquatic habitats within the Cosumnes River corridor;
- the expansion of the floodplain to help establish a naturally functioning ecosystem for native fish and terrestrial species; and
- the creation of a buffer of agricultural land to ensure ecologically compatible land uses along the river in perpetuity.

For the **land acquisition** element of the proposal, we request funding for the purchase of properties which fall into three categories:

1. properties presently under TNC option or control;
2. properties in the floodplain which we intend to acquire to expand the existing Preserve; and
3. properties on which we can set back levees and expand the river's floodway, upstream and downstream of the existing Preserve.

Only willing sellers will be involved. We will pay no more than fair market value for the properties.

We propose to split the ownership of some properties between The Nature Conservancy and the state Wildlife Conservation Board. For those properties which TNC will own outright, we will develop an appropriate title reservation or other instrument to preserve the necessary legal

interest and to ensure that the properties are permanently dedicated to conservation objectives. The Nature Conservancy anticipates that fee or easement interests of the properties acquired may be transferred in the future to a qualified agency or organization, at the discretion of the granting agency. In this case, it is expected that a reasonable portion of management funds, if provided under this grant, may be transferred to the new partner agency or organization for the continuing long-term management of the properties.

**Initial restoration and stewardship activities** include biological and cultural surveys, the development and writing of management and monitoring plans, fencing, signage, repair of infrastructure (including roads), and demolition of any dangerous structures. We will also assess habitat restoration needs and develop restoration plans.

**Long-term operations and management activities** include patrolling to limit trespass and vandalism, monitoring and enforcing restrictions (particularly on lands with conservation easements), administering farm contracts and habitat restoration agreements, controlling invasive exotic plant and animal species, supervising visitor activities, and general maintenance. Long-term management funding will come from two primary sources: income generated from farming leases, and the annual yield of a permanent endowment fund's invested capital. We also expect that the Sacramento Local Conservation Corps (SLCC) program, if funded by CALFED under a separate proposal, will be a significant help to us in meeting our management needs. Ongoing assistance from the SLCC (beyond the three-year program for which they seek funding now) could play a significant role in long-term operations.

***b. Location and/or geographic boundaries of project***

The properties proposed for acquisition, enhancement, and management are all located in southern Sacramento County, within the floodplain of the Cosumnes River. See Maps 1 and 2.

***c. Expected benefits***

***1. Benefits from the acquisition, initial restoration, and stewardship actions in this proposal include the protection of approximately***

- 2100 acres of **seasonal wetlands and aquatic habitats**
- 3800 acres of **perennial/annual grassland**
- 300 acres of **fresh emergent wetlands**
- 17 miles of **instream aquatic habitat** along the Cosumnes River, Mokelumne River, Laguna Creek, and associated backwaters and sloughs
- 17 miles of **shaded riverine aquatic habitat**
- 3700 acres of **agricultural wetlands**

This project will result in a significant reduction of these priority stressors:

- **loss of existing riparian zones and lack of regeneration potential**
- **high water temperature**
- **elevated predation and competition losses**
- **urbanization**
- **competition from introduced plants**
- **improper grazing**
- **impacts of near-stream agriculture**

Reduction of these stressors will result in immediate and long-term benefits for the following priority species: eastside tributary **fall-run chinook salmon** (and possibly other chinook races); **spawning splittail** and other CALFED target species, including **resident native fish, waterfowl, neotropical migratory birds, nesting and foraging Swainson's hawks, greater sandhill cranes, shorebirds, wading birds, giant garter snakes, and western pond turtles.**

Significant restoration benefits will be realized after properties are acquired due to the shift to conservation management. For example, we estimate that shaded riparian aquatic habitat alone will increase 50 percent within three years if we simply reduce livestock numbers and add appropriate fencing.

## *2. Benefits from future restoration actions*

Benefits from future restoration actions that are not part of this proposal but are dependent on the success of this proposal include the **restoration of more than 1,000 acres of tidal perennial aquatic habitat** (through setting-back, removing, and breaching levees on secured properties). Additionally, these actions will cause a major reduction in or complete elimination of these stressors on the lower Cosumnes River system:

- physical isolation of the river from its floodplain
- prevention of river channel meander
- alteration (incision) of channel form

Reduction of these stressors and development of this priority habitat will provide additional benefits to the species listed above especially **natal and non-natal rearing of east-side delta tributary fall-run chinook salmon** (and possibly other races as well) and significant new benefits to **splittail, delta smelt, and possibly green sturgeon and striped bass.**

Other benefits of this proposal, both immediate and future, include those relating to third parties:

- **levee setback projects** on both the upper and lower floodplain (not proposed for, but facilitated by, funding in this proposal) will provide **greater and more permanent flood protection** than the current inadequate levee system; in addition, greater floodplain inundation will encourage **greater aquifer recharge.**
- **agricultural easements** will permanently **protect farming by limiting urban sprawl** and by providing additional **capital to small dairy farms** in the area.
- expansion of the Preserve will provide additional appropriate **recreational opportunities** such as birdwatching, hunting, hiking, and fishing. Direct production and enhanced survival of juvenile chinook salmon will benefit the **commercial fishing industry.**
- **educational opportunities** for local schools will be increased.

Other benefits of the proposed ecosystem restoration program:

- anadromous fish restoration efforts called for in the **Central Valley Project Improvement Act** will be facilitated by the proposed land acquisitions and protection of the floodplain. CVPLA supported the most recent major Cosumnes Preserve acquisition (Valensin Ranch).
- expanded winter habitat for waterfowl, provided by floodplain inundation, is an objective sought by the **North American Waterfowl Management Plan**, promoted by the Central Valley Habitat Joint Venture, and to be achieved through this proposal.
- converting marginal agricultural lands back to wetlands is an objective of the **USDA Wetland Reserve Program**.
- farmland protection promoted by the **USDA 1995 Farm Bill (Farmlands for the Future)** will be achieved through the purchase of agricultural easements.

Non-ecosystem objectives of CALFED which are supported by this program include:

- **water quality** (e.g., temperature, organic material, sediment filtering, etc.) is enhanced by protecting and restoring shaded riverine habitat along the river corridor in both the upper and lower floodplain.
- **water supply** will be increased by permitting flood waters to infiltrate an enlarged floodplain and recharge groundwater.
- expanding the Cosumnes River floodplain will result in greater floodwater storage and will **reduce pressure on downstream Delta levees** during storm events.

#### *d. Background and biological/technical justification*

The plan presented here proposes to expand an existing project, the multi-partner Cosumnes River Preserve. Current holdings within the Cosumnes Preserve total approximately 11,000 acres and represent a cumulative investment in land, management, planning, and scientific investigation of approximately \$30 million to date. Of this funding, approximately one fourth has been raised from private sources. The balance represents a mix of federal, state, local, and mitigation funding. The Nature Conservancy, the Bureau of Land Management, and other partners provide the approximately \$500,000 needed annually for management of the Preserve. Ongoing private fundraising by the Conservancy continues to generate substantial revenues for management and special projects, as well as for an endowment to support long-term management. This endowment currently stands at \$1 million.

Obtaining the requested funding will allow us to substantially complete the Preserve's holdings within the Cosumnes floodplain. Remaining key properties are not expected to be offered by willing sellers in the foreseeable future. Long-term benefits from the proposed round of land acquisitions will be particularly significant because controlling these properties will enable us to expand the river's floodway and undertake natural-process restoration on a much larger scale than has been possible so far. Acquiring the targeted properties will also allow us to create a habitat corridor from the Valensin Ranch to a point downstream from the Mokelumne-Cosumnes confluence and eventually extend it upstream to include the upper floodplain. The proposed mix of fee and easement acquisitions assures both maximum cooperation with the local community and the lowest practicable cost of implementing our program.

Extensive supporting documentation is available on the habitats, species, and hydrology of the Cosumnes River Preserve. A partial bibliography is included as Figure 1. Ongoing scientific research is summarized in Figure 2.

*e. Proposed scope of work*

- **Task One:** Complete the purchase of 2,915 acres in the Cosumnes River's lower floodplain. These lands are presently under option or require permanent financing. Key parcels include Shaw (598 acres), Whaley (287 acres), Denier (1,202 acres), Park (735 acres) and Bjelland (93 acres). The option agreements for these properties expire between November 1997 and January 1998, so completion of these acquisitions is of highest priority.
- **Task Two:** Conclude negotiations for additional targeted acquisitions, enter into option agreements, carry out required due diligence investigations, and close these acquisitions.
- **Task Three:** As lands are acquired, undertake initial restoration and stewardship activities, adaptive management monitoring, and longer-term research on the new properties.

Reports on the status of acquisition activities supported by this grant will be provided to CALFED on a quarterly basis, as specified by the RFP.

*f. Monitoring and data evaluation*

The Cosumnes River Preserve has extensive, well-established programs for monitoring species population trends, vegetation changes and indices of ecosystem health (see Figure 3). Much of the monitoring effort is supported by the Preserves extensive volunteer network. Many of these monitoring programs, such as bird monitoring, will be immediately extended to the newly acquired lands. Additionally, we will conduct baseline habitat mapping for each property acquired as part of the development of a conservation management plan (these funds requested for restoration and stewardship startup). The resulting maps will allow the Preserve staff to track restoration as a result of conservation management.

Future restoration of the properties such as would result from levee setbacks or tree planting projects (not part of this proposal) will require intensive monitoring. Figure 4 is an example of the types of monitoring that will be initiated at the time individual restoration projects are initiated

*g. Implementability*

The proposed program complies with existing laws and regulations. Immediate activities do not trigger permit requirements. Some longer-term benefits (such as levee setbacks or removal) will result from activities that will require permits and additional site-specific analysis.

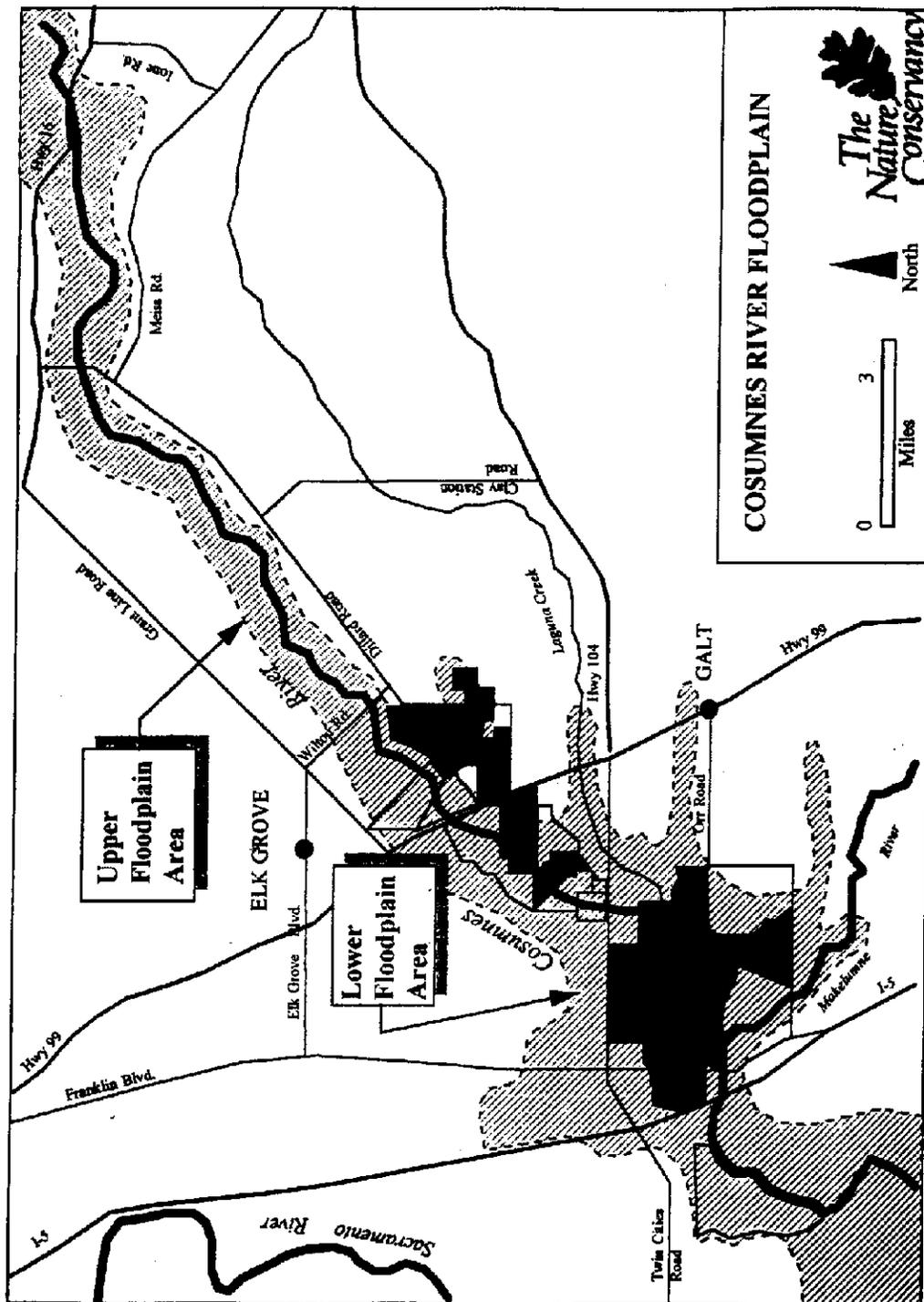
There are no known encumbrances or environmental compliance problems associated with the properties under option. It is The Nature Conservancy's standard practice, prior to closing on any acquisition, to assure that there is no contamination, pollution, or other condition on the subject property that would create a liability or unforeseen expense.

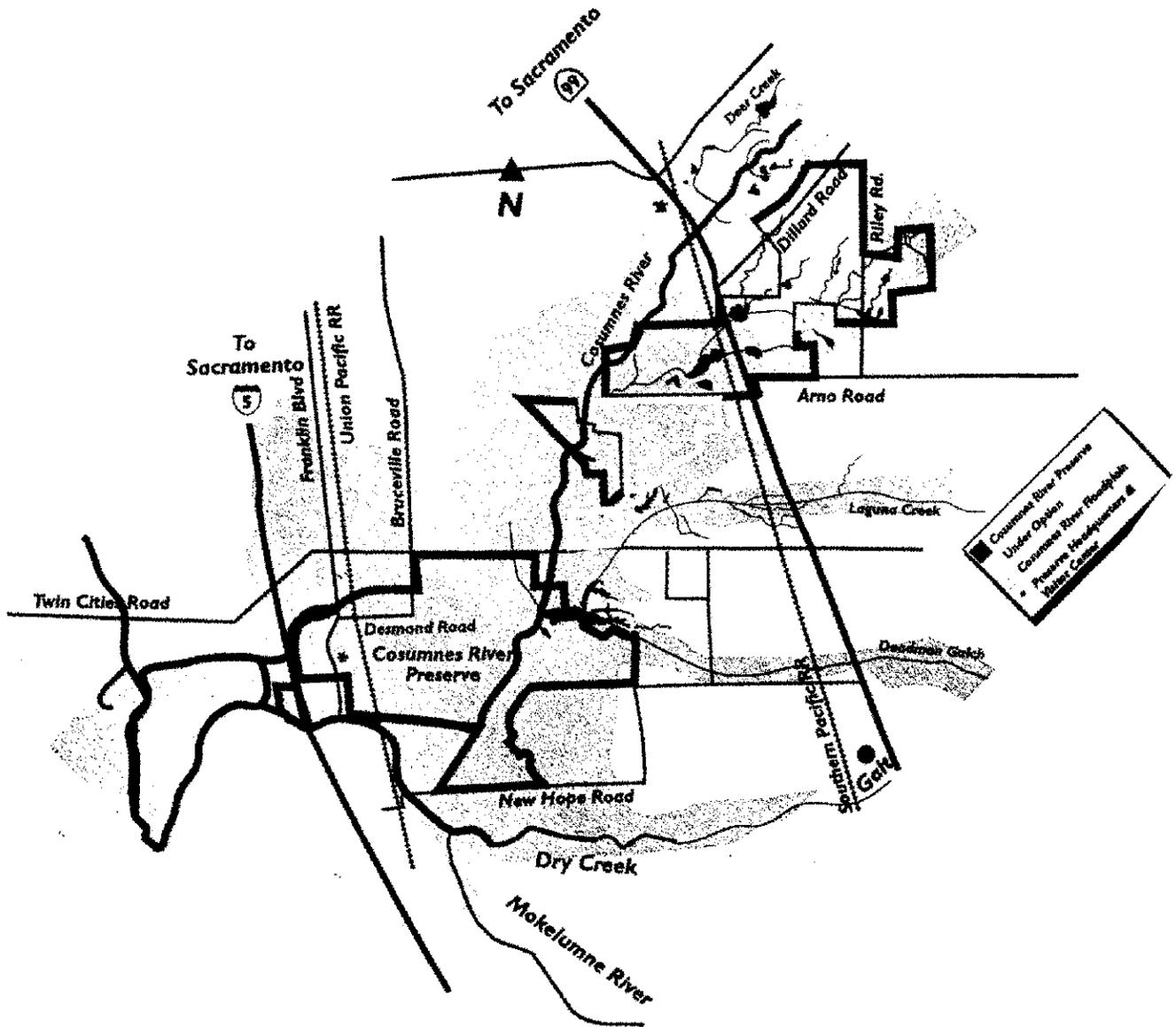
The benefits of this program will be durable over time and under most scenarios concerning possible changes in the climate.

The properties already in the Cosumnes River Preserve and those proposed here for addition to the Preserve contain extensive archaeological resources. To assure the protection of these resources, Preserve staff work closely with the California Archaeological Conservancy, the Sacramento County Historical Society, and the local Miwok community, many of whom are likely descendants of the native Americans who used these village and burial sites. These organizations and individuals strongly support the Preserve and our land acquisition program. Many of the associated individuals are directly involved as volunteers in stewardship of the Preserve's cultural resources.

The programs of the Cosumnes River Preserve have generated substantial public awareness of and support for the Preserve in the local communities of Galt and Elk Grove and in the greater Sacramento region, as evidenced by favorable treatment in the local press and ongoing support from locally-elected officials. The Preserve is supported by Sacramento County's General Plan, and the program proposed here will assist the county in implementing that plan.

The Nature Conservancy engages in property transactions only with willing sellers. All transactions proposed here are in that category.





## IV. Costs and Schedule to Implement Proposed Project

### a. Budget costs

TNC and WCB request the following:

1. To acquire and manage lands under option:	\$5,356,300
2. For Preserve additions under negotiation:	\$7,767,300
3. For acquisition of additional flood plain parcels:	\$7,416,400
4. For WCB staff expenses:	\$130,000
5. TOTAL:	\$20,670,000

Figure 5 contains budget detail.

We also anticipate funding from other sources of up to \$7,800,000. These other funds are not included in the total amount of this grant request.

**Land acquisition expenses** include direct salary and benefits for The Nature Conservancy staff to carry out the project as described in the Scope of Work. Service Contracts includes the costs of appraisals, toxics studies, easement documentation reports, surveys/mapping for the planned acquisitions. Overhead is calculated on salaries and benefits only, at a rate of 19.4 percent, The Nature Conservancy's federally-approved rate.

**Initial restoration and stewardship costs** include biological and cultural surveys, plan development, fencing, signage, necessary repair of infrastructure, including roads, and demolition of any dangerous structures. Habitat restoration needs will be assessed either by staff or under contract. Two alternative methods of estimating initial restoration and stewardship costs are used. For properties under option (category (a)) we carried out an inventory and prepared an estimate of property-specific requirements. For categories (b) and (c), we estimate an average cost.

**Long-term operations and management expenses** include patrolling to limit trespass and vandalism, biological monitoring, enforcement of restrictions (particularly for easements), administering farm and habitat restoration contracts, controlling invasive exotic plant and animal species, supervising visitor activities and general maintenance. Long term management funding will come from two primary sources: income generated from farming leases, and the annual yield of invested capital of a permanent endowment fund. Endowment calculations assume that properties leased for farming (but not grazing) will pay for themselves and that non-farmed habitat lands (which will not generate revenue) will require endowment support of management costs. This proposal requests endowment contributions equal to 30 percent of the purchase of habitat (non-farmed) properties; additional funds have been and will continue to be raised from other sources. We also expect that the Sacramento Local Conservation Corps (SLCC) program, if funded by CALFED under a separate proposal, will help meet management needs in a significant way, and that ongoing assistance from the SLCC (beyond the 3-year program for which they seek funding now) could play a significant role in long term operations.

*Note:* Land acquisitions have limited value if the owning agencies lack funding for appropriate management. Before we can implement our program, we need to have a proportional share of funding for each of the above activities, although it is not necessary

for all the funds to come from a single source. If CALFED and its allied funding sources are unable to fulfill our entire funding needs on this project, we will raise additional funds from other sources and, if necessary, scale down the project to match the available funds.

***b. Schedule milestones***

1. **Close escrow on optioned properties.** As funding becomes available, the four properties presently under option will be exercised in the fall of 1997, and escrow is scheduled to close at these times:
  - Bjelland: 12/97
  - Park: 12/97
  - Whaley: 3/98
  - Denier: 3/98
2. **Conclude negotiations and sign options on Block Grant Properties and Floodway Expansion Properties.** These negotiations are ongoing and are expected to continue throughout the next two years.
3. **Undertake initial restoration, stewardship, monitoring, and research activities.** Each of these activities will be initiated immediately upon close of escrow on each property acquired.

***c. Third-party impacts***

The activities proposed here have no anticipated negative third-party impacts. Any subsequent activities, such as levee removal or setback, will be subject to site-specific analysis, environmental review and permitting and will not proceed if there are negative third party impacts

## V. Applicant qualifications

The California Wildlife Conservation Board is the land acquisition arm of the Department of Fish and Game. The Board's professional staff has extensive experience in property negotiation and acquisition. The WCB is a key partner in many of California's major land conservation projects, including the Cosumnes River Preserve.

The Nature Conservancy is an international, private, non-profit membership organization. Its mission is to preserve plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. The Conservancy has more than 45 years of experience in identifying, protecting, and managing significant natural areas. Its strength and reputation are built on the organization's policy and practice of applying the best available conservation science and of building partnerships with local communities, private organizations, and public agencies to achieve mutual conservation goals.

The Nature Conservancy of California uses a wide variety of tools to forge solutions to conservation issues. We employ the following four methods most frequently: land acquisition; land management and restoration; land-use planning and conflict resolution; and community education and outreach.

Several of the Conservancy's landmark conservation projects have focused on riparian ecosystems. Conservation efforts aimed at these complex natural communities must include maintaining and restoring the natural processes that are essential to the long-term health of the hydrological system. In addition, The Nature Conservancy strives to balance the protection and restoration of natural communities with compatible human uses.

### The Nature Conservancy: A Scorecard (as of December 1996)

<i>Acres Protected in the U.S. since 1953:</i>	10,088,000
<i>Acres Protected outside the U.S. with TNC Assistance:</i>	44,000,000
<i>Acres Managed:</i> (Acres the Conservancy owns or has under conservation easement)	1,500,000
<i>Membership:</i>	900,704
<i>Corporate Associates:</i>	1,500
<i>Preserves Under Conservancy Management:</i> (each preserve may be composed of a number of land conservation projects owned in fee or protected by conservation easements)	1,500
<i>Natural Heritage Inventory Programs and Conservation Data Centers:</i>	86

## **VI. Compliance with standard terms and conditions**

The applicants acknowledge the requirement of the Standard Clauses for service and consultant service contracts for \$5,000 and over with nonpublic entities (Item 2), as described in the Terms and Conditions of the 1997 Category III Request for Proposal.

The Nondiscrimination Compliance Statement form is attached, as required under the Terms and Conditions of the 1997 Category III Request for Proposal.

## NONDISCRIMINATION COMPLIANCE STATEMENT

THE NATURE CONSERVANCY, 201 Mission St., 4th Floor, San Francisco, CA 94105

COMPANY NAME

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

*I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.*

Steve McCormick

OFFICIAL'S NAME

DATE EXECUTED

7/24/97

PROSPECTIVE CONTRACTOR'S SIGNATURE

Regional Director, Vice President

PROSPECTIVE CONTRACTOR'S TITLE

The Nature Conservancy

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

EXECUTED IN THE COUNTY OF  
San Francisco

**Figure 1**  
**Bibliography**  
**Cosumnes River Project-Related Documents**

INTERNAL PLANNING DOCUMENTS

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TNC, 1996. Cosumnes River Watershed Project, Sacramento County Vernal Pool Protection Strategy. The Nature Conservancy of California, San Francisco, California.

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## SCIENCE

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TNC, 1996. A Riparian Valley Oak Ecosystem: Seasonal Flooding effects on Key Species Establishment and Succession in the Cosumnes River Preserve, California. 1995 progress report. 12 pages.

**Figure 2**  
**Cosumnes River Preserve:**  
**Recent (1994-1997) Science and Research Projects**

Effects of flooding on valley oak forest, Dr. Jim Richards, U.C. Davis (\$40,000, TNC ecosystem research grant program, 1995-97)

Effects of flooding on root dynamics of valley oak forest species, Dr. Caroline Bledsoe, U.C. Davis (\$40,000, TNC ecosystem research grant program, 1995-97)

Old field succession in the Cosumnes River floodplain, Dr. Marcel Rejmanek, U. C. Davis (\$40,000, TNC ecosystem research grant program, 1995-97)

Songbird breeding success in Cosumnes River floodplain habitat, Dr. Geof Geupel, Point Reyes Bird Observatory (1995-97)

Opportunities for Restoring a Natural Flood Regime on the Cosumnes River Floodplain, Philip Williams and Associates (TNC contract, \$66,000, 1997)

Middle Cosumnes River Watershed: River Corridor and Vernal Pool / Grassland Study; Cosumnes River Vernal Pool Conservation Plan, Jeff Hart and Associates and TNC staff (TNC contract, \$60,000, 1995)

Cosumnes River watershed blue oak habitat investigation and regeneration of blue oak study, Jeff Hart and Associates (TNC contract, \$45,000, 1995)

Preliminary fisheries survey of lower Cosumnes River, Amy Harris (TNC contract, \$10,000, 1995)

Inventory of fish and herptiles, Cosumnes River Watershed, Kathy Hill, DFG (TNC augmentation of an EPA 319 grant, \$10,000, 1994)

Design of a Cosumnes River water quality monitoring system; Survey of aquatic macro-invertebrates, Jim Herrington, DFG (TNC contract, \$9,000, 1995)

Planning Scale GIS of the Cosumnes River Watershed, Tim Dwane, UC Berkeley (TNC contract, \$10,000, 1994)

Survey of giant garter snakes on the Cosumnes River Preserve  
Glen Wiley, USBS (\$9,000 in TNC funding, 1995-1997)

Computer hydrologic flow model for the Cosumnes River Watershed, Bruce McGurk, USFS Forest and Range Experiment Station (\$80,000, Bechtel Grant, 1996)

Restoration of Badger Creek, Valensin Ranch, Steve Burton, Ducks Unlimited (Packard Foundation Grant, \$87,000, 1997)

Monitoring of wildlife recovery on a restored reach of Badger Creek, Sacramento County, Dr. John Eadie, UC Davis and California Waterfowl Association (Packard Foundation Grant, \$87,000, 1997)

Comparisons of arthropod diversity in soil samples from a mature riparian valley oak forest and a restoration site at the Cosumnes River Preserve, Dr. Alice Hunter, Univ. of the Pacific (ongoing)

Survey of nocturnal Lepidoptera at the Cosumnes River Preserve, Richard Hunter, Pacific Coast Entomology Society (ongoing)

Survey of Cynipid gall wasps the Cosumnes River Preserve, Kathy Shick, U.C. Davis 1991 -1997 (ongoing)

Monitoring of feral honey bees before the arrival of Africanized bees, Dr. Robin Thorpe, U.C. Davis Entomology Dept. (ongoing)

Monitoring of solitary bees at the Cosumnes River Preserve. Dr. Robin Thorpe, U.C. Davis Entomology Dept. (ongoing)

**Figure 3**  
**Cosumnes River Preserve**  
**Monitoring Activities that Support Adaptive Management**

SPECIES / PARAMETER	TYPE	FREQUENCY	CONDUCTED BY	LOCATION
Waterfowl	Ground and Aerial	Monthly in winter	DU and CRP Staff	CRP wetland units/ farm
Sandhill Cranes	Counts	Monthly in Winter	DU and CRP Staff	CRP wetland units/ farm
Shore birds	Counts	Monthly in winter	DU and CRP Staff	CRP wetland units/farm
All birds	Counts along transect	Monthly all year	Stockton Audubon	Willow slough trail
Wetland unit vegetation	Photo points	Quarterly	CRP volunteers	CRP wetland units/farm
Restoration plots (veg.)	Counts / tree height	Annual 3yrs. then 5 yrs.	CRP staff	All restoration sites
Invasive / rare plants	Field search	Annual in summer	CRP staff / volunteers	CRP
Butterflies	Transect count	Annual in spring	CRP staff / volunteers	Tall Forest transect
Acorn Production	Field search	Annual in summer	CRP staff/ volunteers	CRP
Songbird nesting success	mist net, point counts	Each 2 weeks	Point Reyes Bird Obs.	Tall forest / Valensin
Veg. succession	transects, quadrants	Annual	U.C. Davis	Tall forest / Valensin
Aquatic Macro Inverts.	Kick samples at stations	Annual last 3 years	D.F.G. water lab	12 points in Watershed
Domestic native and solitary bees	counts /collections	Monthly	U.C. Entomology	Tall forest
Wildlife	Direct counts	Monthly	U.C. Davis	Badger Creek

**Figure 4**  
**Monitoring Restoration of Acquired Properties**

**I. Permanent Elimination of Certain Ecosystem Stressors**

	Regeneration of Riparian Corridors	Natural Regeneration of Native Habitats through Inundation	Restoration of Channel Form
Ecological Indicators	Total cover of riparian vegetation	Total floodable area	Channel -section profiles
Monitoring Protocol	Aerial photo digitization/interpretation	Aerial photo digitization/interpretation	Transit measurements
Plans for evaluating selected restoration methodology against alternatives	Comparison to conditions at outset of project (baseline). Comparison to local unprotected areas.	Comparison conditions at outset of project (baseline).	Comparison to conditions at outset of project (baseline).
Justification of proposed monitoring methodology	More cost-efficient than ground sampling.	More cost-efficient than ground sampling.	More cost-efficient than ground sampling.

**II. Restoration and Protection of Priority Habitats**

Ecological Indicators	Number of acres protected/restored.
Monitoring Protocol	Aerial photo digitization/interpretation
Plans for evaluating selected restoration methodology cross against alternatives	Comparison to conditions at outset of project (baseline).
Justification of proposed monitoring methodology	More cost-efficient than ground sampling.

**III. Benefits to Priority and Other Important Species**

	Priority Fish	Migratory Birds	Resident Birds	Giant Garter Snake
Ecological Indicators	Direct counts	Direct counts	Direct counts	Trap counts.
Monitoring Protocol	Work with DFG to extend delta monitoring.	Expand Preserve's annual surveys onto new lands.	Expand Preserve's annual surveys onto new lands.	Expand NBS's annual surveys onto new lands.
Plans for evaluating selected restoration methodology against alternatives	Evaluation of population trends.	Comparison to conditions at outset of project (baseline). Comparison to local unprotected areas.	Comparison to conditions at outset of project (baseline). Comparison to local unprotected areas.	Comparison to conditions at outset of project (baseline).
Justification of proposed monitoring methodology	Cooperative effort with agencies would be most cost effective.	Data will be most comparable with existing database.	Data will be most comparable with existing database.	Data will be most comparable with existing database.



**2. BLOCK GRANT to support acquisition of Preserve additions under negotiation**

Funds are requested for a block grant to provide for acquisition of properties not yet under option, but which are foreseen to be available for purchase in the near future. (Additional private and mitigation funding will continue to be sought and, where obtained, will be used for additional land acquisition.) Land acquisition includes the purchase of either fee simple or conservation easements. Fee simple acquisition prices have ranged between \$2200 to \$3200 or more per acre, averaging \$2500/ac. Easements are less expensive and customized to address protection of specific values such as farming-compatible land uses, while prohibiting vineyards and orchards. Typically, easements are valued at \$800 to \$1000 per acre (averaging \$900/ac). We expect 10 easement and 4 fee simple transactions to be available for acquisition.

Funding requested from CALFED would be expended generally as follows:

<u>Acres</u>	<u>Cost/acre</u>	<u>Total Cost</u>
2500 (easement)	\$900/ac	\$2,250,000
1500 (fee simple)	\$2500/ac	\$3,750,000
		\$6,000,000

	<u>Other Sources</u>	<u>CALFED</u>	<u>TOTAL</u>
CAPITAL	\$0	\$6,000,000	\$ 6,000,000
<u>EXPENSES</u>	<u>\$0</u>	<u>\$1,767,300</u>	<u>\$ 1,767,300</u>
Total:	\$0	\$5,356,300	\$ 7,767,300

**GRANT REQUEST: \$7,767,300**

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	Overhead Labor (General, admin and fee)	Service Contracts	Material and Acquisition Contracts	Miscellaneous and other Direct Costs	Total Cost
Land Acquisition	6,289	279,263	54,177	109,000	6,000,000		6,442,450
Start-up Restoration & Stewardship	910	25,000	4,850	320,000			349,850
O&M Funds						975,000	975,000
<b>TOTALS</b>	<b>7,199</b>	<b>304,263</b>	<b>59,027</b>	<b>429,000</b>	<b>6,000,000</b>	<b>975,000</b>	<b>7,767,300</b>

Figure 5 - Page 2

### 3. FLOODWAY EXPANSION BLOCK GRANT

Funds are requested for continuation of Cosumnes River floodplain restoration and non-traditional flood control projects. We are also pursuing USDA Wetland Reserve Program (WRP) funds and floodway easement funds available through the Natural Resources Conservation Service. Both easement programs cap the value of the easement at \$2000 per acre and require a match of \$500/acre (25% of total cost). Funding requested from Category III will allow us to acquire 100% of such easements or fee simple purchase in situations where neither WRP or emergency floodway easement funding is available. While our focus in developing this proposal element has been on the upper floodplain (above U.S. Highway 99), we intend funds also to be available on an opportunity basis to downstream properties offering attractive habitat restoration and/or floodway expansion opportunities.

Funding requested from CALFED would be expended generally as follows:

Acres	Cost/acre	Total Cost
2000 (easement)	\$500/ac	\$1,000,000
2000 (fee simple)	\$2500/ac	\$5,000,000

Funding distribution:

	NRCS	CALFED	TOTAL
CAPITAL	\$3,000,000	\$6,000,000	\$ 9,000,000
EXPENSES	\$0	\$1,416,400	\$ 1,416,400
<b>Total:</b>	<b>\$3,000,000</b>	<b>\$7,416,400</b>	<b>\$10,416,400</b>

**GRANT REQUEST: \$7,416,400**

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	Overhead Labor (General, admin and fee)	Service Contracts	Material and Acquisition Contracts	Miscellaneous and other Direct Costs	Total Cost
Land Acquisition	4,190	186,300	36,150	94,000	6,000,000		6,316,300
Start-up Restoration & Stewardship	910	25,000	4,850	320,000			349,850
O&M Funds						750,000	750,000
<b>TOTALS</b>	<b>5,100</b>	<b>211,300</b>	<b>41,000</b>	<b>414,000</b>	<b>6,000,000</b>	<b>750,000</b>	<b>7,416,400</b>

Figure 5 - Page 3

#### 4. WCB SHARE OF EXPENSES

Because title for much of the acquired land will be recorded by the Wildlife Conservation Board, funds have been budgeted to support WCB staff time for transfer of title.

GRANT REQUEST: \$130,000,000

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	Overhead Labor (General, admin and fee)	Service Contracts	Material and Acquisition Contracts	Miscellaneous and other Direct Costs	Total Cost
Acquisition: Optioned Property		18,800					18,800
Acquisition: Block Grant		66,750					66,750
Acquisition: Floodway Expansion		44,450					44,450
<b>TOTALS</b>		<b>130,000</b>					<b>130,000</b>



July 23, 1997

Mr. Lester Snow  
CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

Dear Mr. Snow:

The purpose of this letter is to urge your strongest consideration for the proposals submitted by several non-profit organizations and government agencies to expand the Cosumnes River Preserve and for management, visitor-serving, and restoration projects on the Preserve.

As the community closest to the Preserve, Galt benefits directly from the activities of the Preserve. These benefits include opportunities for schoolchildren and teachers, for recreation, and for farmland and open space preservation. Galt also benefits indirectly from the Preserve, since people visiting the Preserve are likely to use the restaurants and hotels in Galt and purchase any needed retail items in Galt.

As a community at the gateway to the Delta, we are excited about your programs and their long term potential for establishing linkages involving education and business activities in Galt.

Sincerely,

Christina H. De La Cruz  
Mayor, City of Galt

CHDLC/ac

c: Galt City Council  
Jerry L. Glenn, Interim City Manager

380 Civic Drive · Galt, California 95632  
(209) 745-9153 · City Clerk's Office  
Fax (209) 745-3313

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# COSUMNES ARCHAEOLOGY WORKING GROUP

July 23, 1997

Mr. Lester Snow  
CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

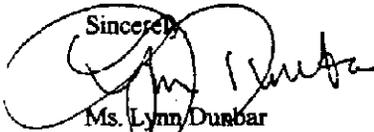
Dear Mr. Snow:

The purpose of this letter is to indicate our support for the property acquisition proposal submitted to your organization by The Nature Conservancy for expansion of the Cosumnes River Preserve. Some of the lands proposed for acquisition have a high cultural resource and archaeological significance, as do other lands currently within the Cosumnes Preserve. Not only is the landscape inherently valuable to the Indian and archaeological communities, but the Preserve offers a rare, almost unique, opportunity for preservation and interpretation of these resources within an authentic natural context.

The Cosumnes Archaeology Working Group (CAWG) was formed in large part in response to the opportunity posed by the creation and expansion of the Cosumnes River Preserve. Both the Native American community and The Nature Conservancy have been active participants in CAWG. It is CAWG's objective to work with The Nature Conservancy and the other relevant organizations to assure that these resources are managed to protect their unique cultural value and for maximum public benefit over the long term. We are confident that The Nature Conservancy's planning for habitat restoration on the Preserve will be coordinated with CAWG and the Indian community and will draw upon our expert resources as needed.

We urge your support for Preserve expansion.

Sincerely,



Ms. Lynn Dunbar  
Western Regional Director  
Archaeological Conservancy



Mr. Ken McKean  
Chair  
Cosumnes River Indian Association

The  
Nature  
Conservancy

Northern California Area Office  
1330 21st Street, Suite 103  
Sacramento, California 95814  
TEL 916 449-2850  
FAX 916 448-3469

F1-307

California Regional Office  
201 Mission Street  
San Francisco, California 94105  
TEL 415 777-0487  
FAX 415 777-0224

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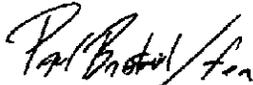
Ms. Kate Hansel  
July 28, 1997  
Page Two

The four demonstration projects proposed would provide needed information on the feasibility of habitat enhancements for priority aquatic species. The key objectives of the four demonstration projects are:

- restore and evaluate unique steelhead and splittail habitat;
- restore and protect shaded riverine aquatic habitat and wetland-slough complex habitat;
- promote establishment of vegetation in a highly scoured zone; and
- demonstration of an alternative bank protection method.

The Sacramento Area Water Forum, representing 46 stakeholders, the City/County Office of Metropolitan Water Planning, and the LAR Task Force which is comprised of 8 Community Groups, 6 Environmental Interests, 2 Recreation Interests, 8 Flood Control Agencies, and 3 Resource Agencies (*see attached Statement of Support*). This demonstration project is consistent with the objectives of CALFED and the goals of other ongoing projects. The AFRP recommends developing a riparian corridor management plan. The Lower American River Technical Team endorses restoration of wetland-slough complexes and riparian habitats along levees in the lower portion of the LAR, and management and restoration of large woody debris, especially in the upper reaches of the LAR.

Sincerely,

  
Timothy Washburn  
Agency Counsel