# **Delta Island Restoration Project**

# **Project Information**

#### 1. Proposal Title:

Delta Island Restoration Project

### 2. Proposal applicants:

Waldo Holt, Old River Committee, Inc.
David Laux, Old River Committee, Inc.
Ron Leachman, Old River Committee, Inc.
Breann Northcutt, Old River Committee, Inc.
Terry Ronneberg, Old River Committee, Inc.
Mary Souza, Old River Committee, Inc.
Henry Tosta, Old River Committee, Inc.
Mary Walker, Old River Committee, Inc.
John Yonan, Old River Committee, Inc.
Kathy Laux, Old River Committee, Inc.

### 3. Corresponding Contact Person:

Kathy Laux Old River Committee, Inc P.O. Box 1181 Tracy, CA 95378 209 833-6153 dklaux@pacbell.net

## 4. Project Keywords:

Habitat Restoration, Riparian Neotropical migratory birds Wildlife-friendly Agriculture

#### 5. Type of project:

Planning

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:

Riparian Habitat

# 8. Type of applicant:

Private non-profit

#### 9. Location - GIS coordinates:

Latitude: 37.798

Longitude: -121.427

Datum:

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

An island property located at the juncture of Old River, Tom Paine Slough and Paradise Cut, about one mile north of Tracy. The parcel is approximately 146 acres in size.

#### 10. Location - Ecozone:

1.3 South Delta

### 11. Location - County:

San Joaquin

## 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:

17

#### 15. Location:

California State Senate District Number: 12

California Assembly District Number: 26

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

17. Requested Fund
--------------------

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: 2% \*\*

Total Requested Funds: \$2,419,900.00

b) Do you have cost share partners <u>already identified</u>?

No

c) Do you have potential cost share partners?

No

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

No

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

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

No

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

No

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?

No

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:

Percentage of overhead is based on total costs including acquisition. This budget does not reflect the donated time and expertise of our board members or our volunteer consultants.

# **Environmental Compliance Checklist**

# **Delta Island Restoration Project**

#### 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.

As this proposal is only for acquisition of property (without change of use) and planning it does not trigger an EIR/EIS. Once a full plan is formulated, we will seek second phase funding to prepare and file the appropriate documentation.

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

CEQA Lead Agency: None

NEPA Lead Agency (or co-lead:) None

NEPA Co-Lead Agency (if applicable): None

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

#### **CEOA**

- -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

#### 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:

# 6. Comments.

# **Land Use Checklist**

# **Delta Island Restoration Project**

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: 146
Easement: 0
Total: 146

b) Will existing water rights be acquired?

Yes

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

No

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?

No

If you answered no to #3, explain what type of actions are involved in the proposal (i.e., research only, planning only).

This phase is acquisition and planning only.

#### 4. Comments.

The Old River Committee, Inc. is a [501(c)3] non-profit entity. It is out intention to hold title under a subsidiary 501(c)2. As such, we shall negotiate with farmers to continue to farm the land with alternative environmental and wildlife friendly agricultural processes.

# **Conflict of Interest Checklist**

# **Delta Island Restoration Project**

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):

Waldo Holt, Old River Committee, Inc.
David Laux, Old River Committee, Inc.
Ron Leachman, Old River Committee, Inc.
Breann Northcutt, Old River Committee, Inc.
Terry Ronneberg, Old River Committee, Inc.
Mary Souza, Old River Committee, Inc.
Henry Tosta, Old River Committee, Inc.
Mary Walker, Old River Committee, Inc.
John Yonan, Old River Committee, Inc.
Kathy Laux, Old River Committee, Inc.

#### **Subcontractor(s):**

Are specific subcontractors identified in this proposal? Yes

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

Patrick Miller

Stephen
Sinnock

Kjeldsen, Sinnock & Neudeck, Inc.

Habitat Assessment and Restoration Team, Inc.

E. Lee
Wildlife Enhancement Specialist--Department of Wildlife, Fish, and Conservation
Fitzhugh

Biology--University of California

#### **Helped with proposal development:**

Are there persons who helped with proposal development?
No
Comments:

# **Budget Summary**

# **Delta Island Restoration Project**

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	(per	Benefits (per year)	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
1	Purchase						8500.00		2,100,000.00	2108500.0		2108500.00
2a	Pre-plan AssessmentKSN						100000.00			100000.0		100000.00
2b	Pre-plan Assessment2M						22000.00			22000.0		22000.00
2c	Pre-plan AssessmentH.A.R.T.						45000.00			45000.0		45000.00
2d	Pre-planOld Rivr Committee, Inc.				1500.00	20000.000			5000.00	26500.0	600.00	27100.00
3a	Restoration PlanH.A.R.T.						55000.00			55000.0		55000.00
3b	interpretive Trail Plan2M						30000.00			30000.0		30000.00
3c	PlanOld River Committee. Inc.				1700.00	1000.00			8500.00	11200.0	1000.00	12200.00
4a	Community Involement and OUtreach2M						2300.00			2300.0		2300.00
4b	Community Involement and OUtreachOld River Committee, Inc.								3500.00	3500.0		3500.00
5a	Final PresentaionOld River Committee, Inc.				300.00	2300.00			500.00	3100.0	200.00	3300.00
5b	Final Presentaion2M						11000.00			11000.0		11000.00
		0	0.00	0.00	3500.00	23300.00	273800.00	0.00	2117500.00	2418100.00	1800.00	2419900.00

Year 2												
Task No.	i iask i			Benefits (per year)	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Year 3												
Task No.	LISSK			Benefits (per year)	Travel	Supplies & Expendables	Services or Consultants	Equipment	Other Direct Costs	Total Direct Costs	Indirect Costs	Total Cost
		0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Comments.

# **Budget Justification**

# **Delta Island Restoration Project**

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

Not billed to this project

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

Not billed to this project

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

Not billed to this project

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

\$3500. Travel expense is for trips to Sacramento, Stockton, Walnut Grove Davis and Berkely to consult with sub-contractors, CALFED staff and to do research.

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

Office \$2400.00 -- Computing \$600.00 -- Field Supplies \$5300.00 -- Alfalfa seed and ground replanting \$15,000.00

**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.

Tuttle, Von Konenyberg -- legal fees associated with Land Trust 23 hours @ \$350.00 per hour. 2M Landscape -- 230 hours @ \$123.00 per hour. Staff at 2M -- 350 hours @ \$80.00 per hour. HART -- \$90 per hour. KSN Not broken out

**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.

none

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

Inspection of work in progress --- \$2500.00 Final report preparation -- \$2500.00 Public Presentations to Community -- \$250.00

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

Accounting -- \$ 3500.00 Public Meeting for input -- \$2500.00 Quarterly newsletter to public officials, supporters and local property owners -- \$1200.00 Insurance -- \$3000.00

**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.

Phones \$1800

# **Executive Summary**

# **Delta Island Restoration Project**

The Old River Committee, Inc. a local, community based non-profit, (ORC) requests \$2,419,000.00 from the CALFED ERP and the CVPIA for assistance in the acquisition of land in the South Delta region. We intend to develop a multi-use project composed of: Participation in the development of a wildlife friendly alfalfa growing protocol based on the non-use of diazonin and clorpyrifos, A restoration plan for some of the last Great Valley Riparian Oak Forest in the Central Valley using biotechnical methods and constructs, · A plan for an interpretive trail to give the public access to the rich bio-diversity of the South delta and impart first hand knowledge of agriculture as it is practiced today. The proposed project supports the objectives of the CALFED-ERP by focusing on protecting and restoring riparian habitat for at-risk native species, including the Swainson's hawk and the western pond turtle (Strategic Goal DR#1 and #4), providing broad ecosystem benefits like eradicating non-native invasive species (Strategic Goal DR#5), and supporting wildlife-friendly farming by limiting pesticide use (Strategic Goal DR#3). Per the SDIP objectives, we believe that the strategic location will allow for greater flexibility in responding to changing hydraulic conditions in the Delta channels. The area is subject to episodic flooding and we would expect it to continue functioning as part of the floodway during times of high water. This project would extend an existent habitat corridor funded by non-CALFED sources, which might decrease the quantity of fish that enter Clifton Court Forebay. And lastly, the shade created by restored riparian oak forest would aid in decreasing water temperatures which would help in meeting dissolved oxygen objectives. Land acquisition under this proposal will be purchased at an appraised value from willing sellers. ORC is currently negotiating with the willing sellers.

# **Proposal**

# Old River Committee, Inc.

# **Delta Island Restoration Project**

Waldo Holt, Old River Committee, Inc.
David Laux, Old River Committee, Inc.
Ron Leachman, Old River Committee, Inc.
Breann Northcutt, Old River Committee, Inc.
Terry Ronneberg, Old River Committee, Inc.
Mary Souza, Old River Committee, Inc.
Henry Tosta, Old River Committee, Inc.
Mary Walker, Old River Committee, Inc.
John Yonan, Old River Committee, Inc.
Kathy Laux, Old River Committee, Inc.

# **Delta Island Restoration Project**

Old River Committee, Inc Submitted to the ERP October, 2001

**Project Description: Project Goals and Scope of Work** 

#### Location

The project location is an island of 138 acres at the confluence of Old River, Paradise Cut and Tom Paine Slough in San Joaquin County. It is in the South Delta, Ecological Management Zone 1.3. The coordinates are 037° 47′ 57.51″ N, 121° 25′ 39.29″ W. on the USGS Topographical Map Ref. Code 37121-G4-TF-024 for Union Island.

Figures 1 and 2 show the general and detailed location of the property

#### **Problem**

This project was designed to address a number of problems in the South Delta.

- 1. Habitat for listed and/or endangered species such as the Swainson's hawk (*Buteo swainsoni*) is disappearing.
  - "Preferred foraging habitats for Swainson's hawks include: alfalfa; fallow fields; beet, tomato, and other low growing crops; dry-land and irrigated pasture;"
     (California Department of Fish and Game, Draft Non-regulatory Guidelines for Determining Appropriate Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California. February 6, 1994)
  - "Composition of the croplands adjacent to nesting areas appear to influence whether a pair of Swainson's hawk will attempt to nest or is successful in fledging young. During this study there was a strong tendency for Swainson's hawks in the Central Valley to nest in association with alfalfa, hay or wheat." (Bloom, P.H. 1980 The Status of the Swainson's Hawk in California, 1979, Mgmt. Branch, Nongame Wildl. Invest, Job II-8.0 Calif. Dep. Fish Game).
  - "Swainson's Hawks in the Central Valley appear to exploit an abundance of prey made available due to the affects of certain farming practices, e.g. harvesting, disking, mowing, flood irrigation, and agricultural burning." (Estep, J.A. 1989 Biology movements and habitat relationships of the Swainson's Hawk in the Central Valley of California, 1986-87. Calif. Dep. Fish Game, Nongame Bird and Mammal Sec. Rep.)

Viticulture has replaced open row crop ground on many of the Delta islands such as Roberts Tract. The tomato packing plant in Tracy has closed so that fewer tomatoes are being planted. The sugar beet plant in Tracy has closed so sugar beets are no longer being grown. And while alfalfa is continuing to be planted, the Tracy area grows some of the highest test hay in the valley, dairies are relocating to Turlock and other less urbanized locales.

San Joaquin County in April of this year (2001) commissioned a study of agriculture in the Old River area. One of the five key findings was "The current economic outlook for agriculture in this area is slim to no profit margins due to rising costs of production, low commodity prices, relatively high land prices compared to other production areas in California, and poor economies of scale."

The study's specific conclusions about alfalfa profitability are summarized in the chart below. (House Agricultural Consultants,2001,Report on Agriculture, Old River/NW Tracy Specific Plan)

Table 4 below examines the profitability of three common project area crops. The table uses San Joaquin County average prices and yields for the years 1995-1999, and subtracts from them a sample cost of production as published by the University of California Cooperative Extension in the years 1998-2000

Table 4: Profitability of Selected Crops at County Average Prices and Yields											
Crop	County Average Yield T/A	County Average Price T/A	Value/Acr e	Production Cost/Acre	Net Income /Acre						
Alfalfa Hay	6.56	\$118	\$774	\$935	-\$161						
Dry Beans	1.07	\$699	\$748	\$650	\$98						
Safflow er	1.46	\$320	\$467	\$453	\$14						

Table 4 demonstrates a net loss for alfalfa at 5 year County average yields and prices. Dry beans fare better with a \$98 per acre profit, and safflower indicates a near breakeven situation. In this analysis of alfalfa, growers must produce well above average (approx 20% above average yield) to break even, or must get higher than average prices.

- 2. The reverse flows caused by the permanent barriers will decrease circulation and exacerbate water quality problems in some of the channels. Two years ago, in the course of it's ongoing study of water in the Delta, DeltaKeepers found a 100% mortality of the Zooplankton, Ceridaphnia, due to the presence of diazinon and chlorpyrifos in the water in Old River. These are pesticides that are perceived as a necessary part of the growth of alfalfa.
- 3. Tracy is the seventeenth fastest growing area in the state. The population in the South Delta has tripled in the last ten years. This has further decreased habitat. And, the young, urban families moving here from the bay area have no knowledge of the Delta or it's rich bio-diversity.
- 4. There is an island that is ringed by the remnants of the Great Valley Oak Riparian Forest. (Smith,F., 1977, A Short Review of the Riparian Forests in Ca., their ecology and conservation, Institute of Ecology, Pub. 15, U.C. Davis) This island has been recommended to be purchased and restored for almost forty years. The family that has owned it for the last sixty years is now willing to sell. See quote below.
  - "Old River meanders approximately 11 miles through the southern and western portions of the South Delta Study Area. Although the riverbanks have been cleared of vegetation in places, there is a 3-mile stretch of river, which is bordered by fragments of the Great Valley Oak Riparian Forest. Few examples of this vegetation community remain in the State of California. Historically, an estimated 921,000 acres of riparian forest existed in the Great Valley and only 2.5 percent, or about 1325 acres, of mature riparian forest remains today." (South Delta Recreation Concepts for the South Delta Water Management Project, September 1992)

# **Goals and Objectives**

- 1. Purchase of the island with the remnants of the Great Valley Riparian Oak Forest.
- 2. Increase habitat for endangered and listed species, aquatic, avian, and terrestial, through a well thought out restoration plan using biotechnical methods with over plantings of native plants.
- 3. Improve water quality by participating in the developing of protocols for, and then implementing, a habitat friendly agricultural program for the growth of alfalfa without the use of diazinon and chlorpyrifos.
- 4. Develop a plan for public access and an interpretive trail around the island.

# **Conceptual Model and Selection of Prototype**

Our model is based on the many studies documenting the high value of alfalfa as forage for the voles and ground squirrels that constitute the primary diet of Swainson's hawk.

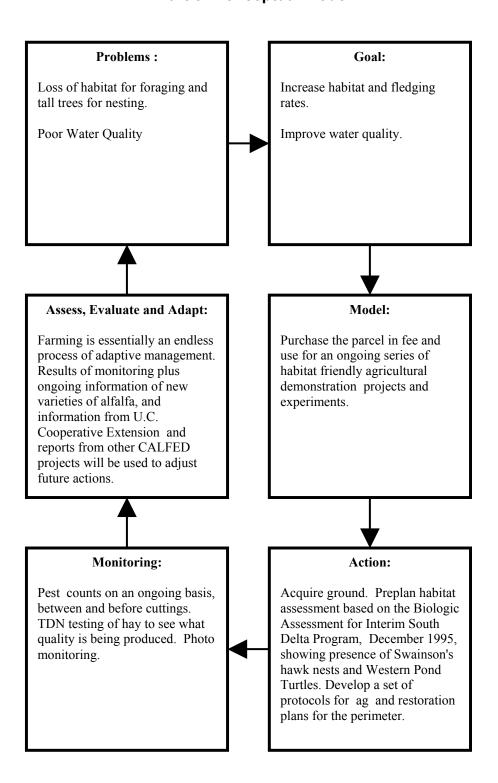
- Babcock,K.W., 1993. Home range and habitat analysis of Swainson's hawk in West Sac., by Michael Brandeman;
- Bloom.P.H., 1980, The Status of the Swainson's hawk in Ca.,1979, Widl. Mgmt. Branch, Nongame Widl., Job II-8.0 Ca. Dep. Fish Game;
- Estep, J.A., 1989, Biology Movements and habitat relationships of the Swainson's hawk in the Central Valley, 1986-87, Ca. Dep. Fish Game, Nongame bird and mammal Sec. Rep.;
- Ca. Dept. Fish and Game, Draft Nonregulatory Guidelines for determining appropriate Mitigation for Impacts to Swainson's hawks in the Central Valley, 1994)

We believe that this has been sufficiently researched to support a demonstration project.

The 140 acre parcel that we wish to purchase is an island at the confluence of Tom Paine Slough, Old River, and Paradise Cut. The perimeter is rimmed with the remnants of a Great Valley Riparian Oak Forest. The acquisition of this parcel would be in keeping with the programmatic target E011608, "Protect existing riparian woodlands..." The interior is planted to alfalfa. The island has riparian water rights and is irrigated by a three-phase pump and gravity flow through the fields. There are no levees. It is not in a reclamation district; nor is it in an irrigation district.

We propose that the restoration of the riparian and riverine habitats, and the shade from an expanded Valley Oak (Querus lobata) forest, will help to maintain cooler water temperatures in an area of poor circulation. (This is per the CEQA findings of the CALFED bay delta program, Section 5.3 Adverse impacts of water quality; Impact 6 Increased water temperatures and resultant decreased DO; Mitigation Strategy 4.) We propose that this may help with the low dissolved oxygen in this area. We further propose that the implementation of a studied regimen of habitat friendly agricultural practices such as not using diazinon or chlorpyrifos will improve water quality. We believe that this island would be a unique environment for people to learn about both agriculture and the Delta.

# **Chart of Conceptual Model**



# **Hypothesis**

We hypothesize that the purchase and restoration of this parcel in conjunction with the other parcels in this channel, which were purchased with non CALFED mitigation dollars, can positively impact the water quality of the south Delta by synergistically working together as a habitat corridor for at risk species, aquatic, avian, and terrestrial.

# **Approach**

The Old River Committee, Inc., is working with willing sellers to acquire parcels of land that would extend an exsisting habitat corridor. The current corridor is made up of two non CALFED mitigation properties. These two parcels are an 82 acre island held by a construction company for mitigation for a project built in another part of the county (APN 189-24-16) located at 037° 48" 27.17" N 121° 24' 41.41" W), and the 5 mile stretch of the low portion of the south side of Reclaim Island/Stewart Tract/Califia located at 037° 49" 13.06" N 121° 22" 46.54 W. We believe that the addition of this island into the habitat corridor at the juncture of Old River, Paradise Cut, and Tom Paine Slough will increase connectivity for endangered species, aid flood control, and water improve quality.

We will first do a preplan assessment of the threatened, listed and endangered species on the island and around the perimeter. This will be done under the direction of Lee Fitzhugh,Ph.D., professor of Wildlife Biology at U.C. Davis. We anticipate that much of the field work for this will be done by board members Waldo Holt and Terry Ronneberg with assistance from the Native Plant Society. All professionally accepted standards will be observed. We will incorporate sightings and listings from a variety of documents. The results will be developed into a report that will be the basis of the restoration plan and the agriculture component

The restoration of the site will include the installation of various biotechnical methods to control erosion, with-over planting of site -appropriate native plants. A minimum three year monitoring plan will be developed to evaluate the effectiveness of the methods used. The island has a wide range of physical sites to test various constructs. And, the physical location of the island itself in the South Delta means that while in general the river is aggrading sediment, there is the potential during the winter for scouring floods.

#### Habitat Restoration Plan and Interpretative Trail Design

This portion will be done by Jeff Hart of HART RESTORATION in Walnut Grove. Engineering will be done by Kjeldsen, Sinnock and Neubold of Stockton. The public access/trails portion of the plan will be coordinated with Patrick Miller of 2M, licensed landscape architects. We expect that the approach would be sensitive to the problems of non-native invasives and the uses and needs of native plants. The information to be evaluated would include but not be limited to, changing hydrodynamics, geomorphology, drainage patterns on site, soils, on site irrigation, the problems of untreated tailing running back into the river, surrounding land uses, agricultural practices and needs, jurisdictional policies addressing public access, floodplain information, existing habitat assessments, potential habitat enhancements, and easements. All this site specific information will then be adapted by the information gleaned from previous uses of biotechnical techniques in other CALFED FUNDED projects such asTyler Island/ Georgiana Slough and In Channel Islands.

This planning portion will essentially be an out-of-house effort by a team of highly skilled professionals.

### **Agriculture Demonstration Program**

We have the experience on the board of the Old River Committee, Inc., to direct this portion of the restoration plan. Our eight member board includes one dairy farmer/alfalfa farmer, one owner of alfalfa acreage, and one rancher with cattle and horse pasture. We will subcontract some functions, i.e. cutting, raking, baling and trucking. We will have the land planing done and do the seeding ourselves.

We will do an analysis of the existing alfalfa crop. This analysis will include but not be limited to such variables as variety, number of years already in the ground, density of the plants, soils analysis, field survey of elevations to determine ease of watering and projected rates of flow, condition of the pump and outfalls, possibility of participating in a demo fish screen project and review of reports from other CALFED fish screen projects, a review of any new literature from U.C. Extension and consultation with their local field person, and a review of new varieties of alfalfa. Decisions will have to be made as to the feasibility of attempting to grow high-test hay.

High test alfalfa is generally good for three to five years and then needs to be taken out and replaced with a cover crop for a year before replanting again. Lower Total Digestible Nutrients (TDN) hay, does not command the market price, but does not incur the expenses of needing to be replanted so often. All of this would be wrapped up into a working plan.

The normal course of business in alfalfa growing is the ongoing visual checking for bugs and the subsequent discussions with field men as to what to apply and when. We will be looking for acceptable cultural activities to curtail the use of diazonin and chlorpyrifos. Kearney Ag Station has been running some field studies and we would look to see if they would be applicable here.

Cuttings of hay will be tested at an approved testing laboratory. Samples will not be "grab". They will be with the CAFA recommended method of probes with an approved type drill.

### **Feasibility**

We believe that the very structure of this project will aid it's near term feasibility and it's long term viability.

We have deliberately chosen a restoration team that is experienced in the biologic and hydrologic forces of the Delta. The techniques of biotechnical restoration being proposed have been demonstrated to be feasible in other areas,e.g. Petaluma River, American River near CSU, and Georgiana Slough. The technical issues will be those of adapting the techniques to an area of the Delta with a different geomorphology and different physical processes at work.

This is Phase I of a multi phase project. Neither the purchase nor the planning will initiate the need for further CEQA/NEPA permits or review. The ongoing usage of alfalfa growing is the permitted activity of the General Plan A/G designation and the zoning OPEN SPACE.

The purchase of this parcel of land in fee will eliminate many future problems. The island in question uses riparian water rights to irrigate crops. This is not a site that is appropriate for development/conservation easements. The fragile habitat that needs restoration cannot be adequately protected from the ongoing farming operations without supervision.

Current access to the island is over a bridge that is on an easement from the adjoining parcel owner. This adjoining parcel owner parcel is supportive of the project. This bridge is adequate to the needs of the restoration component and the agriculture component of this proposal.

We are a private, non-profit corporation. We do not normally submit EIR/EIS documentation. While this could be a subcontracted component of our proposal, we believe that it would be more appropriate for the funding agency to take the lead in any EIR/EIS documentation and that we will supply information as needed.

The island is in a floodway and in years of high water such as 1997-98, it provided additional water carrying capacity to the system. Normally, it is not inundated and can be worked during the winter months.

#### **Performance Measures**

Monitoring and Assessment Plans: The report that is developed by the information gathered in the preplan habitat assessment will form the baseline of our monitoring component. The monitoring component will be developed with the restoration plan and submitted with Phase II. The monitoring plan will include but, not be limited to references to ongoing water quality monitoring programs by other entities, wildlife use patterns, photo monitoring, monitoring of neotropical migratory birds, monitoring of native/non-native invasive vegetation, review of any fish count records or information generated by other CALFED ERP projects relevant to the corridor.

### **Data Handling and Storage**

Data collected as a result of this project will be presented as reports, documents and photos. Data will be archived in a form available to other CALFED agencies. Data will be collected with GIS coordinates to facilitate GIS data layer development, where applicable. The Old River Committee intends to maintain the collected data in its' office and intends to provide documents upon request and as appropriate.

### **Expected Products/Outcomes**

Annual reports will be made available on request. Photographic records will be made on an infrequent, but regular basis. The planning and technical teams will be encouraged to give talks and presentations as the opportunities arise. The island will be available for viewing.

#### **Work Schedule**

Work on Phase I will begin immediately upon acceptance of this proposal and securing a contract. Land acquisition and a restoration plan will be completed by the contract applicant within one year of application.

The tasks for the proposed project are as follows:

<u>Task 1. Acquisition</u>. This task includes all reasonable due diligence related to securing an appraisal, approval of the appraisal by the funding agency, hazardous materials assessments, surveys if necessary, title reports and insurance, legal and accounting services, and other direct costs.

Task 2. Preplan Habitat Assessment. Following acquisition, Old River Committee will do a biologic review of the sight. Dr. Lee Fitzhugh will review the parameters for this. Baseline conditions will include, vegetation, water quality, fish and avian communities. It will include the review of all relevant documents, e.g. EIS/EIR SDIP, SJCMHP, GIS maps. Photos will be taken. These efforts will be put in report form. Kieldsen, Sinnock & Neudeck will prepare base maps using aerial photogrammetry. Ground surveys will be performed to locate specific physical features. Deliverables will be digital mapping files and hard copy plots based on 1'=40' superimposed over digital orthophotography. An overall base map of the project site will be prepared. KSN will provide engineering services necessary to prepare interpretive trail design and schematics for parking, access to the water if feasible. Hart and 2M will commence conceptual plans for the restoration and the trail. Conceptual plans will be approved. Research will commence on the alfalfa. Decisions will be made as to whether to participate in the Putnam/CAFA study or work with a local field man. Ground will be land planed if necessary. Alfalfa seed will be purchased and broadcast. Assuming the signing of the contract by the end of September 2002, (and that it is not an unduly wet fall) all of this will take place in the fall of 2002. There will be ongoing supervision of the site and coordination with the design team. Necessary reports will be generated.

<u>Task 3. Community Involvement.</u> There will be a large community meeting in Tracy. Meeting notices will be mailed to all signers of the petition, elected officials, reclamation districts, irrigation districts, potentially interested parties like the parks and recreation commissions of the city and county, planning commissioners, Delta Protection Commission, and adjoining property neighbors. Notices will be taken out in the newspapers. The Leaque of Women Voters of San Joaquin County has been asked to facilitate the meeting. 2M will make a presentation of the plan and get input from the community. Smaller meetings will be held with local property owners.

<u>Task 4 Plan.</u> Work will start on a plan for restoration. Collection of plant material continue.. The feedback from Task 3 will be incorporated into Task 4. There will be ongoing

coordination with the design team and ORC. Plan will be completed by late summer.

<u>Task 5. Final Presentation</u>. Working plans will be accepted and final report written. This will occur in late summer.

#### **ERP, Science Program and CVPIA Priorities**

The proposed project supports the objectives of the CALFED-ERP and Science Program Goals, the Implementation Plan, and CVPIA Priorities in a variety of ways.

# **ERP Strategic Goals, Priority Species, and Habitats**

# Goal 1. Recovery of at risk native species.

The maintenance of alfalfa growing on the island and the restoration of the Great Valley Oak Riparian Forest would support this goal by increasing forage and nesting for Swainson's hawk(*Buteo swainsoni*), and habitat for the Western Pond Turtle (*Clemmys marmorata*). Both are identified as being on or near the island by the habitat survey done for DWR in 1995. An additional benefit would likely be to the Red Bat (*lasiurus borealis*), This is a pending addition to the California Species of Special Concern. The bat is associated with riparian habitats, most particularly the Fremont cottonwood (Populous fremonti), where they sleep and forage.

# Goal 4. Protect and restore functional habitat types.

The restoration of the perimeter of the island with it's Valley oaks would support this goal by restoring riparian forest, riparian and riverine habitat.

### **Delta Region Priorities per the 2001 PSP**

#### DR-1. Restore habitat corridors.

This project would provide for Swainsons hawk, Western Pond Turtle, and the Red Bat, Mason's lilaeopsis, and rose mallow.

It would extend an already existing corridor through Paradise cut to the San Joaquin River.

# DR-3. Support wildlife –friendly agriculture

The maintenance of alfalfa growing on the island and working with efforts to develop a set of protocols for the diminished use of diazonin and chlorpyrifos supports this goal.

#### DR-4. Restore habitat.

This project would restore Great Valley Riparian Oak Forest, and the perimeter of riparian and riverine habitat.

# Programmatic Targets per the ROD

#### E011101 Restoration of slough habitat.

The circumference of this island is approximately two and one-half miles. A portion of the surrounding waterway is a small slough of channel widths fifty to seventy-five feet across. This project would help to meet the programmatic target of the restoration of twenty -five miles of slough habitat in the South Delta unit.

#### E011608: Protect existing riparian woodlands.

The purchase of this property with its large old oak trees would help to meet this target.

# **ERP Stage 1 Milestones**

#### Delta and Eastside Tributary Habitats

Restore a minimum of 15 miles of slough habitat (widths less than seventy-five feet.

The restoration of the two and one-half mile perimeter of this island would help to meet this milestone.

#### **Stressors**

The proposed project seeks to address key stressors affecting the Swainson's hawk. DFG (1994) attributes the decline of Swainson's hawk to a loss of nesting foraging habitats, and recently, the conversion of farm ground to urbanized uses and incompatible crops. Smith (1977) estimated that in 1850 there were over 770,000 acres of riparian habitat in the Sacramento Valley. In 1984, Warner and Hendrix estimated that there were 120,000 acres of riparian habitat extant in the Sacramento and San Joaquin Valleys combined. (Biologic Assessment for Interim South Delta Program, 1995, Ca.DWR).

### **Relationship to Other Ecosystem Restoration Projects**

The San Francisco Bay, the Delta and all the rivers that feed into them are a single, fragile, system. This project would relate as a potential site for the project in the current go round being submitted by Dan Putnam, Ph.d. of U.C.Davis. regarding diazonin and chlorpyrifos.

This project is related to, and with adaptive management will be modified by, the ongoing results of The InChannel Island Project, The Georgianna Slough Project, the Ecosystem and Natural Process Restoration of the Sacramento River: Active Restoration of the Sacramento River Project.

# Previous Recipients of CALFED Program or CVPIA funding/Requests for Next-Phase Funding

The Old River Committee, Inc. has not been the recipient of previous CALFED or CVPIA funding.

# **System-Wide Ecosystem Benefits**

# <u>S</u>DI

One of the major functions of biotechnical habitat restoration is to explore alternative methods of protecting a site from such primary stressors as dredging activities, and changes in watershed hydrodynamics. The South Delta region through the programmatic actions of South Delta Improvements Program (SDIP) is going to have major stressors on it's aquatic and biotic systems. This proposal will investigate whether these biotechnical solutions will work in the hydrodynamics of the South Delta.

#### Levee System Integrity Program.

A secondary and equally important potential use for biotechnical habitat restoration is in the exploration of alternative methods to "hard surface" erosion control such as riprap. There are serious aggradation problems in this section of the South Delta. The June 1980 joint report by USBR and SDWA states that between Vernalis and the Mossdale Bridge "The bottom elevation of the river increased from 0.5 feet to 9.5 feet, with an average increase of four feet. The aggradation raised the bottom elevation of about 45

percent of this reach to an elevation of 1.5 to 3.5 feet above LWD whereas it was 2 feet to 7 feet below LWD in 1933."

This aggradation greatly stresses the integrity of the levee system along Paradise Cut and Old River and upstream on the other side of I-5. There were major levee breaks in the South Delta in 1997-98. This proposal will investigate the potential use of this kind of levee protection in the South Delta. The results could be helpful to reclamation districts who maintain the private levees on Sugar Cut and Old River.

### Additional Information for Proposals Containing Land Acquisition

We are negotiating with willing sellers. The land has belonged to one family since the late 1940's. It has not previously been for sale. This is a time sensitive acquisition. There is no publicly owned land in this part of the South Delta for habitat restoration projects. More to the point, this is a very unique parcel of land.

The island is at the juncture of Old River, Paradise Cut, and Tom Paine Slough. In times of high water this is a floodway. In the summer it is a lazy, backwater with Western Pond Turtles (*Clemmys marmorata*) sunning themselves on logs. Nests of Swainson's hawk (*Buteo swainsoni*) have been sighted in the surrounding cottonwoods.

The island has remnants of the Great Valley Oak Forest all around it's perimeter. The acquisition of this parcel would fulfill Programmatic Target/Action EO11608: "Purchase riparian woodland property or easements." The purchase and restoration of the parcel would also fulfill the Programmatic Target/Action EO11101: "Restore twenty five miles of slough habitat where the channel width is less than fifty to seventy five feet wide." Lastly it would fulfill Programmatic Target/Action E011602: "Restore fifteen to twenty -five miles of riparian and riverine aquatic habitat along other Delta island levees throughout the South Delta Ecological Unit to create corridors of riparian vegetation of which 60% is more than 75 feet wide with 10% no less than 300 feet wide and one mile long."

This would be the extension of an existent habitat corridor. To the east is an eighty acre island held by a construction company for mitigation for a project elsewhere in the county. Beyond that is Reclaim Island/Stewart Tract, a.k.a., Califia. The southern portion of which borders Sugar Cut. This low lying portion of the island is to be habitat mitigation for any development that occurs there.

The General Plan designation is Open Space. The zoning A/G, general agriculture. The parcel will remain in agriculture, encircled by an interpretive trail, and restored habitat. No changes of use will be made in this Phase I.

The Old River Committee, Inc., is a 501(c)3 tax exempt corporation. It is our intention to take title of the project in a 501(c)2, trust.

#### **Qualifications**

The Old River Committee, Inc is a local non-profit with board members from both the urban and rural communities. Our members bring a variety of experience and skills to our group in

the fields of management, agriculture, and conservation. We have assembled a respected group of technical consultants to complement our in-house knowledge to enhance the success of our project.

#### **Our Board**

**Waldo Holt** has extensive experience with wildlife in the Central Valley of California including many Threatened and Endangered species.

He has participated in or conducted many surveys regarding Swainson's hawk including a five year study (1990-94) of Swainson's hawk nesting territories within a 185 square mile area in and around the city of Stockton.

With David Yee, he discovered, monitored and confirmed the existence of a unique population of Swainson's hawks that winter annually in the Sacramento/San Joaquin Delta from November through February. As many as 30 individuals continue to be found regularly each winter on Delta islands. This is the only location where adult Swainson's hawks can be reliably found returning to a wintering area within the United States.

He contributes survey effort on a yearly basis to the Department of Fish and Game's Swainson's hawk statewide nesting surveys and assists in Central Valley Swainson's hawk migration study sponsored by the California Department of Water Resources and the California Swainson's Hawk Technical Advisory Committee.

He is a member of the Swainson's Hawk Technical Advisory Committee and has served on the Technical Working Group and the Policy Committee of the San Joaquin Council of Governments Multi-Species Habitat Conservation and Open Space Plan, since 1994.

Mr. Holt has served as the Conservation Chair of the San Joaquin Audubon Society and is an officer of the Central Valley Bird Club and The Committee to Save the Mokelumne River. He has worked under contract to the United States Fish and Wildlife Service, Miriam Green and Associates, the California Department of Water Resources and the U.S. Army Corps of Engineers primarily to provide technical guidance and monitoring of the Swainson's hawk migration patterns and nesting sites.

His publications include:

England, A.S., J.A. Estep, and W.R. Holt. <u>Nest-site selection</u> and reproductive performance of urban-nesting Swainson's hawks in the <u>Central Valley of California</u>. The Journal of Raptor Research, Vol. 29, No 3, Sept. 1995.

Holt, W.R. and D.G. Yee. <u>Swainson's hawks (Buteo swainsoni)</u> <u>wintering in the Sacramento/San Joaquin River Delta of California.</u> manuscript in preparation.

Yee, D. G. and W.R. Holt. <u>The Field Checklist of the Birds of San Joaquin County</u>. Revised 1997. Sponsored by the San Joaquin Audubon Society, 1997.

**Henry Tosta** is a lifelong resident of Tracy, California. His career as a dairyman and farmer began in 1974 with 6 cows and \$75. Today he is the owner of the Henry Tosta Dairy, a Class A, fully automated, double 20, herringbone barn with a herd of over 2300 cows. He also farms 675 acres, most of which is in alfalfa.

### Mary Walker, President ORC, Inc.

Mrs. Walker received her B.A. from UCLA. She has served as the National Vice President of the American Agriwomen and was also the chairperson for a statewide legislative task force, California Women for Agriculture. Mrs. Walker spent 10 years working as a consultant to non-profit groups, building multi family housing with funding from H.U.D., C.H.A.F.A. and F.H.A. She is a partner in a small horse and cattle operation in Tracy, California.

Ron Leachman, V.P., ORC, Inc. earned his B.A. at Occidental College and a J.D. from Boalt Hall, U. C. Berkeley and currently practices Real Estate Law in Tracy, Ca. He served on the founding board of the Boys and Girls Club of Tracy and on the board of the San Francisco Girls' Chorus. He is an active member of the Modesto Youth Symphony and the Tracy First Presbyterian Church, where he also teaches Sunday School.

**Breann Northcutt, Treasurer, ORC, Inc.** has a B.S. from the UOP. She has participated in the City of Tracy's Tracy Tomorrow Committee on the Land Use Planning, Open Space and Agriculture Task Force. Breann currently serves on the Finance Committee for St. Bernard's Catholic School.

**Terry Ronneberg, Secretary, ORC, Inc.** received his A.A. from San Francisco City College. He has served as Vice-President for the San Joaquin Audubon Society and is a member of the Consumnes River Preserve, for whom he has performed a monthly bird survey for the past eight years. He was the recipient of a Service Award from the California Nature Conservancy in 1966. He currently works for the City of Tracy as the Water Resources Coordinator in Charge of Water Conservation.

**Souza, Mary** graduated with a B.A. from U. C. Santa Barbara. She was also member of Tracy Tomorrow Committee for the City of Tracy, where she worked on the Land Use Planning, Open Space and Agriculture Task Force.

**David Laux** received a B.S. in Agriculture from the University of Arizona and a MBA in Management from the University of Phoenix. He brings over fifteen years of business management experience to the board..

#### **Paid Consultants**

Kjeldsen, Sinnock & Neudeck, Inc. Consulting Engineers and Land Surveys 711 N. Pershing Avenue P.O.Box 844 Stockton, Ca 95201

As a full service civil engineering and surveying firm, Kjeldsen, Sinnock & Neudeck, Inc. (KSN) has been serving a broad spectrum of public agency and private sector clientele in the Sacramento - San Joaquin Delta, for over 40 years. Their familiarity with the unique conditions and the complex Federal, State and local standards and regulations applicable to the Delta, will serve to compliment the specialized expertise of the team of consultants we have assembled for this project.

KSN has extensive experience with a wide variety of projects that involve a unique blend of land surveying, civil engineering and habitat restoration elements. KSN has prepared easement acquisition documents for State and Federal wildlife habitat restoration projects on Medford Island. They have designed and managed the construction of a levee setback and habitat restoration on Twitchell Island. In conjunction with the Twitchell Island project, KSN provided the surveying, engineering design and construction management services for the restoration of habitat at a former borrow site on Decker Island. KSN is currently working with HART Associates on a soft bank restoration along Georgianna Slough, which has been funded by CALFED. KSN provided the surveying and mapping for the second phase of the Tuolumne River Restoration Project, a project managed by the Turlock Irrigation District to improve anadromous fish spawning habitat.

2M Associates Landscpe Architecture, Planning & Horticulture Box 7036 Landscape Station Berleley, Ca 94707

**Patrick Tormay Miller,** ASLA Patrick Miller is a landscape architect and recreation planner. His work experience covers wildland and urban open space planning, public access planning, park planning, facility design, interpretive programming, and visual analysis. In private practice for twenty-eight years, he has worked for both the public and private sector land conservation and recreation interests.

Mr. Miller's professional experience includes the development of master plans for over twenty-five open space, park, and recreation areas. He was the principal planner for the San Joaquin River Parkway Conceptual Plan spanning 22 miles of river corridor in Madera and Fresno Counties and the City of Fresno, California and he provides continuing consulting to the San Joaquin River Parkway and Conservation Trust relating to implementation of the Parkway. He is experienced in the planning and design of re-vegetation projects involving native landscapes and he is a member of the San Francisco Bay Conservation and Development Commission's Policy Advisory Committee for the Public Access and Wildlife Compatibility Policy Development Project.

# H.A.R.T., Inc. (Habitat Assessment and Restoration Team, Inc.)

Jeffrey Hart, Ph.D. will serve as the restoration contractor for this project. He has had more than 30 years of field biology experience and is a recognized expert in the areas of restoration ecology, resource analysis and conservation. He has had considerable success in designing and/or implementing many local projects (e.g. Restoration projects: Stone Lakes National Wildlife Refuge, Grizzley Slough, Decker Island.-- Bioengineering Projects: Dry Creek, Lower American River -- Riparian and Wetland resource studies: Consumes River, Lower American River.

His clients include mostly government agencies and non-profit organizations such as the Sacramento Flood Area Control Agency, Sacramento County Water Resources Division, Ca Dept. of Water Resources and the Nature Conservancy. He is currently working on CALFED funded projects such as the Project for the Enhancement of Delta In-Channel Islands.

#### **Volunteer Consultants**

Along with the professionals who serve on our board, Mr. Fitzhugh has generously offered to waive any fees in his assistance of our project.

E. Lee Fitzhugh
Cooperative Extension Wildlife Specialist
Department of Wildlife & Fisheries Biology
University of California
Davis, California 95616
(916) 752-1496; elfitzhugh@ucdavis.edu

Mr. Fitzhugh graduated from the University of Michigan with a BS in Wildlife Management and went on to earn a PhD in Wildlife Biology from the University of Arizona with a minor in Range Management. For the past 21 years he has been with the Cooperative Extension, University of California, Extension Wildlife Specialist-Wildlife Enhancement. He has developed Statewide training in wildlife resources for Farm Advisors, landowners, other professionals, special interest groups, and regulators to help them apply research to improve wildlife habitat and increase wildlife populations. Mr. Fitzhugh, as the statewide coordinator, for a program of Congressional appropriations for Natural Resources Extension, administered other smaller grants, and was acting Wildlife Extension Unit Coordinator.

He was an original member of California Interagency Wildlife Task Group, and Chair from 1998-2001. The task group developed and now oversees administration of the California Wildlife Habitat Relationships System, a database model with associated documents and continuing administration that allows prediction of suitability of any habitat in California for any of the terrestrial wildlife species of California. Mr. Fitzhugh helped Coarsegold Resource Conservation District develop a new section of the Madera County, California General Plan for protection of watershed values and oaks.

# **Selected Organizations and Committees**

The Wildlife Society (many chapter, section, and international committees) California Interagency Wildlife Classification Task Group.

Member. Habitat Book Revision Committee.

Chair, Youth Education Committee.

Chair, Task Group, Project WILD Implementation Committee, C

California Department of Fish & Game and Western Regional

**Environmental Education Council.** 

Central Valley Habitat Joint Venture, North American Waterfowl Management Plan.

Agriculture-Wildlife Committee.

Communications Committee, Chair, San Joaquin Valley subcommittee.

Technical advisor to California Interagency Floodplain Management Coordination Group, California Department of Water Resources, 1998-2000.

#### Cost

Total project costs requested in this proposal are \$2,419,900.00. Per the proposal instructions, the detailed budget and budget justification are included in the web forms. This project has no cost share partners.

#### **Local Involvement**

We believe that the successful implementation of conservation and restoration practices is best achieved through a community based program. To that end, we have been seeking to involve both the urban and rural members in the area.

We have begun to organize support for this project. We have collected over 2000 signatures in support of the project. During the collection of these signatures, there has been almost no negative comment. The major issues of concern are those of property owners located several miles away. They fear use of eminent domain in the acquisition of property and the loss of water rights. These issues do not apply to this project since this land will be purchased from willing sellers and the majority of it will remain in agriculture.

The interpretive trail portion of this project will include a community meeting to acquire further input from the local community. Notices will be placed in the local newspapers and mailed to residents who have signed our petition as well as local elected officials. This meeting will be facilitated by the League of Women Voters of San Joaquin County. We will also have additional informal meetings with local landowners.

We have met with both the owner of the property immediately across the river, Arnaudo Brother's Farming, and adjacent landowner, the Bacchetti Silva Dairy. Neither is opposed to this project.

The concept for this trail and the general location have received the endorsement of the City of Tracy's Park and Recreation Commission. It was one of the recommendations of the Tracy Tomorrow Land Use Planning Task Force. The San Joaquin County Parks Department has expressed interest in our project as it might relate to their plan to establish a regional park in this part of the county.

This project is also being supported by The Environmental Network of San Joaquin County. Their affiliate members include The League of Conservation Voters, The Sierra Club, Mother Lode Chapter, and Bill Jennings, Delta Keeper.

We have also received the endorsement of the Editorial Board of the Tri-Valley Herald.

### **Compliance with Standard Terms and Conditions**

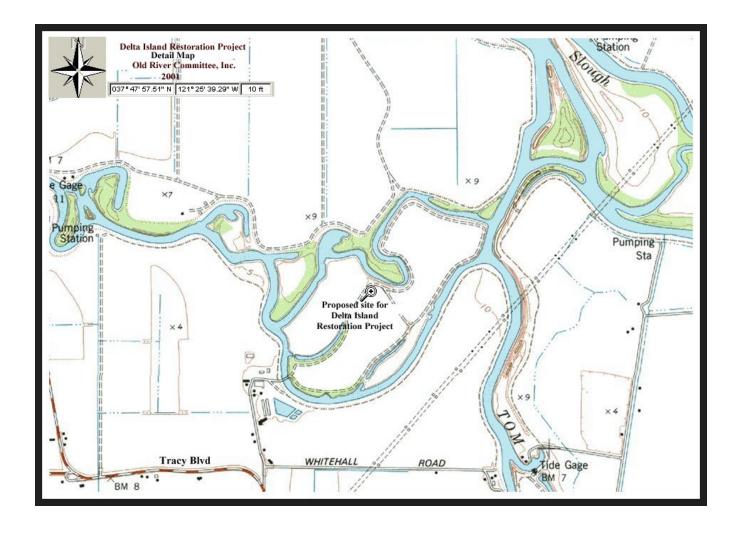
The Old River Committee, Inc. will comply with all standard terms and conditions as required to accept the requested funding.

#### **Literature Cited**

- Babcock, K.W., 1993. Home range and habitat analysis of Swainson's hawks in West Sacramento. Report by Michael Brandman Associates prepared for the Southport Property Owner's Group, City of West Sacramento, CA. 21 pp.
- Bloom, P. H. 1980. The status of the Swainson's hawk in California in 1979. Wildlife Management Branch, California Department of Fish and Game and U.S. Bureau of Land Management, Sacramento, CA. 42 pp.
- CALFED Programmatic Record of Decision. 2000. Volume 1 3, August 28, 2000.
- Department of Fish and Game. 1990. Draft mitigation guidelines for Swainson's hawks (*Buteo swainsoni*) in the Central Valley of California. Nongame Wildlife Section, Sacramento, CA. 12 pp.
- Department of Parks and Recreation, Environmental Design Division. 1992. South Delta Recreation Concepts for the South Delta Water Management Project. Prepared for Department of Water Resources. September 1992.
- Department of Water Resources, Office of Environmental Services. 1992. Biological assessment
  - for South Delta temporary barriers project. February 1992.
- \_\_\_\_\_. 1994. Temporary barriers project: fishery, water quality, and vegetation monitoring, 1993. February 1994. 169 pp. + appendices.
- ECOS, Inc. 1987, South Delta water management project for biological assessment. Prepared for
  - U.S. Bureau of Reclamation, Mid-Pacific Region, Sacramento, CA.
- \_\_\_\_\_. 1990. Sensitive species survey report for the south Delta water management project. Prepared for the U.S. Bureau of Reclamation, Mid-Pacific Region and Department of Water Resources, Division of Planning, Sacramento, CA. September 1990. 44 pp. + appendices.
- Entrix. 1995. Administrative Draft Environmental Impact Report/Environmental Impact Statement Interim South Delta Program. May 1995. Various paging.
- Estep, J.A. 1989. Biology, movements, and habitat relationships of the Swainson's hawk in the

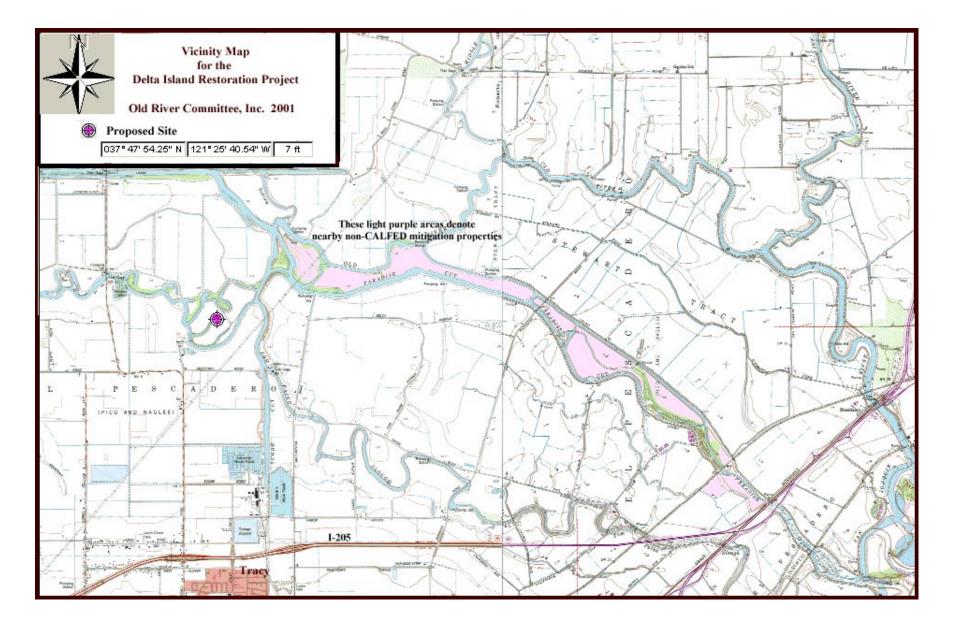
- Central Valley of California, 1986-87. California Department of Fish and Game, Nongame Bird and Mammal Section, Sacramento, CA. 52 pp.
- Holland, D.C. and R.B. Bury. 1992. Status of western pond turtle (*Clemmys marmorata*) in 1991.
  - Paper presented at the Western Section of the Wildlife Society annual meeting, San Diego, Ca.
- House Agriculture Consultants. 2001. Report on Agriculture, Old River/Northwest Tracy Specific Plan. April 25, 2001.
- Jones & Stokes Associates. 1990. Habitat conservation plan for the Swainson's hawk in San Joaquin County. Prepared for the Community Development Department, Stockton, CA.
- McBride, D.K., D.E. Peterson, and H.A. Lamey. 1988. Persistence and mobility of pesticides in soil and water. Bulletin 49. North Dakota State University Extension Service, Fargo.
- Natural Diversity Data Base. 1992. Computer printout of sensitive species records in California.
  - Updated version as of September 30, 1992. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.
- \_\_\_\_\_. 1992. Computer printout of sensitive species records in California. Updated version as of December 30, 1994. California Department of Fish and Game, Natural Heritage Division, Sacramento, CA.
- Peterson, G. and D. Putnam. 2001. Choosing alfalfa cultivars. University of California Davis Extension.
- San Joaquin County Multi-Species Habitat Conservation and Open Space Plan. 1999. Public Review Draft, September 23, 1999.
- Smith, F. 1977. Short review of the status of riparian forests in California *In* A. Stet (ed.), Riparian forests in California: their ecology and conservation. Institute of Ecology, Publication 15. University of California, Davis.
- U.S. Fish and Wildlife Service. 1992. Endangered and threatened wildlife and plants: 90-day finding and commencement of status reviews for a petition to list the western pond turtle and California red-legged frog. Federal Register 57(193):45761-45762. October 5, 1992.
- Warner, R.E. and K.M. Hendrix, eds. 1984. California riparian systems; ecology, conservation, and productive management. University of California Press, Berkeley, CA.

Figure 1.



This map shows a better detail of the proposed site for the Delta Island Restoration Project. The Island is 144 acres and contains approximately 2.5 miles of coastline.

Figure 2



These are pictures of some of the many stands of Great Valley Oaks along This area of the Old River.





