



**Petaluma River Council**

P.O. Box 750501  
Petaluma, CA 94975  
(707) 763-9336

F-153

July 21, 1997

CALFED Bay-Delta Program  
1416 Ninth St., Suite 1155  
Sacramento, CA 95814

Dear CALFED:

The City of Petaluma has embarked upon an ambitious program aimed at restoring and replacing lost and damaged riparian and wetlands habitat along the Petaluma River and tributaries.

While the River still produces some of the worst inflow water quality to the San Pablo/ San Francisco Bay system, it also contains areas for valuable improvements. The grant requests will help implementation of Petaluma Marsh Restoration acquisitions, Petaluma River Greenway easement acquisitions, and upper Adobe Creek management programs. These programs will have distinct beneficial results for a variety of habitats, fisheries, recreation, wastewater reuse, and the local economy.

The Petaluma River Council, a watershed-based citizens' advocacy group for the last 7 years, strongly recommends CALFED's support for these projects. These funds will go far towards restoration of the Petaluma watershed.

If you have any questions, please feel free to contact me, at (707) 763-9336. Thank you for your consideration.

Sincerely,

David Keller  
Director

DWR MATTHEW

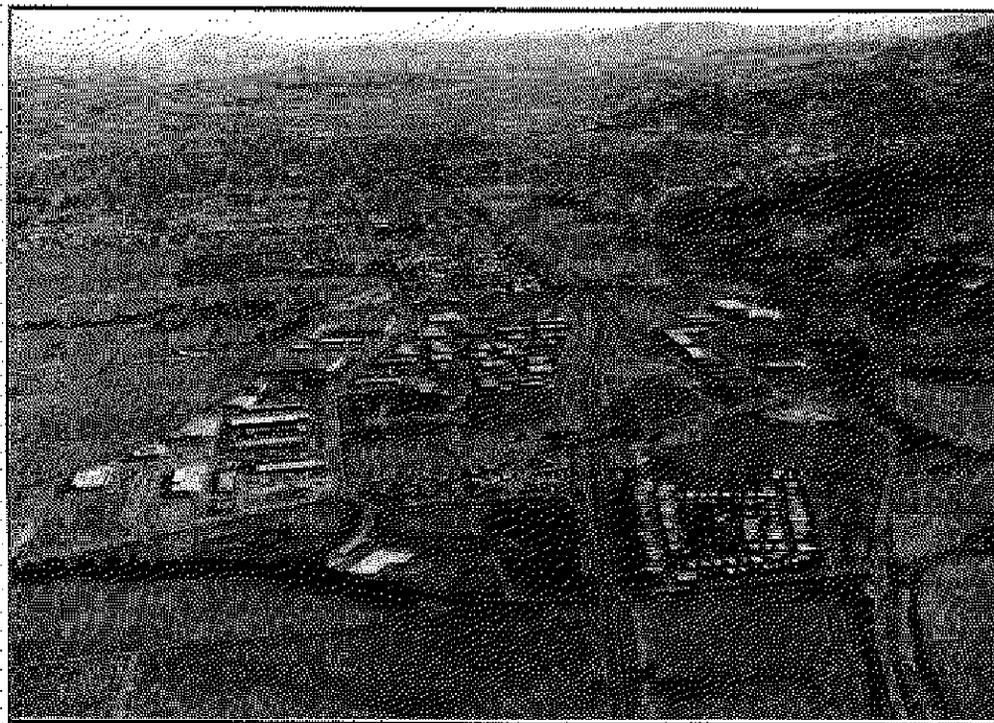
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*City of Petaluma*

**CALFED PROPOSAL**

**MODEL WATERSHED  
RESTORATION AND HABITAT MANAGEMENT PROGRAM**

**PETALUMA RIVER GREENWAY PROJECT**



**SECTION I**  
**EXECUTIVE SUMMARY**

*"A vision without a task is but a dream,  
A task without a vision is drudgery,  
A vision and a task is the hope of the world."*

quote from a church in Sussex England  
Circa 1730

## 1. EXECUTIVE SUMMARY

The City of Petaluma is pleased to submit this proposal for the *Petaluma River Greenway*. This proposal is one of three separate proposals submitted by the City of Petaluma and a fourth Inquiry Submittal submitted by the local Resource Conservation District, that collectively would comprise a Model Watershed Restoration and Management Program for CALFED. The objective for the Model Restoration and Habitat Management Program is to provide a framework for complete restoration of the Petaluma River Watershed. The focus of this proposal is to restore a continuous riparian corridor along the Petaluma River and enhance water quality and aquatic habitat by preserving and recreating natural floodplain functions. The three primary objectives for the Petaluma River Greenway are to: (1) restore and connect fragmented riparian habitat areas; (2) recreate floodplain functions to improve water quality; and, (3) preserve natural flood retention areas. The proposal involves the three upper reaches of the Petaluma River known as Corona, Denman and Willow Brook and the flood retention area known as Denman Flats at the confluence of the headwaters as illustrated in Figures I-1 through 4.

The Petaluma River supports the Sacramento splittail and Delta smelt through the tidal reaches and steelhead trout and chinook salmon through the upper reaches connecting to spawning habitat in Adobe Creek, Lynch Creek and through Willow Brook to Lichau Creek. The Petaluma River also supports the non-native striped bass. The Petaluma River Greenway Project would restore the riparian canopy connecting fragmented habitat areas along the river to provide shaded riverine habitat that would in-turn reduce water temperatures and increase aquatic food sources. Acquisition of the natural floodplain and creation of a flood terrace/setback levee would improve water quality by providing seasonal wetlands, vegetated swales and retention areas that will filter stormwater runoff prior to entering the Petaluma River. The upstream retention area known as Denman Flats serves an important function of retaining flood waters, detaining sediment and providing for aquifer recharge. This area also supports a myriad of seasonal wetlands and vernal pools that provide habitat for migratory birds and waterfowl.

The City of Petaluma is seeking matching block grant funds from CALFED in the amount of \$1.2 million over a 3 year period to acquire the lands encompassing the Petaluma River itself and the adjacent floodplain areas through the upper reaches. These funds are matched by \$1.0 million in additional Block Grant funds secured from the Sonoma County Open Space District and the Sonoma County Water Agency and \$500,000 in acquisition funds budgeted by the City of Petaluma for riparian restoration and seasonal wetland mitigation. Another \$1.0 million is budgeted for implementation within the Corona Reach. Additional private contributions of land and restoration improvements are required as conditions of project approvals in certain river segments totaling an estimated \$4.5 million in private contributions. However, lands along the river are subject to intensive development pressures and land values are beginning to escalate beyond local resources. With CALFED participation in site acquisitions, critical sites will be secured for the restoration project. A phased construction program is proposed to complete the restoration project over the next five years. Funding for design and construction of the restoration project will be through a combination of developer contributions, mitigation fees, drainage impact fees, and flood mitigation grants. Additional funding for long-term monitoring and management will be provided from parcel taxes, landscape assessment districts and City and County operating budgets, and private contributions to the proposed Habitat Management Program described in the companion proposal for the Adobe Creek Pilot Project.

Acquisition of the land is the most critical factor in the implementation program, as these sites are subject to both urban and vineyard development pressures. The City has limited authority to prohibit

development without due compensation (i.e. paved parking lots, streets etc. are permitted uses in the floodway and floodplain). The block grant program would enable the City to preserve critical sites within the floodplain and prohibit development or conversion to a higher use.

The Petaluma River Greenway will have a synergistic effect with other local restoration efforts that are underway and proposed for additional funding assistance from CALFED in the *Petaluma Marsh* and *Adobe Creek* as illustrated in Figures I-2 and I-3. If fully funded by CALFED, the three proposals from the City and the fourth Inquiry Submittal from the Resource Conservation District will empower the local agencies to complete all restoration activities within the Petaluma River Watershed, providing an excellent model for other restoration efforts throughout the Bay-Delta system. The Petaluma River Watershed provides an outstanding opportunity to develop a completely restored model watershed for the following reasons:

**Vision** - The proposals are based upon the community's shared vision for restoration of the Petaluma River Watershed. The City of Petaluma has completed comprehensive plans for the restoration effort through the completion of the *Petaluma Marsh Enhancement Plan (1992)*, the *Adobe Creek Restoration Plan and Management Program (1995)*; the *Restoration Design and Management Guidelines for the Petaluma River Watershed (1995)*, and the *Petaluma River Access and Enhancement Plan (1996)*. Planning for the upper watershed is underway through a 205j planning grant from the EPA. administered by the local RCD.

**Synergy** - The proposals are comprehensive and well-integrated, providing a framework for complete restoration of the entire Petaluma River Watershed. The proposals are structured to maximize benefits to endangered fish by addressing stressors throughout the habitat range in the lower marsh (food supply and nursery habitat), riparian zones (water quality and aquatic habitat) and upper watershed (attraction flows/erosion control and spawning habitat).

**Ready to Build** - The proposed projects are ready to build, providing for early implementation and "in-the-ground" restoration that directly benefits the targeted species. Environmental review has been completed or is underway and nearly completed for the three proposals. The City has assembled all of the resources needed to implement the program with some funding assistance from CALFED.

**Highly Leveraged** - The proposals are highly leveraged with extensive local participation and funding resources. The City of Petaluma, partner agencies and private contributors have invested over \$11.6 million in restoration activities in the Petaluma River Watershed (refer to Table V-1). Over \$11.9 million in local resources are committed as matching funds for the three proposals submitted by the City. Total requested CALFED participation in the three proposals is \$2.9 million over a 3 year period.

**Sustainable** - The proposed projects empower the local community to engage in more sustainable resource management practices that address critical issues of water supply and water quality in the context of ecosystem restoration. The proposals are integral to the City's larger planning efforts in water supply and wastewater management that includes upgrade of the City's treatment facilities to provide recycled water for urban irrigation, thus reducing the demand on potable water supplies and creating a more sustainable system of water use.

**Precedent** - The proposals set an excellent precedent of broad community participation in restoration activities, based upon a strong foundation of comprehensive planning and implemented through innovative methods involving both public and private sector investments.

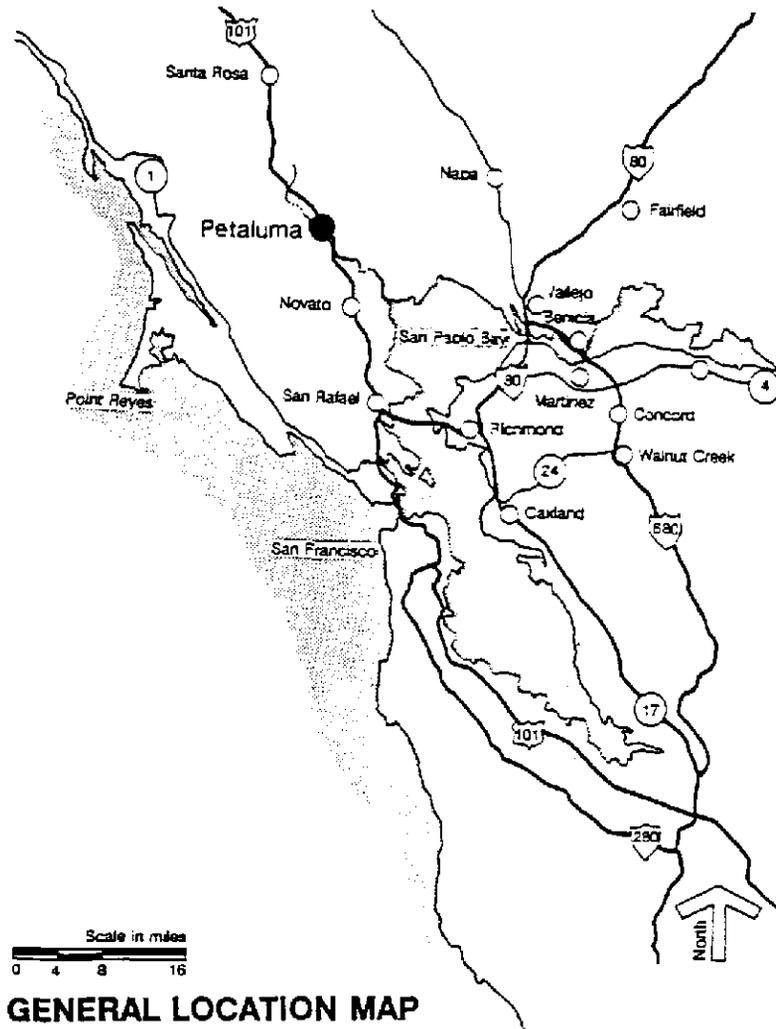


FIGURE I-1

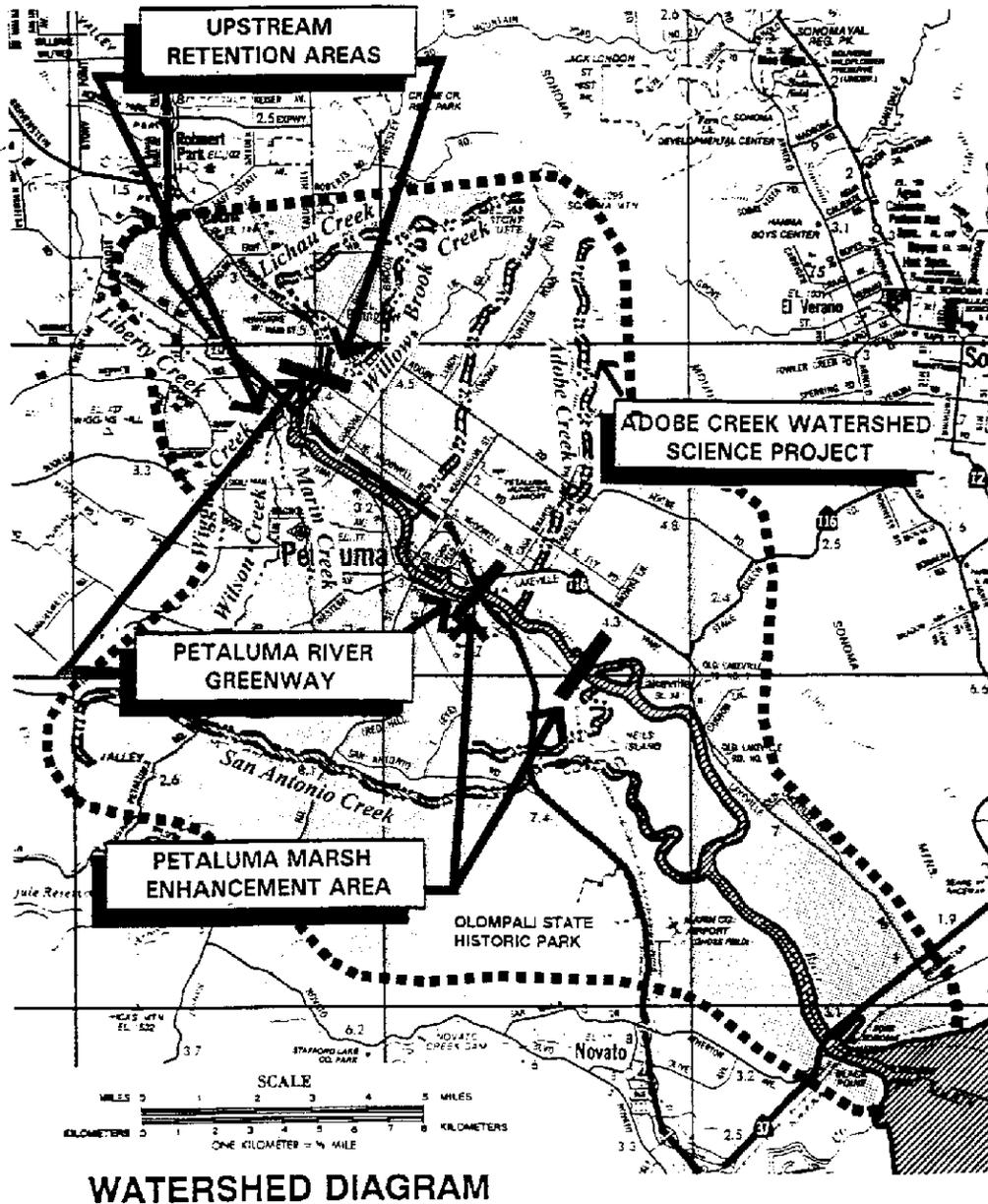


FIGURE I-2

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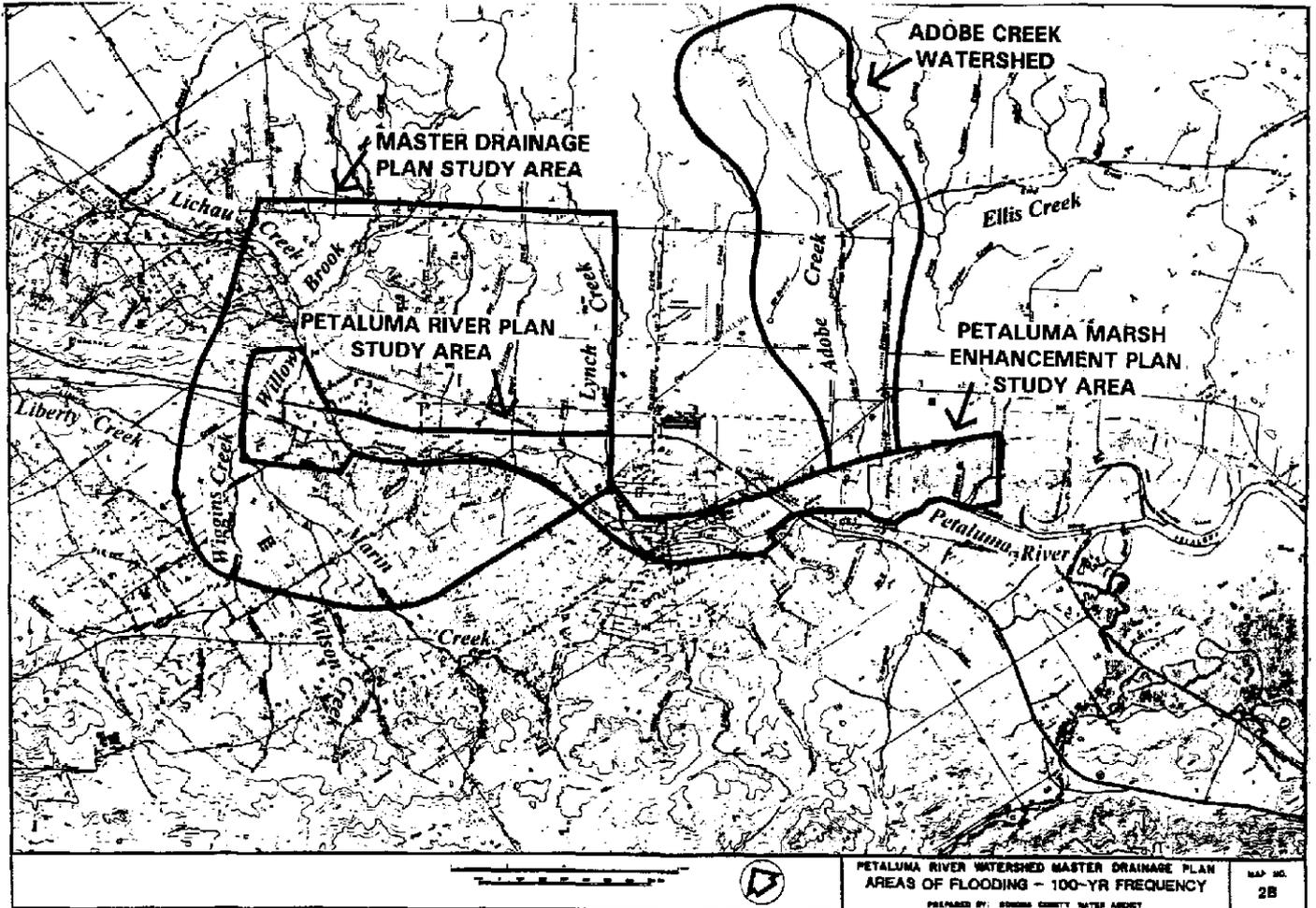
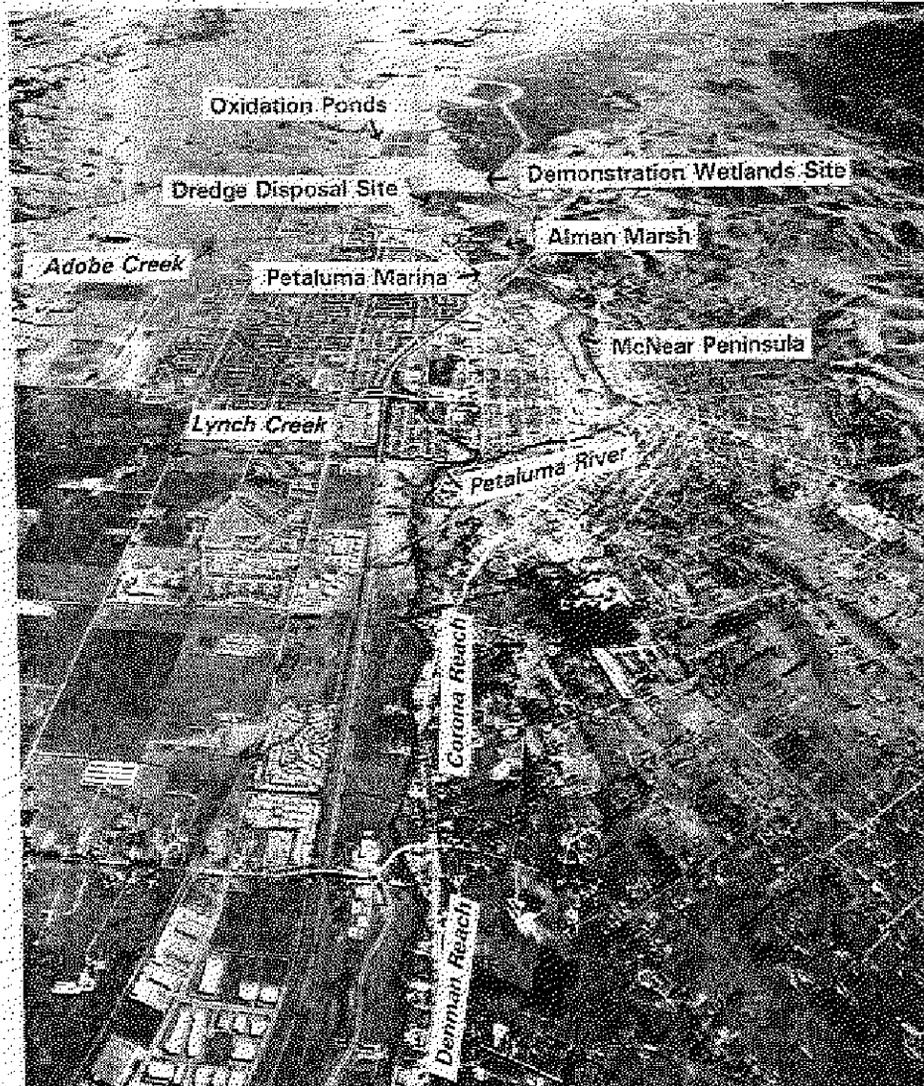


FIGURE I-3

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FIGURE I-4



City of Petaluma, looking southwest toward San Pablo Bay. 1984. *The Marsh Plan (1997)* envisioned 300 acres of restored tidal marshes at the upper end of the estuary. *The River Plan (1995)* envisioned restoration of a continuous riparian corridor or greenway connecting the tidal marshes through town to the upper watershed areas. Adobe Creek is the pilot project for a comprehensive approach to long-term monitoring and habitat management, incorporating a public education program with research science and utilizing local volunteers to nurture the streams back to a healthy ecosystem.

## II. PROJECT SUMMARY/TITLE PAGE

### PROJECT TITLE: *Petaluma River Greenway*

**APPLICANT:** City of Petaluma  
P.O. Box 61  
Petaluma, CA 94953

**PROJECT MANAGER:** Jennifer Barrett, Senior Planner      Phone: 707 778-4317  
Fax: 707 778-4498  
Cityhall@ci.petaluma.ca.us

**FINANCIAL MANAGER:** David Spilman, Finance Director      Phone: 707 778-4352  
**TAX IDENTIFICATION NUMBER:** 94-6000392

### PARTNERS/COLLABORATORS:

- Sonoma County Agricultural Preservation and Open Space District - Acquisition Funding
- Sonoma County Water Agency - Acquisition Funding, Technical Guidance and Hydraulic Maintenance
- Dept. of Fish and Game - Technical Review and Habitat Management Oversight
- San Francisco Estuary Institute - Data Analysis and Regional Monitoring Program

**PROJECT TYPE:** Acquisition Block Grant, FY97-00; Design Services FY 98-99; Construction FY 99-00

### REQUESTED FUNDING

	FY 97-98	FY 98-99	FY 99-00
Site Acquisition	\$202,398	\$757,360	\$241,860

**SITE CHARACTERISTICS:** Upper reaches of the Petaluma River from the confluence of Lynch Creek to the headwaters and natural floodplain retention area at Denman Flat, consists of freshwater shaded riverine aquatic habitat supporting steelhead, salmon and other sensitive species.

**LOCATION:** North Bay, Sonoma County, Petaluma River Watershed

**PROPOSED PROJECT CHARACTERISTICS:** Block grant for site acquisition of the floodplain over three year period to preserve and restore a continuous riparian greenway along the Petaluma River and preserve natural floodplain characteristics. Design and construction of a setback levee/flood terrace in the Denman and Willow Brook reaches with restoration of riparian vegetation and seasonal wetlands. Acquisition of conservation easements to preserve natural floodplain/retention areas and provide for restored riparian vegetation and created seasonal wetlands in the Corona reach and upstream in the Denman Flats at the confluence of the headwaters.

***SECTION III  
PROJECT DESCRIPTION***

*"One must be the change  
you wish to see in the world."*

**Gandhi**

### III. PROJECT DESCRIPTION

The Petaluma River Greenway proposes acquisition of the riparian corridor and adjacent floodplain areas to accommodate restoration of shaded riverine aquatic habitat within the three upper reaches of the Petaluma River. The project proposed for CALFED funding includes acquisition of the river itself and critical floodplain areas, creation of a setback levee and flood terrace, riparian and seasonal wetland habitat restoration and bank stabilization within the Corona, Denman and Willow Brook reaches of the Petaluma River as illustrated in Figures III-1. The proposed riparian restoration encompasses both banks of the river and adjacent buffer areas, extending nearly 4 miles upstream from the confluence of Lynch Creek, comprising an estimated 150 acres of land area proposed for acquisition. This section of the Petaluma River provides an important corridor for migrating fish to upstream spawning habitats that exist in both Lynch Creek at the southern end of the project area (within the zone of tidal influence) extending through Willow Brook to Lichau Creek at the uppermost end of the watershed. The adjacent buffer zones will provide for creation of floodplain terraces, preservation and creation of adjacent seasonal wetlands and enhancement of upland grasslands/oak woodlands that provide critical habitat for targeted species and serve important functions in preserving water quality.

The City of Petaluma is seeking block grant funds from CALFED in the amount of \$1.2 million over a three year period to match existing local funding of \$1.5 million for acquisition of lands encompassing the Petaluma River and adjacent floodplain areas. These funds will be used to acquire lands within the Corona, Denman, and Willow Brook reaches, in addition to the acquisition of conservation/flood easements in the natural floodplain retention areas at the confluence of the headwaters in Denman Flats. Funding for design and construction of the flood terrace and setback levee in the Willow Brook and Denman reach and restoration of riparian and seasonal wetland habitat within the entire upper reaches corridor will be provided through drainage impact fees, mitigation requirements, private contributions and possible grants from FEMA's Flood Mitigation Program and the Environmental Enhancement Mitigation Program.

**Restore and Connect Fragmented Habitat Areas.** The deterioration of riparian habitat in the upper reaches is readily apparent in the comparison of aerial photographs provided in Figures III-2 and III-3. The riparian canopy that once provided a continuous shaded corridor for migrating fish has been fragmented and deteriorated by past agricultural practices and land uses. Sections of Willow Brook and the Petaluma River (Denman Reach) were channelized or "ditched" eliminating the native riparian forest in these upstream sections. The Petaluma River Greenway will provide for restoration of a continuous riparian corridor connecting the remaining riparian habitat areas along the river to the upstream spawning habitats within Lynch Creek and Lichau Creek.

**Recreate Floodplain Functions** Urban and rural developments have encroached upon the Petaluma River with fill and bank constrictions within the Denman and Willow Brook reaches which have caused serious flooding problems. Acquisition of land to provide for construction of a setback levee and flood terrace within the Denman and Willow Brook reaches is proposed to restore the natural ecological processes and relationship of the floodplain to the river as shown in Figures III-4 and 5. Typical cross-sections are provided in Figure III-6 and III-7. The proposed flood terrace will include seasonal wetlands, vegetated swales and retention areas to filter urban runoff prior to entering the river as shown in Figure III-8. Figure III-9 illustrates the freshwater planting zones for riparian restoration.

**Preserve Natural Flood Retention Areas.** Natural floodplain retention areas currently remain essentially intact within the Corona Reach and upstream in the area known as Denman Flats. Both of these areas are critical for floodplain management to limit the need for downstream flood control improvements and provide for storage of floodwaters that serves to drop out sediments and filter pollutants prior to entering the river.

The Corona Reach contains the most significant native riparian vegetation and oak woodlands remaining along the Petaluma River. These vital resources are currently threatened by urban development. Although the City has the authority to require dedication and restoration of riparian vegetation as conditions of project approvals, the City has limited authority to fully prohibit development within the floodplain without due compensation. Parking lots, streets, and landscaped areas are permitted uses within the floodplain, as well as buildings and structures that meet the City's no net fill and floodplain requirements. Preservation of the natural floodplain areas to provide for buffers of annual grasslands, seasonal wetlands and oak woodlands is proposed within the Corona Reach by acquiring a greenway extending 100 to 150 feet beyond the riverbanks as illustrated in Figures III-9 and III-10. Cross-sections of the proposed greenway within the Corona Reach are illustrated in Figure III-11. A portion of the greenway is anticipated to be dedicated by the property owners as a condition of development approvals. Funding will be used for acquisition of additional lands or easements to provide the buffer area to retain the natural floodplain functions (i.e. limit paving of the floodplain).

Additionally, acquisition of floodplain easements near the confluence of the headwaters in Denman Flats is also proposed to preserve this important flood retention area, preserve the water quality functions of the floodplain and provide for aquifer recharge. These lands are subject to speculation in vineyard development which would destroy the seasonal wetlands and could impact both surface and ground water quality. Retention of stormwaters in Denman Flats is critical to reducing the need for "flood control improvements" in the downstream sections of the river. Refer to background discussion on the Master Drainage Plan in Section D of this proposal.

#### A. PROJECT APPROACH

The City of Petaluma has undertaken a 5-year site acquisition program to acquire lands within the Corona, Denman and Willow Brook reaches of the Petaluma River with block grant funding provided by the Sonoma County Water Agency (\$500,000) and the Sonoma County Agricultural Preservation and Open Space District (\$500,000). The City has budgeted an additional \$500,000 for site acquisition in the Corona Reach to provide for riparian restoration and wetland mitigation associated with a major roadway project. An additional \$1.0 million is budgeted for construction of the mitigation project that will provide over 10 acres in restored oak woodlands and 2.0 acres of seasonal wetlands within the Corona Reach. The City has also acquired conservation easements within a segment of the Corona Reach and additional dedications and restoration improvements were completed in 1994 as part of another commercial development project (factory outlet).

Land within the upper reach of Willow Brook has been dedicated to the City. Design of the flood terrace and restoration improvements within the upper Willow Brook reach are completed and the project is expected to be constructed in 1997. Additional land dedications are anticipated along portions of the Corona and lower Denman reaches. However, additional funding for site acquisitions in the Corona, Denman and lower Willow Brook reaches is needed to provide for restoration of a continuous riparian corridor and natural floodplain. Additional acquisitions of conservation/flood easements are proposed in the upstream natural floodplain retention areas at the confluence of the

headwaters in Denman Flats to preserve the important functions of aquifer recharge and retention of flood waters that will maintain water quality and reduce flood hazards as well as, the need for downstream flood control improvements.

**Project Implementation.** The site acquisition process will be implemented by the City through a public information and workshop program conducted in conjunction with the Upper Reaches Master Drainage Plan and Floodplain Management Study which is currently underway. On properties with willing sellers, appraisals, right-of-way mapping, negotiations and Phase I assessments will be conducted through consultant contract services. Design and construction management of the flood terrace, riparian restoration and created seasonal wetlands would also be conducted through consultant contract services. The City will publicly bid the restoration project and award the construction contract to the lowest responsible bidder. Monitoring of the restoration project will also be conducted through consultant contract services to determine successful establishment of the vegetation and hydrologic regime as discussed in Section F. An organizational chart illustrating the role of each partner in implementing the project is provided in Figure III-12.

City staff will provide project management, interagency coordination/permitting, technical review and construction oversight, grant administration and financial reporting, as well as facilitation of public workshops and coordination of property owner contacts. The Sonoma County Open Space District will participate in acquisition of land and conservation easements and will monitor the conservation easements in perpetuity. The Sonoma County Water Agency will provide technical support staff for review of hydraulic and hydrologic modeling and will perform hydraulic maintenance of the upper reaches Petaluma River Greenway project. The Department of Fish and Game will provide technical reviews of the restoration plans and oversight of the monitoring and habitat management program.

## **B. LOCATION AND/OR GEOGRAPHIC BOUNDARIES OF PROJECT**

The Petaluma River Watershed is situated in the North Bay draining into San Pablo Bay as shown in Figure I-1 through I-4. The watershed comprises an estimated 32 square miles with numerous tributaries. The Petaluma River extends 14 miles from the mouth at San Pablo Bay to the City of Petaluma and then another 4 miles through the City to the confluence of the headwaters in Denman Flats at the northernmost boundary of the City. The zone of tidal influence extends along the river to a point approximately 4000 feet upstream of the confluence of Lynch Creek where the river transitions into a freshwater riparian zone that extends north to the city limits.

The area along the Corona Reach is a large natural floodplain area comprised of oak savanna and annual grasslands, dotted with seasonal wetlands and transected by numerous small tributaries draining into the Petaluma River. Upstream of Corona Road is known as the Denman Reach in which most of the natural riparian forest has been eliminated and rural/urban encroachments have compromised the natural floodplain functions causing serious flooding problems. The headwaters of the Petaluma River consist of a convergence of several creeks within a broad natural flood retention area known as Denman Flats at the northernmost boundary of the City. Willow Brook is one of the major tributary/headwaters to the Petaluma River which connects the Petaluma River with the shaded riverine aquatic and spawning habitats that exist upstream within Lichau Creek. The upper watershed areas are predominantly characterized by dairy farms extending to Sonoma Mountain on the east, Meacham Hill on the north, Burdell Mountain to the south, and the coastal hills separating the Petaluma Valley from Bodega Bay on the west.

### C. EXPECTED BENEFITS

Sensitive fish species known to exist in the Petaluma River include the Sacramento splittail and Delta smelt within the tidal reaches, as well as, steelhead trout and fall-run chinook salmon through the upper reaches. The Petaluma River also supports the non-native striped bass. Species expected to benefit from the Petaluma River Greenway Restoration Project are listed in Table III-1. The Petaluma River Greenway will provide restored shaded riparian aquatic habitat connecting the fragmented habitat areas along the Petaluma River to the headwaters and spawning habitats that exist upstream within Lynch Creek and Lichau Creek.

The Petaluma River Greenway will help preserve and restore the ecological relationship of the floodplain to the river allowing the natural floodplain functions for reduced flood hazards and minimizing floodplain encroachments through a major urban area. Restoration of the Petaluma River Greenway will also provide for shading of the channel, thus reducing water temperatures, increasing the aquatic food supply and eliminating channel undergrowth (tules) that trap sediment in the channel and require dredging. The Petaluma River Greenway will improve water quality and reduce impacts related to stormwater runoff through the provision of natural retention areas, vegetated swales and created seasonal wetlands. Additional benefits would accrue in the acquisition of flood easements within the upstream retention areas that provide an important function of aquifer recharge. The Petaluma Valley aquifer provides an opportunity to augment the City's water supplies and reduce the community's reliance on stream diversions (refer to discussion of water rights in the Adobe Creek Pilot Project proposal). A broader benefit from the Petaluma River Greenway project is the educational and research value it provides in the comprehensive evaluation of local efforts to restore the fisheries habitat and natural floodplain functions through a major urban area.

### D. BACKGROUND AND BIOLOGICAL/TECHNICAL JUSTIFICATION

The vision for the Petaluma River Greenway was developed through the Petaluma River Access and Enhancement Plan ("River Plan"). The Coastal Conservancy funded development of the River Plan that was completed and adopted with overwhelming community support in May 1996. The River Plan calls for restoration of riparian habitat and establishment of a continuous riparian corridor or "greenway" along the Petaluma River through the City of Petaluma. The area targeted for extensive habitat enhancement and riparian restoration incorporates the three upper reaches of the Petaluma River from the confluence of Lynch Creek upstream to include the tributary of Willow Brook at the confluence of the headwaters. Areas along the river downstream of Lynch Creek to the Petaluma Marina are highly urbanized and targeted for bank softening/stabilization and brackish marsh restoration to provide a continuous wildlife corridor connecting the riparian areas upstream of the City to the more extensive Petaluma River tidal marshes extending south of town to San Pablo Bay.

The City of Petaluma has also been working on an update of the Petaluma River Master Drainage Plan and Floodplain Management Study ("Flood Study"). The Master Drainage Plan, developed by the Sonoma County Water Agency in 1985, called for channelization of the Petaluma River and/or major diversions of flow into a constructed "by-pass channel". The updated Flood Study addresses flood hazards through a combination of setback levees and created flood terraces, the preservation and enhancement of natural retention areas, and bank improvements. The Flood Study is expected to be adopted as a major revision to the Master Drainage Plan in 1998. An Environmental Impact Report/Environmental Assessment is currently underway which will provide environmental clearance for

construction of the Petaluma River Greenway flood terrace, restoration and floodplain management areas.

#### **E. PROPOSED SCOPE OF WORK**

The proposed scope of work includes three phases from site acquisition, design and construction over the next three to five years. The first three years of the project will focus on site acquisition utilizing block grant funding provided by the Water Agency, Open Space District and supplemented by CALFED. Design services and construction is proposed in a phased program over a five year period as acquisitions within each reach are completed.

**Site Acquisition.** Site acquisition will be undertaken with willing sellers only. A coordinated program of public information and planning workshops has been initiated by the City in conjunction with the Petaluma River Master Drainage Plan and Upper Reaches Floodplain Management Study which is currently underway. This program will serve to notify property owners of the City's acquisition program and provide a forum for public information and participation in the planning process. As willing sellers are identified, the City will initiate the site acquisition process through consultant contract services to provide "right-of-way" mapping, Phase I assessments, and acquisition services. A qualified appraiser will be used to provide appraisal, negotiations and escrow services. Site acquisitions will focus on Denman Flats and the lower Willow Brook and upper Denman reaches in the first two years. Acquisitions in the Corona Reach are expected to be completed in the second and third year of the program as the planning for this area is completed and additional land dedications are provided.

**Design Services.** The City has undertaken an update of the Petaluma River Master Drainage Plan and Floodplain Management Study and Environmental Impact Report which is currently underway and expected to be completed in FY 97-98. Design services for construction of the flood terrace and restoration project in the lower Willow Brook and upper Denman reaches would be initiated through a professional services agreement with the City's consultant team (i.e. Questa Engineering and Phil Williams and Associates). The consultant team will prepare design plans and specifications and construction bid documents, including the contract requirements as specified in the grant agreement(s) and an engineers estimate.

**Construction** The City will advertise for bids and award the construction contract to the lowest responsible bidder in accordance with the terms of the grant agreement. Construction management, survey and inspection will be handled through professional service agreement/contract with the consultant team. City staff will provide project administration and oversight.

#### **F. MONITORING AND DATA EVALUATION**

A comprehensive long-term Monitoring and Habitat Management Program is proposed in conjunction with the S. F. Estuary Institute's Regional Monitoring Program through a Watershed Science Project. The proposed program includes three interrelated elements that will work together to form a comprehensive monitoring and adaptive habitat management program for the Petaluma River Watershed. The first element is the Watershed Science Project which will establish the baseline data and focus for the monitoring and educational program and volunteer efforts. The second element is the long-term monitoring program that would provide professional assistance in evaluating stream conditions, preparing annual reports and coordinating the data collected with the Interagency Management Team, the Regional Monitoring Program, and the Local Educational Program. The third

element is the Habitat Management Program which will utilize the monitoring data results and interagency evaluation to determine appropriate adaptive management techniques and maintenance needs to nurture the river back to a healthy, thriving fishery.

This program will tie together and build upon the Restoration Design and Management Guidelines for the Petaluma River Watershed; the Petaluma River Access and Enhancement Plan; and, the Petaluma River Master Drainage Plan and Upper Reaches Floodplain Management Study. Refer to the detailed discussion in the companion proposal for the Adobe Creek Pilot Project.

Funding for long-term monitoring and management of the Petaluma River Greenway will be provided through developer contributions, landscape assessment districts, parcel taxes (Zone IIA funds) and the roll-out of the Petaluma River Watershed Science Project and Habitat Management Program. The City will evaluate the feasibility of requiring development fees for long-term monitoring and management to be held in a trust fund account generating revenues in perpetuity for the monitoring and management program. Additionally, the City requires performance criteria and monitoring programs to be established as an integral part of the project review and approval process to ensure the success of restoration and mitigation projects. The Sonoma County Water Agency will contribute to the management and maintenance of the Petaluma River Greenway through the Zone IIA parcel taxes which are in place.

#### G. IMPLEMENTABILITY

The City has already an established framework for implementation of the Petaluma River Greenway Restoration Project through completion of the Petaluma River Access and Enhancement Plan (1996), the Restoration Design and Management Guidelines for the Petaluma River Watershed (1995) and the Master Drainage Plan and Upper Reaches Floodplain Management Study and EIR/EA that is currently underway. The planning, pre-design and environmental review process will be completed this fiscal year (FY 97-98). The project is ready for the first phase implementation of site acquisition over the next three years through FY 99-00. Partial funding for site acquisitions has been secured through the Sonoma County Open Space District, Sonoma County Water Agency and the City mitigation fees as illustrated in the Proposed Budget. Additional funding from CALFED for site acquisition would secure critical sites needed for the restoration project before land values escalate beyond the reach of local resources.

TABLE III-1  
BENEFITTING SPECIES

RESTORED TIDAL MARSH

Targeted Special-Status Species	Other Benefiting Species
* California black rail	* Marsh wren
* California clapper rail	* Shorebirds
* Chinook salmon (fall-run)	* Striped bass
* Delta smelt	* Virginia rail
* Sacramento splittail	
* Salt marsh common yellowthroat	
* Salt marsh harvest mouse	
* Steelhead trout	

FRESHWATER POND/MIXED RIPARIAN WOODLAND

Targeted Special-Status Species	Other Benefiting Species	
* California red-legged frog	* Bats	Marsh wren
* Saltmarsh common yellowthroat	* Belted kingfisher	Migratory waterfowl
* Western pond turtle	* Bullfrog	Muskrat
	* Cliff swallow	Pacific tree frog
	* Diving and puddle ducks	Raccoon
	* Garter snake	Red-winged blackbird
	* Great blue heron	Song birds
	* Great egret	Western toad

TRANSITIONAL PANNES

Targeted Special-Status Species	Other Benefiting Species
* Salt marsh common yellowthroat	* Killdeer
* Western snowy plover	* Marsh wren
	* Shorebirds

SEASONAL WETLANDS

Targeted Special-Status Species	Other Benefiting Species
* Northern harrier	* Great egret
	* Killdeer
	* Raptors

VALLEY OAK SAVANNA

Targeted Special-Status Species	Other Benefiting Species
* White-tailed kite	* Bushnit
	* Red-shouldered hawk
	* Scrub jay
	* Spotted towhee
	* Woodpecker

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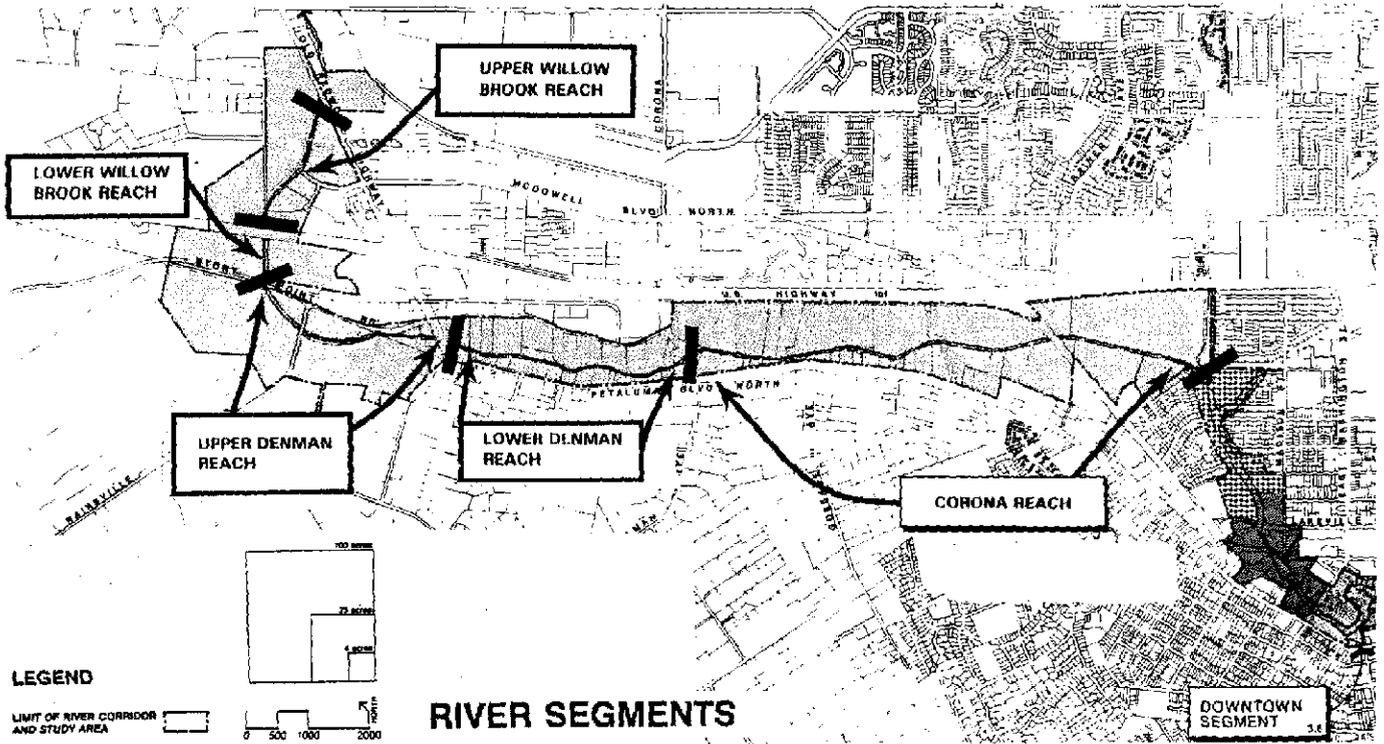


FIGURE III-1

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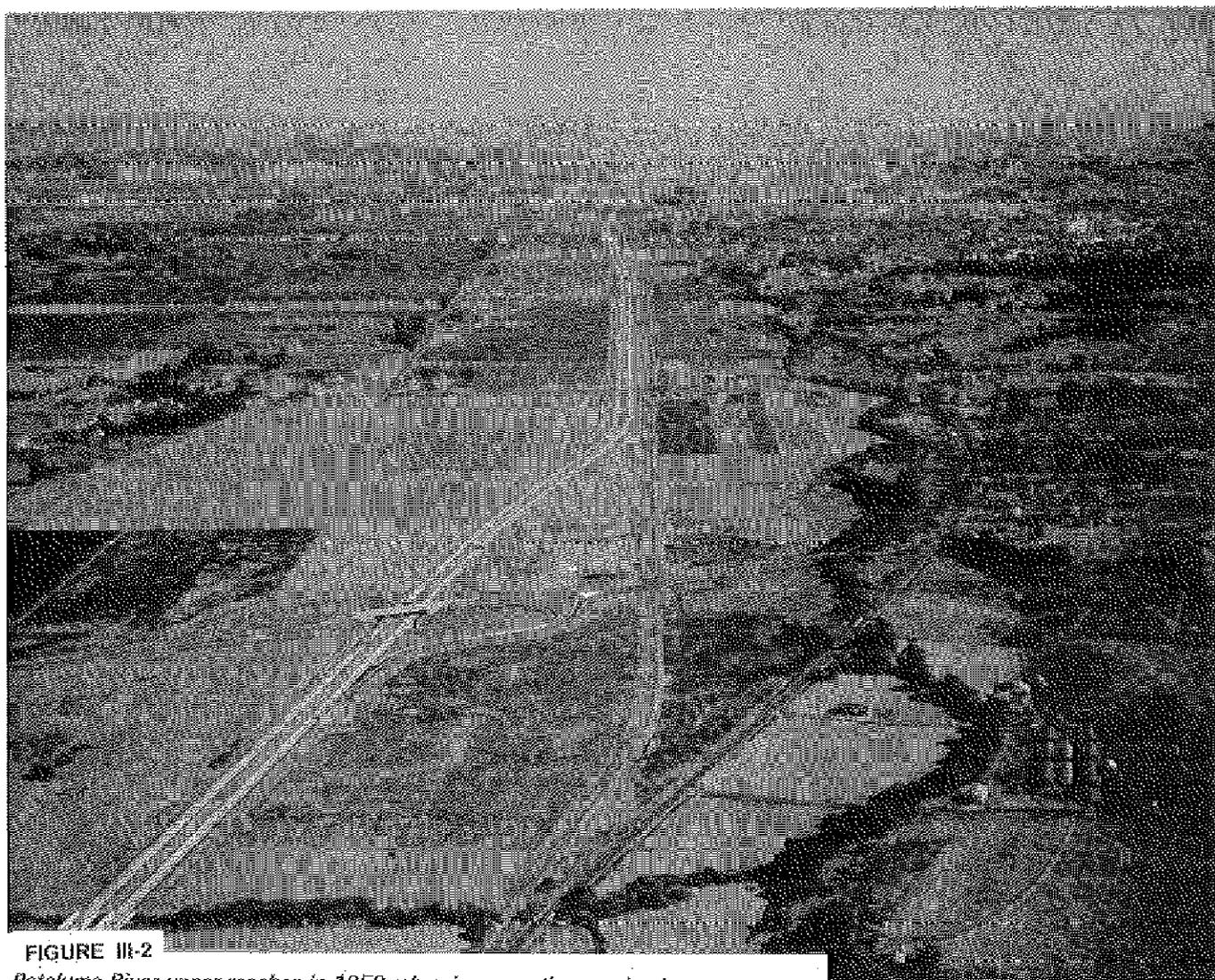


FIGURE III-2

*Petaluma River upper reaches in 1959, showing a continuous riparian canopy.*



**FIGURE III-3**  
*Petaluma River upper reaches in 1988, showing fragmented riparian corridor and urban encroachment.*

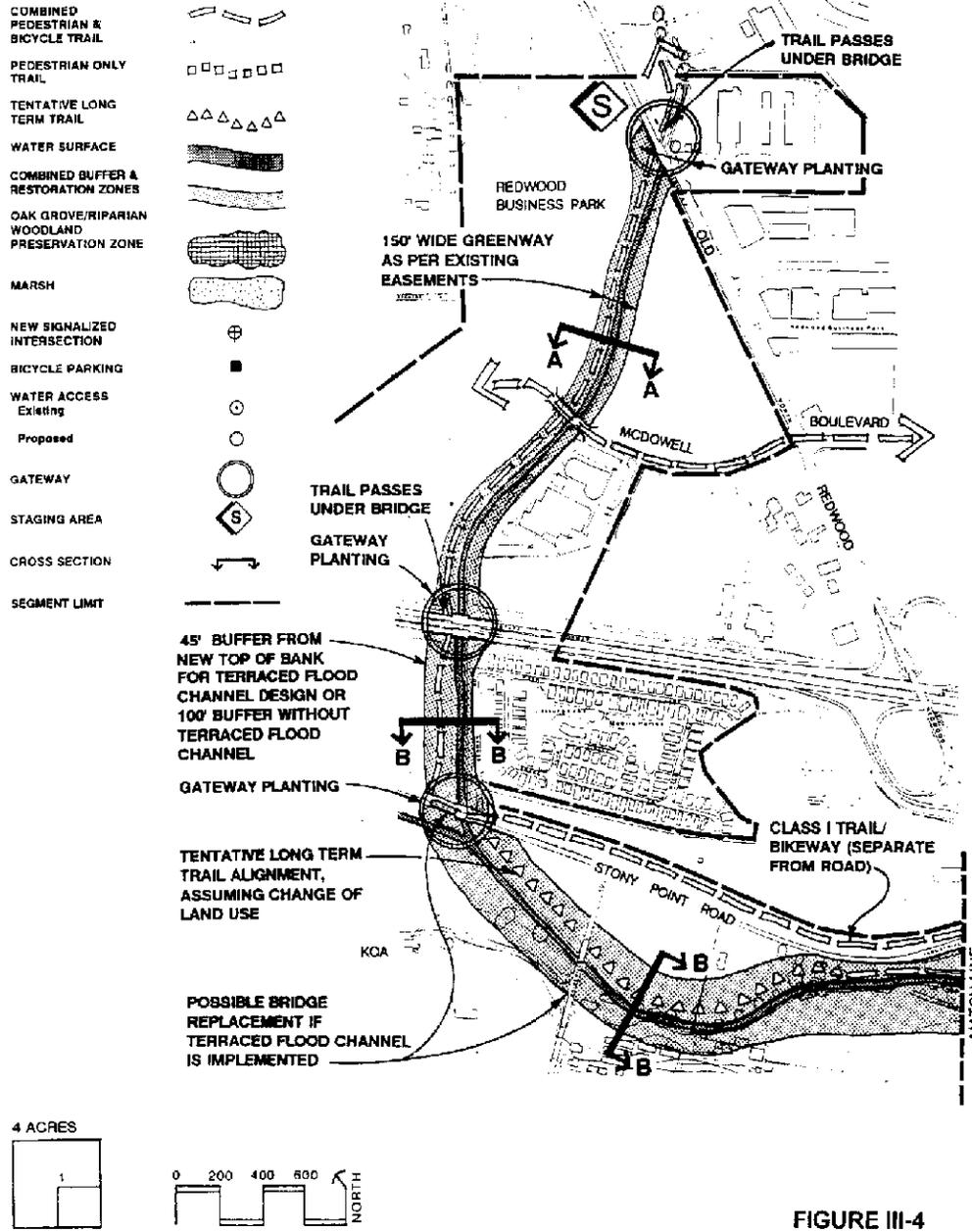
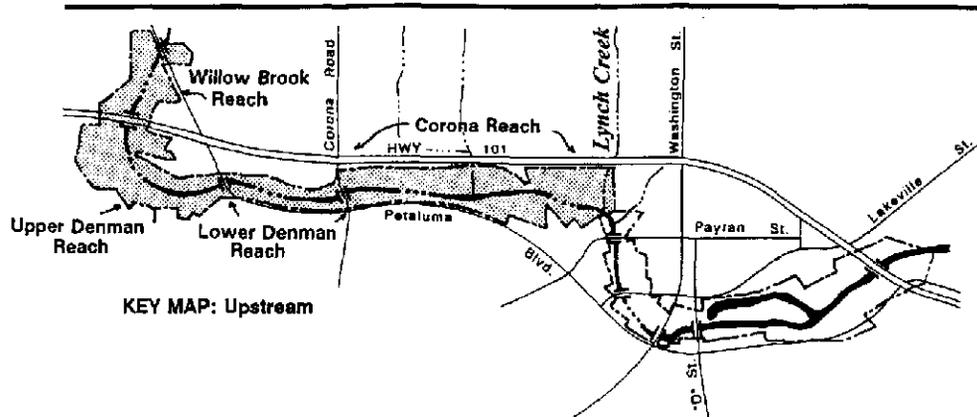


FIGURE III-4

WILLOW BROOK AND UPPER DENMAN REACHES



### 3.3 UPSTREAM SEGMENT

"Existing oaks, riparian habitat must be preserved and supplemented."

Participant in Community Workshop, 1992

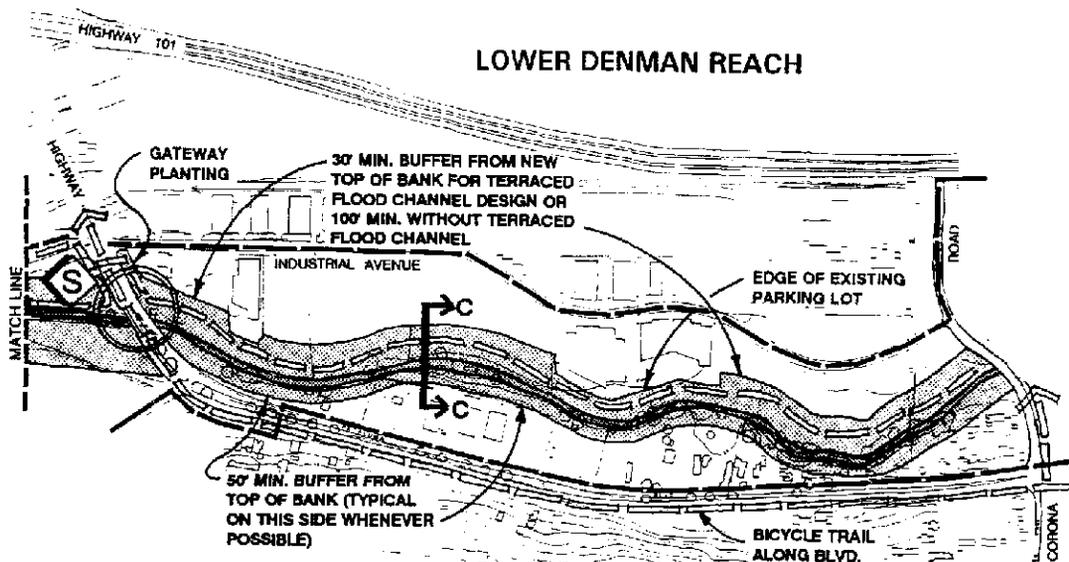
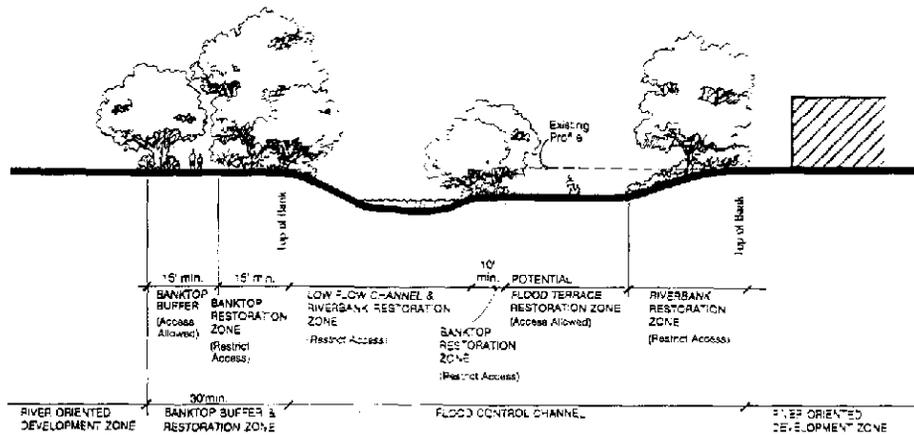
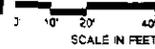


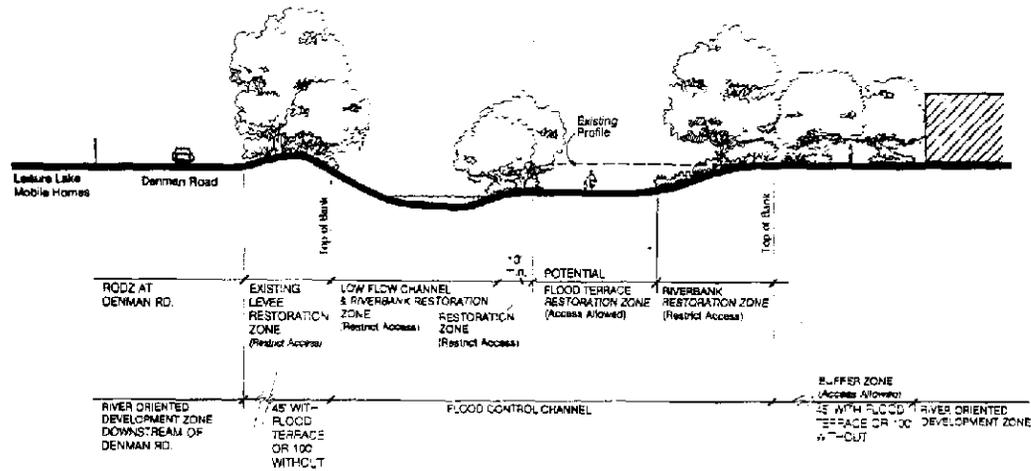
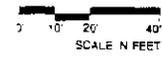
FIGURE III-5

**SECTION A-A GREENWAY AT WILLOW BROOK UPPER REACH**

(Revegetation/Restoration Should Be Concentrated On Southerly Bank)

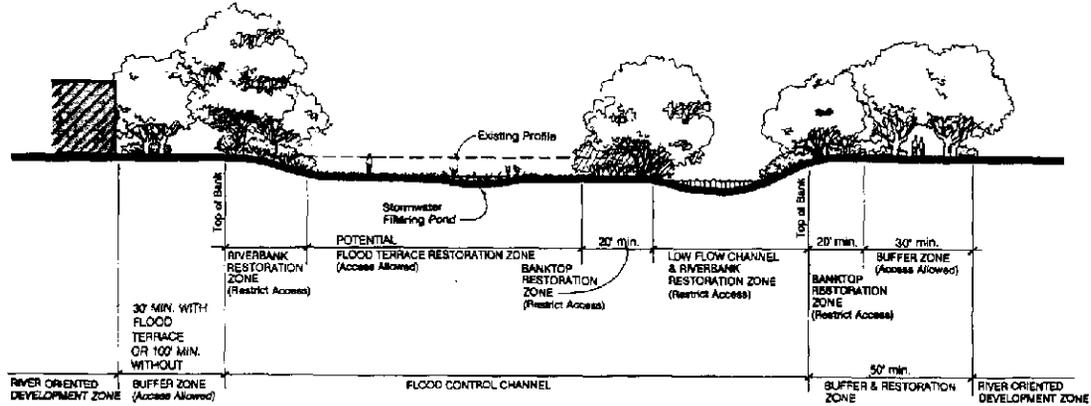
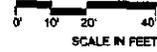


**SECTION B-B GREENWAY AT LOWER WILLOW AND UPPER DENMAN**



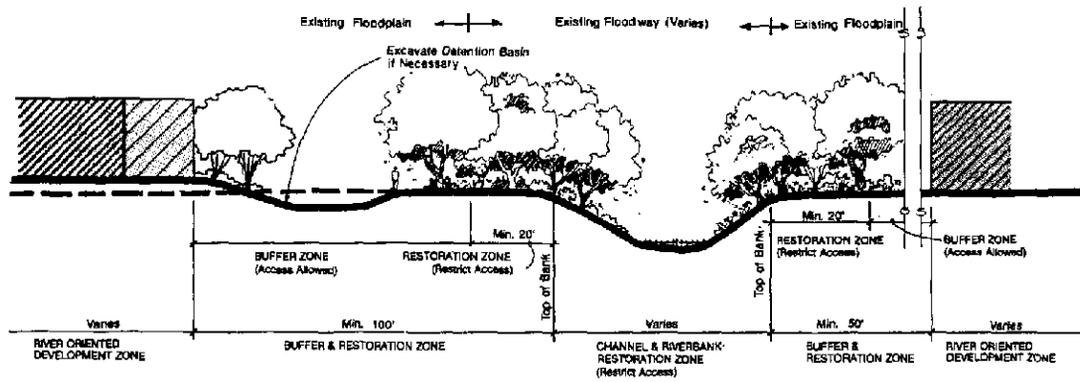
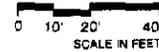
**FIGURE III-6**

**SECTION C-C DENMAN REACH - Between Old Redwood Highway and Corona Road**



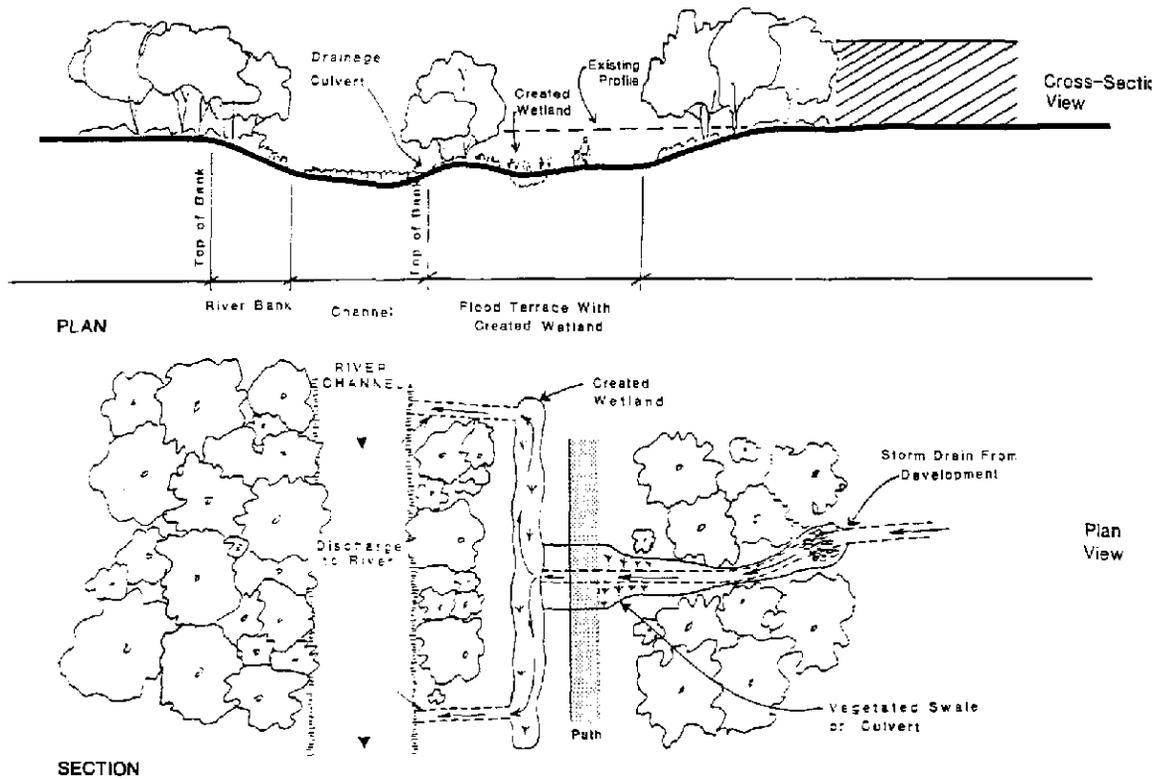
**SECTION D-D CORONA REACH - Standard Greenway Corridor**

Looking Downstream (No Planned Flood Control Alterations)



**FIGURE III-7  
LOWER DENMAN AND UPPER CORONA REACH**

FLOOD TERRACE WITH SEASONAL WETLANDS FOR WATER QUALITY CONTROL



*This conceptual diagram shows how a natural appearing created wetland might be integrated into a flood terrace in the upstream reaches to aid in filtering and cleaning urban runoff while providing aesthetic and biotic benefits.*

FIGURE III-8

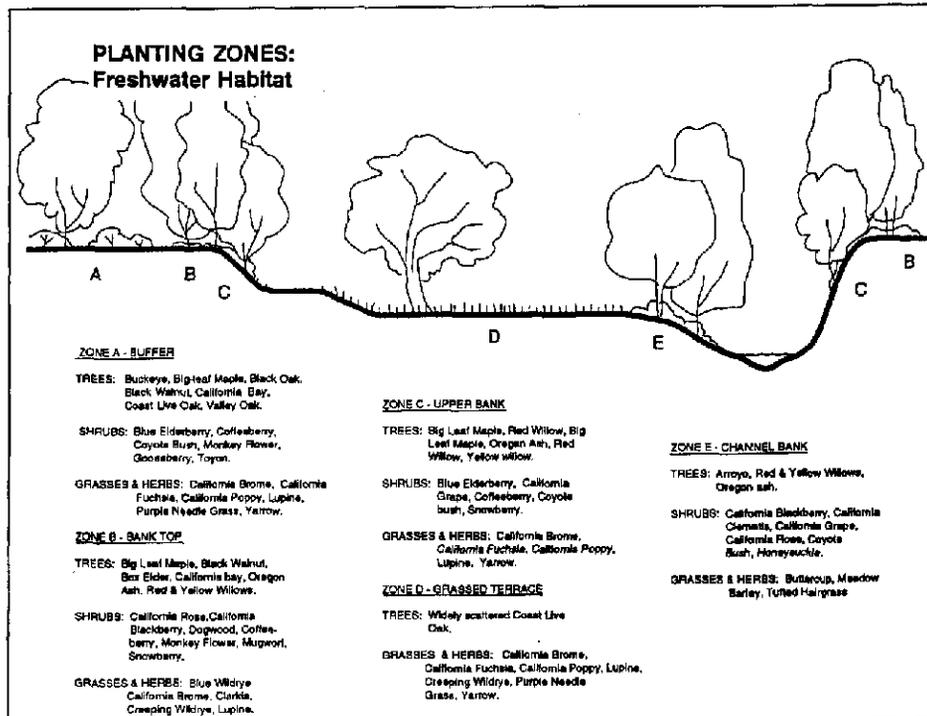
**Freshwater Habitat**

**Riparian Forests:** To enhance the freshwater riparian habitats upstream of Lynch Creek, riverbanks and banktops should be restored with a wide variety of native shrubs and trees. Enhancement would largely consist of removal of exotic trees and shrub species and planting more open areas with riparian trees and shrubs to close the canopy and create a more diverse and dense multi-story riparian habitat. Minor modifications to the streambed should also be made to improve fish habitat.

At banktop, dense plantings of willows can be included with the native Box elder, Oregon ash and Black walnut, with Big leaf maple close to the stream. The riparian forest

should gradually open to woodland then savannah areas of Live oak, Buckeye and scattered Valley oak where width of the buffer allows. Establishment of a complex mosaic of understory and overstory species of deciduous and evergreen plants is desirable in this area to provide a rich wildlife habitat with diverse food and cover sources throughout the year.

**Planting Density:** Riparian area planting density should result in a community with a range of about 50 to 100 trees per acre and 500 to 700 shrubs per acre. The trees should be most dense along the creek and decrease outward in wider portions of the corridor. Areas of Oak woodland should have a density of about 30 to 50 trees per acre. The overall



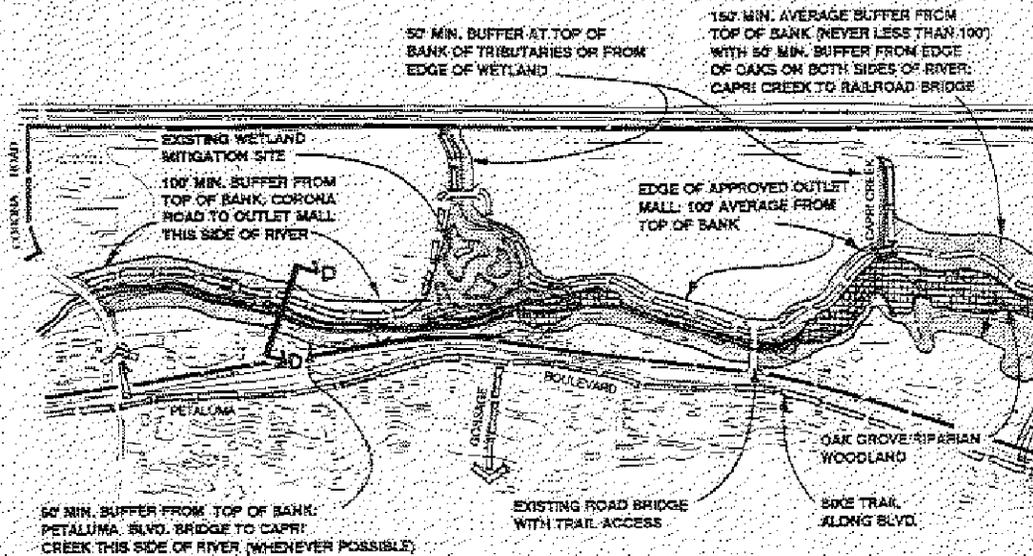
**FIGURE III-9  
FRESHWATER HABITAT PLANTING ZONES**



An example of a beautiful mature box elder tree (*Acer negundo*) can be found near the top of the bank in its natural riparian setting along the river near Capri Creek. This is one of the recommended trees on Table 1.



The upstream freshwater habitat in a relatively healthy state contains a diverse mix of canopy trees, understory shrubs, and wetlands, as seen in this area near Oak Grove Apartments.



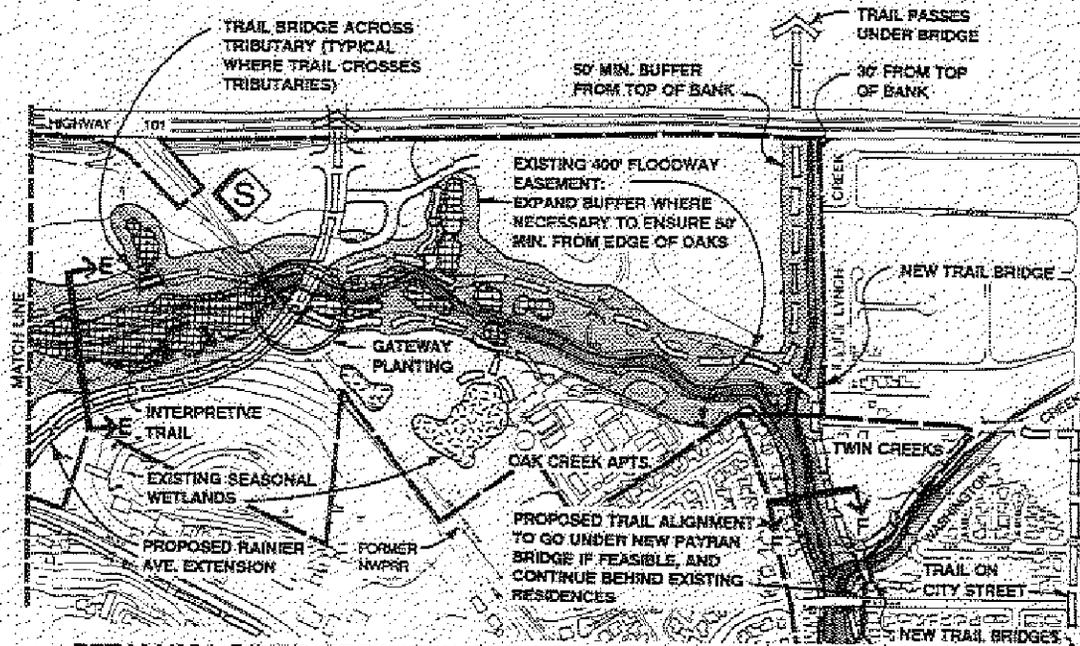
PETALUMA RIVER GREENWAY AT UPPER CORONA REACH  
FIGURE III-10



The naturally diverse riparian forest, which is re-establishing itself between Corona Road and Capn Creek, will be preserved and enhanced.



The native oak woodland in the upstream preservation area will be protected under the conditions of the River Plan. In addition, this valuable threatened habitat will be expanded, using these magnificent trees as seed sources.



PETALUMA RIVER GREENWAY AT LOWER CORONA REACH

FIGURE III-11



Valley oaks along the river in the Corona reach were once part of an extensive riparian forest typical of the freshwater reaches above downtown. The River Plan encourages preservation and expansion of these natural resources.



Oak Creek Apartments, just upstream of Lynch Creek, successfully integrates the natural flood zone into the property's open space network and preserves the existing oak trees.

SECTION E-E CORONA REACH - OAK WOODLAND/RIPARIAN VEGETATION AREA

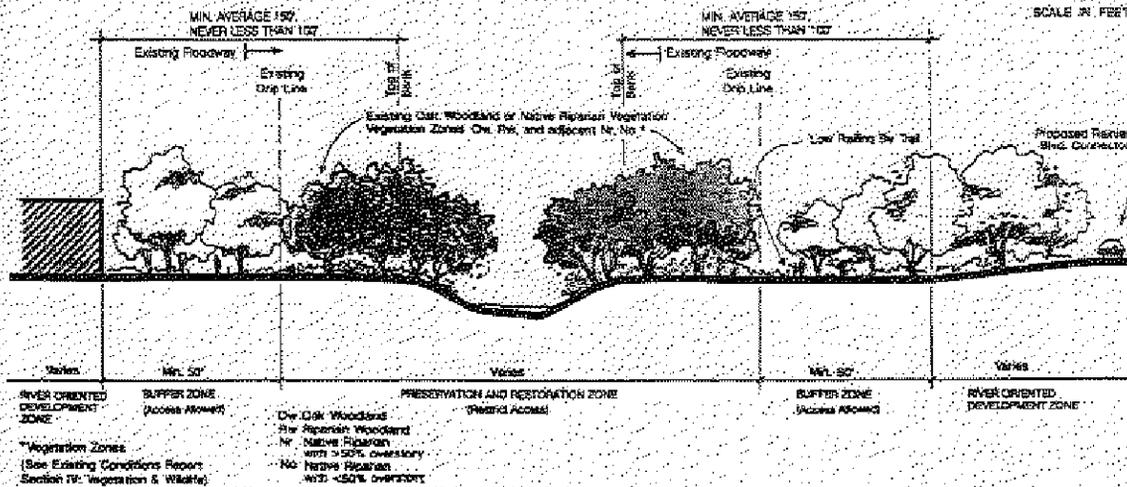
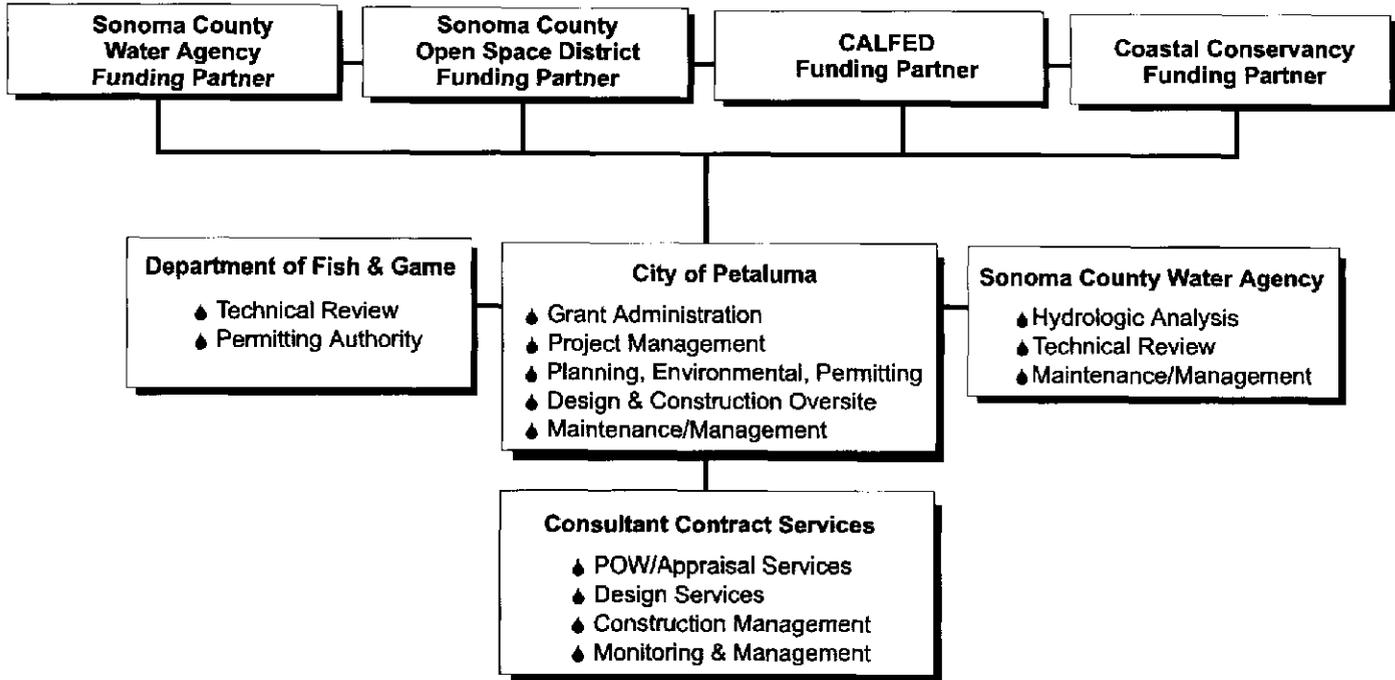


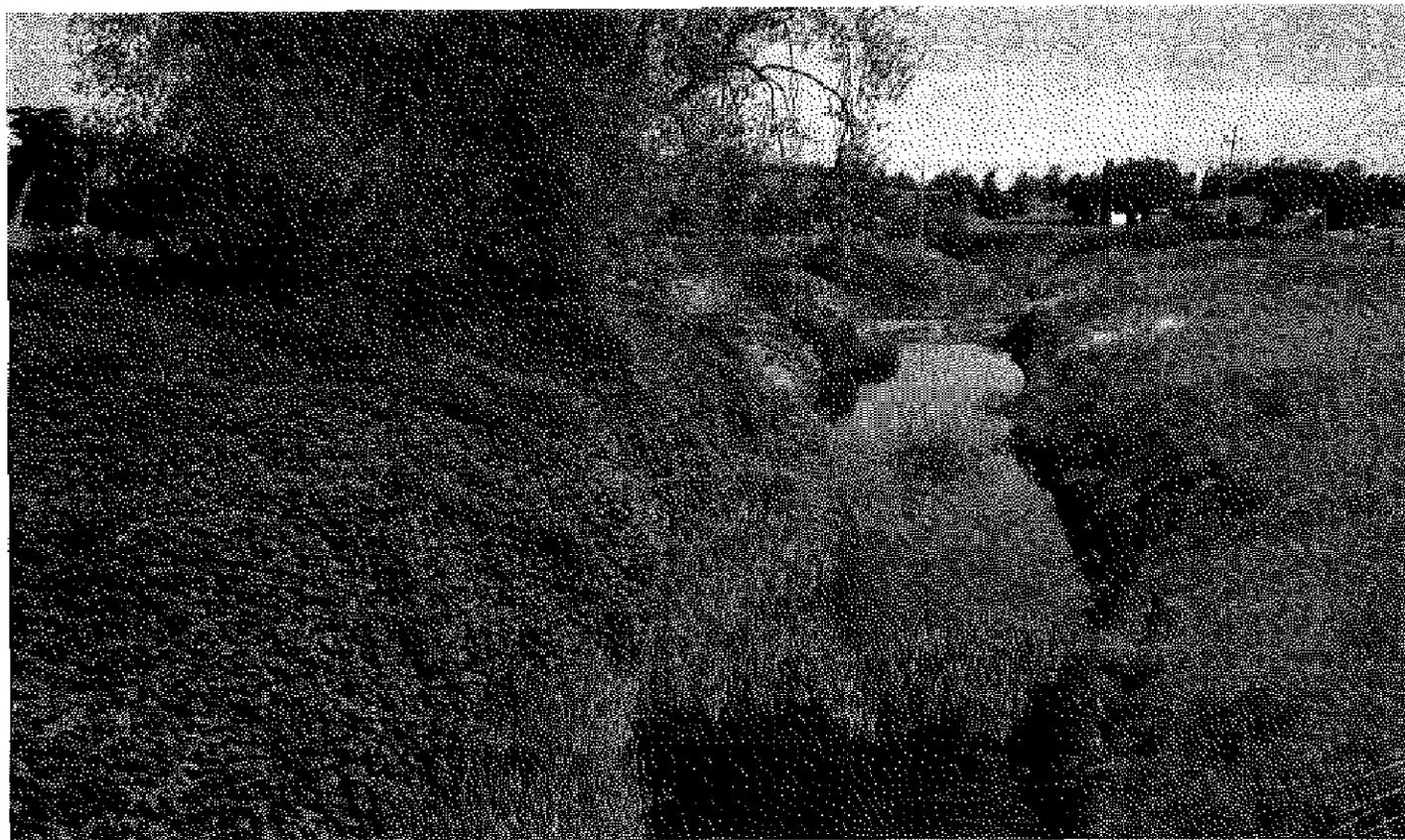
FIGURE III-12

SECTION E-E GREENWAY AT CORONA REACH

**FIGURE III-13**  
**Petaluma River Greenway**



I-003510



*View near confluence of the headwaters of the Petaluma River looking downstream through the upper Denman Reach. This area is proposed for acquisition, creation of a setback levee and flood terrace and extensive riparian restoration to provide a contiguous riparian corridor connecting the Petaluma River upstream through Willow Brook to existing spawning habitat in Lichau Creek.*

FIGURE III-14



FIGURE III-15

*These stately oaks and seasonal wetlands are located adjacent to the Petaluma River in the Corona Reach. The Petaluma River Greenway proposal would provide additional funding to acquire an interest in these floodplain areas to prohibit development and allow for riparian restoration. Seasonal wetlands along the Petaluma River serve an important function of filtering stormwater runoff.*

**SECTION IV  
COSTS AND SCHEDULE**

*"Make no small plans, for they fail to inspire the hearts of men.  
Make only big plans, for they contain magic that will compel men's actions."*

**Daniel Burnham, 1903  
"Father of City Planning"**

#### IV. COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

The estimated costs of the land acquisition program is summarized in Table IV-1. A proposed budget for the land acquisition block grant program is provided in Tables IV-2. Funding partners and local matching contributions for full implementation of the Petaluma River Greenway project are summarized in Table IV-4. The proposed budget and schedule calls for completion of site acquisitions over the next three years in FY 97-00 focusing on critical sites in the upper reaches and the Denman Flats retention areas. Design of the flood terrace is underway in the Upper Willow Brook reach for construction in FY 97-98. Design and construction in the lower Willow Brook or Denman Reaches could begin the second year in FY 98-99 for construction in FY 99-00. Within the Corona Reach, the natural floodplain would be preserved and enhanced with restored riparian vegetation and seasonal wetlands to connect the fragmented habitat areas.

All matching local funding sources for site acquisition, planning, and environmental review have been secured and budgeted by the City of Petaluma, Sonoma County Water Agency and Sonoma County Agricultural Preservation and Open Space District. Both the Sonoma County Water Agency and the Sonoma County Open Space District have allocated \$100,000 per year over the next five years for the acquisition program for a total local matching contribution of \$200,000 each year. The City has budgeted an additional \$500,000 for site acquisition in the Corona Reach as part of the Biological Mitigation Plan for the Rainier Avenue Extension and Interchange Project. Design studies are currently underway for completion of the mitigation project. An additional \$1,000,000 has also been budgeted for implementation of the Mitigation Plan to provide for restoration of the riparian corridor and seasonal wetlands in a portion of the Corona Reach (approximately 10 to 20 acres). Additional funding for completion of the setback levee and flood terrace in the Upper Willow Brook reach is also in place through the dedication of land by the developer and formation of a local assessment district.

Additional funding for design and implementation of the flood terrace and restoration project for each reach will be initiated by the City through the use of drainage impact fees, mitigation fees, developer contributions, local assessment districts and possible flood mitigation grants. Monitoring and maintenance of the Petaluma River Greenway will be funded through a combination of matching contributions from the Sonoma County Water Agency Zone IIA parcel taxes, Landscape Assessment Districts, and developer contributions. Parcel taxes for maintenance of the Petaluma River Greenway have been approved by the voters and provide matching funds for site acquisition through the Sonoma County Water Agency. The City is also evaluating the possible establishment of an endowment trust for the Petaluma River Watershed funded through impact fees and a roll-out of the Watershed Science and Habitat Management Program (refer to Adobe Creek Pilot Project proposal). The Watershed Science Project and Habitat Management Program will provide resources for long-term monitoring and management of the Petaluma River Greenway.

The City has the ability to finance the design and construction, as well as, long-term monitoring and maintenance, if and only if, the land is secured. Because the lands are subject to intensive development pressures, the City's ability to secure the land with local land use authority and funding resources is limited. CALFED participation in the block grant acquisition program would provide the additional leverage needed to secure the sites before land values escalate out of reach. The opportunity to implement the Petaluma River Greenway Project may be precluded by conversions in land use to urban and vineyard developments, if the City does not proceed to secure these sites immediately.

**PETALUMA RIVER WATERSHED  
MODEL RESTORATION AND MANAGEMENT PROGRAM**

**TABLE V-1  
PETALUMA RIVER GREENWAY  
COST ESTIMATE**

PROJECT REACH	QUANTITY	UNIT COST	OVERHEAD ADMIN	SERVICE CONTRACTS	MATERIALS ACQUISITION	PROJECT TOTAL	REQUESTED CALFED	LOCAL MATCH	FUNDING SOURCES
<b>REAL ESTATE TRANSACTIONS</b>									
<i>Willow Brook Reach</i>									
1. Phase I Site Assessment		estimate	\$ -	\$ 3,000	\$ -	\$ 3,000	3,000		
2. Appraisal Services		estimate		1,800		1,800	1,800		
3. ROW Mapping/Legal Description		estimate		1,500		1,500	1,500		
4a. Land Acquisition (Upper Willow Brook)	125,000 sq.ft.	\$3.50 /sq.ft.			437,500			\$ 437,500	Developer Contribution/Dedications
4b. Land Acquisition (Lower Willow Brook)	2.20 acres	\$30,000 /acre			66,116	66,116	66,116		
5. Closing Costs (escrow, documentation & title)		estimate			1,322	1,322	1,322		
6. Project Management and Administration		9% of contract	1,260			1,260	1,260		
			<b>\$ 1,260</b>	<b>\$ 6,300</b>	<b>\$ 604,938</b>	<b>\$ 74,998</b>	<b>\$ 74,998</b>	<b>\$ 437,500</b>	Developer Contribution/Dedications
<i>Denman Reach</i>									
1. Phase I Site Assessment		contract amount	\$ -	\$ 8,000	\$ -	\$ 8,000	8,000		
2. Appraisal Services		contract amount		6,000		6,000	6,000		
3. ROW Mapping/Legal Description		contract amount		3,000		3,000	3,000		
4a. Land Acquisition (Upper Denman)	350,000 sq.ft.	\$1.00 /sq.ft.			350,000	350,000	50,000	300,000	So. Co. Open Space (3 year budget)
4b. Land Acquisition (Lower Denman)	350,000 sq.ft.	\$1.00 /sq.ft.			350,000	350,000	50,000	300,000	So. Co. Water Agency (3 year budget)
5. Closing Costs (escrow, documentation & title)		estimate			7,000	7,000	7,000		
6. Project Management and Administration		9% of contract	3,400			3,400	3,400		
			<b>\$ 3,400</b>	<b>\$ 17,000</b>	<b>\$ 707,000</b>	<b>\$ 727,400</b>	<b>\$ 127,400</b>	<b>\$ 600,000</b>	So. Co. Water Agency/So. Co. Open Space Dist.
<i>Corona Reach</i>									
1. Appraisal Services		contract amount	\$ -	\$ 9,000	\$ -	\$ 9,000	\$ 9,000	200,000	So. Co. Open Space (2 year budget)
2. ROW Mapping/Legal Description		contract amount		1,800		1,800	1,800	200,000	So. Co. Water Agency (2 year budget)
3. Land Acquisition	21 acres	\$5 /sq.ft.			4,500,000	4,500,000	450,000	3,150,000	Developer Contributions
4. Closing Costs (escrow, documentation & title)		estimate		2,300	16,000	20,300	20,300	500,000	City Rainier Mitigation Acquisition
5. Project Management and Administration		9% of contract	2,620			2,620	2,620		
			<b>\$ 2,620</b>	<b>\$ 13,100</b>	<b>\$ 4,618,000</b>	<b>\$ 4,533,720</b>	<b>\$ 483,720</b>	<b>\$ 4,050,000</b>	Developer Contributions/City Mitigation Fees
<i>Denman Flats Flood Easements</i>									
1. Appraisal Services		contract amount	\$ -	\$ 12,500	\$ -	\$ 12,500			
2. ROW Mapping/Legal Description		contract amount		5,000		5,000			
3. Land Acquisition	200 acres	\$9,000 /acre			1,000,000	1,000,000		\$ 516,600	Possible Open Space District grant, if CALFED matching funds are made available
4. Closing Costs (escrow, documentation & title)		estimate		10,000		10,000			
5. Project Management and Administration		9% of contract	3,500			3,500			
			<b>\$ 3,500</b>	<b>\$ 27,500</b>	<b>\$ 1,000,000</b>	<b>\$ 1,031,000</b>	<b>\$ 516,500</b>	<b>\$ 516,600</b>	Possible So. Co. Open Space District Grant
<b>TOTAL ACQUISITION COSTS</b>			<b>\$ 7,360</b>	<b>\$ 46,900</b>	<b>\$ 6,022,938</b>	<b>\$ 6,367,118</b>	<b>\$ 1,204,618</b>	<b>\$ 6,130,400</b>	

1. Service contracts are for phase I assessments, appraisal, mapping of right-of-way and survey.

**PETALUMA RIVER WATERSHED  
MODEL RESTORATION AND MANAGEMENT PROGRAM**

**TABLE V-2  
PETALUMA RIVER GREENWAY  
PROPOSED BUDGET FOR BLOCK GRANT ACQUISITION**

PROPOSED BLOCK GRANT BUDGET					TOTAL	FUNDING SPONSOR
FY 97-98	FY 98-99	FY 99-00	FY 00-01	FY 01-02		
\$ 202,398	\$ 757,360	\$ 241,860	\$ -	\$ -	\$ 1,201,618	Requested CALFED Block Grant
\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000	So. Co. Water Agency Zone IIA Funds
\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 500,000	So. Co. Open Space District Block Grant
\$ -	\$ -	\$ -	\$ 500,000	\$ -	\$ 500,000	City of Petaluma Rainier Mitigation ROW
<b>\$ 402,398</b>	<b>\$ 957,360</b>	<b>\$ 441,860</b>	<b>\$ 700,000</b>	<b>\$ 200,000</b>	<b>\$ 2,701,618</b>	<b>40 % CALFED / 60% LOCAL MATCH<sup>1</sup></b>

1. Not including developer contributions/dedications or possible matching grants from So. Co. Open Space Distr

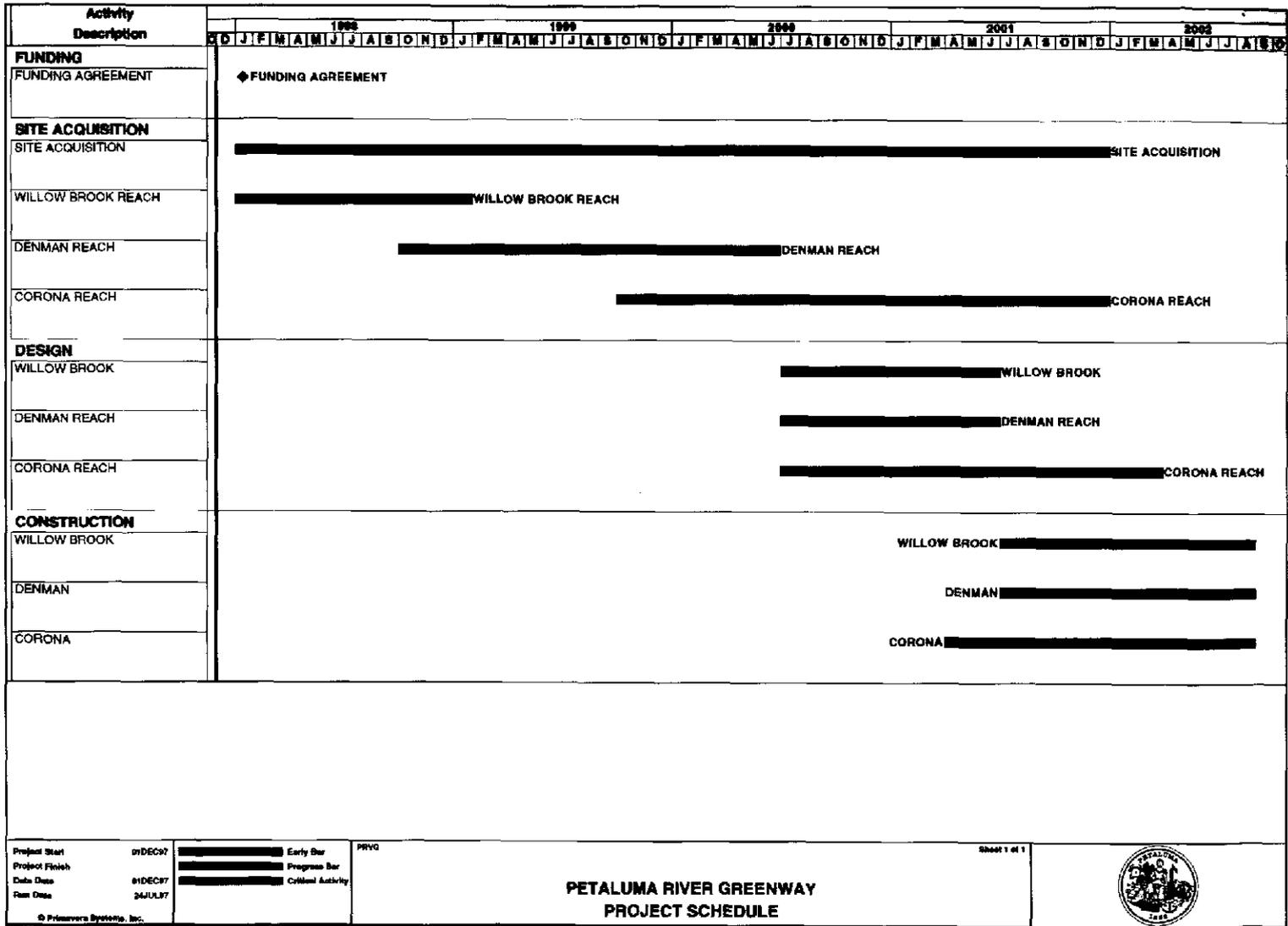
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TABLE V-3  
PROJECT FUNDING PARTNERS

<b>City of Petaluma - Master Drainage Plan &amp; EIR</b> (Planning, Environmental Review, Permitting & Project Management)	<b>\$ 334,000</b>
<b>Coastal Conservancy</b> (Funded Petaluma River Access and Enhancement Plan)	<b>300,000</b>
<b>Sonoma County Open Space District</b> (Land Acquisition Block Grant)	<b>500,000</b>
<b>Sonoma County Water Agency</b> (Land Acquisition Block Grant Funds Allocated)	<b>500,000</b>
<b>City of Petaluma</b> <b>Rainier Mitigation Project - Corona Reach</b> (Acquisition, Riparian Restoration and Seasonal Wetlands)	<b>1,500,000</b>
<b>Corona Reach Specific Plan</b> (Land Dedications and Project Mitigations)	<b>4,050,000</b>
<b>Other Private Contribution - Willow Brook Upper Reach</b> (Land Dedication, Construction of Flood Terrace and Riparian Restoration)	<b>1,000,000</b>
<b>CALFED Requested Grant</b> (Acquisition Block Grant)	<b><u>1,201,608</u></b>
<b>TOTAL PROJECT COSTS</b>	<b>\$9,385,608</b>

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Project Start 09DEC97  
 Project Finish 01DEC97  
 Date Drawn 04JUL97  
 Drawn By

Early Bar  
 Program Bar  
 Critical Activity

PRVG

Sheet 1 of 1

**PETALUMA RIVER GREENWAY  
 PROJECT SCHEDULE**



1-003518

**SECTION V  
APPLICANT'S QUALIFICATIONS**

*"We must see nature as a community  
to which we belong, rather than  
a community belonging to us."*

Aldo Leopold  
*A Sand County Almanac*

## V. APPLICANT QUALIFICATIONS

**City of Petaluma/Principal Grant Contractor/Applicant.** The City of Petaluma has worked diligently on planning for restoration of the Petaluma River and tributary watersheds and has a proven track record of success on many restoration projects. Our experience in successful mitigation and restoration projects is illustrated in the attached Table V-1 which lists the many projects that have been completed or are underway. The City's approach involves development of a project team with the skills, expertise, knowledge and experience to bring a project from conceptual planning through environmental review, site acquisition, design and construction as well as long term maintenance and management as illustrated in Figure V-1. The City's interdepartmental project team is complimented by outside agency support and consultant contract services where appropriate to provide a multi-disciplined team. As a local government agency, the City has extensive experience with right-of-way procedures for site acquisition and bid procedures for construction projects. As the primary land use authority, the City is also in a unique position to leverage CALFED funding with local contributions from the private sector and other participating agencies. The City of Petaluma also has extensive human resources available in an actively involved community of well qualified volunteers as described in Figure V-2.

Project management, grant administration and interagency coordination will be coordinated through the City's Planning Department with Jennifer Barrett, Senior Planner as the project manager. Jennifer Barrett has a proven track record of success in planning, environmental review, permitting and providing management support for the City's capital improvement program. Her recent accomplishments include completion of the Facilities Plan for the Wastewater Facilities Project, Petaluma Marsh Enhancement Project, Adobe Creek Restoration Project, and the Wetland Mitigation Plan for the Lakeville Highway Improvement Project.

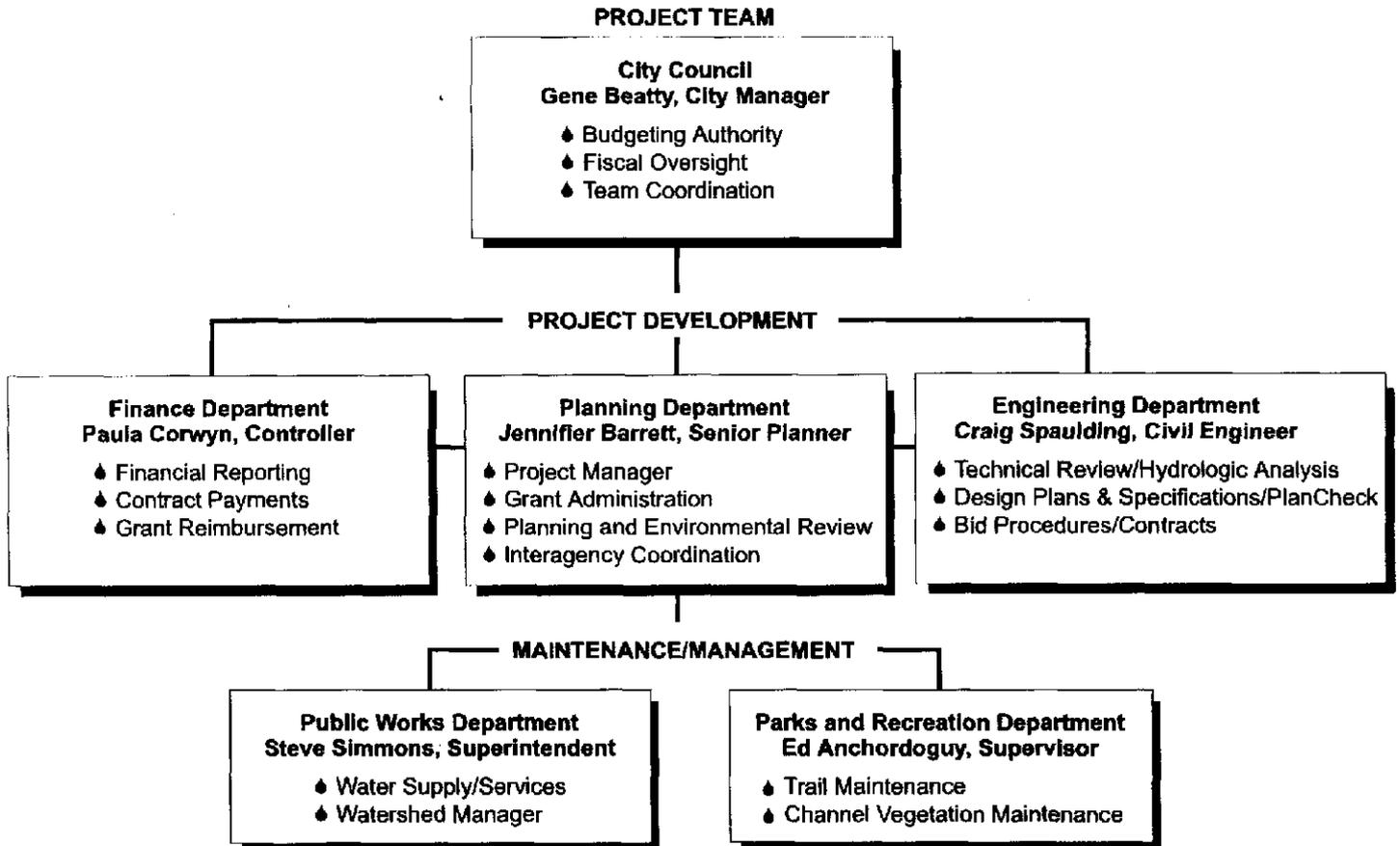
Technical assistance, plan review and bid procedures will be handled through the City's Engineering Department by Craig Spaulding, Associate Civil Engineer. Craig Spaulding has extensive experience in plan checking and design with particular expertise in hydrologic analysis and grading/earthwork.

Block grant funds will be managed by David Spilman, the Finance Director. Financial Reporting, contract payments and grant reimbursement requests will be managed through the City's Finance Department by Paula Corwyn, Controller. The Finance Department has managed numerous state and federal grants and has received numerous awards for excellence in financial reporting from both the Government Finance Officers Association and the California Society of Municipal Finance Officers.

**Agency Partners.** Interagency support will be provided by: (1) Department of Fish and Game - Bill Cox, Fisheries Biologist; (2) Sonoma County Water Agency - Cordell Stillman, Civil Engineer and Bill Stevens, Maintenance Supervisor.

**Technical Support.** Josh Collins of the S.F. Estuary Institute will provide assistance in development of the long-term monitoring program and ongoing support for providing data analysis and management recommendations. Jeff Peters of Questa Engineering is the co-author of the Restoration Design and Management Guidelines and the design engineer for the Master Drainage Plan and Upper Reaches Floodplain Management Study. Jeff Peters will also provide design and construction management services in conjunction with Betty Andrews of Phil Williams and Associates.

**FIGURE V-1**  
**City of Petaluma**  
**Petaluma Watershed**  
**Model Restoration and Management Program**



Petaluma has a long history of active citizen participation and volunteerism. Civic interest and pride in all sorts of social, political, recreational, and environmental issues have made Petaluma a very special place to live and work. This volunteer spirit may be used to help maintain the river corridor as a safe and healthy environment, as an educational tool for our schools, and as the principal image of our community.

#### TYPICAL VOLUNTEER ORGANIZATIONS

- BUSINESSES & CORPORATIONS
- PROFESSIONAL ORGANIZATIONS
- SERVICE & SOCIAL CLUBS
- EDUCATIONAL GROUPS & CLASSES: (e.g., United Anglers of Casa Grande, Youth for Environmental Action - YEA, Youth for Environmental Service - YES, Adopt a Watershed, Montessori School, and others)
- ENVIRONMENTAL GROUPS: (e.g., Sierra Club, Trout Unlimited, Audubon Society, Urban Creeks Council, Ducks Unlimited, Petaluma River Council, and others)
- NEIGHBORHOOD ASSOCIATIONS: (e.g., People Who Care - Thompson Creek, and others)
- RECREATION & SPORTS ORGANIZATIONS: (e.g., Petaluma Yacht Club, Northbay Rowing Club, Sea Scouts, Petaluma River Festival, and others)



The new Marina and nearby marsh restoration project have drawn attention to the natural and recreational aspects of the downstream river reaches.



Acquisition of McNeat Peninsula for a public park, a high priority, is being sought through Sonoma County Agricultural Preservation and Open Space District.

*"We must adopt a central organizing principle,  
then use every institution, every method  
to restore the earth's balance."*

Al Gore

TABLE V-1  
City of Petaluma  
**PETALUMA RIVER WATERSHED MODEL RESTORATION PROGRAM**

**SUMMARY OF PROJECTS COMPLETED OR UNDERWAY**

PROJECT PHASE/TYPE	STATUS	ESTIMATED COST	FUNDING SPONSOR
<b>PLANNING AND ENVIRONMENTAL REVIEW</b>			
<i>Petaluma River Marsh Restoration (Tidal Reaches)</i>			
Petaluma Marsh Enhancement Plan	Approved December 1992	\$ 30,000	Coastal Conservancy
<i>Petaluma River Riparian and Aquatic Habitat Restoration</i>			
Petaluma River Access and Enhancement Plan	Approved May 1996	300,000	Coastal Conservancy
<i>Petaluma River Upper Watershed Restoration</i>			
Restoration Design and Management Guidelines for the Petaluma River Watershed	Approved July 1996	68,000	Dept. of Water Resources
Petaluma Watershed Planning Program (Resource Conservation District 20bj grant)	Underway 1997-00	194,000	Resource Conservation District
Ellis Creek Enhancement Plan	Approved June 1996	30,000	City of Petaluma
<i>Adobe Creek Riparian and Aquatic Habitat Restoration</i>			
Lafferty Access and Management Plan (Adobe Creek Headwaters)	Underway 1997-98	78,000	City of Petaluma
Adobe Creek Restoration Plan and Management Program	Approved July 1996	18,000	Private Contribution (Ouesta Engineering)
<b>SITE ACQUISITIONS</b>			
<i>Petaluma River Marsh Restoration</i>			
Oxidation Pond Site 45 acres dedication to tidal marsh restoration	Acquired 1972	300,000	City of Petaluma
Dredge Disposal Site 45 acres dedication to tidal marsh restoration	Acquired 1970	200,000	City of Petaluma
Petaluma Marina 17 acres former Schollenberger Park	Acquired 1969	1,060,000	County of Sonoma Dedication
Alman Marsh Acquisition of 20 acres tidal marsh	Acquired 1997	64,000	So. Co. Open Space District
<i>Petaluma River Riparian and Aquatic Habitat Restoration</i>			
McNear Peninsula 20 acres	Acquired 1997	170,000	So. Co. Open Space District
Petaluma River Greenway Block Grant Acquisitions for Upper Reaches	Underway 1997-03	1,000,000	So. Co. Water Agency/So. Co. Open Space District
Petaluma Demonstration Wetlands Site (Grayview, Farms)	Underway 1997-98	1,400,000	City of Petaluma/So. Co. Open Space District
Petaluma River Corona Reach Flood Easement 20 acres	Acquired 1979	800,000	Developer Contribution
Petaluma River Vista site acquisition	Acquired 1997	60,000	City of Petaluma/TEA Grant
<i>Adobe Creek Riparian and Aquatic Habitat Restoration</i>			
Adobe Creek Upper Reach Cross Creek Dedication 40 acres	Acquired 1997	280,000	Developer Contribution
Adobe Creek Lower Reach Lakeville Business Park Dedication			
Upper Reach Restoration (Cross Creek Restoration and Mitigation Project)			
<b>IMPLEMENTATION/CONSTRUCTION</b>			
<i>Adobe Creek Restoration Project</i>			
Adobe Creek Fish Hatchery	Completed 1992	500,000	United Anglers/Private Donations
Lower Reach Restoration (Lakeville Highway Mitigation Project)	Completed 1995	225,000	City of Petaluma
Middle Reach Enhancement (downstream of McDowell Blvd.)	Completed 1995	22,000	Petaluma Tree People
Middle Reach Demonstration Restoration Project (Phase III)	Under Construction 1997	336,000	Environmental Enhancement Mitigation Program
Middle Reach Enhancement (upstream of Sartori Drive)	Completed 1985	10,000	United Anglers
Middle Reach Restoration (Fairway Meadows Mitigation Project)	Completed 1989	130,000	Developer Contribution
Upper Reach Restoration (Adobe Creek Golf Course Mitigation Project)	Completed 1985	260,000	Developer Contribution
Upper Reach Restoration (Cross Creek Restoration and Mitigation Project)	In Design for Const. 1988	260,000	Developer Contribution
Adobe Road Fish Ladder (County of Sonoma)	In Design for Const. 1988	40,000	United Anglers/NFWS
<i>Petaluma Marsh Enhancement Project</i>			
Oxidation Ponds Marsh Mitigation Project (45 acres tidal marsh restoration)	Completed 1972	40,000	City of Petaluma
Dredge Disposal Site Mitigation Project (45 acres tidal marsh restoration)	Completed 1970	40,000	City of Petaluma
Petaluma Marina Excavation and Marsh Enhancement (7-acre basin)	Completed 1987	1,000,000	City of Petaluma
Casa Grande Landfill Closure & Marsh Enhancement (10 acre tidal marsh/9 ac. upland)	Completed 1994	440,000	City of Petaluma
Schollenberger Park Lower Adobe Creek Fencing, Trailhead and Pathway Improvements	Completed 1996	150,000	City of Petaluma/State Grant
<i>Petaluma River Riparian and Aquatic Habitat Restoration</i>			
Paysan Reach Flood Control Project Mitigation	In Design for Const. 1998	280,000	U.S. Army Corps of Engineers
Willow Brook Middle & Upper Reach Flood Terrace and Riparian Restoration	In Design for Const. 1998	350,000	Redwood Business Park Contribution
Corona Reach Riparian Restoration (Rainier Ave Mitigation 10 ac. riparian 2 acres wetland)	In Design for Const. 1999	1,600,000	City of Petaluma
Corona Reach Factory Outlet Wetland Mitigation	Completed 1994	190,000	Developer Contribution
Corona Reach Factory Outlet Riparian Restoration	Completed 1994	125,000	Developer Contribution
<b>TOTAL PROJECT COSTS ESTIMATED</b>		<b>\$ 11,910,000</b>	

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***SECTION VI  
COMPLIANCE***

*"It is better to be half right on time,  
than totally right too late."*

Socrates

## VI. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

The City accepts the standard terms and conditions as stated in the Request for Proposals and will provide the appropriate forms for submittal with the grant agreement as noted in Table D-1. The non-discrimination form is attached with this grant proposal as specified in the Request for Proposals.

The only exception that the City suggests is that the Sonoma County Agricultural Preservation and Open Space District hold the conservation easement over the land, and the City hold fee title where applicable. The State will hold an interest in the land below the ordinary high water as specified in State law. The Sonoma County Open Space District will develop the terms of the easement and monitor the conservation easement in perpetuity. The Open Space District is funded through a ¼ cent sales tax and is well structured for this purpose with administrative staff to monitor conservation easements. There is a concern that if the State is involved in the acquisition, it may deter some of the property owners from participating in the acquisition program. It appears to be no need for the State to hold title to the land since a qualified open space agency is involved.

The City suggests this title arrangement only to simplify the acquisition process and would dedicate an interest to the State, if necessary to meet the terms of the grant agreement.

## NONDISCRIMINATION COMPLIANCE STATEMENT

---

**Company Name:** City of Petaluma

---

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.

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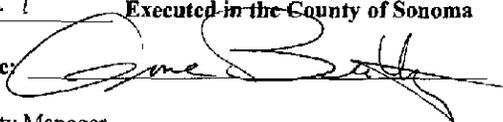
### CERTIFICATION

---

*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.*

**Official's Name:** Gene P. Beatty

**Date Executed:** 7-23-07 **Executed in the County of** Sonoma

**Prospective Contractor's Signature:** 

**Prospective Contractor's Title:** City Manager

**Prospective Contractor's Legal Business Name:** City of Petaluma

compliance / plan83

**SECTION VII  
ATTACHMENTS**

**PARTNERSHIP LETTERS AND  
LETTERS OF SUPPORT**

*"I truly believe from what I have seen,  
that Sonoma County is the chosen spot  
of all of the earth, as far as nature is concerned."*

Luther Burbank

Resolution No. 97-152 N.C.S.  
of the City of Petaluma, California

1  
2  
3  
4  
5 **APPROVING THE APPLICATION FOR GRANT FUNDS FROM CALFED FOR**  
6 **THE PETALUMA DEMONSTRATION MARSH PROJECT AND THE**  
7 **PETALUMA RIVER UPPER REACHES ENHANCEMENT PROJECT**  
8  
9

10 WHEREAS, an interagency agreement was signed by various state and federal agencies  
11 to resolve problems in the Bay-Delta system;

12  
13 WHEREAS, Category III of the funding agreement provides for restoration of habitat to  
14 implement the long-range plan for the Bay-Delta system;

15  
16 WHEREAS, the voters of the State of California have enacted Proposition 204 which  
17 provides state funds for grants under the agreement to local, state and federal agencies  
18 and nonprofit entities for projects to enhance and restore habitats for targeted species;

19  
20 WHEREAS, CALFED is the interagency association designated to establish procedures  
21 and criteria for reviewing grant proposals and selecting grant recipients;

22  
23 WHEREAS, said procedures and criteria established by CALFED require the applicant to  
24 provide a resolution authorizing such applications;

25  
26 WHEREAS, the applicant will enter into an agreement with CALFED or a designated  
27 agency to carry out the restoration project(s);

28  
29 WHEREAS, the City of Petaluma in conjunction with the Coastal Conservancy and other  
30 responsible agencies has developed restoration plans for the Petaluma River and the  
31 Petaluma Marsh which are significant resource areas in the Bay Delta system that are  
32 within the City of Petaluma's jurisdiction;

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WHEREAS, the Petaluma Marsh Enhancement Plan and the Petaluma River Access and Enhancement Plan demonstrate a significant benefit to endangered fish and other sensitive species could be achieved through implementation of the measures and improvements recommended in the area plans;

WHEREAS, additional funding is needed to implement the recommended measures;

NOW THEREFORE BE IT RESOLVED that the City Council of the City of Petaluma hereby approves the filing of grant applications for CALFED funding and appoints the City Manager, his successors or assigns to conduct all negotiations, execute and submit all documents, including, but not limited to applications, agreements, amendments, payment requests and so on, which may be necessary for the completion of the Petaluma Demonstration Marsh and the Petaluma River Greenway.

c:\grant\reso

Under the power and authority conferred upon this Council by the Charter of said City.

REFERENCE: I hereby certify the foregoing Resolution was introduced and adopted by the Council of the City of Petaluma at a (Regular) (~~Adjourned~~ (~~Special~~) meeting on the 16th day of JUNE, 1997, by the following vote:

Approved as to form

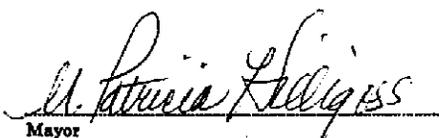
  
City Attorney

AYES: Read, Keller, Stompe, Torliatt, Maguire, Vice Mayor Hamilton, Mayor Hilligoss

NOES: None

ABSENT: None

ATTEST:   
City Clerk

  
Mayor

LYNN WOOLSEY  
5TH DISTRICT, CALIFORNIA

COMMITTEES:  
BUDGET  
ECONOMIC AND EDUCATIONAL  
OPPORTUNITIES

WASHINGTON OFFICE:  
438 CANNON BUILDING  
WASHINGTON, DC 20515-0506  
TELEPHONE: (202) 225-5181

Congress of the United States  
House of Representatives  
Washington, DC 20515-0506

DISTRICT OFFICES:  
1101 COLLEGE AVE., SUITE 200  
SANTA ROSA, CA 95404  
TELEPHONE: (707) 542-7182  
FROM PETALUMA CALL:  
(707) 795-1462  
NORTHGATE BUILDING  
1050 NORTHGATE DRIVE, SUITE 140  
SAN RAFAEL, CA 94903  
TELEPHONE: (415) 507-9554  
INTERNET ADDRESS:  
woolsey@hr.house.gov

July 23, 1997

RECEIVED

JUL 24 1997

PLANNING DEPARTMENT

CALFED Bay-Delta Program  
1416 Ninth Street, Suite 1155  
Sacramento, CA 95814

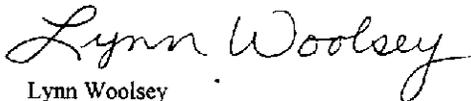
To Whom it May Concern:

I am writing to express my support for the City of Petaluma's proposal for funding from the CALFED Bay-Delta Program. Petaluma has already made outstanding achievements in their efforts at environmental restoration in the community.

As I understand it, funding from CALFED would allow the city to expand restoration projects for the Petaluma Marsh, Adobe Creek and upper reaches of the Petaluma River. Together, these projects would create a model watershed project for research and education. This model will be tied together by a watershed science and habitat management program focusing on Adobe Creek.

Thank you for your careful consideration of the City of Petaluma's application for funding. It is my sincere hope that Petaluma will receive the funding it needs to continue and expand its environmental preservation efforts for the community.

Sincerely,



Lynn Woolsey  
Member of Congress

LW:tf

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I-003530



Mr. David Hansen  
General Manager  
Sonoma County Agricultural Preservation  
and Open Space District  
415 Russell Avenue  
Santa Rosa, CA 95403

Re: City of Petaluma Open Space Grant Proposals for  
Acquisition of the Petaluma River Greenway and  
Marsh Restoration Site

Dear Mr. Hansen:

I am writing to express enthusiastic support for the City of Petaluma's applications for grant funding to acquire greenway lands along the upper Petaluma River and to restore wetlands adjacent to the City's oxidation ponds.

The Conservancy is gratified to have been able to assist the City in preparing natural resource enhancement and public access plans for both the relatively urbanized upstream area and the more rural downstream wetlands. The City has been very successful in working with landowners, citizens and agencies in crafting detailed, feasible plans for protecting and improving river resources and in carrying out plan recommendations.

Implementation of the projects for which the City is requesting Agricultural Preservation and Open Space District funding would enable creation of a buffer for fish and wildlife habitat in the upstream area and restoration of wetlands and a migration corridor for the endangered saltmarsh harvest marsh near the oxidation ponds. Both of these undertakings are essential components of the plans for which the Conservancy provided funding.

We hope that the District will contribute to Petaluma River protection and restoration by providing the funding assistance requested by the City.

Sincerely,

Michael L. Fischer  
Executive Officer

1330 Broadway, 11th Floor  
Oakland, California 94612-2530  
510-286-1015 Fax: 510-286-0470

C a l i f o r n i a   S t a t e   C o a s t a l   C o n s e r v a n c y

**SAN FRANCISCO BAY JOINT VENTURE**

mailing address: Coastal Conservancy, 1330 Broadway, Suite 1100, Oakland, CA 94612  
phone: 510-286-6767 fax: 510-286-0470

July 17, 1997

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JUL 21 1997

PLANNING DEPARTMENT

Kate Hansel  
CALFED Bay-Delta Program  
1416 Ninth St., Suite 1155  
Sacramento, CA 95814

RE: City of Petaluma Category III Proposals for the Petaluma Marsh Restoration, Petaluma River Greenway and Adobe Creek Restoration Project

Dear Kate:

I am writing on behalf of the Management Board of the San Francisco Bay Joint Venture in support of the City of Petaluma's grant applications to acquire lands to create a greenway along the Petaluma River, to restore 150 acres of wetland habitat in the Petaluma Marsh and to restore the Adobe Creek Watershed.

As you know, the Joint Venture is a partnership of public agencies, environmental organizations, business representatives and agricultural interests working cooperatively to protect, restore and enhance all types of wetlands around the San Francisco Bay region. We have begun assisting with the completion of existing wetlands protection projects and developing new projects and have been working with the city of Petaluma on their projects.

The City of Petaluma has done an excellent job of implementing the Coastal Conservancy funded Petaluma Marsh Enhancement Plan and Petaluma River Access and Enhancement Plan. The Joint Venture strongly supports their work. The creation of a greenway along the upper reaches of the Petaluma River will create a buffer from urbanization and provide for habitat restoration as described by the River Plan. The proposed marsh restoration project near the City's oxidation ponds will create approximately 50 acres of salt marsh along the river as envisioned in the Marsh Plan. The City's work on Adobe Creek on behalf of fish and wildlife has helped bring back steelhead and salmon.

We support these proposals and encourage CALFED to consider them favorably. Thank you for your consideration.

Sincerely,

  
Nancy Schaefer  
Coordinator

✓ cc: Jennifer Barrett, City of Petaluma



**Trout Unlimited  
of California**

July 22, 1997

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

Re: City of Petaluma-Restoration Project:

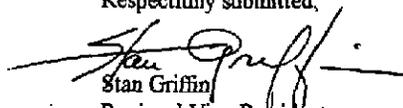
Dear Mr. Snow:

Trout Unlimited is America's leading coldwater fisheries conservation organization dedicated to the protection and restoration of our trout and salmon resources and the watersheds that sustains those resources. We have over 1100 members in Marin and Sonoma Counties who voluntarily contribute their personal resources to aquatic habitat protection and restoration efforts.

I have reviewed the Petaluma Watershed Model restoration and Management Program with some of our local members and they are very supportive of the program. Not only will it benefit the riparian and aquatic habitat in the watershed, the program will greatly improve the water quality in the river and the San Pablo Bay and the Wildlife Refuge. As the San Pablo Bay is used by the outgoing migrating juvenile salmon and steelhead as a nursery area prior to their journey to the ocean the improved water quality will greatly enhance their survival.

As previously indicated, Trout Unlimited supports the above entailed program and looking forward to an improved Petaluma River watershed and improved water quality in San Pablo and San Francisco Bay.

Respectfully submitted,

  
Stan Griffin  
Regional Vice-President  
Southwest Region

5200 Huntington Ave. #300, Richmond, CA 94804-5416 • Phone 510-528-5390 • Fax 510-525-3664

---

*Protecting and Improving Your Fishing Future*

SIERRA  
CLUB



## SONOMA COUNTY GROUP

P.O. Box 466, Santa Rosa, CA 95402

(707) 544-7651

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JUL 16 1997

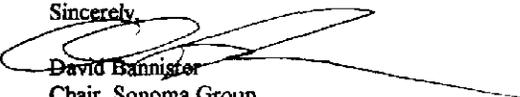
PLANNING DEPARTMENT

CALFED Bay-Delta Program  
1416 Ninth St. #1155  
Sacramento, Ca. 958145

To Whom It May Concern:

The Sonoma Group of the Sierra Club supports the restoration efforts of the City of Petaluma in the projects: Petaluma Marsh, Petaluma River Greenway, and Adobe Creek. These restoration efforts are important to bringing wildlife back into habitats that had been degraded. Thanks for your consideration of these important efforts.

Sincerely,



David Bannister  
Chair, Sonoma Group

*To explore, enjoy and protect the earth*

I - 0 0 3 5 3 4

I-003534