
DRAFT

SACRAMENTO RIVER

GREENWAY PLAN

Prepared by:

County of Sacramento
County of Yolo
City of Sacramento
City of West Sacramento
State Lands Commission

Date: December 1992

ACKNOWLEDGMENTS

Planning Team

Gene Andal, Director, Parks, Recreation and Open Space, County of Sacramento

Earl Balch, Director, Department of Parks and Grounds, County of Yolo

Val Toppenberg, Deputy Director of Redevelopment Agency, City of West Sacramento

Walt Ueda, Acting Director Department of Parks and Community Services, City of Sacramento

Charles Warren, Executive Officer, State Lands Commission

Technical Team

Janet Baker, City of Sacramento

Earl Balch, County of Yolo

Tara Gee, County of Sacramento

Elaine Hamby, County of Sacramento

Grace Hovey, City of Sacramento

Michelle Nelson, City of Sacramento

Elizabeth Patterson, State Lands Commission

Mary Shearer, City of West Sacramento

Special Thanks to Other Contributors

Kathleen Bartoloni, Department of Fish and Game

Rob Burness, County of Sacramento

Dan Gorfain, State Lands Commission

Jeanne Gunther, State Lands Commission

Jeffrey Hart, County of Sacramento

Roy Imai, County of Sacramento

Diana Jacobs, State Lands Commission

Scot Mende, City of Sacramento

Peter Rabbon, Department of Water Resources

Katherine Ross, State Lands Commission

John Squires, Board of Reclamation

Dorothy Walker, State Lands Commission

TABLE OF CONTENTS

I.	INTRODUCTION	Page 2
	Greenway Concept	3
	Memorandum of Understanding	3
	Organization of the Greenway Plan Document	4
II.	BACKGROUND	8
III.	GOALS AND POLICIES	10
	Description of Riparian Habitat	13
	Description of Land Use Designations	17
IV.	AREA DESCRIPTIONS	23
	A. Sacramento County	
	1. Airport Planning Area - Sacramento County	25
	2. South Natomas Planning Area - City of Sacramento	29
	3. Downtown/Landpark Planning Area - City of Sacramento	32
	4. Pocket Planning Area - City of Sacramento	35
	5. Freeport Planning Area - City of Sacramento	38
	B. Yolo County	
	1. North Elkhorn Planning Area - Yolo County	40
	2. South Elkhorn Planning Area - Yolo County	42
	3. West Sacramento Planning Area - City of West Sacramento	45
	4. Babel Slough Planning Area - Yolo County	52
V.	IMPLEMENTATION	53
	Managing Entity	53
	Facilities Considerations	54
	Land Acquisition Considerations	54
	Riparian Habitat Restoration Considerations	55
	Funding	56
VI.	REFERENCES	57

APPENDICES

58

Appendix A	Overview of the Sacramento Marina Carrying Capacity Study	A-1
Appendix B	Overview of Public Trust Doctrine	B-1
Appendix C	Memorandum of Understanding	C-1
Appendix D	Natural Resources of the Sacramento River	D-1
Appendix E	List of Flora	E-1
Appendix F	List of Fauna	F-1
Appendix G	Marina Background	G-1
Appendix H	Managing Entity Options	H-1
Appendix I	Potential Funding Sources	I-1

LIST OF TABLES AND EXHIBITS

iii

Exhibit 1 -	Regional Map	1
Exhibit 2 -	Public Ownership Maps (4)	6
Exhibit 2a-	Bicycle Trails Existing and Proposed	9
Exhibit 2b-	Levee Cross-section	11
Exhibit 3 -	Riparian Habitat Maps (4)	16
Exhibit 4 -	Proposed and Existing Land Uses Along Greenway Maps (4)	18
Exhibit 5 -	Regional Map Showing All Sections of the Greenway	22
Exhibit 6 -	Map for Sacramento County Airport Area	24
Exhibit 7 -	Map for South Natomas	28
Exhibit 8 -	Map for Downtown/Land Park	31
Exhibit 9 -	Map for Pocket Area	34
Exhibit 10 -	Map for Freeport	37
Exhibit 11 -	Map for North Elkhorn	39
Exhibit 12 -	Map for South Elkhorn	41
Exhibit 13 -	Map for West Sacramento	44
Exhibit 14 -	Map for Babel Slough	51

Appendix

Marinas Location Maps	G-1a, G-1b
Table of Existing and Proposed Marinas and Facilities	G-2a, G-2b

GLOSSARY

iv

GLOSSARY:

Boundary Line Agreement means a negotiated agreement for the purpose of reaching an agreed boundary location of the high or low water marks under Public Resources Code Section 6357. This line is used to delineate the boundary between sovereign state owned lands and private upland parcels.

Carrying capacity means the ability of a natural or artificial system to absorb population growth or physical development without significant degradation or breakdown. The term as used in ecosystems management is defined as the maximum population density for a given species in an environment which could be supported without degradation of that environment.

Cover Types means the classification of habitats, primarily based on type and condition of existing vegetation. (Often synonymous with vegetative type).

Development Rights means the concept that public or private entities may purchase or transfer credits described as "development rights", by separating a landowner's property right to develop from the property itself, in order to preserve sensitive land.

In-stream marinas means those marinas which are located within the existing river channel.

Kapiloff Funds means funds earmarked exclusively for trust purposes pursuant to Division 7 of the Public Resources Code. The funds are created by monetary payments to State Lands Commission as the result of title settlements consistent with the public trust doctrine.

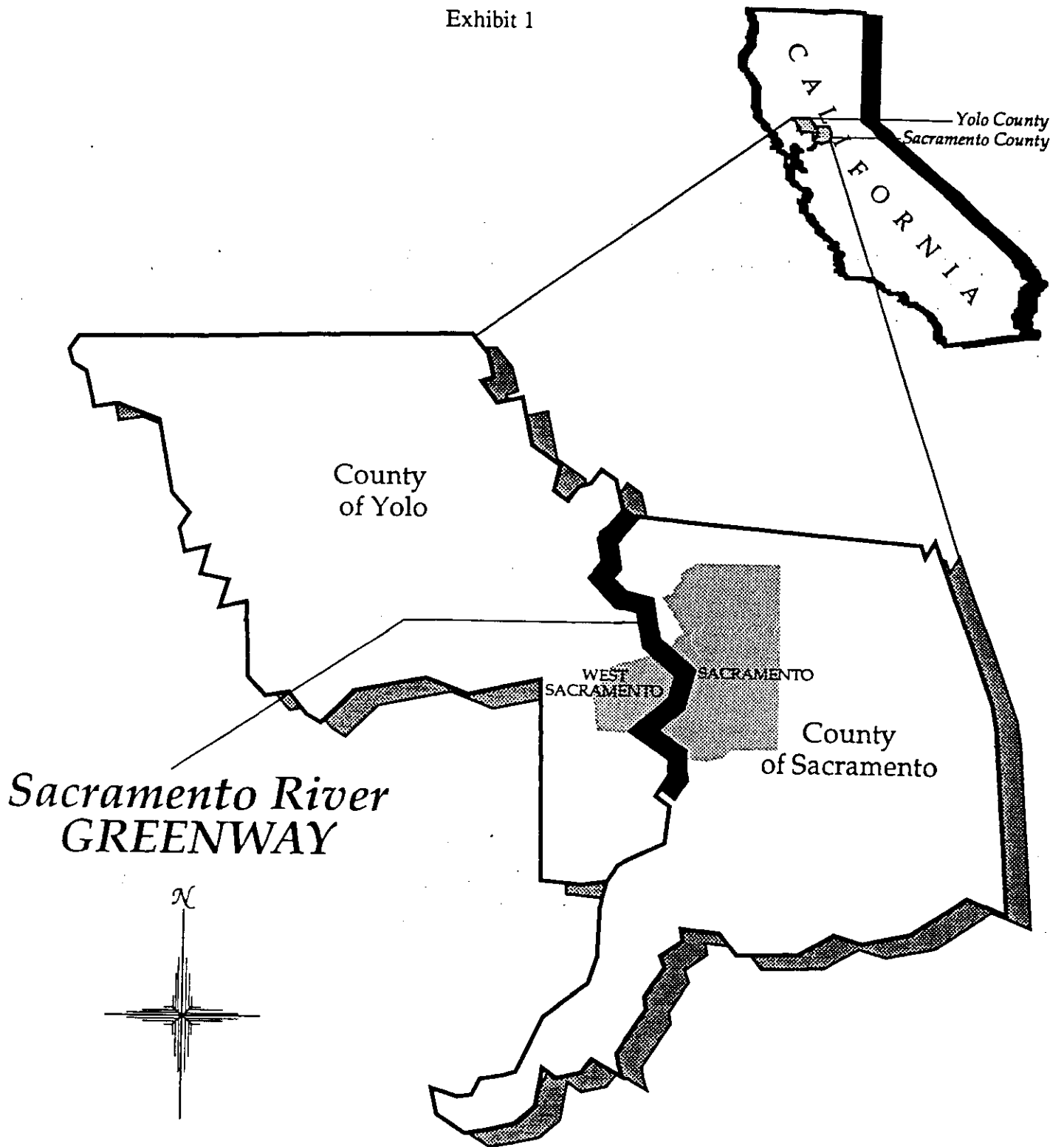
Littoral corridor means shorelands bordering the river.

Mitigation Bank means those lands (wetlands, riparian and aquatic) acquired for protection, restoration and management for habitat values and shares "bought" into by developers fulfilling their "no net loss" responsibility by helping to pay off a habitat lands purchase already made.

Off-stream marinas means those marinas located outside of the existing river channel usually in an artificial "harbor" created with a cut in the levee and into adjoining uplands.

Opportunities and Constraints means a planning approach for designating land use that takes into account environmental limitations, such as flood plain hazards and sensitive habitat, existing land use, such as agricultural or residential and opportunities for development, such as greenway trail facilities or urban waterfront.

Exhibit 1



SACRAMENTO RIVER GREENWAY PLAN

I. INTRODUCTION

The Sacramento River Greenway Plan is a regional resource management plan for a portion of the Sacramento River. The plan area extends from the Sacramento/Sutter County line at river mile 75.5 to slightly below the Freeport area at river mile 45.8. (See Exhibit 1, Regional Context Map.) The Plan meets the requirements of Government Code §65300 for Area Plans.

The impetus for the Greenway Plan came as a result of the Sacramento River Carrying Capacity Study (River Study), which was accepted by the State Lands Commission (the Commission or SLC) in 1986. Elements of the River Study are described in Appendix A, "Overview of the Sacramento River Marina Carrying Capacity Study." One of the goals of the River Study was to provide the Commission and other public agencies with information to evaluate the level of marina development which could be accommodated in balance with other competing uses and resource protection in the Sacramento/Yolo County area of the Sacramento River (River Mile 75.5 to 45.5). Realizing that implementation of the River Study would require coordinated land use decisions among the various jurisdictions within this stretch of the River, the State Lands Commission introduced the concept of a Greenway Plan. Appendix G provides further background on the marinas.

The Greenway Plan was initiated by the State Lands Commission, through a Memorandum of Understanding (MOU) with the City of Sacramento and the counties of Sacramento and Yolo. The City of West Sacramento is also participating in the development of the Plan, but did not sign the MOU. The planning effort was initiated to coordinate resource management and public recreation access. In addition, the Commission wished to pursue the Greenway project in an effort to more fully incorporate the state's ownership interest in navigable waterways and associated upland parcels. These sovereign and public trust interests are described in Appendix B, "Overview of Public Trust Doctrine."

The goals of the Plan, identified in the MOU, are as follows:

- to preserve, protect, enhance, and restore the riparian corridor and its associated ecosystems;
- to design a system of controlled public access for active and passive recreational uses related to the river.

The Plan contains land use policies and implementation measures which support these goals. These policies and measures were developed through a process which included identifying and evaluating publicly-owned parcels, riparian habitat, recreation facilities and adjacent land

uses. The result of this process is a comprehensive planning document for the public and private lands within the Greenway jurisdiction. After the CEQA process is completed each jurisdiction will consider adoption of the Plan pursuant to Government Code §65300. Once adopted by each jurisdiction, the Greenway Plan will become an official statement of policies to guide decision makers in determining the physical development and resource management of the Sacramento River.

Greenway Concept

The term "greenway" was first used in the 1950s, but the current greenway movement gained national prominence in 1987 by the President's Commission on American Outdoors. The President's Commission documented the need for natural areas that are close to home and accessible to citizens of all ages. Among other things, it cites the fact that urbanization has fragmented our open countryside, severely jeopardizing the natural corridor systems that protect water supplies, maintain biological diversity, and preserve natural beauty. It was revealed that recreational activities such as bicycling, jogging, and walking are among the most popular uses of leisure time, thereby suggesting a crucial role for greenways in environmental planning and action. The following definition describes what is envisioned for the Sacramento River Greenway.

Greenway (gren'-wa) n. 1. A linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a

canal, a scenic road, or other route. 2. Any natural or landscaped course for pedestrian or bicycle passage. 3. An open-space connector linking parks, nature reserves, cultural features, or historic sites with each other and with populated areas. 4. Locally, certain strip or linear parks designated as a parkway or greenbelt. (American neologism: green + way; origin obscure.)¹

In every respect the Sacramento River Greenway fits the national trend of governmental agencies, community groups, and non-profit organizations reclaiming rivers and restoring these corridors of nature and recreation.

The Memorandum of Understanding (MOU)

The MOU, signed by the participating jurisdictions and the State Lands Commission on September 9, 1990, established the interagency planning team to oversee the preparation of the Greenway Plan. The membership of the team consisted of the following individuals or their designees: the Director of Yolo County Facilities Department, the Sacramento County Director of Parks and Recreation, the City of Sacramento Director of Parks and Community Services, the Director of the City of West Sacramento Redevelopment Agency and the Executive Officer of the State Lands Commission.

The technical team, composed of at least one representative from each agency, was established as working staff to the planning team and was responsible for assembling and analyzing data, preparing reports and recommendations, and

providing other staff support to the planning team. The technical team was also responsible for developing a schedule and a funding program to govern the preparation, review and presentation of the Draft Greenway Plan. While each jurisdiction was responsible for drafting a segment of the Plan, the overall approach and decision-making was by consensus of the participants. (See Appendix C, "Memorandum of Understanding", for specific requirements of the MOU.)

During the preliminary planning process the technical team met with various other public entities with land or interests along the Greenway to acquaint them with the project's extent, purpose, goals, policies and implementation programs. As a result of these discussions, the U.S. Army Corps of Engineers, the State Reclamation Board, the State Department of Parks and Recreation, the Sacramento Metropolitan Airport, the Sacramento Area Flood Control Agency, and the California Department of Transportation have expressed their willingness to cooperate with the establishment of the Greenway.

In addition, during the preparation process, each agency agreed to advise the others of new data, projects or actions which might impact either the planning area or the development of the Greenway Plan. Also, there was agreement that no action would be taken by the jurisdictions that would be detrimental to the proposed Greenway or the intent of the MOU.

Organization of the Plan Document

The structure of the Greenway Plan is designed to focus attention on the planning of the public recreation access

and riparian habitat protection issues which are the basis for the land use designations. The document also focuses on opportunities and constraints for implementation of the Plan.

Planning opportunities include existing public ownership, as shown on Exhibit 2. Environmental constraints, riparian habitat, is shown on Exhibit 3. Each set of maps, including land use designation (Exhibit 4) is presented in four segments, north to south. The area covered on each segment is the same for each map set for ease of identification and comparison. It should be noted that the land use designations may change after public review. Prior to adoption of the Plan pursuant to Government Code §65322 by each jurisdiction there will be an environmental review as required by the California Environmental Quality Act (CEQA). This review may result in land use designation changes.

Goals, policies, and land use maps which support the Greenway goals are the heart of the Plan. These directives will chart the course of river development, preservation and restoration of natural resources and ultimately determine the future character of the Sacramento River.

The "Area Descriptions" section describes existing land use, the application of land use designations and opportunities and constraints for development of specific areas within the Greenway. A description of the Greenway trail and other recreation facilities for each area are also contained in this chapter.

The "Implementation" section provides the framework by which each agency will

framework by which each agency will make coordinated land use decisions regarding adjacent land uses, development priorities, habitat restoration and future land acquisitions.

The Appendices consist of supporting documents and data for the Greenway

Plan. Natural resource technical data, plant and wildlife lists, an overview of the Public Trust Doctrine and a copy of the MOU are examples of the type of information provided in the Appendices.

¹ Patrick F. Noonan, in Greenways for America (Charles E. Little, 1990)

EXHIBIT 2

PUBLIC OWNERSHIP MAPS

II. BACKGROUND

The Sacramento River, stretching from its headwaters in Shasta County in the north to its confluence with the Sacramento-San Joaquin Delta in the south, is the largest California river. The River was once bordered by up to 500,000 acres of riparian forest, spreading inland as much as four to five miles on either side of its banks. Human activities over the last 150 years, farming and urbanization have reduced this abundant forest to less than five percent of its previous extent.

The pattern of historical land use along the Sacramento River near urban centers has been predictable. First, the land was leveed to prevent inundation of agricultural land by the River's flooding. As the urban areas grew, these agricultural lands were converted to industrial, commercial and residential uses. The River's navigability and direct connection to San Francisco Bay and the Pacific Ocean created a market for shipping ports, while the growing population of the Sacramento region led to the conversion of agricultural lands to residential subdivisions.

The historical land use, which reduced the amount of riparian forest in the area, and continuing development pressure has led to the current interest in preserving the remaining habitat along the banks of the Sacramento River. The remaining habitat is critical to the survival of several species of plants and animals.

The riparian habitat in the Greenway ranges from pristine woodland, which supports a wide variety of wildlife, to unvegetated, rip-rapped riverbank. Some

of the wildlife species in the area are threatened or endangered, which underlines the importance of habitat preservation. A list of the threatened and endangered species is provided in Appendix D, "Natural Resources of the River."

The riparian habitat along the Greenway is home to a variety of wildlife species including the Swainson's hawk, the Giant Garter snake, the Valley Elderberry Longhorn beetle, fox, otter, and owl species. These species and many more are dependent upon the riparian environment for survival - for nesting sites and food sources. For example, the Valley Elderberry Longhorn beetle is so named for its dependence upon the elderberry, a plant species found along the Sacramento River. Appendix E provides a list of the flora and Appendix F is a list of fauna of the area.

In addition to the habitat and wildlife issues of the Sacramento River, there has been historical interest in providing public recreational access to the River. As early as the turn of the century, people were interested in using the river for recreation. In 1916, John Nolan recommended that a riverfront recreation area be established along the Sacramento River. In 1929, the firm of Bartholomew and Associates made the same recommendation. In 1928 and again in 1946, Frederick Law Olmstead made similar recommendations in his reports to the State Park Commission. In 1960, the firm of Pacific Planning and Research recommended that the area along the Sacramento River be developed as a parkway with hiking and riding trails.

Since 1960, urban encroachment along the river has occurred rapidly. In order to ensure access to public waterways as urbanization engulfs open land, the California State Assembly in 1971 passed Assembly Bill 1504. The provisions of this bill are now a part of the Subdivision Map Act and require certain dedications of reasonable public access to and along public waterways. The local agency is required to define the extent and character of such dedications.² The Public Trust Doctrine also mandates public access to the River for recreation.

In 1975, the City of Sacramento adopted the Sacramento River Parkway Master Plan which provides for a variety of

recreational opportunities including a continuous pedestrian and bicycle trail along the Sacramento River. The City of West Sacramento and the counties of Yolo and Sacramento have since prepared bikeway and other recreational plans that include public access to the River. Proposed and existing bicycle trail linkages within each jurisdiction to the Greenway trail system are shown on the following map (Exhibit 2a). The extent of public ownership as shown in Exhibit 2, page 6, will provide the basis for Greenway recreational trail envisioned as early as 1916.

Additional background information relating to the hydrology, wildlife and habitat of the Greenway is contained in Appendix D.

² City of Sacramento, Sacramento River Parkway Master Plan (1975)

III. GOALS AND POLICIES

The Sacramento River Greenway Plan is a planning document with goals and policies to guide planning for habitat preservation and public recreational access within the Greenway area. Future land uses shall be consistent with the following:

- A. **GOAL:** To preserve, protect, enhance and restore the riparian corridor of the Sacramento River within the Greenway boundaries and its associated ecosystems.

1. GUIDING POLICIES

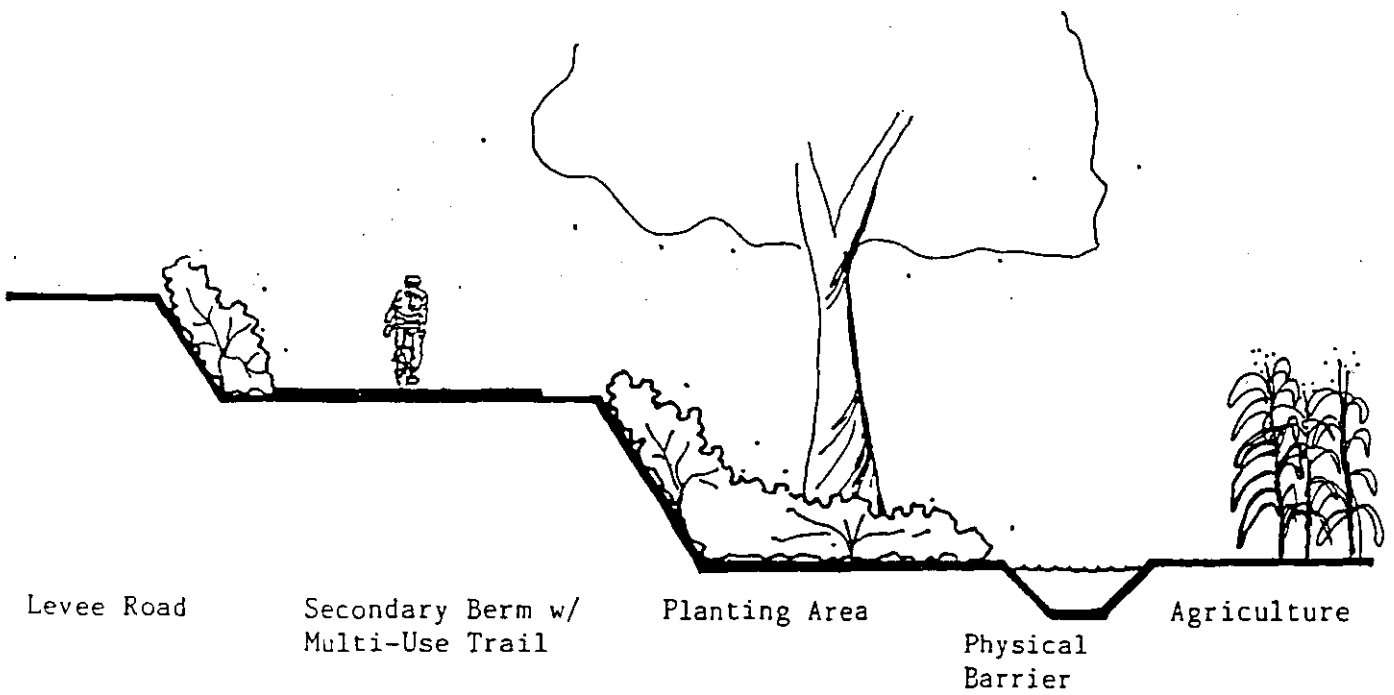
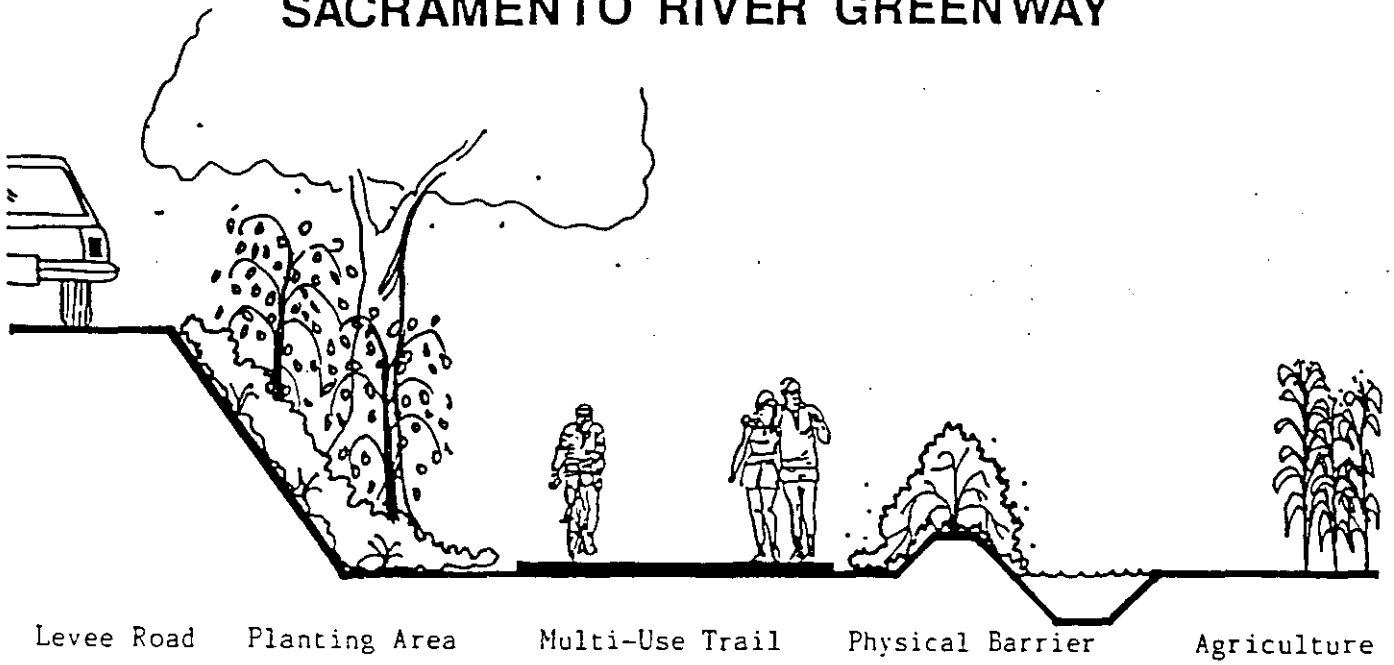
- a. Provide a greenway corridor from levee to levee, inclusive of the river, typically extending not less than ten feet beyond the landward toe of the levee. The Greenway shall include other lands, such as adjacent riparian forests, parks, and recreation facilities as referenced on the Greenway Map. (See Exhibit 2b, Conceptual cross-section with recreational trail. Note that this is representational and will vary due to actual trail placement, berm conditions and other physical and planning considerations).
- b. Acquire land for riparian preserve, nature study and recreation through purchase, conservation or other easement, mitigation sites and fees, gifts or boundary settlements.

- c. Coordinate riparian restoration program with federal agencies, participating jurisdictions and other state and local agencies.
- d. Review proposed development projects to ensure consistency with the Greenway policies.
- e. Provide for the protection and/or enhancement of existing native and indigenous vegetation along the Greenway.
- f. In Urban Waterfront and Riverfront District designation, where protection and enhancement of existing native and indigenous vegetation is not feasible, mitigation shall be provided to ensure no-net-loss of habitat with Greenway boundaries.
- g. Local jurisdictions may utilize buffer zones to delineate a transition in land use between riparian habitat areas and other more intense uses.

2. ISSUE POLICIES

- a. Habitat Preservation
 - i. Siting of projects within "sensitive habitat areas" shall be avoided under

SACRAMENTO RIVER GREENWAY



any one of the following circumstances:

- The project can be located elsewhere on the site so as to avoid the sensitive habitat.
 - The project will negatively impact a listed threatened or endangered species.
 - The habitat that is lost due to the project cannot be mitigated to its functional equivalent.
- ii. Where impacts on sensitive habitats cannot be avoided, lost habitat shall be replaced to the functionally equivalent values according to the following hierarchy within the Greenway: 1) on-site mitigation; 2) off-site mitigation (boundaries may be amended to be a part of the Greenway).
- b. Habitat restoration
- i. New plant material within the Greenway shall be native or indigenous to the riverine environment.
 - ii. Where restoration and/or mitigation is to occur, a site specific

restoration/mitigation plan shall be developed consistent with approving and responsible agency requirements.

- B. GOAL:** To provide for controlled public access for recreational uses related to the Sacramento river.

1. GUIDING POLICIES

- a. Develop and implement a system of controlled public access for recreational uses.
- b. Acquire land for recreation through purchase, conservation or other easement, mitigation sites and fees, gifts or boundary settlements or fee interest.
- c. Seek dedicated rights-of-way or recreational trail easements to increase recreational opportunities, provide emergency vehicle access, assist in flood protection and control, and provide linkages to other transportation systems.
- d. Provide the public with information about the current and historic uses of the Sacramento River and the ecology of its riparian corridor.
- e. Ensure that public access, provide for public health, safety and welfare.

2. ISSUE POLICIES

a. Public Access

- i. New development shall provide on-site public access to the river except when: 1) such access is infeasible for public health and safety reasons; or 2) the shoreline resources are too fragile to accommodate general public use.
- ii. Where, due to environmental or other constraints, public access is infeasible, local government may consider assessing the project proponent in-lieu fees to further the public access goals of the Greenway Plan.
- iii. Public access points (e.g. piers, floats, restrooms) shall be provided for the purpose of promenade, viewing, fishing, etc., with necessary security and safety precautions.
- iv. Alignment of the Greenway trail shall be designed to provide linkages with other trail systems.
- v. To accommodate access for people with disabilities, the design of public access shall

conform to the federal Americans with Disabilities Act of 1990 and other applicable State law.

- vi. Design guidelines shall be developed with interpretive themes, management, safety and directional information; sign and panel standards shall be established for design, color, size, and for being weather and vandal resistant.

b. Marinas and Recreational Piers

- i. New recreational and commercial marina developments shall be consistent with State Lands Commission requirements for marinas.
- ii. New recreational and commercial marina developments are allowed only to the extent that, based upon a carrying capacity study for which environmental threshold standards should be set, no significant negative impacts to public trust values, ecological or water quality will result.
- iii. Upland areas within the Greenway boundaries

suitable for commercial space and hotel accommodations should be consistent with the overall Greenway Plan.

iv. Proposed marina and recreational boating activities shall be designed and located in such a fashion as not to interfere with commercial and recreational fishing.

v. Where more than one marina is proposed, and carrying capacity (to be established) permits only limited new facilities, preference shall be given to marinas that propose, or are expanding toward a diverse array of water-related commerce activity centers.

vi. Ensure no-net-loss of riparian habitat within each marina development or expansion through careful site planning or effective long-term mitigation measures. The hierarchy of preferred mitigation is avoidance, mitigation on-site, and mitigation off-site. (Replacement of affected habitat through acquisition or restoration of riparian habitat outside the affected area is not recommended because it does not respond to the

loss of local habitat productivity.)

vii. Multi-use residential recreational piers are preferred to individual piers in order to reduce the overall number of structures in the water for water safety concerns and water sports, such as waterskiing.

c. New Development

i. Development should compliment and enhance the greenway through design detail, color, materials and siting of structures.

ii. Specific design standards (e.g. architectural detail, color, siting including set back of structures) in the Urban Waterfront and Riverfront designations shall be determined on a site specific basis, area plan or subarea plan by the local jurisdiction.

iii. New development shall include bicycle/pedestrian trails and access connections, as appropriate.

iv. Structures shall present an unobtrusive presence within the Greenway through appropriate building materials.

- v. Development adjacent to environmentally sensitive habitat or parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas.

d. Scenic Resources

- i. Development shall be sited and designed to protect scenic views associated with the Greenway.
- ii. Where site topography allows, viewing locations should provide for pedestrian access to the river.
- iii. Viewpoints should be designed as safe, comfortable resting places to view the river.

e. Public Safety

- i. Trail and access points shall be designed to accommodate patrol, emergency and maintenance vehicles.
- ii. Development shall consider ease of patrolling for public safety.
- iii. Firebreaks shall be located to avoid sensitive habitats.

- iv. Where appropriate, firebreaks may be combined with emergency and maintenance vehicle access within the Greenway.

- v. In public access areas, where appropriate, security lighting may be permitted to enhance public safety.

- vi. Where public access is to be accommodated, vegetation shall be located and maintained consistent with habitat needs, to ensure public safety.

- vii. Whenever possible, specific development plans shall incorporate safety controls and features into its design.

Riparian Habitat Descriptions

The following riparian habitat descriptions are based on the cover types described in the River Study. Major physical and biological aspects are included in the descriptions of these six vegetation cover types. See Riparian Habitat Map, Exhibit 3.

A. Riparian Woodland - Mature/Undisturbed/Usually On Wider Berms. (R1)

Dense and continuous vegetation structure from ground layer to canopy tops; high tree and shrub species

EXHIBIT 3

RIPARIAN HABITAT MAPS

diversity. Mature riparian tree overstory (e.g., cottonwoods, willows, sycamore, oaks) with well-developed understory (e.g., willows, box elder, ash) and dense undergrowth (e.g., wild grape, blackberry, poison oak, creeping wild rye, California mugwort). Commonly, wild grape and other vines form thick undergrowth or lianas hanging from tree layers. May contain areas suitable for riparian habitat restoration, i.e., a portion of the overall site contains little or no riparian woodland, but the area is capable of supporting it, given planting, protection, or other active management.

B. Riparian Woodland - Immature/Disturbed/May Be On Little or No Berm. (R2)

Similar to R1 above except certain components of vegetation structure are missing because stand is young or site has been altered by human impacts. Examples: overstory of mature trees, but with little or no understory, ground layer of grass, bare soil; shrubs are sparse or absent; or shorter and/or less dense overstory of shrubs and younger trees (e.g., cottonwoods, willows, alders). May contain areas suitable for riparian habitat restoration, i.e., the site contains little or no riparian habitat woodland, but the area is capable of supporting it, given planting, protection, or other active management.

C. Riparian Woodland - Residential Development. (R3)

Mature riparian tree overstory primarily with residences, lawn, shrubs and/or paving underneath. Usually overstory canopy coverage is less than in R1.

D. Riparian Woodland - Urban Waterfront Development. (R4)

Some mature riparian tree overstory primarily with commercial development or paving underneath. Site is highly disturbed.

E. Unvegetated River Bank - Levee Slope/Little or No Berm. (R5)

Little or no riparian woodland vegetation present. Riprap or rubble as bank protection often present.

Land Use Designations

The Greenway land use designations described in this section were created to ensure that the Greenway would be developed consistent with the goals and policies of the Plan. Current land use, land ownership, wildlife and habitat issues were considered in developing and assigning land use designations to the Greenway. See Land Use Maps (Exhibit 4) showing existing and proposed uses for the Greenway.

The following general land use designations form a continuum of uses ranging from least development to most intensely developed. Each of the seven

EXHIBIT 4

PROPOSED AND EXISTING LAND USES

uses contains a description, activity, and Greenway facilities permitted within the designation.

1. Riparian Habitat Preserve

- a. Description - Land use is managed to protect, enhance, and restore riparian habitat. Open space areas are preserved and remain undeveloped. Other environmentally sensitive areas with special habitat and topographic characteristics are included.
- b. Activities - Public access is restricted to minimal access for habitat restoration, monitoring and scientific study.
- c. Facilities - None.

2. Nature Study Area

- a. Description - Land use includes disturbed riparian habitat, and areas suitable for riparian habitat restoration. This use includes vegetation and associated wildlife that is tolerant of light to moderate public use.
- b. Activities - Public access for nature study, pedestrian use on designated trails or observation areas, and bicycling, where appropriate, habitat restoration and monitoring, where suitable.

- c. Facilities - Trails of dirt, crushed stone, or other porous materials, occasional benches for observation areas, interpretive signs, water and portable toilets. Paved surfaces may be appropriate in some areas.

3. Riverfront District

- a. Description - Land use includes residential, recreational and river-related commercial uses along the Sacramento River in the South Natomas Community Plan Area as defined in the South Natomas Community Plan for the City of Sacramento. Development projects require public access to the River and maintenance of view corridors along the River.
- b. Activities - Pedestrian and vehicular access to the River. Public access to scenic viewpoints, boating, fishing, dockage, picnicking, bicycling, residential uses, restaurant and other commercial uses.
- c. Facilities - Scenic turnouts, pedestrian trails or walkways, parking areas, marinas, fishing piers, short and long term dockage facilities, restaurants, river-related commercial facilities, restrooms, picnic areas.

4. Recreation Area

- a. Description - Land use includes active recreation allowed without development of extensive facilities. These areas are found within most major parks and vehicle access areas.
- b. Activities - Public access for nature study, pedestrian use, bicycling, picnicking, fishing, boating and horseback riding (where designated). Habitat restoration and monitoring, where feasible.
- c. Facilities - All trails, interpretive signs, observation areas, picnic areas, water, portable toilets or restroom facilities, horse trailer and boat launching areas, fishing piers, and parking areas.

5. Urban Waterfront Recreation

- a. Description - Land use includes moderate to heavy water-related improvements that provide opportunities for public access, commercial, and recreational activities for residents, employees, and visitors along the River.
- b. Activities - Scenic viewing, bicycling, public gathering, pedestrian, boating, fishing, short-term boat docking, marina, restaurant, and other river-related commercial uses.

Habitat restoration where feasible.

- c. Facilities - Public access for pedestrian trails and walkways, bicycle paths, plazas, piers, amphitheaters, restrooms, scenic viewpoints, short-term boat dockage, parking areas, restaurants, and other river-related commercial facilities.

6. Public Utility

- a. Description - Includes areas essentially devoid of habitat value.
- b. Activities - Flood control, transportation, water and sewer service. Habitat restoration and monitoring, where feasible. Public access for pedestrian use and bicycling where appropriate.
- c. Facilities - Public utility-related facilities, such as flood walls and armored banks, bridges, water intakes and outfalls, storm drains, etc. Public trail for pedestrian use and bicycling where appropriate.

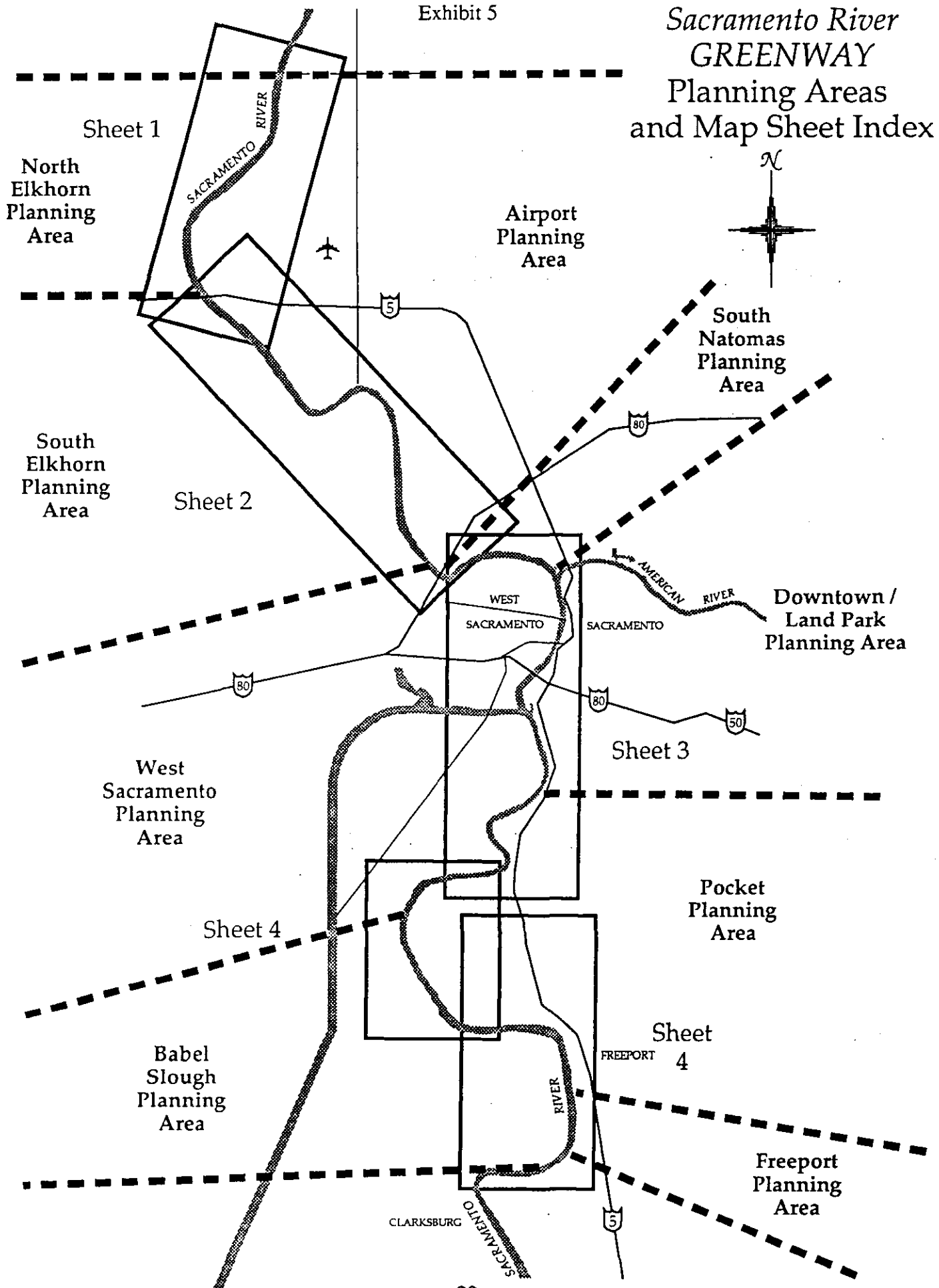
7. Special Study Area

- a. Description - This area denotes a combining zone where a resource conservation overlay is applied over the existing zone to avoid impacts on the natural resources.

This includes areas that contain moderate to high value habitat, habitat restoration potential or foraging opportunities. This designation is for the County of Sacramento only.

- b. Activities - Restricted public access, habitat restoration or enhancement for nesting and foraging opportunities for resident and migratory wildlife species.
- c. Facilities - none.

Sacramento River GREENWAY Planning Areas and Map Sheet Index



IV. AREA DESCRIPTIONS

The Sacramento River Greenway is a regional plan to provide the 31 mile long area with a planning approach that balances uses along the river among riparian preserve, river recreation and urban waterfront. Although the Greenway Plan covers multiple jurisdictions, each of those jurisdictions will implement the plan through their land use authority. Each jurisdiction has planning policies and programs that have been applied to designated areas along the Greenway.

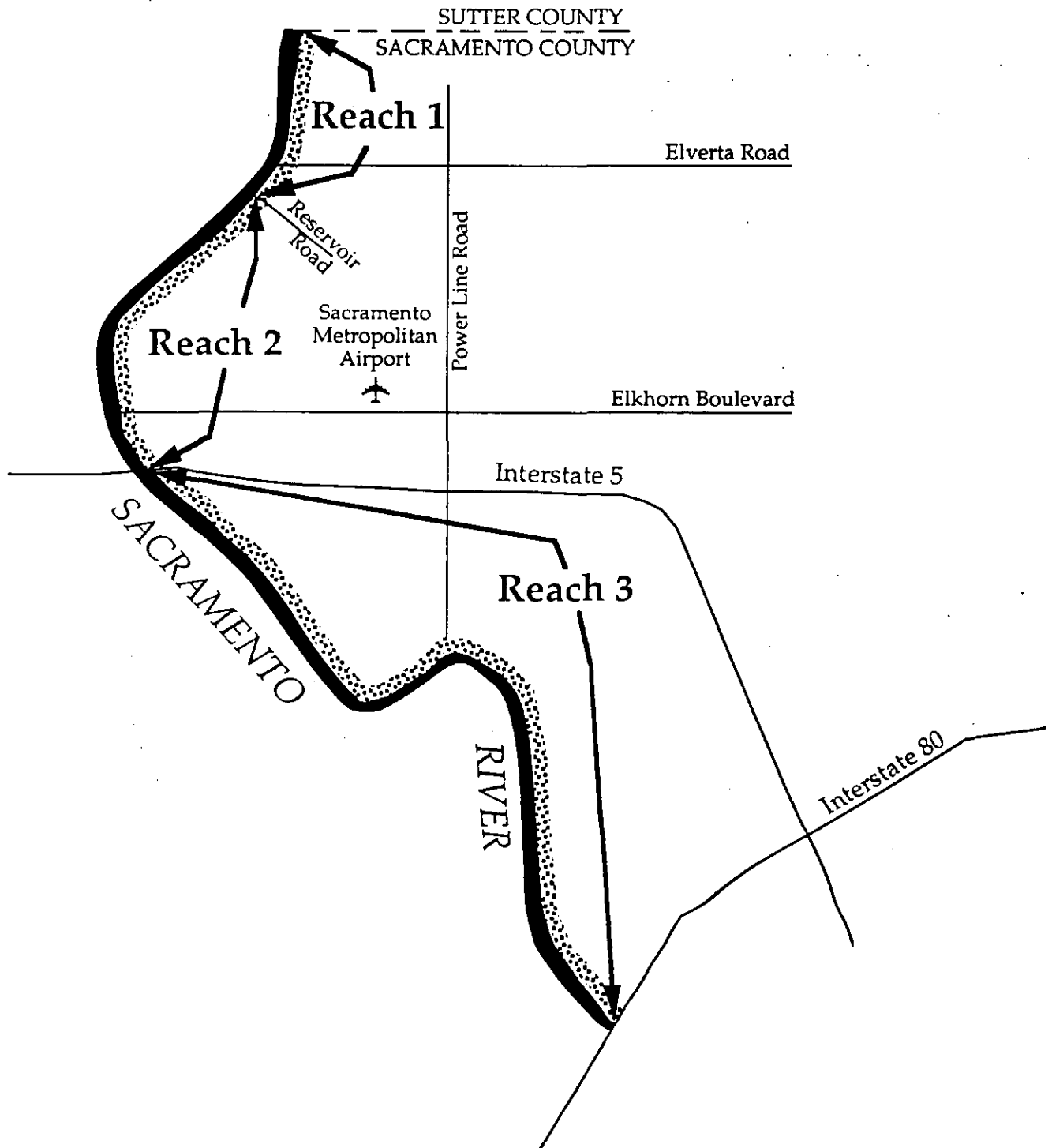
All those lands described in each Area Description below which border the River are therefore adjacent to the sovereign and public trust lands. In some instances, the land area of the last natural channel below high tide has not been completely

surveyed to determine State Lands. The Area Descriptions' Opportunities and Constraints discussions assume the above circumstances.

This Section describes component areas of the Plan, and where applicable, includes existing public access and recreation, discusses biological resources and planning opportunities and constraints. It is intended that this section give a more detailed view of what is hoped to be accomplished in each of the areas when the Greenway Plan is adopted.

Exhibit 5 depicts the planning areas for each jurisdiction along the river and references the map sections for the larger pull-out maps. Specific planning area maps are included prior to each Area Description.

Sacramento River
GREENWAY
Airport
Planning Area
(See Sheets 1 and 2)



A. SACRAMENTO COUNTY

1. The Airport Planning Area

The Airport Planning Area begins in the north at the Sacramento/Sutter County line. This area continues south along the river to Interstate 80.

Existing Use: A portion of these lands was purchased by the County Department of Airports to create a buffer zone around Metro Airport. This buffer zone is intended to protect the airport corridor from intensive development within its noise zone. The parcels between the river and the levee are zoned single-family residential. Aside from the Elkhorn Boat Launch and two private marinas (described below under existing public access), this planning area is either undeveloped or privately owned. This area is designated under the current general plan as single-family residential, making the river virtually inaccessible to the general public.

Existing Recreation/Public Access Facilities: At the crossing of Interstate 5 and the river, the County operates and maintains the Elkhorn Boat Launch. Sacramento County leased State of California right-of-way land under Interstate 5 in 1972. Popularity and heavy use prompted expansion of this facility in 1977. Approximately 7.71 acres of the total 10.05 acres are leased excess highway land. The remaining 2.34 acres were purchased by the County.

In addition to the boat launch, this facility provides family and group picnicking with drinking fountains and barbecues, a

restroom, and lighted and paved parking facilities for 68 car-trailers and 62 cars.

Natural Resources: Of all the planning areas within this Greenway Plan, this area has the most continuous stretch of existing riparian habitat along the river. The riparian vegetation is mature, healthy and abundant. While the existing habitat hosts a variety of wildlife, the potential for increased wildlife is opportune.

Proposed Recreation/Public Access Facilities: Within this planning area are a large number of privately owned parcels. These lands are mostly undeveloped and sustain a large portion of riparian vegetation. Single-family homes are scattered throughout. A special study area designation is applied to these parcels. Alternatives to acquisition are the use of existing public utility easements, creation of conservation or recreation easements or acquisition of development rights. The proposed designations are consistent with the County's General Plan.

For ease of understanding, this planning area is presented in three separate reaches. The first reach lies between the Sacramento/Sutter County line and Reservoir Road. The reach is heavily vegetated and contains rich riparian preservation opportunities. (See Appendix D, "Natural Resources of the Sacramento River," for more information). For the majority of this reach, the land use designation is "Riparian Habitat Preserve". A Nature Study/Pedestrian Observation area has also been identified directly

across from the intersection at Elverta Road and Garden Highway. Impacts of human intrusion are evident. By providing a specified access/overlook platform, human use of this otherwise pristine area can more easily be controlled. Associated with this site is a three to six car earthen or gravel parking lot. This is located on the landside of Garden Highway on the southside of Elverta Road. The bicycle access shown on Elverta Road is a proposed bike lane to be included in the City/County's "Bikeway Master Plan Update" currently being prepared.

The second reach is from Reservoir Road south to just past the Elkhorn Boat Launch at Interstate 5. The majority of these lands are privately owned and zoned single-family residential. A special study area designation is applied to these parcels. Adjacent to the Elkhorn Boat Launch are Alamar and Metro Marinas. These privately owned commercial parcels would remain as such. The existing Elkhorn Boat Launch will remain a public facility. Improvements at the boat launch may include expanded picnic facilities, and a courtesy dock.

The third reach continues southward from Interstate 5 to Interstate 80. As with the other reaches, privately owned parcels are interspersed between public lands. For planning purposes, these private parcels are designated as "Special Study Area".

On the landside of Garden Highway, the major ownership is public with leases to agricultural tenants. A vegetative enhancement corridor at the toe of the levee road (Garden Highway) or on the secondary berm is proposed. This corridor includes a bicycle loop which

follows Power Line Road up to the West Drainage Canal. The bicycle trail-loop continues adjacent to the canal levee road, connecting to the California Department of Transportation's (Caltrans) Elkhorn rest area off of Interstate 5. From the rest area, a pedestrian/bicycle path completes the loop south to Garden Highway.

The vegetative enhancement corridor is an opportunity to establish native plant material along the highway and along the above described loop. An informal staging area is located on the eastern side of the loop. A small grove of oak trees is found here and offers an ideal location for such a staging and rest area.

Elements which may be located at this staging/rest area include a restroom, drinking fountains, picnic facilities, a small parking lot, security lighting, an information kiosk, benches and a small turf area.

A nature study/pedestrian observation area has also been included as part of the loop. It is an area currently being utilized by the public. Used as a pedestrian access, this nature study area offers a pleasant diversion for users of the Elkhorn rest area at Interstate 5, as well as a scenic stop for users of the bicycle trail.

A unifying element which connects these three reaches is a continuous bicycle trail. This trail could be located either on the secondary levee berm or at the toe of the levee in a conservation or recreation easement. This continuous trail will be a part of this vegetative enhancement

corridor/trail loop. The trail could be located either on or at the toe of the secondary levee berm. Actual location of this vegetative corridor/trail shall be coordinated with and approved by the Reclamation Board and other governing agencies.

The Sand Cove property, although recently purchased by the City of Sacramento, is within the Sacramento County limits. This parcel will be annexed into the City of Sacramento. (See South Natomas Planning Area for more information.)

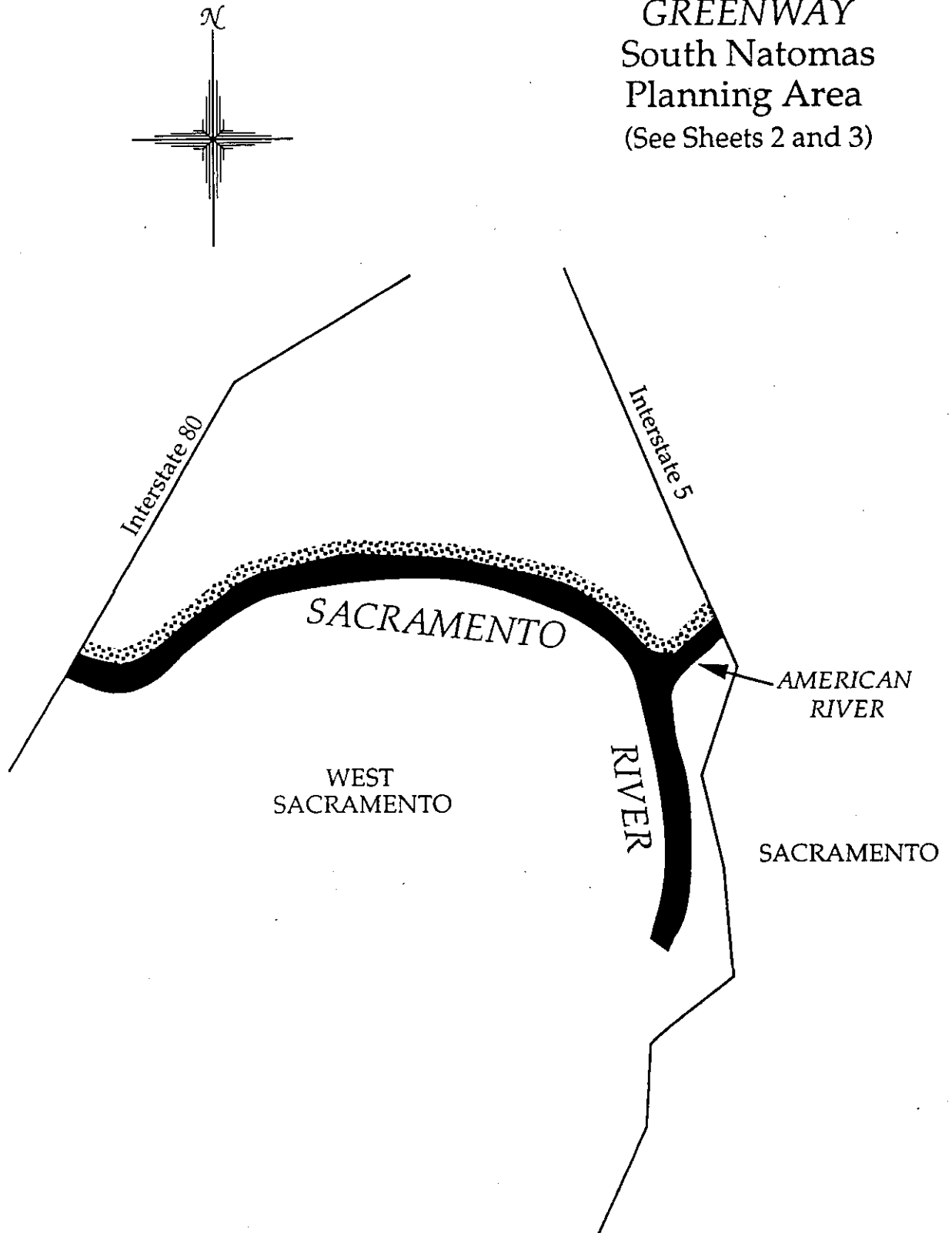
Opportunities and Constraints: As previously mentioned, this planning area contains a variety of valuable and mature riparian vegetation. In order to preserve and protect this habitat, the proposed bicycle/pedestrian trail has been located on the landward side of the levee (Garden Highway) where existing natural vegetation is sparse. Specified access points along this stretch allows for

controlled public access while protecting the more valuable vegetative resources, in addition to taking advantage of the natural viewsheds.

By taking an active approach to protection and preservation of the natural ecosystem, new opportunities are created adjacent to the levee (Garden Highway). The vegetative enhancement corridor expands the width of actual wildlife forging and nesting area, therefore increasing the value of the existing habitat.

Many entities, both public and private, will be affected by this proposal. The Sacramento Department of Airports, the State Board of Reclamation, the Sacramento Area Flood Control Agency, and the University of California Agriculture Department have responded favorably to the concept. The specific development plan for this area, however, will undergo critical scrutiny by the above entities as well as the private landowners and leaseholders.

Sacramento River
GREENWAY
South Natomas
Planning Area
(See Sheets 2 and 3)



2. South Natomas - Planning Area

The area of South Natomas that is within the proposed Greenway is bounded by I-5 on the east, I-80 to the west, Garden Highway to the north, and the Sacramento River to the south.

Existing Use: This area is designated by the 1988 South Natomas Community Plan as Riverfront District. The Riverfront District is a mixed use designation that allows for river-related commercial and residential uses with a Special Permit. Currently, the eastern half of the District is commercial development consisting of restaurants, retail, and marinas. A General Plan Amendment and Rezoning has been initiated for a parcel between the Riverbank Marina complex and Bannon Island.

The western half of the District is mainly residential development consisting of condominiums and single family detached homes. The portion of the riverfront west of El Centro Road is within the County of Sacramento, but is being considered for annexation to the City in the near future. This annexation proposal includes a small beach area, Sand Cove, vacant parcels with riparian habitat, and some single family detached homes.

To the north of the Sacramento River Greenway, across Garden Highway, the land use is a combination of office and residential development. A significant amount of the land designated for residential use is vacant and is being used for agriculture. Once the flood zone residential building moratorium is lifted, the area will be developed to low density residential development.

Existing Recreation/Public Access Facilities: Natomas Oaks Park is located directly across the Highway from the Riverbank Marina commercial development. Existing recreation facilities include a parking lot, a historic oak grove, and an open grassy area. Also in the area is the County's Discovery Park. A portion of the Park is within the jurisdiction of the Sacramento River Greenway as well as the American River Parkway. The portion of Discovery Park within South Natomas does provide some valuable riparian habitat (Bannon Island) in addition to recreation facilities. Discovery Park amenities include parking, picnic tables, restrooms and boat launch.

Natural Resources: The U.S. Fish and Wildlife Service has identified the endangered Swainson hawks' nesting sites in this area. The hawk uses the remaining mature cottonwoods and oaks for nesting. The proximity of these nesting trees to nearby foraging habitat make the area attractive to the birds. According to a 1991 Fish and Wildlife study, a Swainson's hawk nest is located just west of Discovery Park. An additional endangered species found in this area is the Elderberry Longhorned beetle. Elderberry bushes are found in the area and therefore, it is assumed that the beetle also lives there.

Proposed Recreation/Public Access Facilities: The South Natomas Community Plan "Riverfront District" provides policy direction for development in the area. The Greenway Plan recognizes the unique character of the area and has incorporated the Riverfront

District land use as Greenway policy for the area.

The Riverfront District will support river-oriented commercial development, such as marinas, small-scale restaurants, and upscale residential uses that blend with the river environment. The vision is to create a Riverfront District that is compatible with the river environment and accommodating to the residents and public. Public access to the River is an important component of the Riverfront District policy, consisting of physical or visual access to the water's edge. It is envisioned that all future development along the river will provide some type of public access or provide mitigation for public access on a nearby site.

Proposed development of Sand Cove includes parking, restroom facilities, and picnic tables. Additional development of Natomas Oaks Park will provide a picnic shelter and an interpretive trail through the oak grove.

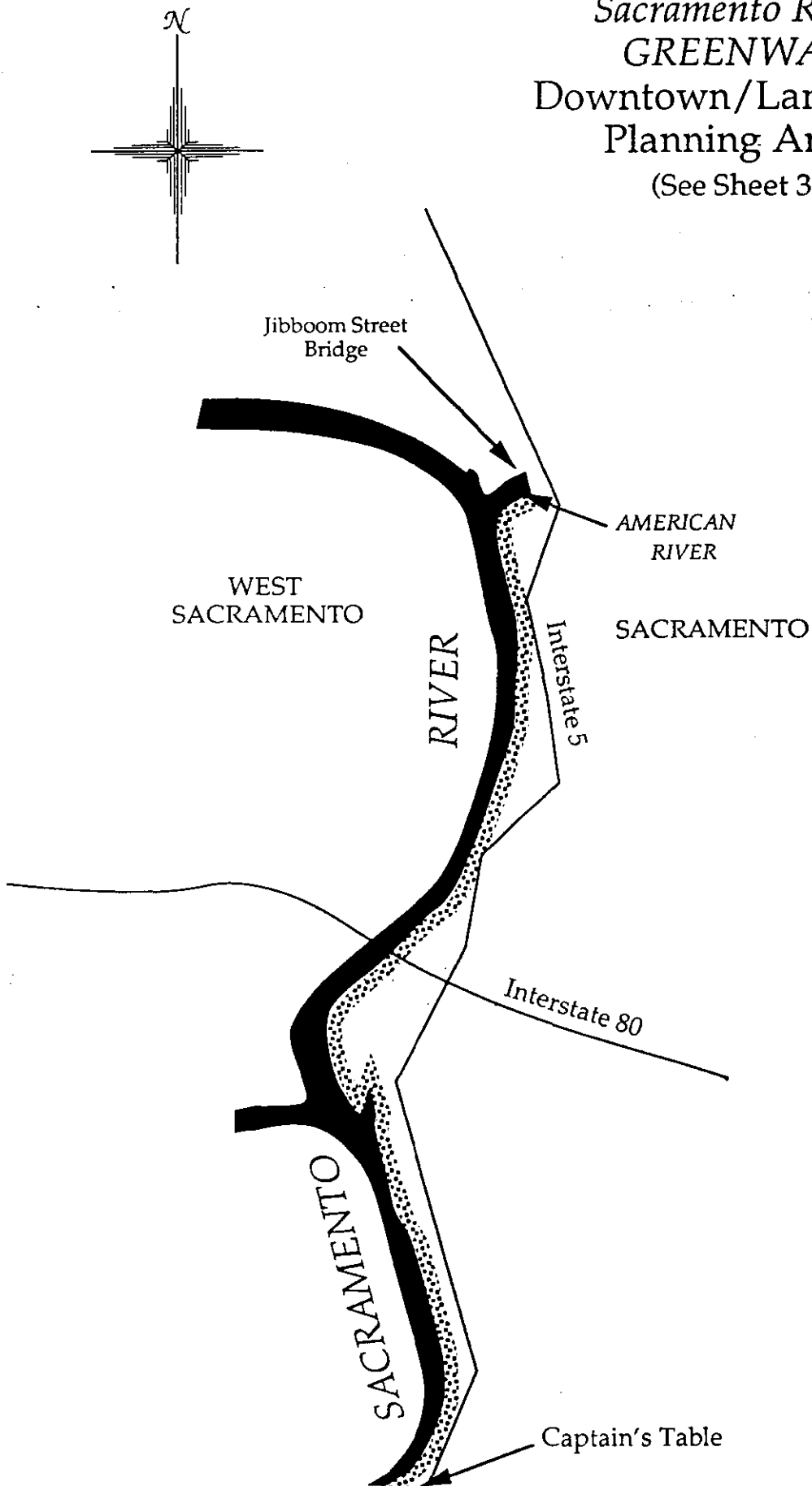
The draft City/County Bikeway Master Plan shows an on-street and an off-street bikeway along Garden Highway. The bikeway plan within the Greenway boundaries will be incorporated into the Greenway Plan for South Natomas. The bikeways will provide bicycle and pedestrian linkage with bikeways along the drainage canal and other county bikeways.

Opportunities and Constraints:

The Greenway area is constrained by the physical characteristics of the levee as well as by land ownership patterns and the development that has already occurred in the area. The extremely narrow and very steep levee berm along this stretch of the River limits the amount of riparian habitat and the potential for recreation facility development, but does not limit commercial or residential development.

The Garden Highway makes the area accessible and attractive to development. Thus, most of the riverfront is developed or has proposals for development. Direct public access to the River's edge is limited in the area due to private residential and commercial development which represents 95% of the land use. There is limited public access by way of walkways around the commercial developments and to the marina gates. Views of the River are possible from the riverfront restaurants and at some places along the Garden Highway.

Sacramento River
GREENWAY
Downtown/Land Park
Planning Area
(See Sheet 3)



3. Downtown/Land Park Planning Area

The area between the Jibboom Street Bridge on the north and 25th Avenue on the south and bounded by I-5 on the east and the Sacramento River on the west.

Existing Land Use: The Downtown area is primarily developed with commercial and industrial uses. The most recognized developments in the area are the Southern Pacific Railyards, the Old Sacramento Riverfront, and the State Railroad Museum.

In addition to the commercial and industrial uses, there is a substantial amount of publicly-owned land along the River. Most of the riverfront between the Jibboom Street Bridge and the I Street Bridge is undeveloped and publicly owned. The riverfront area between Miller Park and Captain's Table is owned by the City of Sacramento.

Existing Recreation/Public Access Facilities: Several recreation facilities are found within this area of the Greenway. Tiscornia Park, across the Jibboom Street Bridge from Discovery Park, provides a sandy beach, parking and restrooms. There is a paved bike trail from Tiscornia Park, south to Old Sacramento. The Old Sacramento riverfront encourages public access to the River. Miller Park, south of Old Sacramento, has boat launching, a marina, and landscaped areas with views of the River. An off-street bikeway connects Miller Park to Captain's Table, a private marina at the southern border of this segment of the Greenway.

Natural Resources: The area between the Jibboom Street Bridge and the I Street Bridge has been identified as R2 Riparian Woodland, which is the second highest quality riparian habitat in the Plan area. The availability of trees and understory vegetation probably provides habitat to a variety of species including the Swainson's hawk and the Elderberry Longhorn beetle.

The Old Sacramento Area is predominantly urbanized and does not support significant habitat and wildlife. There is little or no berm with very sparse vegetation.

The area between Miller Park and Captain's Table has been identified as R2 Riparian Habitat. The mature trees and well-developed understory may support a variety of species including the Swainson's hawk and the Elderberry Longhorn beetle.

Proposed Recreation/Public Access Facilities: The Downtown area, for the most part, is designated as Urban Waterfront Recreation which allows for a variety of passive and active recreation activities in an urban setting. A variety of commercial activities are allowed under this designation.

The Greenway area between the Jibboom Street Bridge and the I Street Bridge is included in the Southern Pacific Railyards/Richards Boulevard Area Specific Plans. These plans include a riverfront park with pedestrian promenades, landscaping, a museum, linkages to the existing off-street bikeway,

and commercial development. Existing recreation facilities in the area will not be affected by the specific plans.

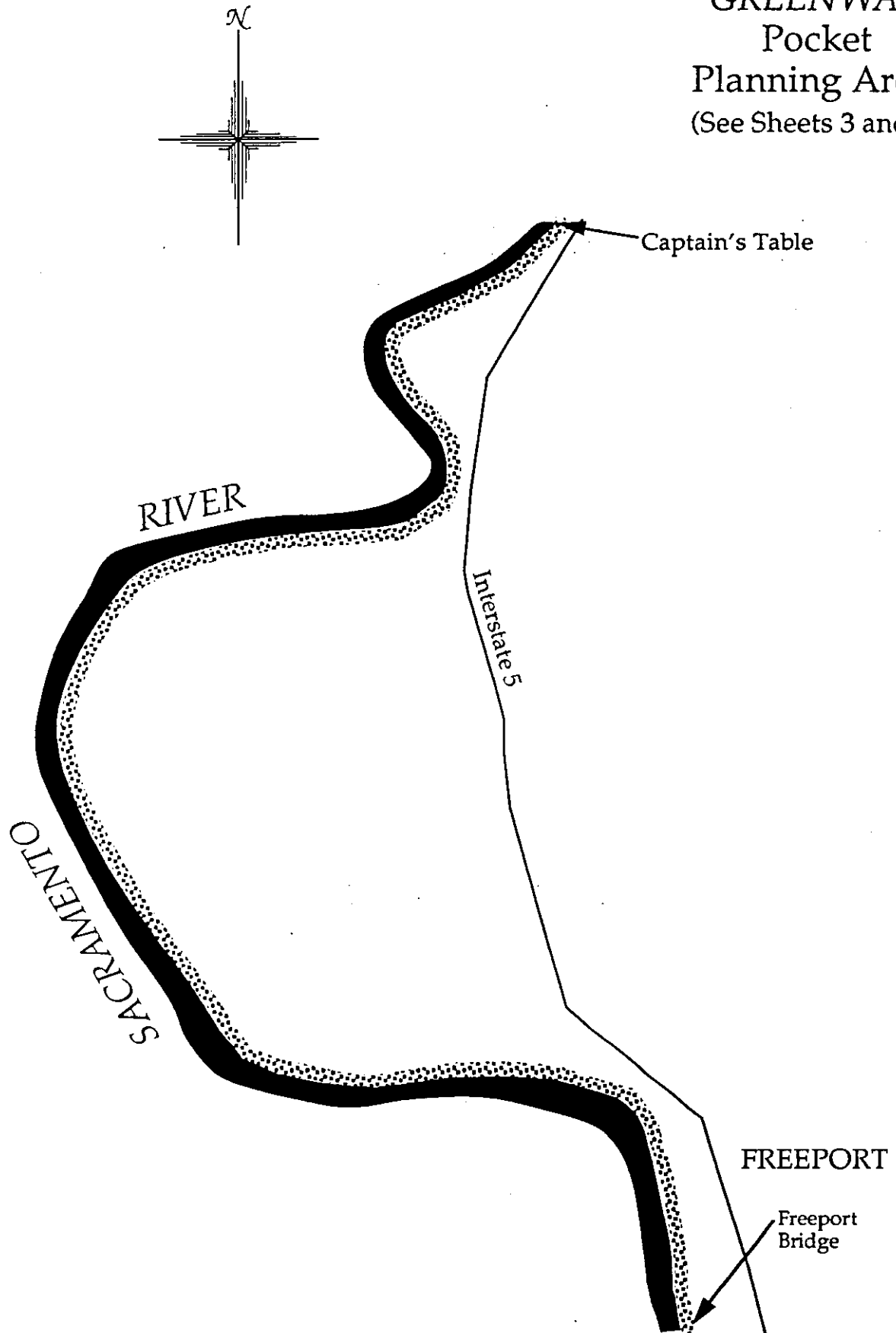
The Docks Project area, just south of Old Sacramento, is owned by Sacramento Housing and Redevelopment Agency (SHRA). Preliminary plans for the area include a marina, paddleboat, public walkways, restaurants, motels, and a museum. A public promenade, extending from the termination of Front Street at Capitol Mall to the I-80 Bridge, is planned as part of the Docks project.

New facilities are also planned for Miller Park. There are plans underway for more commercial development around the existing marina. There is a small area of the Park that is landscaped and not identified for commercial development. Some riparian restoration may be done in the area to prevent erosion of the riverbank.

Opportunities and Constraints: The Downtown area offers both opportunities and constraints to Greenway development. Most of the Downtown riverfront is publicly owned which may facilitate the implementation of the Greenway policies. In addition, most of the projects planned for the area recognize the riverfront as a positive amenity and are planning their development to enhance the public's access to and enjoyment of the River.

Constraints to Greenway development, in part, are due to the type of development that is planned for the riverfront. Habitat preservation and restoration is less likely to occur in this area. Existing habitat may be sacrificed to allow for urban uses as outlined in specific plans. Current land uses in some areas may also limit Greenway development.

Sacramento River
GREENWAY
Pocket
Planning Area
(See Sheets 3 and 4)



4. Pocket Planning Area - City of Sacramento

The area of the Pocket that is within the Greenway is bounded by 25th Avenue to the north and to the Freeport Bridge to the south.

Existing Use: The area is almost exclusively residential development, primarily single family homes, although apartment and condominium projects exist. There are few remaining family farms. The most publicly owned riverfront parcels are the properties south of Arabella which were developed after the 1975 Sacramento River Parkway Plan was adopted. Dedication of riverfront property to the City in the Pocket Area is an implementation policy for the Sacramento River Parkway from the 1980 Pocket Community Plan and is also a requirement of the Subdivision Map Act.

In the Pocket area north of Arabella to Chicory Bend many private property owners have constructed private fencing and gates on the crown of the levee with permission from the State Reclamation Board. The Reclamation Board requires that residents provide the Board with gate keys for access to enable inspection and repairs to the levee system. In addition, property owners have installed landscaping, private docks, and other amenities on both sides of the levee.

Existing Recreation/Public Access Facilities: Three developed City parks provide access to the Sacramento River in the Pocket area: Seymour Park (Zacharias Park Section) in the north section, and Garcia Bend and Shore Park toward the southern section.

The 57-acre Seymour Park is a community linear parkway beginning at the Sacramento River at the Zacharias Park Section and ending at the Pocket Canal. The Zacharias section to the north of Riverside Boulevard provides access to the Greenway. The park consists of an older playground and a soccer field. There is no special walkway to the River and only street parking along Clipper Way is available.

Shore Park is a two and one-half acre neighborhood park which provides a walkway to the River and picnic tables. It is situated between two apartment developments and is meant to provide pedestrian access to the River for residents within one-half mile of the park.

The largest and most highly used riverfront park in the Pocket area is the 24-acre Garcia Bend Park which is a primary boat launching ramp for the entire Sacramento area. High demand and limited capacity of the launching facilities can result in long delay. There are three soccer fields and parking for boaters and soccer participants.

Natural Resources: The natural resources of the area vary depending on location. In those areas where the levee is rip-rapped and narrow, there is very little vegetation and therefore, very little habitat. This occurs, for the most part, from Arabella Avenue, south, to the Meadowview Sewage Treatment Plant.

In those areas that have been severely altered by levee maintenance work, the riparian habitat designation is

Unvegetated Riverbank. Unvegetated Riverbank constitutes more than 50% of the riverbank in the Pocket Area. However, there is opportunity for some habitat restoration.

The vegetated segments of the Parkway within the Pocket Area are designated R2, Riparian Woodland - immature, disturbed found mostly in the Greenhaven and Little Pocket areas. In these areas less vegetation has been removed from the levee and the berm is wider which has allowed the riparian habitat to develop. Large cottonwoods and willows sit within a well-developed understory of riparian shrubs. Potential wildlife species include Swainson's hawk, Elderberry Longhorned beetle, river otter, raccoon, fox and a variety of bird species.

Cultural Resources: Numerous archaeological sites have been identified along the Sacramento River in the Pocket Area. According to the draft 1985 Sacramento General Plan Update (SGPU), Exhibit V-5, Sensitive Cultural Resources, the riverfront from approximately Arabella Avenue south, is a "primary Impact Area," meaning that significant archaeological resources are found in the area. One known site is located in the South Pocket area and is identified as CA-SAC-43³. The materials found at this site are from the Plains Miwok and may date from around 500 B.C. In addition, the Technical Appendices of the SGPU DEIR, pages 4 - 7, describe several sites in the area, mainly containing prehistoric village materials.

Proposed Recreation/Public Access Facilities: A master plan for the Garcia

Bend Park is phased to develop facilities with available funding. These facilities and elements include: expanding the paved parking; improving the soccer fields and irrigation system; widening the boat launch ramp; play equipment; tennis courts and picnic areas. Some of the widest berm areas along the River are in the Garcia Bend area. There are natural habitat areas, although somewhat disturbed due to the active recreation.

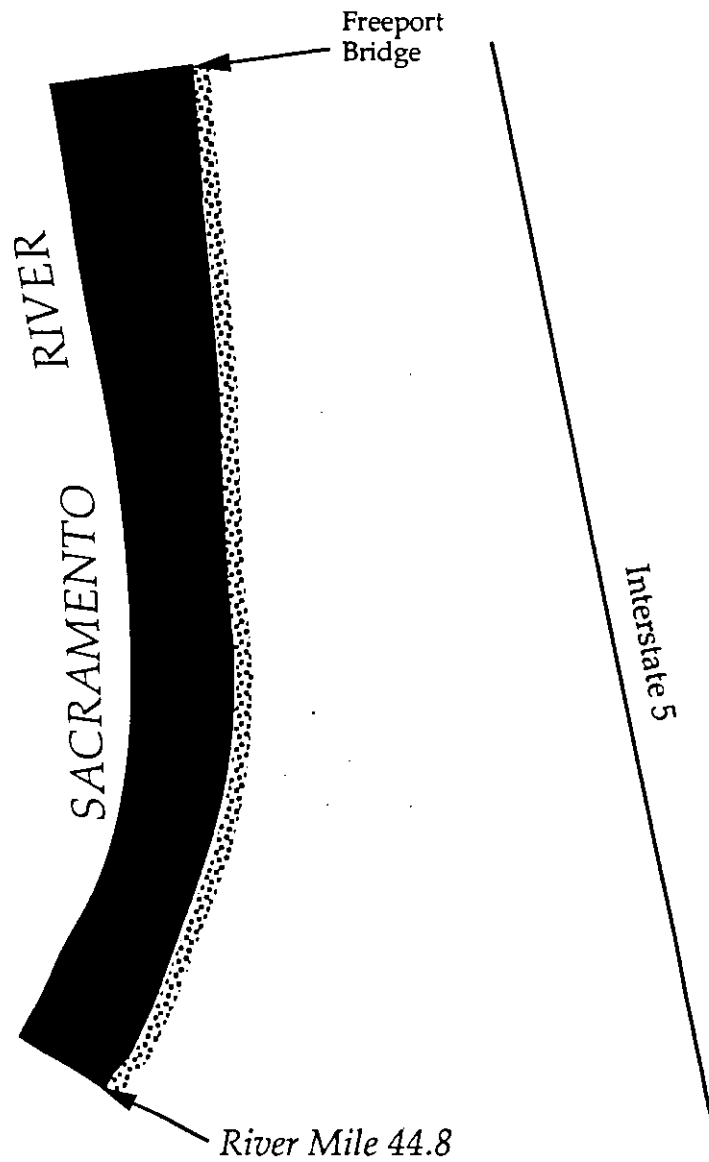
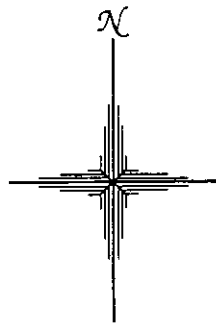
Proposed Greenway land use for the Pocket Area features land use designation of "Nature Study". Existing park sites which include active recreation uses are designated "Recreation Area".

Opportunities and Constraints: The Pocket area is constrained by the physical characteristics of the narrow levee system lined with riprap and limited vegetation. There are limited opportunities for natural habitat area. Without a berm area for the bikeway, the continuous trail is limited to the crown of the levee.

Landowner concerns may constrain the recommendation of the Sacramento Greenway Plan for additional access every one-half mile. Property owners in the pocket area have installed gates across the levee, planted gardens, and built docks. They experience security and privacy problems with uncontrolled access and fear that additional public access will increase these problems. The implementation of the Greenway Plan will need to consider these issues.

³ From "Test Excavations of CA-SAC-43" prepared by Peak and Associates Inc., Sacramento, CA October 1985.

Sacramento River
GREENWAY
Freeport
Planning Area
(See Sheet 4)



5. Freeport Planning Area

The area of Freeport that is within the Greenway is bounded by Meadowview Boulevards to just north of the Freeport Bridge and the southern city limits of Freeport at river mile 44.8.

Existing Use: The area landward of the levee is a combination of small rural communities, farmland, and open space. There is a historic railroad right-of-way on top of the levee that extends the entire length of the Planning area. The railroad tracks are intact, although service was discontinued in 1978. There is also an existing private marina just north of the Freeport Bridge.

Natural Resources: There is no significant vegetation on the River's bank in this area because of erosion control measures. There is limited opportunity for revegetation.

Proposed Recreation/Public Access Facilities: The State Department of Parks and Recreation is proposing a steam excursion train to operate between Old Sacramento and Hood, using the existing right-of-way on the levee. A passenger stop is proposed for just north of the Freeport bridge with commercial and retail facilities. The State also has plans for a paddle wheel tour from Old

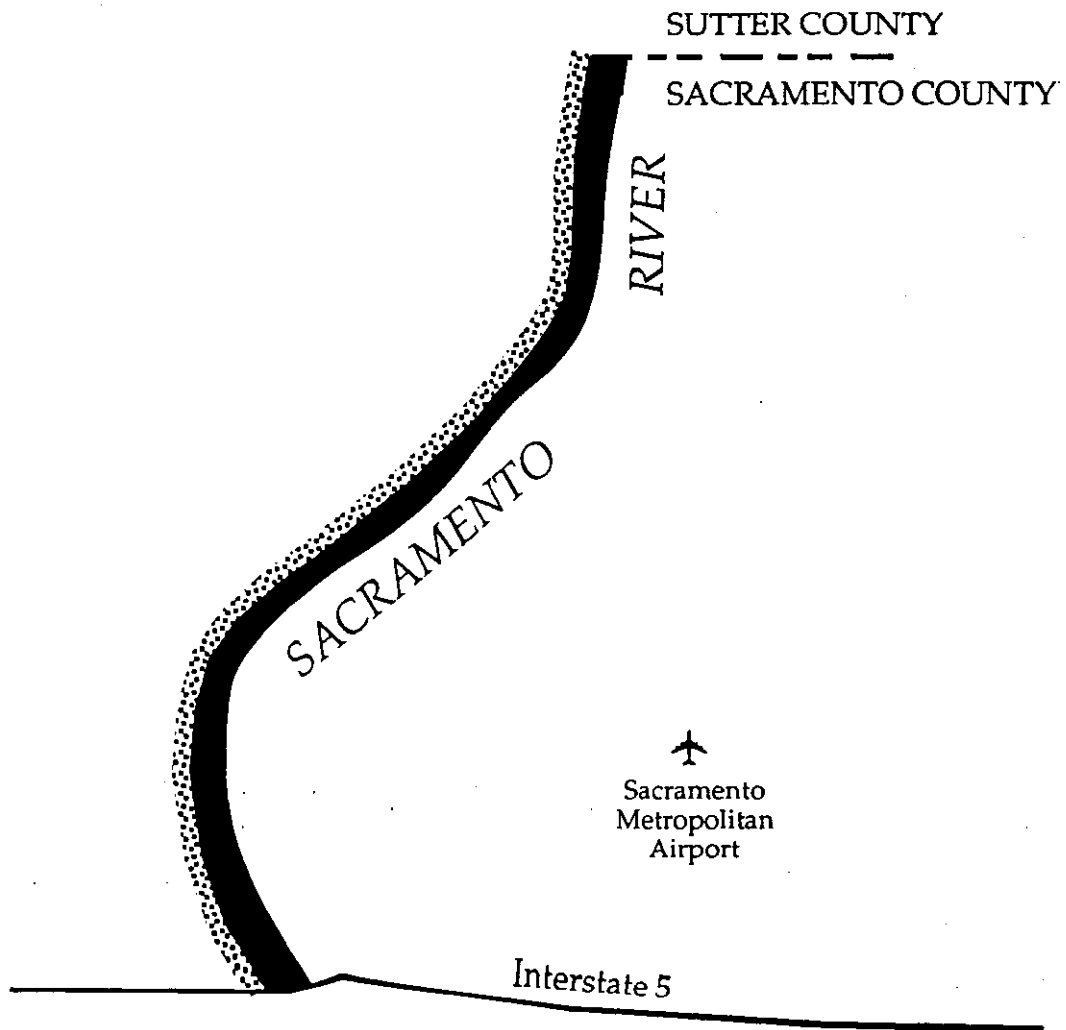
Sacramento with a southern terminus in the same location. A public promenade would connect the launch area to the train stop. The City of Sacramento is constructing a public golf course east of Freeport Boulevard with clubhouse, pro shop, and parking facilities. The promenade would extend across Freeport Boulevard to extend access to the golf course.

Due to the location of the railroad tracks, an off-street levee bike trail is not feasible in this planning area. An on-street bike trail is proposed along the river road (Freeport Boulevard) the entire length of the planning area.

Opportunities and Constraints: An off-street bike trail is not possible in this area due to the rail road tracks on the crown of the levee and the steepness of the landward and riverward slopes. Existing erosion control measures have limited the quality and quantity of vegetation found on the levee slope. There are few opportunities for revegetation.

The continuation of the bike trail through Freeport offers the opportunity to provide a link between the Greenway and the County of Sacramento's Beach Lake Preserve.

Sacramento River
GREENWAY
North Elkhorn
Planning Area
(See Sheet 1)



B. YOLO COUNTY

1. North Elkhorn Planning Area

The North Elkhorn Area begins at the Sacramento/Sutter County line, on the opposite side of the River (River Mile 75.5) and goes south or down river to the Interstate 5 bridge that crosses the River.

Existing Use: The agricultural lands within this reach of the river are under private ownership with the dominant agricultural yield consisting of field crops and orchards farmed up to the landward toe of the levee.

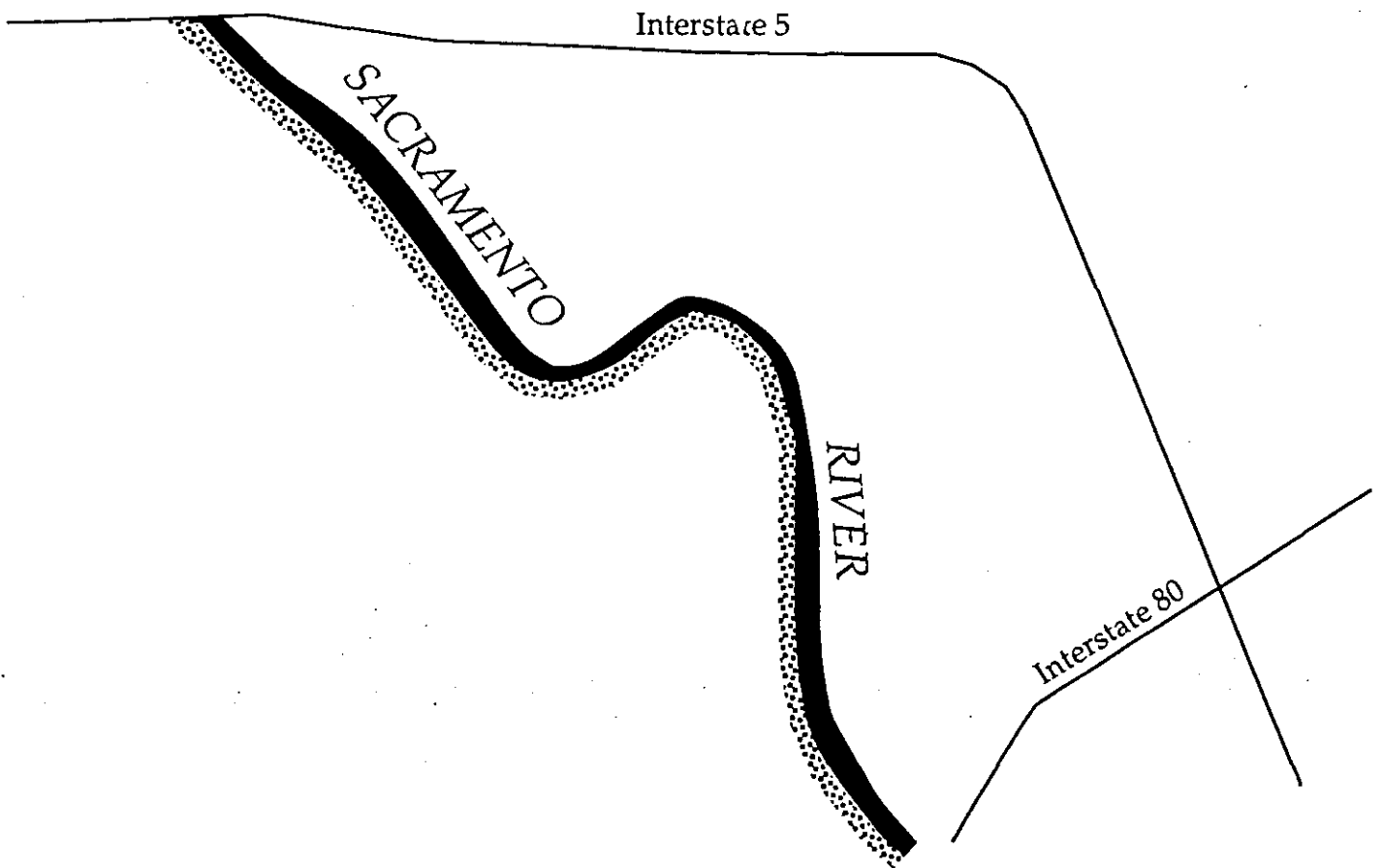
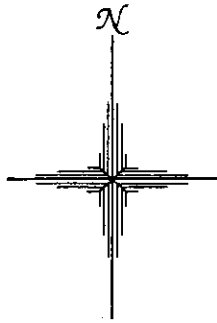
Existing Recreation/Public Access Facilities: There are no public recreation facilities along this reach of the River.

Natural Resources: The natural resources of the area consist of agriculturally productive lands including field crops, orchards and natural vegetation. Levee maintenance and agricultural practices have significantly limited the riparian habitat.

Proposes Recreation/Public Access Facilities: See South Elkhorn area description.

Opportunities and Constraints: See South Elkhorn area description. The land between the River and levee is narrow precluding significant changes to the riverbank.

Sacramento River
GREENWAY
South Elkhorn
Planning Area
(See Sheet 2)



2. South Elkhorn Planning Area

The South Elkhorn Area within the Greenway begins at the Interstate 5 (I-5) bridge (Vietnam Veterans Memorial Bridge) that crosses the Sacramento River and runs south along the river ending at the north city limit boundary of the City of West Sacramento.

Existing Use: The agricultural lands within this reach of the river are under private ownership with the dominant agricultural yield consisting of field crops (i.e. hay, wheat, barley, corn, etc.) and orchards farmed up to the landward toe of the levee.

Existing Recreation/Public Access Facilities: Yolo County operates and maintains Elkhorn Regional Park which is a fifty-five (55) acre park with approximately one and one-half (1 1/2) miles of river frontage within the levee area. The park facilities include a two (2) lane boat launching ramp, parking for fifty (50) automobiles and boat trailers, restroom, lawn and picnic area, and access to the river for bank fishing. The upper portion of the park is extremely narrow and contains limited riverbank/levee stabilization by vegetation. The remaining portion of the park is heavily vegetated with significant riparian habitat. Access to the park is by way of the County Road 22.

Natural Resources: The natural resources of the area consist of agriculturally productive lands consisting of field crops, orchards and natural vegetation along the riverside of the levee. Levee maintenance and agricultural alteration of the area have significantly diminished the riparian habitat.

Federal and state listed threatened, endangered, and candidate species have been sighted by the U.S. Fish & Wildlife Service and the California Department of Fish & Game in this area. Elderberry bushes have been found in this area. The Elderberry bush frequently provides a life-center for the Elderberry Longhorn Beetle which is a federal listed endangered specie. Swainson's hawks have been sighted nesting and foraging at several locations in the mature riparian vegetation along the Sacramento River. The Sacramento River also provides habitat for the Winter-run chinook salmon.

Proposed Recreation/Public Access Facilities: Yolo County is preparing a 1992 update to the County of Yolo Bikeway Plan. This document update sets forth goals, policies, and action guidelines for the County-wide bikeway system. The plan will respond to current identified needs, and encourage and promote more bicycle riding in the future. The proposed Bikeway Route Map of the plan shows that a Class II bikeway route will be established along County Road 22 linking Elkhorn and the City of West Sacramento.

Opportunities and Constraints: The Yolo County General Plan land-use element designates the plan area as AG (agricultural). Lands designated agricultural are subject to conservation standards, limitations, and other requirements to conserve the agricultural use of the land. County General Plan policies within this area serve to protect and conserve agricultural by restricting non-agricultural uses from designed agriculture through land-use element

policies, zoning restrictions, and by supporting the California Land Conservation Act of 1965 (Williamson Act).

As shown on the county zone maps, lands within this reach of the river are zoned either A-P (agricultural preserve) or A-1 (agricultural general). The purpose of the A-P zone is to preserve lands best suited for agricultural use from the encroachment of nonagricultural uses. The A-P zone is intended to be used to establish agricultural preserves in accordance with the California Land Conservation Act of 1965 and is established in areas designated by the General Plan for agricultural use. The purpose of the A-1 zone is to preserve lands best suited for agricultural use from the encroachment of incompatible uses, and to preserve in agricultural use lands suited for eventual development to other uses, pending proper timing for the economical provision of utilities, major streets, and other facilities so that compact orderly development shall occur.

Agricultural usage concerns may constrain public access along this stretch of the river. These concerns pertain to trespassing and conflicts with agricultural activity. Future public access, if any, in this area would need to address these issues and related agricultural usage vs. public access/use issues.

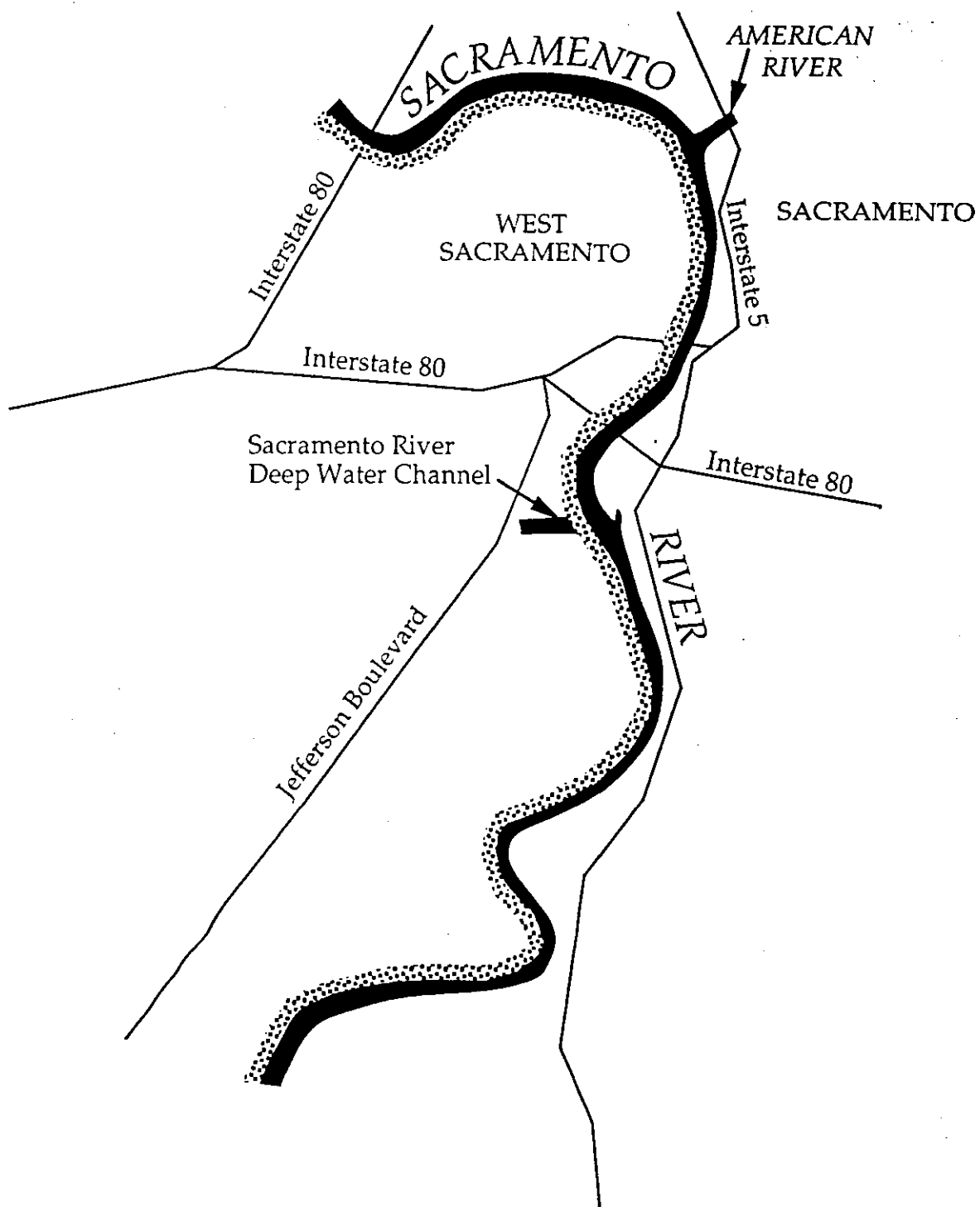
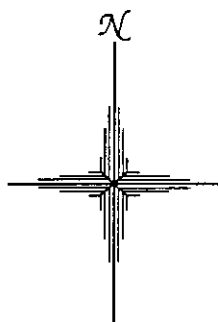
The riparian vegetation along this area of the river ranges from very limited riverbank/levee stabilization by vegetation to mature riparian habitat. Preservation,

protection, restoration, and creation of habitat for federal and state listed threatened and endangered species are issues of prime focus in the county's proposed habitat management program (i.e. Habitat Management Program For Yolo County). Public use and access through designated habitat areas of the county's proposed habitat management program boarding the river may be limited.

The South Elkhorn Area is situated within a designated federal flood hazard region and is subject to periodic inundation which presents potential losses to life, property, health and safety, and the extraordinary public expenditure for flood protection and relief. Public access and use in this area will require adequate flood mitigation measures in their design and construction. Flood damage prevention and control mitigation measures may limit public access and use of property.

A proposed project located adjacent to the Interstate 5 at the Elkhorn Interchange involves the development of a 243 acre site bordering the Sacramento River for use as: a hotel/conference center; travel-related commercial services; distribution, warehousing, manufacturing, processing, repair and service facilities. Approximately 4 acres of the site near the Sacramento River is to be designated as open space and is to serve as a buffer between the project and river. It is envisioned that project development involving the riverbank/levee will provide public access planned and maintained consistent with public safety.

Sacramento River
GREENWAY
West Sacramento
Planning Area
(See Sheets 2, 3, and 4)



3. West Sacramento Planning Area

The City of West Sacramento has approximately twelve miles of river frontage from the northwestern edge at Yolo Bypass south to the City limits below Burrows Road. The City has been separated into sub-areas for Greenway planning purposes.

AREA 1: The northwestern edge of the City beginning at the Sacramento Bypass and extending south along Riverbank Road to the Lighthouse Marina.

Existing Use: Parcels east and west of I-80 are designated by the General Plan as Open Space or Public and are held in private and City ownership. Private parcels west of I-80 are used for outdoor storage or undeveloped. Narrow parcels along Riverbank Road are used for roadside parking by those seeking a river view or rest stop. Parcels east of I-80 contain buildings with active operations on public lands held by the City, Reclamation Board and Army Corps of Engineers. Two private undeveloped parcels are west of the Lighthouse area.

Existing Recreation/Public Access Facilities: There are no public facilities.

Natural Resources: Northwestern portions of the area contain little or no riparian woodland vegetation on steep, rip-rapped banks. These areas are classified as Developed Area which contain pavement and public works facilities. Riparian vegetation consisting of mature trees and shrubs is found on both public land and on private parcels as the River moves east towards Lighthouse. These lands are classified as Riparian

Woodland (R2) immature, disturbed, on a narrow berm; the second highest riparian designation.

Proposed Recreation/Public Access Facilities: A rest stop and overlook between the Bypass and I-80 are proposed. Bicycle and pedestrian trails are proposed to border the River on the levee top or adjacent to the levee.

Opportunities and Constraints: The Greenway Plan designates this area as Recreation/Public Utility. Areas adjacent to the rest stop may be suitable for revegetation although the banks are steep. Should public agency activities cease on river side sites, the City may have an opportunity to provide additional public access.

AREA 2: Lighthouse, located east of Todhunter Road and west of "A" Street.

Existing Use: As the result of negotiations which clarified the State's interests, the State Lands Commission entered into boundary line agreements (see Glossary) on the riverfront portion of the proposed Lighthouse Marina. The City General Plan designates the land Riverfront Mixed Use.

Agreements between SLC and Lighthouse identify the boundary between public and private properties. The site is subject to a major development proposal. The following description applies exclusively to the State's property.

As part of the boundary line agreement, the Lighthouse Marina project will provide

passive access to portions of the existing riparian habitat corridor. There is a requirement for a landscape plan whose elements will include protection of the most sensitive habitat on-site and provide access and limited recreation in less sensitive locations.

There is also a proposed reconfiguration of the Viewpoint Marina and relocation of the River Galley Marina to accommodate 150 berths in-stream. State Lands Commission leases are required for these additional projects.

Existing Recreation/Public Access Facilities: Two marinas exist within the Lighthouse Marina property. The River Galley Marina is located just upstream of the confluence with the American River. The Viewpoint Marina is located just downstream of the confluence. Facilities located at these marinas and others along the river are described in Appendix G.

Natural Resources: The central portion of the area is classified as Riparian Woodland (R2) - an immature disturbed riparian habitat with little or no berm. This is the second highest Riparian classification and contains a stand of trees and lower story riparian cover. Also located within the Lighthouse Marina project is Riparian Woodland (R4) extending from the water's edge inland to the levee. This designation recognized urban waterfront development.

Proposed Recreation/Public Access Facilities: A significant public recreation area will contain pedestrian and bike trails for residents and the public. The small habitat area is designated as a Riparian Preserve to protect it from degradation.

South of the habitat area, but within the Lighthouse Marina Development, is public access to the proposed marina. Public recreation areas border the marina to the North and South. Facilities may include a marina, parking, public overlook, and fishing.

Opportunities and Constraints: Greenway land use designations include, Riparian Habitat, Recreation Area and Urban Waterfront Recreation to permit the proposed uses. State Lands agreements with Lighthouse will permit maintenance of a significant stretch of riparian habitat along the River with public access for passive and active uses in designated areas. The development of an off-stream marina will improve river traffic flow and the availability of public boating facilities. Housing will be permitted within portions of the area.

AREA 3: The area extends from south of Lighthouse to north of the "I" Street Bridge.

Existing Use: With the exception of the public boat ramp, the land is undeveloped. The General Plan Designation is Riverfront Mixed Use.

Existing Recreation/Public Access Facilities: The only legal public facility in this area is Broderick Boat Ramp which includes a parking lot and rest room.

Proposed Recreation/Public Access Facilities: The City proposes to maintain the boat ramp. Proposed are picnic facilities and bicycle and pedestrian paths which will connect with the City's projected bicycle and pedestrian paths along the entire waterfront. The City's

Park Master Plan proposes an outdoor theater and community gateway.

Natural Resources: The area is designated Riparian Woodland R2, which is the second highest quality riparian habitat in the area plan. Trees and understory vegetation may provide riparian habitat for a variety of species.

Opportunities and Constraints: Greenway land use designations is Recreation Area and Urban Waterfront Recreation which permits the boat ramp and public recreation facilities proposed. The existing riparian vegetation may create an opportunity for restoration along the riverbank.

AREA 4: Raleys Landing - located between the "I" Street Bridge and Tower Bridge.

Existing Use: The State Lands Commission has entered into a boundary line agreement with Raleys. The agreement identifies the boundary between public and private properties. Land which is waterward from the top of the reconfigured levee to the present edge of the water will be leased back to Raleys or the private party owner/or the City. The designated party must seek a lease from SLC for the berm area between the realigned levee and the present edge of water. The City General Plan designation is Riverfront Mixed Use.

Existing Recreation/Public Access Facilities: There are no public facilities and one lease for a dock.

Proposed Recreation/Public Access Facilities: The site is part of the City's

urban core and opposite the Old Sacramento waterfront. Planning under development includes public facilities which contain active uses such as a public plaza, restaurant, piers, docks, public bicycle trails and pedestrian promenade.

Natural Resources: The areas is classified as Riparian Woodland R2, immature and disturbed by humans. Inland portions of the site have been cleared for development.

Opportunities and Constraints: Greenway land use designation is Urban Waterfront Recreation and Recreation Area. The undeveloped land provides an opportunity for public urban access to the river as part of development proposals.

AREA 5: The Triangle area is bordered by Tower Bridge and Pioneer Bridge in the heart of the City's urban waterfront core. Area 5 is designated for a combination of Urban "Waterfront Recreation" and "Recreation" uses. For this area, the literal interpretation of the specific location of each segment of the two indicated land use designations would be subject to the final design for development of this riverfront area consistent with local land use designation, the Specific Plan and the Sacramento River Greenway Plan. It should be noted that the overall extent and proportion of the Urban Waterfront designation is as shown with minor site planning variations.

Existing Use: Land uses include industrial, warehouse, storage, distribution, office uses, freeways (above and below grade), and rail lines. The existing character of the area is one of under-used industrial land, economically obsolete

buildings, and some active businesses. State Lands has an existing lease for a private dock on the former RGA property near the Pioneer Bridge. General Plan designation for this area is Riverfront Mixed Use.

Existing Recreation/Public Use Facilities: There are no public facilities.

Proposed Recreation/Public Access Facilities: In the center of the City's waterfront urban core, a Specific Plan for mixed-use development will provide for office, retail, residential, hotel, government and institutional uses. The river's edge is proposed to be developed to provide public access for workers, residents, visitors, etc. for viewing and recreational purposes. The public use facilities proposed include an amphitheater, public plaza, piers, promenade, floating dockage, short-term boating berths, and restaurants. Bicycle and pedestrian paths are proposed for the entire length of the riverfront.

Natural Resources: The majority of the area is classified as Riparian Woodland R2, the second highest Riparian classification. The trees and understory in this area are of high visual quality. A portion adjacent to Business 80 is Urban Waterfront Development R4 with some mature tree overstory and commercial development or paving underneath.

Opportunities and Constraints: Greenway land use is designated Urban Waterfront Recreation and Recreation Area permitting the mixed use development planned for this area. The development of a Specific Plan for the entire 188 acre area will orient

development to the River and provide for public access to the River which has not been available in the past.

AREA 6: The area is located south of the Pioneer Bridge (Business 80) and extends to the land located south of the Sacramento Deep Water Channel. The area includes the entrance to the Deep Water Ship Channel. (RM 57 & 58.)

Existing Use: Developed land south of Business 80 to north of the channel is in transition from industrial uses to commercial uses. Gas storage and distribution facilities are located in the area. The City has a sewage treatment facility and city offices inland of the levee and north of the channel.

Vacant lands bordering the channel are held by the Port of Sacramento. Vacant land adjacent to Port land south of the channel is held by the U.S. Army Corps of Engineers and used as a land fill spoils site. State Lands Commission has two existing leases for waterfront use in this area. General Plan designation is Riverfront Mixed Use with Open Space designated a few hundred feet south of the channel opening. From this point south the land use designation is Open Space.

Existing Recreation/Public Access Facilities: No public recreation facilities exist.

Proposed Recreation/Public Access Facilities: A mixed use development plan to include a marina has been approved by the City on private land north of the Channel. Public recreation, viewing areas and promenades for walking or bicycles, marinas and public eating facilities are

proposed. The City proposes to locate a recreation area, community park and marina south of the Deep Water Channel.

Natural Resources: The commercially used land is classified as Riparian Woodland R4. Urban Waterfront Development with paved surfaces are on a disturbed site. The remainder is Riparian Woodland R2, which has mature riparian trees with bare soil and sparse shrubs below. These mature riparian areas are located near the entrance to the Sacramento Deep Water Shipping Channel. Portions of the area may be suitable for revegetation.

Opportunities and Constraints: Greenway land use designation is Urban Waterfront Recreation and Recreation Area to accommodate the proposed commercial and mixed use development of retail, office, marina and community park uses. The vacant land along the entrance to the channel creates an opportunity for development of tourist and resident oriented activities on the riverfront. Private plans for an on-stream marina and City plans for an off-stream marina and community park create opportunities for boating, fishing, picnic sites, and an information center. These uses are not currently available to the general public.

AREA 7: Southport extends from the proposed Community Park south of the Deep Water Channel to the City limits. South River Road borders the River for the entire stretch. (RM 51-57)

Existing Use: The levee road follows the River to the City limits. Development along the waterfront consists of three in-stream marinas: Sacramento Yacht Club,

Sherwood Marina and Four Seasons Marina. Bee Lake, a riparian area, is located between two marinas. Some private boats are moored along the River's edge. Inland, private owners with agricultural uses predominate and limited residential development is located in the northern portion. The Reclamation District owns land near the southern city limit. The General Plan designation along the River frontage is Open Space and Riverfront Mixed Use in the marina locations.

Existing Recreation/Public Access Facilities: Three private marinas provide mooring and services for recreational boaters. No other public facilities exist.

Proposed Recreation/Public Access Facilities: The City proposes to locate a bicycle and pedestrian path on the levee top with strategically located rest stops or staging areas along the route at the foot of Linden and at the county line. The roadway will be moved inland when development takes place. However, portions of the roadway will remain open for vehicle use to provide elderly and handicapped access to the River. The bicycle path can be located on the levee top or may move inland to skirt the Bee Lake riparian habitat area.

South of Bee Lake the City plans a community park with fishing, picnic grounds, overlook, parking, and visitor facilities.

Natural Resources: The natural resources of the area vary depending on location. The majority of the riverfront from the Sacramento Deep Water Ship Channel south to the Four Season Marina (just

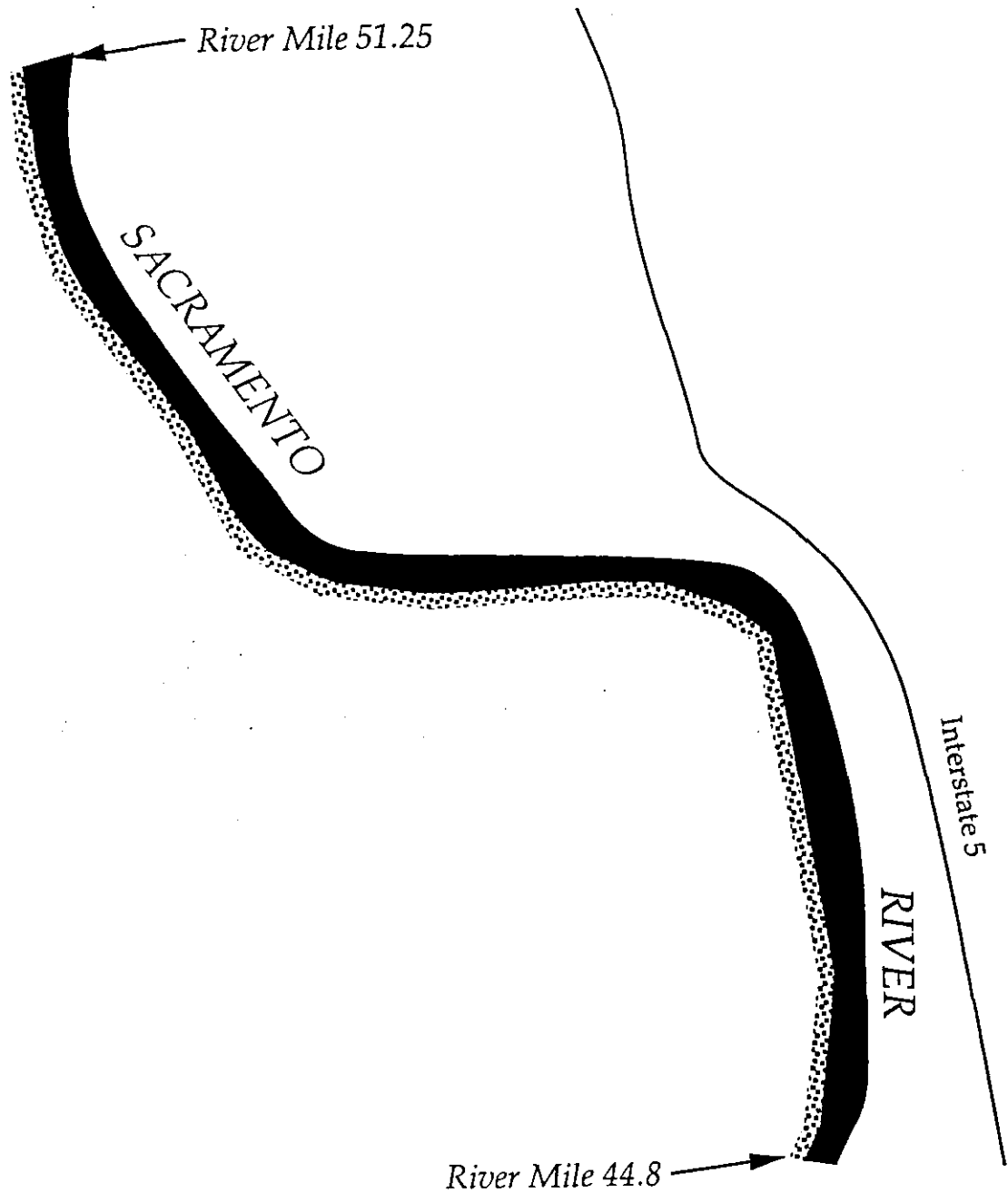
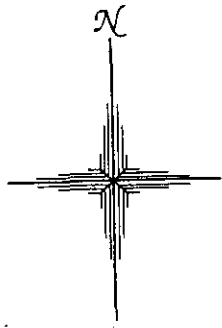
north of Zacharias Park) is classified as Riparian Woodland, R2. Although defined as immature and disturbed, trees and shrubs line the narrow berm and Swainson's hawks, the Elderberry beetle and the Giant Garter Snake may be found here.

Located within this area is Bee Lakes, a pristine mature Riparian Woodland habitat undisturbed on a wide berm. Bee Lake is bordered on both sides by marinas, the Sacramento Yacht Club and Sherwood Marina. The Riparian Woodland designation R4, reflects an urban waterfront development of those marinas. In a recent marina expansion, care was taken to preserve the riparian vegetation. Riparian vegetation R2, consisting of trees and understory extends south from Sherwood Marina to the Four Seasons Marina where the designation again reflects the urban waterfront development of a marina.

From Fours Seasons south to the City limit the classification is Unvegetated River Bank, B, which reflects the steep rip-rapped river banks devoid of vegetation.

Opportunities and Constraints: Greenway Plan land use designations include Urban Waterfront Recreation for the marinas; Recreation Area for the parks, rest stops and paths skirting Bee Lakes and Nature Study Area on the remainder. The largely undeveloped land in Southport creates an opportunity to cluster inland communities, move the levee road inland, and create paths, bikeways and parks for residents and visitors along the River. Some restoration or revegetation could take place in the City designated public use areas, but the southern portion of the levee bank is primarily barren and rip-rapped with no berm.

Sacramento River
GREENWAY
Babel Slough
Planning Area
(See Sheet 4)



4. Babel Slough Planning Area

The Babel Slough Planning Area begins on the south end of West Sacramento City limits, River mile 51.25, and runs to River mile 44.8, the southern terminus of the Sacramento River Greenway in Yolo County.

Existing Use: The agricultural lands within this stretch of the river are under private ownership with the dominant agricultural yield consisting of field crops and orchard farmed up to the landward toe of the levee. With the exception of Babel Convergence with the Sacramento River at River mile 50, the land on the river side of the levee is narrow and offers little potential for recreation or habitat enhancement.

Existing Recreation/Public Access Facilities: There are currently no public recreational facilities within this area.

Natural Resources: The natural resources of the area consist of agriculturally productive lands consisting of field crops, orchards and natural vegetation along the riverside of the levee. Levee maintenance and agricultural alteration of the area have significantly diminished the riparian habitat. Elderberry bushes have been found in this area.

Swainson's hawks have been sighted nesting and foraging in this area. The County is developing a Habitat Management Program for threatened and endangered species and their habitat.

Proposed Recreation/Public Access Facilities There are no proposed recreation or public access facilities in this area at this time.

Opportunities and Constraints: The Yolo County General Plan land-use element designates the property in this area as AG (Agricultural). Lands designated agricultural are subject to conservation standards, limitations and other requirements to conserve the agricultural use of the land. Where Babel Slough Road meets the South River Road offers the only potential as a habitat/recreational area. It is privately owned. Preservation, protection, restoration and creation of habitat for endangered species are issues of prime focus in the County's proposed habitat management program, thus public use and access through designated habitat areas may be limited.

V. IMPLEMENTATION

The Sacramento Greenway Plan must be adopted by each local jurisdiction and the State Lands Commission prior to implementation of the Plan's goals and policies. Plan implementation includes a public review period, the required California Environmental Quality Act (CEQA) review, public hearings and adoption by resolution as a component of each of the jurisdictions' General Plans. Following adoption, each individual jurisdiction will have the responsibility of implementing the Plan policies.

This section discusses the proposed creation of a managing entity as a means of coordinating the implementation of the Greenway Plan. See Appendix H for discussion of other alternatives considered for implementation of the Plan. Implementation measures at either the local level or through the managing entity may include, but not be limited to: 1) specific design guidelines for development projects; 2) developing an acquisition priority list; and 3) developing operations and maintenance plans.

In addition, this section outlines issues that must be considered by the managing entity in making decisions regarding development, land acquisition, and habitat restoration. The factors introduced in these subsections should be used in analyzing and ranking projects and may be used by the managing entity as criteria for funding a particular project.

Managing Entity

The Greenway Plan area includes the jurisdiction of two cities, two counties and the State Lands Commission.⁴ The essential vision of the Plan is to protect and restore riparian habitat and to provide public access by coordinating the planning and management of the Sacramento River within this Greenway Plan areas. It was determined early in the planning stages that consideration of a managing entity was necessary.

A managing entity created specifically for the purpose of coordinating implementation of the multi-jurisdictional Sacramento River Greenway Plan would develop, manage and operate the Greenway consistent with the Plan as adopted. The managing entity would also acquire land or other interests in land, such as conservation easements, necessary to fulfill the Plans goals. The entity would seek revenues, through separate benefit assessment districts or special Greenway district, grants, development impact fees and/or other sources, depending on the actual entity chosen. (See Appendix I - Potential Funding Sources.)

Local land use permits, State leases and federal, State, local or special district programs for flood control would continue to be carried out by the existing responsible agency. However, a coordinating, managing, operating, monitoring and oversight body is critical to an effective Greenway program.

The Greenway Planning Team established by the MOU, directed the Technical Team to consider various entities that would provide an institutional framework for the Greenway management. The following criteria was developed for any managing entity considered:

- To monitor local, State and federal compliance with the Greenway Plan.
- To operate and maintain the Greenway as a whole rather than as unrelated segments.
- To restore, enhance and manage the River's natural resources as an ecological unit which transcends political boundaries.
- To utilize to the fullest extent the substantial public property interests within the Greenway consistent with the Greenway goals.
- To coordinate development and land acquisition proposals within the Greenway.
- To provide and/or coordinate law enforcement and emergency response, security, and public safety within the Greenway.

The Technical Team weighed the merits of five proposals for managing the Greenway: 1) a cooperative management agreement; 2) a joint powers agency; 3) a new public agency created by state legislation; 4) a regional park district; and 5) a state-created conservancy. The benefits and limitations of each one of the proposals is discussed further in Appendix H - Managing Entity Options.

Facilities Considerations

Greenway facilities development priorities for the Greenway will be based on local jurisdiction capabilities. Factors to be considered will include, but not be limited to:

- Funding availability;
- Needs of Greenway and benefits to Greenway resources;
- Highest and best use for wildlife and habitat preservation;
- Best use for public access;
- Conservation management;
- Appropriate linkages to adjacent recreation facilities; and
- Expansion of existing vegetative/wildlife preserve or open space.

Land Acquisition Considerations

Implementation of the Greenway will require the acquisition of additional lands for public purposes over an extended period of time. The priorities for land acquisition within the Greenway are to acquire the most undisturbed or fragile land suitable for riparian habitat and land appropriate to link trail and/or recreation corridors. Actual acquisition of fee or other interest in land shall consider the following criteria.

- Specific acquisition priorities will be developed by local jurisdictions.

- Supports the central core element to trail linkages.
- An identified area of existing prime riparian vegetation (R1 or R2).
- Possess the greatest degree of wildlife restoration potential.
- Adjacent to existing prime habitat.
- Provides quality vistas or viewsheds.
- Possess valuable and unique recreation potential without conflict to adjacent land uses.
- Potential for riparian preservation, restoration and/or enhancement.
- What is the original, undisturbed habitat of the area?
- Uniqueness and variety of habitat.
- Diversity and richness of species in the area.
- Proximity of the site to seed/plant sources - Is there a ready supply of seed/plant sources in the area so that either naturally or commercially, a population can be restored?
- Adjacent land use - Is the adjacent land use compatible with the restoration effort? The restoration species needs to be chosen based on its ability to withstand impact from adjacent land uses.

The separate jurisdictions or an established Greenway managing entity should seek financial or land donations, facilitate land exchanges, accept conservation and recreation easements and create mitigation banks, whenever possible, to minimize expenditures of public funds.

Riparian Habitat Restoration Considerations⁵

The Greenway Plan proposes to restore and enhance areas of riparian habitats along the Sacramento River as part of the implementation measures for the Plan. This subsection outlines habitat restoration issues that should be analyzed for each potential restoration site. It is recognized that it is not possible to create a list of specific criteria that can be applied to all sites since every site has unique characteristics.

- Size/Shape of the site - The size and shape of a site should be considered when determining the priority of sites for habitat restoration. Small areas may fill in naturally. Irregular shaped sites may require more restoration effort.
- Proximity and connection to other areas of habitat value - Priority should be given to restoration sites that improve connection between areas of significant habitat.
- Condition of the bank - The stability of the bank may affect the type of species that can be used.
- Aesthetics - Is the design of the habitat restoration visually pleasing and does it fit in with the existing habitat?

- Threatened species in the area - If there are threatened or endangered species in the area, the habitat restoration effort should emphasize habitat suited for that species.
- Soils - The type of soil on the site affects the vegetation that can be grown on the site.
- Erosion control - The erosion of the site affects the plant species that should be used to restore the site. If the site shows signs of erosion, then there will be an emphasis on species that are used for erosion control.
- Hydrology - The water table of the site affects the type of plant species that can be used for habitat restoration of the site.
- Irrigation - Restoration sites need irrigation during the plant establishment period (the first 2-3 years after planting). A nearby water source needs to be available for irrigation purposes.
- Flood potential - If the site is prone to flooding, hydrophilic species will need to be used for habitat restoration.
- Level of maintenance required - The need for maintenance needs to be considered in selecting habitat restoration sites. Are there funds and maintenance personnel available to care for the site?

Funding

Funding for the Greenway will have three purposes: operation and maintenance, major capital improvements and land acquisition. Opportunities for land acquisition should not be lost because limited financial resources are directed toward maintenance or facilities. However, it is equally important not to develop new facilities without the means of maintenance. Appendix I, Potential Funding Sources, is intended to direct the managing entity and each jurisdiction toward the most likely funding source for the specific purposes, such as acquisition.

⁴ There are other agencies such as the Reclamation districts and Flood Control districts, but for land use planning and permitting and leasing, the cities, counties, and State Lands Commission are the principle parties.

⁵ Personal communication with Joe Donaldson, Jones and Stokes 7/92

REFERENCES

Sacramento County General Plan Update, 1992

Yolo County General Plan, 1983

City of Sacramento General Plan Update, 1985

City of Sacramento, Sacramento River Parkway Master Plan, 1975

City of Sacramento, Pocket Area Community Plan, 1980

City of West Sacramento General Plan, 1990

Newton and Laidet, Division of Mines and Geology, *Nursery Sources for California Native Plants*, 1992

Reclamation Board, *Interim Guide for Vegetation on Flood Control Levees*, 1988

Reclamation Board, *Policy on Bicycle Trails on Levees*, 1991

Reclamation Board and U.S. Army Corps of Engineers, *River Bank Protection Project*, 199_

Sacramento County, *American River Parkway Master Plan, General Review Program*, 1973

State Lands Commission, *Sacramento River Marina Carrying Capacity Study*, 1986

State Lands Commission, *Delta-Estuary: California's Inland Coast, A Public Trust Report*, 1991

U.S. Army Corps of Engineers, *Riparian Planting Design Manual for the Sacramento River: Chico Landing to Collinsville*, 1986

APPENDICES

APPENDIX A

OVERVIEW OF THE SACRAMENTO RIVER MARINA CARRYING CAPACITY STUDY

OVERVIEW OF THE SACRAMENTO RIVER MARINA CARRYING CAPACITY STUDY

The purpose of the Sacramento River Marina Carrying Capacity Study (River Study)¹ was to assess the extent to which the Sacramento River had the capacity to accommodate marinas and related development and activities. Carrying capacity was defined as the "extent to which the Sacramento River and its adjacent banks can carry marina development without significant negative impact on other human, ecological or water quality benefits associated with the river system".

The goals of the River Study were to provide the Commission and other public agencies with information to assess specific project proposals for cumulative impacts and evaluate the level of marina development which could be accommodated in balance with competing uses and with resource protection within the Study area. (See Greenway Plan, Goals and Policies for policies Marina development.) The Commission accepted the River Study report in 1986, and directed staff to develop a process for the implementation of the report's findings and recommendations.

The following elements and additional identified studies in the River Study were considered in the development of the Greenway Plan.

Transit Speed

The River Study indicated that transit speeds in the River are affected by the location of in-stream marinas and boat

ramps, and by the volume of boat traffic. As part of an adequate cumulative impact analysis under CEQA, each new proposed marina should be analyzed with project specific details updated assumptions, and the contribution of off-stream marinas to the volume of boat traffic.

Removal of Vegetation

The River Study concluded that more than 95% of the riparian vegetation on the Sacramento River area has already been destroyed as a result of accumulated development along the river, resulting in negative impacts to bank stability, water quality, visual quality, and recreation, as well as loss of habitat, including habitat for rare and endangered species. A cumulative impact analysis should discuss how projects can be designed to avoid further loss of riparian vegetation. Project alternatives or mitigation measures to minimize damage to existing vegetation and to replace vegetation lost as a result of project development should be developed for each new marina.

Levee Design

The River Study identified levee and bank stabilization projects as major contributors to the loss of riparian habitat in the river area with resulting impacts to the river bed and resource value of the river for fish, animal, and plant life. Alternative levee stabilization approaches that are ecologically sensitive should be developed for future bank protection projects. A cumulative impact analysis should identify

bank protection elements in proposed projects and should include these design alternatives to avoid further damage to the riparian environment in addition to enhancement and restoration of riparian values of the already degraded river banks to mitigate impacts from projects within the riverbank and the adjacent uplands.

Waste Disposal

The River Study identified the potential impacts from waste discharge into the river and recommended a cumulative impact assessment. Mitigation measures should include on-site prevention or treatment with no net gain of water pollution as the result of individual projects.

Loss of Channel Lock

The River Study discussed the role of the locks on boating in the Sacramento River. Any environmental analysis of the

potential impacts of proposed river projects should consider the possibility that, without funding, the locks may be permanently closed. Closure of the locks may contribute substantially to cumulative impacts such as boat traffic and water circulation. There should be an alternative analysis to avoid this compounding effect.

Conflicting Uses

In addition to the cumulative impacts of development upon the resource values of the river, the River Study discussed the conflict, existing and potential, between different human uses of the river environment. Among these competing uses are boating, waterskiing, jet skiing, fishing and more passive activities, such as walking along the shore and bank fishing. A cumulative impacts analysis for each new project would assess each of these elements.

1.State Lands Commission, Sacramento River Marina Carrying Capacity Study, 1986

APPENDIX B

OVERVIEW OF PUBLIC TRUST DOCTRINE

OVERVIEW OF THE PUBLIC TRUST DOCTRINE

The State acquired sovereign ownership of all previously ungranted tidelands and submerged lands and beds of navigable waterways upon its admission to the United States in 1850. The State holds these lands in trust for the benefit of all of the People of the State. The lands must generally be used for Public Trust purposes of statewide benefit which include waterborne and water-dependent uses such as navigation and commerce by means of navigation; fisheries; water-dependent recreation, such as fishing, picnicking, boating, sailing, rafting, canoeing, and water skiing; public access to the waterways; open space; and the protection and preservation of wildlife and its habitat, as well as aquatic and other sensitive resources.

These public trust resources are formally characterized within the Public Trust Doctrine, an important part of the body of law that applies to specific areas of land and water.

The Public Trust is "an affirmation of the duty of the State to protect the people's common heritage in streams, lakes, marshlands and tidelands, surrendering that right to protection only in rare cases when abandonment of that right is consistent with the purposes of the trust." *National Audubon Society v. Superior Court* 33 Cal.3d 419, 441 (1983)

The Doctrine establishes the right of the people to fully enjoy public trust lands, waters and their resources. In general, the Doctrine is applicable whenever navigable

waters or the lands underlying are altered, developed, conveyed or managed. It applies whether the fee interest is public or private. The Doctrine also sets limitations on the State, the public and private owners and their actions affecting these lands and their waters. There are duties and responsibilities of the State managing these public trust assets.

Local land use actions can and do affect public trust lands. From building permits for structures such as boat docks to use permits for marinas or industrial uses, local land use planners are responsible for knowing the State's responsibilities to and requirements of the Public Trust Doctrine. Other local land use actions may adversely affect the public trust resources. Development within a watershed may pollute or degrade public trust values in aquatic, riparian or wetland habitats.

The State Lands Commission, as the agency responsible for the administration of the public trust by which title to sovereign lands is held, seeks to ensure the balance between the development of resources and their preservation. The Commission's challenge is to manage public trust uses balanced with its duty to preserve, protect, enhance and restore California's sovereign and public trust lands. Thus the Commission serves an important role as a moderator of conflicts between competing uses of the varied natural resources under its protection. Determining which uses, among those consistent with the Public Trust, will

prevail has become a major challenge to the Commission.

An overriding goal of the Commission is to ensure Public Trust resource preservation. Within the Commission's approaches for resource planning and analysis are specific criteria designed to strike a balance between competing uses and development. Environmental review and development design criteria are used by the Commission to determine appropriate resource protection measures and compatible trust uses. Through an environmental assessment and application of resource development matrix, decisions on appropriate uses and feasible mitigation measures can resolve these

inherent conflicts. Local planning efforts using the same approach will benefit these environmental concerns and more likely will be consistent with the Commission's responsibilities.

When necessary, the Commission pursues judicial remedies, but only when collaboration fails. However, litigation is not the preferred means of accomplishing Public Trust protection goals. There are other more desirable methods now being employed by the Commission. These methods feature public education, conflict resolution and collaborative planning.

Sovereign Interests

The nature and extent of the State's sovereign interests within the Greenway planning area is governed by the public trust doctrine and statutory and case law related to boundaries. The State owns fee title by virtue of its sovereignty landward to the ordinary high water mark. (The ordinary high water mark is a legal term which describes property boundaries and may not be readily ascertainable by inspection.) In contrast, in non-tidal but navigable channels, the State owns fee between the ordinary low water marks (OLWM). The land between the high and low water marks on navigable non-tidal waterways may be privately owned, provided the deeds applicable to such property show that intent. However, any fee interest which is privately held is subject to a dominant Public Trust easement held by the State for the benefit of its people. Through this easement, the State may prevent uses of the property inconsistent with Public Trust needs or may commit the property to Public Trust purposes. In addition to rights based upon ownership, the public generally has a right to navigate and exercise the incidents of navigation over any area covered by water which is capable of being physically navigated by oar or motor propelled small craft.

APPENDIX C

MEMORANDUM OF UNDERSTANDING

SACRAMENTO RIVER RIPARIAN PARKWAY
MEMORANDUM OF UNDERSTANDING

WHEREAS, the Sacramento River (River) is one of the major rivers in California stretching from its headwaters in Shasta County in the north to its confluence with the Sacramento-San Joaquin Delta in the south; and

WHEREAS, the River was once bordered by up to 500,000 acres of riparian forest which spread four to five miles from it; and

WHEREAS, in 150 years the riparian forest has been reduced by human activities and development to an area of less than five percent of its previous extent; and

WHEREAS, the River supports diverse populations of wildlife, including commercial species of salmon and steelhead, as well as a number of threatened and endangered species of plants and animals; and

WHEREAS, counties and cities have come to depend on the River for water, power, and recreational activities; and

WHEREAS, the River is the object of increasing development which is often not compatible with habitat preservation, public access, flood control and wildlife protection; and

WHEREAS, multiple jurisdictions, including the County of Yolo, the County of Sacramento, the City of Sacramento, the City of West Sacramento, and the State Lands Commission, are involved in the regulation of land uses on and affecting the river;

Now THEREFORE. IT IS HEREBY AGREED, by and between the parties hereto, as follows:

1. The Counties of Yolo and Sacramento, the Cities of Sacramento and West Sacramento and the State Lands Commission will form an interagency planning team to establish a Sacramento River Riparian Parkway within the bounds of River Mile 76.0, in the vicinity of the I-5 Bridge, on the north to River Mile 44.8, near Freeport, on the south which shall have conservation and recreation as its major goals (See attached map). The membership of the team will consist of the following individuals or their designees - the Director of the Yolo County Facilities Department, the Sacramento County Director of Parks and Recreation, the Sacramento City Director of Parks and Community Services, the Director of the

City of West Sacramento Department of Parks and Community Services, and the Executive Officer of the State Lands Commission.

2. A technical planning team, composed of at least one representative from each agency, will be established as working staff to the interagency planning committee. The technical team will be responsible for assembling and analyzing data, preparing reports and recommendations, and providing all other staff support requested by the planning committee. Under the direction of the planning committee, the technical team will be responsible for developing a schedule and a funding program to govern the preparation, review, and presentation of the draft Sacramento River Riparian Parkway Plan (Plan). The five agencies will jointly review and submit the final Plan to their decision-making bodies for adoption.
3. The Plan shall have the following objectives: a) to preserve, protect, enhance, and restore the riparian corridor and its associated ecosystems, and b) to design a system of controlled public access for active and passive recreational uses related to the River.
4. The Plan to be developed will consist of, but not be limited to: a) a delineation of the nature and extent of the area's natural resources and their condition, b) a description of the existing land use, facilities and activities which occur in the planning area, c) a summary of the physical, social, economic, resource, and political factors which influence the management, use and enjoyment of the planning area, d) management alternatives, e) an analysis of the physical, social, and economic effects associated with each alternative, and f) a preferred alternative with guidelines and standards for defining, implementing and managing the Parkway.
5. During the preparation of the Plan, each agency shall advise the others of new data, proposed projects or actions which may impact either the planning area or the development of the Parkway and shall take no action which is detrimental to the proposed Parkway or the provisions or intent of this agreement. Such matters may be discussed at the meetings of the planning team.
6. Following its adoption by each agency, the Plan shall be the governing factor in all subsequent management decisions.
7. This agreement may be amended with the consent of the parties and shall remain in force and effect until terminated by the parties or until the establishment of the Parkway, whichever occurs first.

Signed By:

Carl A. Balch
Director, County Facilities Department
County of Yolo

10/2/90
Date

Mark P. Balch
Director, County Parks and Recreation
County of Sacramento

1/3/91
Date

Walter J. Slye
CITY MANAGER
City of Sacramento

9-27-90
Date

Director, Parks and Community Services
City of West Sacramento

Date

Chuck Warren
Executive Officer
State Lands Commission

1/7/91
Date

ALLES

Mark P. Balch

APPENDIX D

NATURAL RESOURCES OF THE SACRAMENTO RIVER

NATURAL RESOURCES OF THE SACRAMENTO RIVER

Historic Perspective of the River and its Waters

The Sacramento River is the largest river in California and has a watershed of approximately 26,300 square mile area. Prior to the construction of levees and dams, a large part of the Sacramento Valley was subject to periodic if not annual flooding. The flood plain within the valley varied from 2 to 30 miles in width and extended a distance of about 250 miles from Red Bluff to the mouth of the Sacramento River, an area in excess of 1 million acres. Flood periods were often contrasted with very low late summer flows.

Prior to European settlement, bank erosion and lateral movement across the floodplain were natural phenomena, and over the years, erosion and deposition were in balance. Riparian vegetation played an important role by reducing bank erosion and encouraging deposition of soils on the floodplain.

Since about 1850, a number of hydrological, geomorphic, and environmental changes have occurred, including the presence of dams, diversion structures, levees, bank protection measures, stream gravel removal, and hydraulic mining in the mountains. These changes have had far-reaching affects on the river's hydrology and natural characteristics of its banks. Channel meandering has decreased while channel width has increased. Changes in stream morphology have been due to the clearing of riparian vegetation, the effect of levees

on reducing overland flow, and the construction of dams. Water velocities have increased, and the main river has thus scoured deeper and wider. Summer water flows are higher, while winter flows are lower.

Hydrology

The large dams, especially Shasta, serve to capture large volumes of water. During most flood conditions, releases from Shasta are confined within the leveed floodway of the Sacramento River. At higher flood levels, water is diverted into the Sutter Bypass, through a confined channel, and then carried to the confluence of the Sacramento and Feather Rivers. At this point, excess waters pass into the Yolo Bypass via Fremont Weir.

The Sacramento River is designed to carry a flow of 107,000 cfs in the reach from Fremont Weir to the American River and 110,000 cfs from the American River downstream, with at least 3 feet of freeboard. At Sacramento, the maximum experienced from the period 1949-1979 was 104,000 cfs, with the average being approximately 23,584 cfs.

When the combined flow of the Sacramento and Feather Rivers and the Sutter Bypass exceed approximately 70,000 cfs, excess waters flow into the Yolo Bypass through Fremont Weir. Gates at the Sacramento Weir are opened when flows at the I Street Bridge exceed 27.5 feet or about 94,000 cfs, thereby releasing water into the Yolo Bypass.

During high flow on the American River, water levels are highest at the confluence of the Sacramento, causing reverse flows up to 3 miles north at the Sacramento Weir, and waters to flow into the Yolo Bypass.

Flood Management

The first flood control structures probably were levees. Many were built in the late 1800's and early 1900's by local landowners and reclamation districts. The Sacramento River Flood Control Project, formulated by the California Debris Commission in 1914, commenced with the formal building of levees and bypasses along the river which were essentially complete by 1944. The Central Valley Project began in the 1940's, and the State Water Project, began in 1960. Presently, the system includes a network of levees, weirs, dams, bypasses. The major dams include Shasta, Oroville (on the Feather), New Bullards Bar Dam (Yuba) and Folsom (American).

A profile of the river typically includes a steep bank, averaging about 20 feet above the water surface, a 50 to 150 foot (-500) level berm, and a levee. In many places, there is no berm, the levee bank extending directly from the levee to the river's edge. Along many stretches of the riverbank, rip-rap has been placed at the water's edge or all the way to the top of the levee. More than 1000 miles of levees exist along the course of the river. Levee improvements were completed by the U.S. Army Corps of Engineers (the Corps) in 1958.

The levees are maintained by non-federal entities, included several Reclamation Districts and the California Department of Water Resources. Maintenance practices of these agencies varies widely. The 1986 flood caused significant levee damage along the Sacramento River. In the subsequent evaluation, the Corps determined some of the levees are too porous, and has inserted a bentonite and soil slurry wall to form an impervious core. This was done in the east levee between Freeport and the I-5 crossing. Subsequently, the Corps is mitigating for the loss of 70 acres of upland/riparian vegetation and 44 acres of open water/marsh habitat.

The majority of Sacramento River levees are protected under a cooperative agreement established under the Flood Control Act of 1960 between the Corps and the California Department of Water Resources's Reclamation Board. The cooperative effort includes a total of 184.5 river miles, 31 miles of which are within the Sacramento Greenway. The Corps is responsible for design and contracting for construction; and the Reclamation Board is responsible for providing the land and maintenance. There are numerous smaller reclamation districts within the Greenway area which are responsible for the maintenance. They are as follows: North of Sacramento on the east bank falls under Reclamation District (RD) 1000; the west bank north of Sacramento and to West Sacramento is maintained by RD 1600, RD 827, RD 785, and RD 537; south of Sacramento on the west bank includes Reclamation Districts 900, 999, 765, and 307. South of Sacramento on the

east bank is Maintenance Area 9 maintained by the Department of Water Resources.

Standards have been developed by the State Reclamation Board for planting and appropriate vegetation. Other agencies are developing levee revegetation programs.

Sacramento River Ecology

A number of plant communities are found in the Plan area, including riparian, grassland, wetland, and aquatic. Only the riparian areas will be discussed as having major importance to the Greenway Plan area. The principal terrestrial biological resource is the riparian habitat. The Central Valley once supported flourishing tree growth along its waterways. These "gallery" communities are found where the right combination of abundant water supply, high nutrients, and the presence of coarse textured, well aerated and drained soils. Along the Sacramento River, these riparian galleries once varied in width from a few hundred feet to several miles.

Under pristine conditions, the natural meandering of the river resulted in a perpetual succession of plant communities. Scour and fill processes determine vegetation patterns along the river bank. Thus, while a flood may eliminate a portion of a mature forest through bank undercutting, the same material may be deposited elsewhere and serve as seed bed for tree establishment. As water levels gradually drop, germination occurs in the silt laden areas.

Hydrological conditions play a major role in determining plant communities. High terrace banks on the outside bends typically consist of valley oaks, box elder, and black walnut. The point bar on the opposite bank consists of sands, silts and gravel upon which willows and cottonwoods typically regenerate. The invasion of cottonwoods and willows facilitates the deposition of additional soil materials.

There are a variety of riparian habitats along the Sacramento River, including Great Valley Cottonwood Riparian Forest, Great Valley Mixed Forest, and Great Valley Oak Riparian Forest. These subclassifications of riparian communities are based on proximity to water and/or successional status. The cottonwood riparian forest is found nearest to water, the Valley oak farthest, and the mixed is generally found in an intermediate location or is a late successional component. Extensive modifications of historical flooding and the floodplain environment makes it difficult to precisely apply these classifications.

Riparian forests are dominated by deciduous trees: valley oak (*Quercus lobata*), cottonwood (*Populus fremontii*), willows (*Salix lasiandra*, *S. lasiolepis*, *S. hindsiana*, *S. godingii*, *S. hindsii*), ash (*Fraxinus latifolia*), sycamore (*Platanus racemosa*), black walnut (*Juglans nigra*), boxelder (*Acer negundo*), alder (*Alnus rhombifolia*) and buttonwood (*Cephalanthus occidentale*). Riparian woodlands form multi-layered plant communities.

The midstory and shrub layers is composed of young trees of ash and boxelder and shrubs such as wild rose (*Rosa californica*) and coyote bush (*Baccharis pilularis*). A number of epiphytic (upon other plants) vines and lianas drape the tree and shrub layer, including California grape (*Vitis californica*), Dutchman's pipe (*Aristolochia*), poison oak (*Toxicodendron diversiloba*), blackberry (*Rubus procerus* and *R. urcinatus*).

Native understory grasses, sedges and other plants include creeping wild rye (*Elymus triticoides*), Santa Barbara sedge (*Carex barbarea*), Lupines (*Lupinus sp.*). Many introduced plants, such as ripgut brome (*Bromus diandrus*), wild oats (*Avena fatua*), barley (*Hordeum jubatum*), pepperweed (*Lepidium*), bamboo, verbena, and others are to be found along the river. See Flora - Appendix D-1

Present day riparian forest in the Sacramento Valley is greatly diminished as the result of agricultural and urban development. Approximately 95% of this plant community has been removed in the Central Valley. Along the Sacramento River, probably up to 98% of this habitat is gone. From an early estimate of 775,000 acres in the 1850's, only 12,000 acres remain. Cutting of trees for firewood, clearing of land for agriculture, livestock grazing, bank protection and river stabilization projects, the building of levees and dams and other water development projects have all contributed to the demise of this important habitat. Compared to conditions prior to settlement when the riparian plant community extended outward at least

several hundred yards from the river, the present Sacramento River has very confined floodways and riparian habitat.

Riparian corridor habitats are extremely productive for wildlife. Corridors of vegetation along waterways provides avenues for movement for many species of wildlife. Even the comparatively narrow ribbon of vegetation along the Sacramento River provides critically important habitat for wildlife. The value of riparian vegetation is enhanced by the multi-layered and continuous layering of dense vegetation.

Riparian and oak woodland habitats are highly beneficial to wildlife. Nearly 70 species of birds are known to winter in riparian habitats of the Sacramento Valley. Riparian forest, with its multi-layered canopy, provides a rich, diversified habitat of shelter and shade, nesting sites, and food material for numerous kinds of wildlife. In the spring and summer, the foliage, bark and wood of the native oaks, willows, and cottonwoods serve as a food source for many species of insects and other invertebrates. Many small passerine birds--flycatchers, titmice, wrens, vireos, warblers and orioles--feed on these invertebrates. In the autumn, acorns serve as an important source of food for many bird species, such as woodpeckers, quail, and jays. The open oak canopy provides perch sites for aerial foraging species such as ash-throated flycatcher and western wood-pewee, and perch sites for ground feeders such as northern flickers and bluebirds. In the denser riparian forests, many understory plants vines, and forbs -- produce abundant food.

Both living and dead trees serve as nesting sites for many species of birds. Woodpeckers excavate holes in trees. Later, other species, such as flycatchers, western bluebird, and American kestrels, make use of these cavities. Raptors such as red-tailed and Swainson's hawks often use riparian forest stands. Herons and egrets make use of tall trees for nesting, such as at Elkhorn Slough.

Willow scrub habitat is associated with rip-rap areas and areas adjacent to the rivers edge. This habitat offers cover to many wildlife species. Willows support an abundance of insects, which are preyed upon by many species of migratory and resident birds, such as western flycatcher, yellow warbler, MacGillivray's warbler, and Wilson's warbler.

Even narrow, linear willow scrub corridors provide critical habitat for species that utilize adjacent herbaceous or agricultural habitats, such as black-shouldered kites, American kestrels, and western kingbirds. These plants also provide perches and cover for wildlife that forage along waterways, such as double-crested cormorants, green-backed herons, belted kingfishers, tree swallows, black phoebes, beavers, and bats.

Riparian tree habitat protects fishery habitat by providing shade, and thereby cooling aquatic systems. Incubating eggs, juvenile fish and even adult fish have greater mortality rates with increased water temperatures. See List of Fauna - Exhibit F-1.

The Sacramento River provides important habitat for a diverse population of fishes including anadromous and resident species. Anadromous fish include chinook salmon, pink salmon, silver salmon, steelhead trout, striped bass, American shad, green and white sturgeon, and Pacific lamprey. Resident fish include bass, crappie, catfish, bluegill and sunfish, rainbow and brown trout. Native non-game fish include the Sacramento perch, California's only native sunfish, and tule perch. Anadromous species are those that spend part of the year in the sea, but migrate up rivers to spawn. Resident species spend the entire year in the Sacramento River.

More than 90% of the Central Valley salmon and nearly all the American shad spawn in the Sacramento River system. The Sacramento River has four distinctive runs of chinook salmon: fall, late-fall, winter, and spring. The fall run has the most fish, while the winter-run is the least abundant. The Natomas East Main Drainage Canal is used by salmon as a migrating corridor to upstream tributaries, such as Dry Creek, for spawning. Warm-water fishes include bass, sunfish, striped bass, bluegill, and bullhead. Nongame fish include carp, Sacramento black fish, Sacramento perch, surfperch, and fathead minnow. Nearly 2/3 of the striped bass spawn in the Sacramento system. The Sacramento perch is believed to be a threatened species. The presence of dams, unscreened diversion structures, and pollution have severely depleted fisheries.

Special Status Species within the Greenway

The following species are found in the Greenway Area which are listed as endangered or threatened:

Swainson's Hawk (*Buteo Swainsoni*). A state-listed threatened species, the Swainson's Hawk is protected under the California Endangered Species Act. Swainson's hawk nest in scattered trees along riparian areas in the Central Valley. These raptors winter in Central and South America, and typically return to the same area each spring and summer to nest. Swainson Hawk populations have declined, at least partly due to the loss of riparian habitats and conversion of agricultural foraging areas. A number of nest sites have been found along the Sacramento River. EIP Associates found 16 active Swainson Hawk nesting territories along the Sacramento River between the American River and Elverta Road in a 1991 study.

The Great Blue Heron (*Ardea herodias W*) is protected by the Migratory Bird Treaty Act, and rookeries are considered Areas of Special Biological Importance by the State of California (SJRCF 1989). A heron and egret rookery is found at Elkhorn Slough.

A distinct race of chinook salmon, the winter-run chinook (*Oncorhynchus tshawytscha*) is a federally listed threatened and a state listed endangered species. There are other races, including the fall-run, and spring-run, but only the

winter-run spawn only in California, and virtually all of these are limited to the Sacramento River system.

The Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) is a federally listed threatened species. These beetles make exclusive use of elderberry shrubs as host and use shrubs with stems having diameter greater than one inch to complete their life cycle. While elderberry bushes are abundant in many parts of the Plan area, specific instances of the beetles have been found between river miles 60 and 62.5.

The Giant Garter Snake (*Thamnophis couchi gigas*) is a federally listed threaten species. It is among the largest and most aquatic of garter snakes. Its habitat includes slow-moving streams, drainage ditches, fresh water emergent wetland, and valley-foothill riparian.

The California Hibiscus (*Hibiscus californicus*) is a candidate for federal listing as a threatened species. It is also listed on the California Native Plant Species Inventory. It occurs in riparian and freshwater marsh habitat.

Yellow billed Cuckoo (*Coccyzus americanus occidentalis*) is a California Threatened Species, and a Federal Candidate species. It nests in large stands of riparian woodlands where they spend as much as 88 percent of their time foraging. They migrate to South America in the summer.

EXHIBIT E
LIST OF FLORA

COMMON NATIVE FLORA ALONG SACRAMENTO RIVER

Trees:

Ash	<i>Fraxinus latifolia</i>
Black Walnut	<i>Juglans hindsii</i>
Box Elder	<i>Acer negundo</i> subsp. <i>californicum</i>
Buttonwood	<i>Cephalanthus occidentalis</i>
Cottonwood	<i>Populus fremontii</i>
Valley Oak	<i>Quercus lobata</i>
Western Sycamore	<i>Platanus racemosa</i>
White Alder	<i>Alnus rhombifolia</i>
Willows	
Yellow	<i>Salix lasiandra</i>
Red	<i>Salix laevigata</i>
Black	<i>Salix goodingii</i> var. <i>goodingii</i>

Shrubs:

Coyote Bush	<i>Baccharis pilularis</i>
Elderberry	<i>Sambucus mexicana</i>
Mugwort	<i>Artemisia douglasiana</i>
Mule Fat (False Willow)	<i>Baccharis viminea</i>
Snowberry	<i>Symphoricarpos rivularis</i>
Wild Blackberry	<i>Rubus ursinus</i> and <i>R. vitifolius</i>
Wild Rose	<i>Rosa californica</i>
Willows:	
Sandbar	<i>Salix hindsiana</i>
Arroyo	<i>Salix lasiolepis</i>

Vines:

California Grape	<i>Vitis californica</i>
Dutchman's Pipe	<i>Aristolochia californica</i>
Poison Oak	<i>Toxicodendron diversiloba</i>
Wild Clematis	<i>Clematis lasiantha</i> and <i>C. ligusticifolia</i>

Grasses:

Creeping Wild Rye	<i>Elymus triticoides</i>
-------------------	---------------------------

APPENDIX F

LIST OF FAUNA

LIST OF COMMON NATIVE FAUNA ALONG SACRAMENTO RIVER

Mammals:

Beaver *Castor canadensis*
Black-tailed Jackrabbit *Lepus californicus*
Ground Squirrel *Spermophilus beecheyi*
Opposum *Didelphis virginiana*
Raccoon *Procyon lotor*
Red Bat *Lasiurus borealis*
River Otter *Lutra canadensis*
Striped Skunk *Mephitis mephitis*

Amphibians and Reptiles:

Bullfrog *Rana catesbeiana*
Common Garter Snake *Thamnophis sirtalis*
Common King Snake *Lampropeltis getulus*
Gopher Snake *Pituophis melannoleucus*
Pacific Tree Frog *Hyla regilla*
Tiger Salamander *Ambystoma tigrinum*
Western Rattlesnake *Crotalus viridis*
Western Skink *Eumeces skiltonianus*
Western Toad *Bufo boreas*

Birds:

Acorn Woodpecker
American Crow
American Kestrel
American Robin
Anna's Hummingbird
Brown Towhee
Great Blue Heron
Northern Mockingbird
Nuttall's Woodpecker
Plain Titmouse
Red Shouldered Hawk
Red-winged Blackbird
Swainson's Hawk
Scrub Jay
Yellow-billed Magpie

Fish:

American Shad *Alosa sapidissima*
Black Crappie *Pomoxis nigromaculatus*
Blue Gill *Lepomis macrochirus*
Bullhead *Ictalurus nebulosus* and *natalis*
Catfish *Ictalurus catus* and *punctatus*
Chinook Salmon *Oncorhynchus tshawytscha*
Green Sturgeon *Acipenser medirostris*
Largemouth Bass *Micropterus salmoides*
Pacific Lamprey *Entosphenus tridentatus*
Sacramento Squawfish *Ptychocheilus grandis*
Sacramento Sucker *Catostomus occidentalis*
Steelhead *Oncorhynchus mykiss*
Striped bass *Morone saxatilis*
Sunfish *Lepomis macrochirus* and *cyanellus*
Tule Perch *Hysterocarpus traski*
White Crappie *Pomoxis annularis*
White Sturgeon *Acipenser transmontanus*

APPENDIX G

MARINA BACKGROUND

MARINAS

Water-oriented activities on the Sacramento River include fishing, swimming and boating. Marinas and boat ramps have been developed along the riverfront to provide access for boating activities. To develop these marinas, other resource values are often adversely affected and may conflict with other water-oriented activities. These values include the beauty and peace associated with rivers, and the riparian and aquatic resources that provide habitat for wildlife. Thus marinas should be developed in less sensitive locations and in such a manner that mitigates potential impacts on other resources.

As described in the Public Trust Doctrine Appendix B, the State Lands Commission has exclusive jurisdiction for uses of the sovereign and Public Trust lands, which generally include the river bed and shoreline area. The Commission requires lease agreements for such uses, including marinas and other structures.

The Commission staff has developed a process to evaluate marina applications on a case-by-case basis (see Greenway Plan - Marina Policies).

In addition to this evaluation, specific processing tasks have been initiated: (1) a checklist to supplement current application forms which would identify additional project information required; (2) a supplementary CEQA Initial Study checklist for evaluating projects; (3) consideration of River Study recommendations; (4) review of public concerns; and (5) improved

communication, coordination and cooperation with affected public agencies.

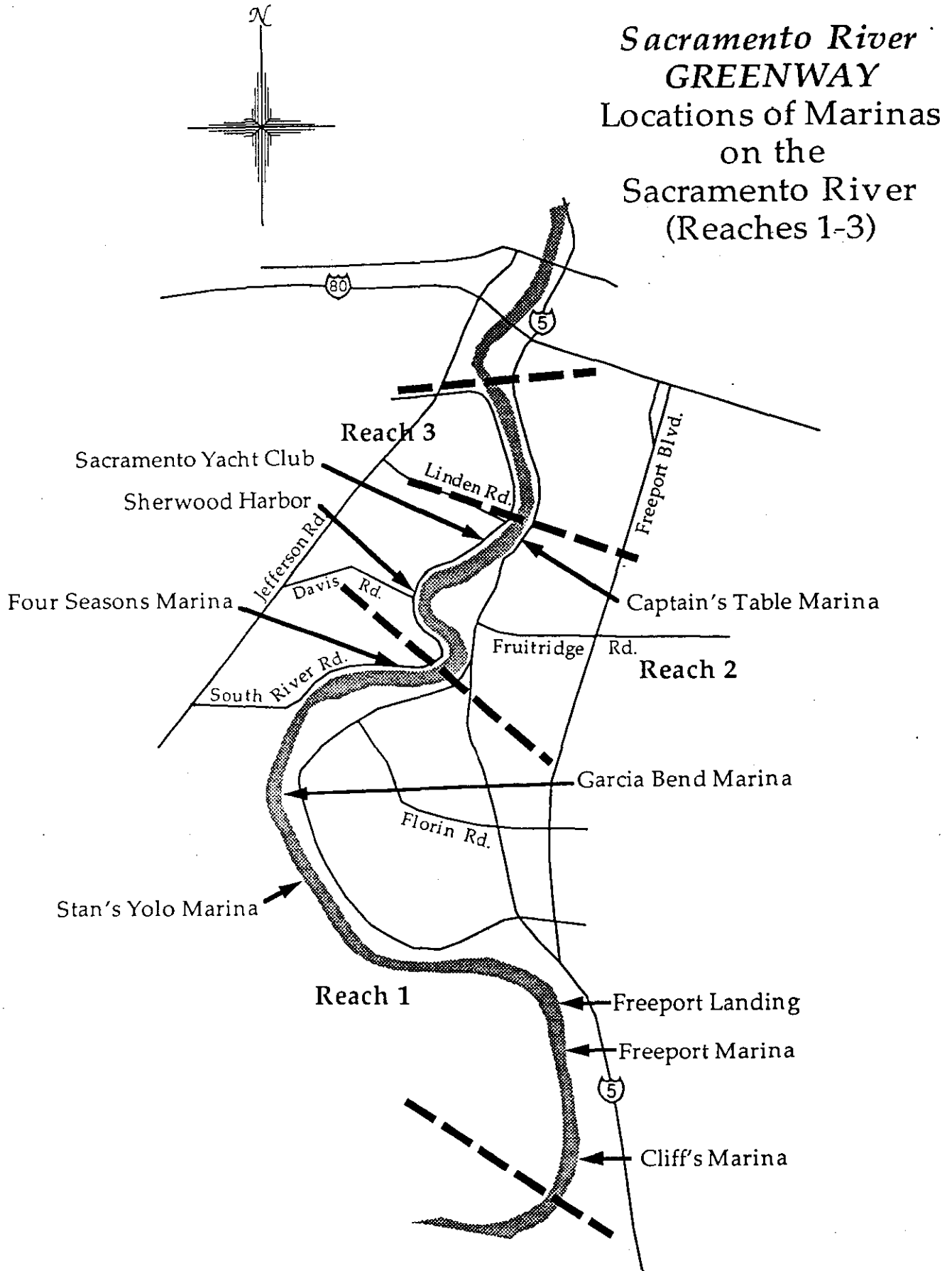
The River Study examined marina impacts on water quality, ecological, human and environments associated with the River system. It established a need to examine each project for impacts to these areas and to assess the cumulative impacts of marina projects. This impact approach will guide future decisions on proposed marina projects and their design in the Greenway.

Existing Marinas

Existing marinas are shown on Exhibit G-1a (Reaches 1 through 3) and G-1b (Reaches 4 and 5).

Proposed Marinas

Exhibit G-2 identifies proposed marinas and their status as of August 1992. The exhibit is read from south - river mile 45.3 - to north - river mile 70.6. Marinas on the west (right) bank of the river are indicated by 'RB' and marinas on the eastern (left) bank are indicated 'LB'. The chart provides a description of the ancillary uses of marinas, such as restaurants and fueling stations. The status of these marinas varies from inactive to being considered in the planning process. Marina proposals may be altered substantially to mitigate environmental impacts.



Sacramento River GREENWAY

Locations of Marinas on the Sacramento River (Reaches 4-5)

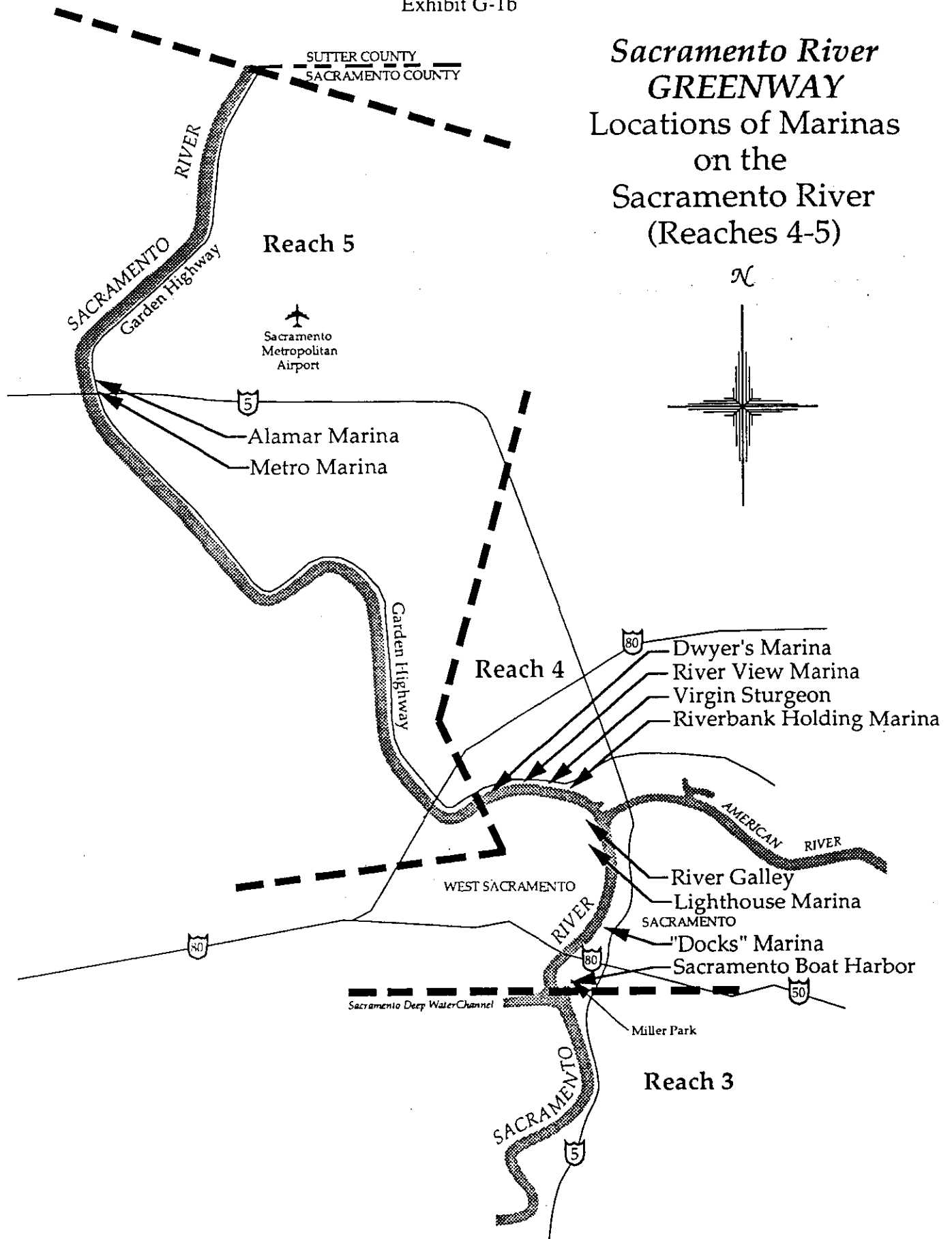


Exhibit G - 2a
EXISTING AND PROPOSED
MARINAS IN SACRAMENTO RIVER GREENWAY

RIVER MILE 1	MARINA	FACILITIES IN ADDITION TO THE MARINA	# OF EXISTING SLIPS INCLUDED IN SCCS 1986	STATUS OF MARINA AS OF 6/92	EXISTING # OF SLIPS AS OF 6/92	# OF SLIPS PROPOSED FOR E OR N AS OF 6/92 E = Expansion N = New
45.3 LB	CLIFF'S MARINA	Store, Fuel Pump out, Parking-100	149	Existing	149	φ
46.2 LB	FREEPORT MARINA	Restaurant, Store, Fuel Parking-70	175	Existing	135	φ
46.4 LB	FREEPORT LANDING (Dock Holiday)	Store Parking-20	8	Existing	8	φ
50.25 RB	STAN'S YOLO MARINA	Parking-40	19	Existing	19	φ
51.1 LB	GARCIA BEND MARINA	Store Parking-20	16	Existing	16	φ
53.6 RB	FOUR SEASONS MARINA	Restaurant Fuel, Pump out Parking 50	76	Existing	76	φ
54.75 RB	SHERWOOD MARINA	Store, Fuel Parking-80	45	Existing	65	φ
55.4 LB	CAPTAIN'S TABLE MARINA	Parking-80	66	Existing	66	φ
55.4 RB	SACRAMENTO YACHT CLUB	Restaurant Parking-120	62	Existing	62	E 28
57.5 LB	SACRAMENTO BOAT HARBOR (Miller Park)	Fuel, Store	287	Existing	553	φ
57.9 RB	RAMOS MARINA		φ	Pending	φ	N 360
	SUBTOTAL THIS PAGE		903		1149	388

1. Right bank on West, looking down river; Left bank on East, looking down river

Exhibit G -2b
EXISTING AND PROPOSED
MARINAS IN SACRAMENTO RIVER GREENWAY

RIVER MILE ¹	MARINA	FACILITIES IN ADDITION TO THE MARINA	# OF EXISTING SLIPS INCLUDED IN SCCS 1986	STATUS OF MARINA AS OF 6/92	EXISTING # OF SLIPS AS OF 6/92	# OF SLIPS PROPOSED FOR E OR N AS OF 6/92 E = Expansion N = New
58.6 LB	REDEVELOPMENT AG. "DOCKS" MARINA	-	0	Pending	0	N 80
60.0 RB	LIGHTHOUSE MARINA (Off-Stream)	-	0	Pending	0	N 100 ²
60.5 RB	LIGHTHOUSE MARINA (In-Stream)	-	0	Pending	0	N 210 ²
60.6 RB	RIVER GALLEY	Restaurant	31	Existing	31	0
60.9 LB	RIVERBANK HOLDING MARINA	Restaurant, Pump out	159	Existing	159	0
61.1 LB	VIRGIN STURGEON MARINA	Restaurant	21	Existing	21	0
61.5 LB	RIVER VIEW MARINA	Pump out, Store	103	Existing	95	0
61.75 LB	DWYERS MARINA	-	12	Existing	8	0
70.5 LB	METRO MARINA	Store	22	Existing	22	0
70.6 LB	ALAMAR MARINA	Restaurant, Fuel	66	Existing	66	0
	SUBTOTAL FROM THIS PAGE		414		402	390
	SUBTOTAL FROM PRIOR PAGE		903		1149	388
	TOTAL		1317		1551	778

1. Right bank on West, looking down river; Left bank on East, looking down river

2. Total of 310 slips for Lighthouse Marina per June 4, 1990 application on file with SLC.

APPENDIX H

MANAGING ENTITY OPTIONS

MANAGING ENTITY OPTIONS

The Greenway Plan area includes the jurisdiction of two cities and two counties and the State Lands Commission¹. The essential vision of the Plan is to protect and restore riparian habitat and provide public access by coordinating the planning and management of the Sacramento River within this Greenway Plan area. It was determined early in the planning stages that consideration of a managing entity was necessary.

A managing entity created specifically for the purpose of establishing the implementation of a multi-jurisdictional Sacramento River Greenway Plan which would develop, manage and operate the Greenway consistent with the Plan as adopted. The managing entity would acquire land or other interests in land, such as conservation easements, necessary to fulfill the Plans goals. The entity would seek revenues, depending on the actual entity chosen, through separate benefit assessment districts or special Greenway district, grants, development impact fees and other sources.

Local land use permits, state leases and federal, state, local or special district programs for flood control would continue to be carried out by the existing responsible agency. However, a coordinating, managing, operating, monitoring and oversight body is critical to an effective greenway program because of the multi-jurisdictions represented in the Greenway.

The Sacramento River Greenway Planning Team established by the Memorandum of

Understanding (MOU) directed the Technical Team to consider various entities that would provide an institutional framework for the Greenway management. The managing entity should meet all of the following criteria:

To monitor local, state and federal compliance with the Greenway Plan.

To operate and maintain the Greenway as a whole rather than as unrelated segments.

To restore, enhance and manage the river's natural resources as an ecological unit which transcends political boundaries.

To utilize to the fullest extent the substantial public property interests within the Greenway consistent with the Greenway goals.

To coordinate the development and land acquisition proposals identified in the Plan within the Greenway.

To provide and/or coordinate effective law enforcement and emergency response within the Greenway to ensure landowners and users security and public safety within the Greenway.

To utilize limited financial resources of local and state governments in the most efficient and responsible economical manner.

Alternatives

The Technical Team researched the benefits and options of five alternatives - Management Agreement, Joint Powers Agreement, Greenway District, Regional Park District, and State Conservancy. Each proposal would be effective, however, each also has limitations which are discussed below.

1. Management Agreement

A Management Agreement (MA or Agreement) defines the administrative structure. Each jurisdiction would be responsible for acquisition, maintenance and operation of its own portion of the Greenway.

Each of the Parties holds title or has the right to independently manage certain lands within the Greenway. The Agreement provides that although each party may have separate authorities and policies, they intend to cooperate to the greatest extent possible. MAs are a recent development, formed to bring together state and local agencies for resource management and operations. The Management Agreement can always be modified to incorporate a Joint Powers Agency when and if the parties believe it is advantageous for funding purposes.

2. Joint Powers Agreement

A Joint Powers Agency (JPA) could be created as a voluntary

contractual relationship by the state and local agencies with responsibility for or interests in the River. The JPA could constitute a separate entity or more commonly signify a partnership among the interested jurisdictions. However, each jurisdiction uses its own taxing authority. In nearly all other ways, including Board composition, operation and maintenance, land acquisition and receipt of gifts, the JPA is similar to the Cooperative Management Agreement.

Within the local taxing limitation, other potential funding sources are landscaping and lighting parcel tax (tiered assessments based on the benefit derived from the Greenway); park and open space districts as provided for in Public Resources Code § 5500 *et. seq.*; a contribution of a fair share of the budget by each member agency from unspecified local sources; allocations by the Sacramento River Greenway Trust (to be developed over time).

Joint Power Agencies have the similar limitations as Management Agreements in that they are impermanent and generally much better suited for the accomplishment of a single project, rather than assuming long-term operational responsibilities. Additional studies will be needed to determine if a Greenway JPA can arise revenue effectively. Failure to adopt financing measures in one jurisdiction could

jeopardize the overall Greenway acquisition and restoration effort. In spite of these noted limitations, there are JPAs recently formed to bring together state and local agencies for resource management and operations.

3. Local Greenway District Through State Legislation

A Greenway District created through state legislation, with county, city and state representation on the governing board could acquire and manage Greenway lands. The entity could compete effectively for grants and funds provided by existing or future programs including state bonds. A Sacramento River Greenway "district" would be distinguished as a regional entity managing a resource of statewide significance. The district's independent financial sources enables more creative partnerships with other private and public entities.

Since the Greenway is an amenity and provides benefits to people outside the planning area, the district boundaries should match the approximate extent of the inhabited areas whose residents could readily travel to the parkway in an hour or less. Thus any benefit assessment for the Greenway would be limited to the region of benefit and any election for a general obligation bond issue or special tax would be conducted only within this region.

The district's development and land acquisition would be limited to the Greenway planning area. It would be governed by a Board which would represent each of the jurisdictions. There would be a designated administrative jurisdiction for operations and maintenance activities. However, there would be mutual aid for emergency and public safety as necessary.

The district's operations and maintenance activities would occur primarily within its administrative jurisdiction. This would consist of land and water areas acquired for the parkway, whether by purchase, lease, easement, etc; other public lands operated by the district on behalf of another public agency; and private lands covered by a conservation easement or as a designated mitigation site to be voluntarily placed in a management agreement with the district.

The district could contract with existing county and city park management departments as well as other departments for operating and management responsibility. The cost of constructing greenway facilities on land owned by a state or local entity would be shared, with the proportion determined by the such matters as the extent to which the particular parkway facility enhances the utility of the state or local entity's land and supports the public program conducted there.

Monitoring Local Compliance with Parkway Plan. The District Board would review and make recommendations regarding the consistency with the Greenway Plan, of proposed changes in land use designations, proposed projects and the public acquisition or disposal of any land or interest in land within or affecting the Greenway.

Land Acquisition and Receipt of Gifts and Funds. Other authority would include acquisition and conveyance of land or interest in land (except land subject to the Public Trust) within the Greenway; acceptance of bequests, gifts, grants, appropriations, and contributions.

Operation and Maintenance. The District would be authorized to carry out or contract for planning activities, capital improvement projects, and operation and maintenance; hire staff for purpose of carrying out its responsibilities under the Act.

District Funding. The legislatively created entity could be funded by a single mechanism or combined methods, such as the following: a parcel-based District tax, state lease revenue (consistent with Public Trust purposes), user fees and/or general obligation bonds.

The significant differences between the MA and Greenway District are 1) the MA does not constitute a

separate entity, but rather signifies a partnership among the interested jurisdictions; and 2) funding is fundamentally different since each jurisdiction must use its own taxing authority rather than the District's. In nearly all other ways, including Board composition, operation and maintenance, land acquisition and receipt of gifts, the MA is similar to the Greenway District.

The Greenway Planning Team expressed concern that the proposed district may be premature, although the better long-term management and financing approach. The principle concern expressed was the need to develop a community commitment to the Greenway in order to have the necessary constituency to support the district initiative.

4. Regional Park District

A regional park district is a local agency for which existing state law exists. Requirements for the district include the provision that at least one city and the proposed territory of the district has a population over 50,000. Without state legislation, appropriate representation of local government interests are not provided. The park district would not include the State Lands Commission and would restrict joint land acquisition and management efforts.

5. State Conservancy

There are four conservancies established by the state and two proposed: Coastal Conservancy, Santa Monica Mountains, Tahoe Conservancy and Coachella Valley Mountains Conservancy; proposed are the San Joaquin River and Los Angeles River Conservancies. State legislation is required to create a conservancy. The primary purpose of a Greenway Conservancy would be to review activities for Plan consistency and to coordinate management. The

Conservancy would have similar duties and authorities as the Greenway District and in most respects is parallel to the District concept. The Conservancy designation would place the Sacramento River Greenway in the same status as the other state conservancies focusing state, as well as local, attention on the state greatest river. The Conservancy designation has been used throughout the United States and conveys a proven resource management cooperative effort between many parties.

1. There are other agencies, such as the Reclamation Districts and Flood Control Districts which have responsibilities along the River, but for land use planning, permitting and leasing the cities, counties and State Lands Commission are the principle parties.

APPENDIX I

POTENTIAL FUNDING SOURCES

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Local Funding Options		
Landscape and Lighting Assessment District	Special benefit area established for specific improvements. (Streets and Highways Code §22500 et seq.)	
Assessment Districts	Taxes assessed as portion of value of property in designated areas for long term improvements, i.e. mosquito abatement, water and sewage. (Improvement Act of 1911, 1913 - Div. 7 §8500 and Div. 12 §1000 Streets and Highway Codes respectively).	
Parcel Tax	Per parcel assessment for designated improvements and usually for specified period of time.	
Facilities District	<i>Mello-Roos Community Facilities District Act</i> enables special districts to levy special taxes to fund a variety of facilities and services. Proceeds are used for direct funding of projects and/or to pay off bonds. (Government Code §53311 et seq.)	
Tax Increment Sales Tax - (Redevelopment Program)	Tax increment revenue is a property tax derived from assessed property values established at the time the redevelopment area is established.	
1/2 Cent Sales Tax	A sales tax is imposed on the area benefiting from development of a project. The special tax is established in a specific amount and for a specific time.	
Grants		
Federal		
Environmental Protection Agency	<i>State Wetland Protection Grant Program.</i> Grants are given to various wetland projects including "multi-objective river corridor management" projects that address multiple use of rivers and adjacent areas, such as recreation habitat protection, water quality and open space. There is a matching requirement of 25%.	Stephanie Wilson 415/ 744-1968

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Department of Transportation	<p><i>Intermodal Surface Transportation Efficiency Act of 1991.</i> Allows federal transportation funds to be used for trail purposes under several categories. Local Metropolitan Planning Organizations (MPO) (SACOG is the MPO for this area) are the planning bodies which develop the plans for allocation of the funds in these categories: Scenic Byways Program, Congestion Mitigation and Air Quality Improvement Program.</p>	<p>Gail Payne Sacramento Area Council of Governments (SACOG) 916/ 457-2264</p>
	<p>Another fund, National Recreational Trails Fund is administered by CA Department of Parks and Recreation.</p>	<p>Charles Willard 916/653-8803</p>
National Park Service	<p><i>Land and Water Conservation Fund.</i> These funds are for acquisition, development, or rehabilitation of neighborhood, community, or regional parks, or facilities supporting outdoor recreation activities. This includes both rivers and trails. Cities, counties and recreation and park districts authorized to provide public park and recreation facilities are eligible to apply. The federal funds pass through the California Department of Parks and Recreation and are available with a 50% matching provision.</p>	<p>Ken Martin Dept. of Parks and Recreation 916/ 653-8837</p>
	<p><i>Urban Park and Recreation Recovery Program (UPARR).</i> Funds are made available to rehabilitate existing park and recreation facilities. Innovative projects are currently favored. In addition, recreation projects that also perform a service, such as projects that target at-risk youth, are also favored. This program provides reimbursable matching cash grants, typically 70% UPARR/30% the local agency. This program is funded at the discretion of Congress. Funds may be available in upcoming years.</p>	<p>George McGuffick UPARR Coordinator 415/ 744-3972</p>
U.S. Department of Agriculture	<p><i>Conservation Reserve Program.</i> This program could be applicable for river projects that have adjacent fragile cropland, especially those with erosion or water quality problems, or areas needing habitat improvement. States and other governments owning croplands are eligible to apply.</p>	<p>Larry Plumb 916/ 551-1801</p>

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
U.S. Department of Agriculture, Con't.	<i>Resource Conservation and Development Grants.</i> These grants are for projects that conserve and improve the use of land, develop natural resources, and improve and enhance the social, economic, and environmental conditions in rural areas. State, local governments and nonprofit organizations with authority to plan or carry out activities relating to resource use and development in multijurisdictional areas are also eligible to apply. This program provides advisory services and counseling. In addition, loan assistance may be provided for the local share of the cost through the RC&D Loan Program.	Jay Collins 916/ 757-8242
U.S. Army Corps of Engineers (Administered by State Reclamation Board)	<i>Sacramento River Bank Protection</i> project includes mitigation actions for habitat restoration. Congressional authorization establishes funding and state match for each component. Recreational aspects may be added subject to non-federal sponsorship. Restoration mitigation is managed cooperatively with Fish & Wildlife Service and Department of Fish and Game.	Anna Hegedus Reclamation Board 916/ 653-7913
Small Business Administration (Administered by Department of Forestry)	Grants to local governments and private individuals for the purchase of land and plant trees. Is viewed as a jobs creation program.	John Ray 916/ 653-9420
State		
Resources Agency	<i>Environmental License Plate Funds.</i> Grants are offered to state agencies, city or county agencies, or private non-profit organizations to support a variety of projects that preserve or protect environment. Eligible projects include acquisition, restoration or enhancement of resource lands and endangered species, and development of interpretive facilities. Projects are funded in one-year increments and each must be a separate, distinct project with a clearly defined benefit.	Hal Warass 916/ 653-9709

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Department of Transportation	<i>Transportation Development Act, Article 3.</i> Projects that include pedestrian/bicycle path or lane projects serving major transportation corridors are eligible. Priority is given to those projects that provide a spectrum of participation of government and the public, as well as review by walking and/or bicycling interests. Grant distribution is handled by a regional transportation planning agency. No matching is required.	Harrison Holton 916/ 322-1412
	<i>Highway Planning and Construction (Federal Aid Highway Program).</i> This is a federal program but application and distribution of funds is made through the CalTrans. Projects that include bicycle transportation, pedestrian walkways, rest areas, and fringe and corridor parking facilities as part of highway beautification projects are eligible. Facilities must either be part of a highway project or independent facilities that serve the highway corridor. The matching requirement is 75-90% depending on the nature of the project.	Richard Blunden 916/ 653-0036
Department of Transportation, Transportation Commission, Resources Agency	<i>Environmental Enhancement and Mitigation Program (Proposition 111, AB471).</i> This program provides \$10 million annually for acquisition, restoration or enhancement of resource lands and trail corridors. All projects must be at least indirectly related to the environmental impact of a new or newly modified transportation facility. There are three grant categories: highway landscaping/urban forestry, resource lands and roadside recreation. Land trusts, local, state, federal and nonprofit entities are eligible to apply.	MaryLou Shurtleff EE&M program coordinator 916/ 653-5674
California Transportation Commission	<i>Bicycle Lane Account.</i> Funding is for trail projects with bicycle access where a commuting connection for bicyclists can be shown. Projects must show that prospective trail users are currently riding on state, county, or city roadways that run "approximately parallel" to the bikeway. The program is funded from the gasoline tax. There is a 10% matching requirement for local agencies.	Mel Aros 916/ 445-6134

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
State Lands Commission	<i>Kapiloff Land Bank Funds.</i> Acquisition of land for trails and other resources through Land Bank funds and or land exchange. Funds come from land boundary settlements with the State and are generally available for projects in the same area that the funds originated. State lease revenue is available to fund projects if approved by legislature.	Mary Howe 916/ 322-5645
Department of Fish and Game	<i>Inland Fisheries Division Grant Program.</i> Grants are provided for fishery restoration work. Funds for this program come from a variety of sources including California Wildlife, Coastal and Park Land Conservation Fund of 1988 (Proposition 70).	Harvey Reading 916/ 654-6505
	<i>The Commercial Salmon Stamp</i> account provides funds for projects directed at restoring salmon populations through habitat enhancement or fish rearing, and for projects designed to educate the public on the importance and the ecology of salmon.	
Wildlife Conservation Board	<i>Federal Land and Water Conservation Fund.</i> Program has funds available for the acquisition or development of neighborhood, community or regional parks or facilities supporting outdoor recreation activities. Eligible applicants include counties, cities, recreation and park districts, special districts with public park and recreation areas. The applicant is expected to finance the entire project and will be reimbursed 50% of the costs, up to the amount of the grant.	Sylvia Gude 916/ 445-1092
	<i>The 1984 Fish and Wildlife Enhancement Bond Act</i> provides funds to correct deficiencies in fish and wildlife habitat. Funds may be used only by public agencies to enhance, develop or restore flowing waterways for the management of fish outside the coastal zone.	Marylynn Gzyms 916/445-1118
	<i>Proposition 70.</i> Funds are available for endangered species and for native trout habitat restoration.	Marylynn Gzyms 916/ 445-1118

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Department of Water Resources	<p><i>Environmental Water Program.</i> The Environmental Water Program, created by the Environmental Water Act of 1989 (AB 444) is for enhancement and restoration projects which will contribute significant environmental benefits to the State. The types of projects eligible for funding are: 1) Fisheries habitat restoration and enhancement; 2) Riparian habitat acquisition, restoration or enhancement; 3) Wetlands habitat acquisition, restoration or enhancement. Projects can be carried out anywhere in California. Land acquisition is an eligible cost, and can be funded as part of a proposed project. Grant monies must be matched by either an equal amount of cash, or a combination of cash and in-kind services (in-kind to be no more than fifty percent of the grantee's share). The program allows for funding of actual projects, not studies. No funding will be available for long-term operation and maintenance costs or mitigation for other projects. Also available are nonsubsidized loans.</p>	Phil Wendt 916/ 327-1660
	<p><i>Urban Streams Restoration Program.</i> Grants provide for local stream restoration projects for prevention of property damage by floods and bank erosion and to restore the natural value of streams. The grants can fund simple projects such as organizing volunteer help to monitor and clean up streams or can fund complex stream restoration work.</p> <p>Cities, counties, districts and nonprofit organizations may apply for grants. This grant program stresses community participation. Therefore, any proposal submitted by a government agency must be cosponsored by a local group with an interest in the problems or streams to be addressed by the proposal. Likewise, projects submitted by nonprofit organizations must be cosponsored by an appropriate local agency.</p>	Earle Cummings Program Manager 916/ 327-1656

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Department of Forestry and Fire Protection	<i>Forest Stewardship Program.</i> The Urban Forestry grant program was created by the California Wildlife, Coastal and Park Land Conservation Bond Act of 1988 (Proposition 70). Cities, counties, districts and nonprofit organizations may apply for grants. Eligible projects include planting trees along streets, in dedicated open space areas, and in public parking lots and school yards. The maximum amount that an applicant may request is \$40,000 for any project, and 90% of the funds must be used for purchasing trees. The remaining 10% may be used for public awareness and education that will encourage public participation, stewardship, and additional community tree planting.	Don Baughart 916/ 653-9505
State Water Resources Control Board	<i>Nonpoint Source Implementation Grant Program.</i> Amendments to the federal Clean Water Act (CWA) established the framework for nonpoint sources (NPS) restoration activities on the State level. The CWA provides funding for the states' NPS programs, including grants for NPS implementation projects. Implementation projects to reduce NPS loading from various sources are eligible for grant funding. NPS implementation activities include demonstration projects, technology transfer, training, public education, technical assistance, ordinance development, and other similar activities associated with control of NPS pollution. The amount of funds available is dependent upon Congressional appropriations.	Pablo Gutierrez 916/ 657-0793
	<i>Water Quality Management Planning.</i> Board provides water quality management planning grants to state, local and regional agencies to address a wide variety of surface and groundwater quality problems. These funds are provided by the federal government under sections of the Clean Water Act. These grants require a 25% non-federal match. The funding emphasis is on projects that focus directly on corrective or preventive actions for water bodies identified as "impacted" in the State's Water Quality Assessment. However, projects that focus on other water quality problems will also be considered.	Paul Lillebo 916/ 657-1031

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Department of Parks and Recreation	<i>Habitat Conservation Fund Program.</i> Through Prop. 117, this program provides funds for a variety of habitat conservation projects. Eligible applicants include counties, cities and districts. Eligible projects include: deer and lion habitat; habitat for rare and endangered, threatened and fully protected species; wildlife corridors and urban trails; wetlands; aquatic habitat for spawning and rearing of anadromous species; and riparian habitat. A 50/50 matching program with match coming from non-State source.	Odel King 916/ 653-8758
	<i>Public Resources Account of the Tobacco Surtax.</i> A percent of the tobacco surtax is set aside for environmental projects that involve acquisition and development. Local jurisdictions must apply through the local representative who submits the request to the State Budget Committee. Grants must show some regional or state significance.	Ross Henry Local Assistance Section 916/ 653-8615
Private		
The Conservation Fund	<i>American Greenways Grant Program.</i> Grants are made in recognition of accomplishments in creative approaches to developing Greenways, particularly through overcoming obstacles and creative problem-solving. (\$500 - \$2,000)	Keith Hay Western Greenway Director 503/ 538-0924
David and Lucile Packard Foundation	Funds given to conservation projects. They are currently concentrating on wetlands projects and support of organizations that acquire and preserve wild open space in California. (\$5,000 - \$80,000)	Jeanne Sedgwick Program Officer 415/ 948-7658
The Shalan Foundation	Foundation provides grants in three categories: economic planning; resource management; and citizen participation. (\$5,000 - \$12,000)	Catherine Lerza Executive Director 415/ 543-4561

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
Low Cost Services		
Federal		
U.S. Department Agriculture Soil Conservation Service Resource	Interest is in research and preservation of site-specific plants. Will collect and propagate seeds if project approved by local Resource Conservation District. All propagation is in small quantities and any requests would need to be related to an on-going Soil Conservation Service research study.	David Dyer 209/ 727-5319
State		
Conservation Corps	Provides low cost services for brush clearance and trail building. Sponsor must provide materials, but Corps provides supervision and some tools. (Corps often works along side volunteers)	Patrick Couch 916/ 323-6595
Other Services/Materials		
Federal		
National Parks Service	<i>Rivers and Trails Conservation Assistance Program.</i> The program provides technical assistance for corridor conservation plans, statewide assessments, conservation workshops, consultation and information exchange.	Nancy Stone 415/ 744-3975
State		
Department of Forestry	Low cost native trees. Must be purchased in quantities of 100 pieces. (May be purchased for habitat and erosion control, but not for landscaping). Can also provide discounts if jurisdiction provides own seed. Ordering requires advanced planning for availability during proper season.	Moran Reforestation Center 916/ 753-2441 Ben Loman Nursery 408/ 423-6551
Conservation Corps	Provides plant materials to any public agency at cost. Prefer 1 to 1 1/2 year lead time for preparation of plant materials. Planting projects do not have to have Corps workers.	Chris Sauer 707/ 253-7783

POTENTIAL FUNDING SOURCES

Funding Source	Description	Contact/Phone Number
State Lands Commission	Historic maps and information on the public's interest and ownership in California rivers are available. A clearing house for planning approaches to initiate local Greenway programs for riparian restoration and public access where suitable.	Aquatic Resources Policy 916/322-7777
Department of Forestry	<i>Forest Stewardship Program</i> (Federal dollars administered by State) for private land owners only. Grants provided to protect, restore and improve wetlands and riparian areas to maintain water quality and enhance habitat. Eligibility is for private landowners as well as public jurisdictions. Small acreage from 20 to 299 acres of land. (\$10,000/year).	Steve Jones 916/653-9505
Technical Assistance Programs		
Community support groups	Volunteer patrolling and safety services: Examples include the East Bay Regional Parks District which uses volunteer bicycle and equestrian patrols along its extensive trail system. Warnings are issued along with educational materials regarding trail safety and courtesy.	Sgt. Matthew Madison East Bay Regional Parks 510/881-1833

