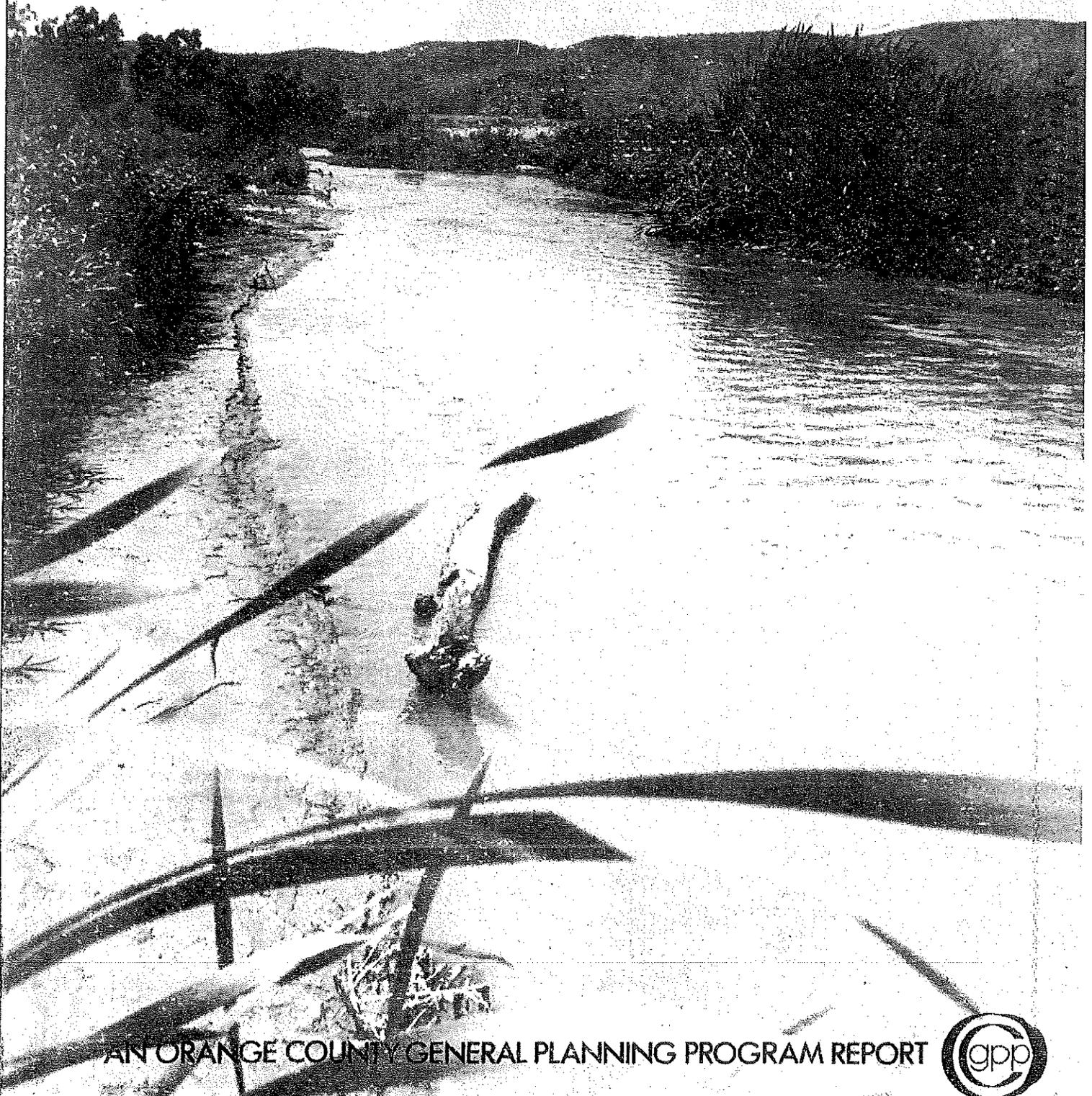


CAROL KAWANAMI

K Carol H Kawanami
18072 Alhens Ave
Villa Park, CA 92661-4533

SANTA ANA RIVER, SANTIAGO CREEK GREENBELT PLAN



AN ORANGE COUNTY GENERAL PLANNING PROGRAM REPORT



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SANTA ANA RIVER-SANTIAGO CREEK CORRIDOR
PLAN FOR RECREATION AND OPEN SPACE

A GENERAL PLANNING PROGRAM REPORT

First Printing: March, 1971
Revised Printing: October, 1971

For information or additional copies:

Orange County General Planning Program
211 West Santa Ana Boulevard
Santa Ana, California 92701

Telephone (714) 834-2050

PREFACE

This is the second printing of the SANTA ANA RIVER/SANTIAGO CREEK GREENBELT PLAN. The first printing was completed in March of 1971. Since that time, the plan has been considered and approved by the Orange County Planning Commission and the Orange County Board of Supervisors.

At the public hearing of June 23, 1971, the Board of Supervisors adopted the Greenbelt Plan as a component of the Orange County Master Plan of Land Use. In addition, the Board adopted the following:

- * a statement of intention to purchase Yorba Regional Park Site in fiscal year 1971-72;
- * authorized a Council and Coordinator to implement the Plan;
- * instructed the Coordinator, once appointed, to investigate all possible methods of granting property tax relief; and,
- * instructed the Department of Real Property Services and the County Surveyor to inventory all public and quasi-public lands within the River/Creek corridor.

The Greenbelt Plan represents a far reaching planning effort in preserving and enhancing an important resource within Orange County: the Santa Ana River/Santiago Creek Corridor. However, little would have been accomplished without the active support and assistance of the ten corridor cities, the Citizens Committee of 100 and numerous other citizens groups throughout the County. A sincere expression of gratitude goes out to all those who donated their time to actively assist in the creation of this Plan. It is my earnest hope that the existing atmosphere of cooperation and understanding will continue to prevail as this Plan is implemented.



Forest Dickason
Planning Director

ECKBO
DEAN
AUSTIN &
WILLIAMS

Forest Dickason, Planning Director
Orange County Planning Department
211 West Santa Ana Boulevard
Santa Ana, California 92701

Dear Forest:

We are pleased to transmit to you the Santa Ana River-Santiago Creek Corridor Plan for Recreation and Open Space. We hope this Plan -- greenbelt, parks, and trails along 37 miles of River and Creek through dense urban areas -- will provide focus and direction for Orange County's sharpening concern for open space and environmental quality.

The Santa Ana River Corridor Plan has been conceived as Orange County's link in the tri-county coast-to-crest Santa Ana greenbelt. We urge the County to continue its example-setting and support for that effort.

Jared Ikeda and Royce Neuschatz of our staff join me in special thanks to Dick Ramella and Bill Cunningham of your staff for their help throughout the work. Our thanks also to the many agencies and individuals who provided facts, ideas, and evaluation during the past nine months -- RPAT, Flood Control, Orange County Water District, Department of Water Resources, the Corps, the cities, whose input was ably coordinated by John Collier, Anaheim Parks Director, and the Santa Ana River Citizens Advisory Committee under Chairman John Willoughby whose liaison role with the cities has been central and will, we hope, continue and expand.

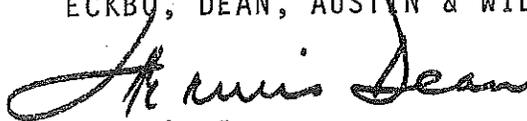
The General Planning Program's new Citizens Direction Finding Commission, with its mandate to consider basic goals, policies, issues, and priorities for the County's future, may wish to review and comment on the proposed Plan.

Bringing the Plan to reality will require vigorous leadership, firm official commitment, and unflagging citizen effort in the years ahead. We believe Orange County is ready for this!

We look forward to presenting this Plan to the County Planning Commission and Board of Supervisors.

Very truly yours,

ECKBO, DEAN, AUSTIN & WILLIAMS



Francis Dean

SANTA ANA RIVER-SANTIAGO CREEK CORRIDOR
PLAN FOR RECREATION AND OPEN SPACE

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SANTA ANA RIVER-SANTIAGO CREEK CORRIDOR
GENERAL PLAN FOR OPEN SPACE AND RECREATION

"THE PLAN IN BRIEF"

The Purpose

Maximize recreation/open space potential of the Corridor, in terms of multi-use possibilities and linkages among open spaces in and near the Corridor.

The Method

Collect, map, evaluate data within Corridor study area - 1-1/2 miles each side of River and Creek; evaluate influences and demands on Corridor; identify opportunities, constraints, conflicts, unknowns; select those most promising, explore feasibility; review and evaluate current policies.

Work with Regional Parks Advisory Team; other local, state, federal agencies; ten Corridor cities plus others; citizen groups; Riverside and San Bernardino Counties.

The River

The Santa Ana flows, above- or underground, more than 90 miles from headwaters near Big Bear Lake, through San Bernardino, Riverside and Orange Counties, to the Pacific.

Orange County's 27-mile portion is roughly one part natural Canyon, two parts leveed sand-bottom channel, dry much of the year. Most of the water stops at Prado Dam, at the head of the Canyon in Riverside County, built by the Corps of Engineers in 1940 to protect Orange County towns and farmlands from flood damage. (Most of northerly Orange County is natural flood plain.) Corps is now restudying the entire River.

Santiago Creek is the River's main tributary within the County. Ten miles of Creek, from the River up to Villa Park Dam, are encompassed in this Plan.

The Santa Ana still waters much of Orange County; water conservation, quantity, and quality are critical planning aspects. So are sand deposition, debris and silting, salt water intrusion.

And now: recreation, open space, wildlife enhancement, ecological concerns, education are recognized as additional River planning considerations. The River is not just a machine for processing water but a resource of many uses and benefits to people.

Still missing: basin-wide land and water planning.

The Planning Areas

The River in Orange County has four fairly distinct segments:

Canyon: still natural, agricultural, and open; no permanent channel.

Middle River: levees, old gravel pits, complex water conservation needs.

Lower River: constricted by channelization and urban crush.

Santiago Creek: more intimate scale downstream, unsightly gravel pits but scenic valley setting upstream.

The Concept

Santa Ana River-Santiago Creek Corridor as linear green-belt, linking park nodes and significant open spaces, with channel and riding-hiking-bike trails as spine.

Save or restore River look and atmosphere where possible. Emphasize trees, informal space, and quiet -- contrast to surrounding urban texture and "busy-ness".

Balance open space/recreation demands with Corridor potentials -- some areas of intensive use, some of natural preserve, many in-between.

The Santa Ana River-Santiago Creek Corridor as Orange County's link of "coast-to-crest" greenbelt along the Santa Ana.

The Proposals

The principal proposals of the Plan are:

Lower River: Ocean to 17th Street

- * Rivermouth regional park with restored natural estuary-marsh, bluffs, camping, small boating, and other activities.
- * Fairview regional park, utilizing State surplus land, possibly linking through to Upper Newport Bay.
- * Trail enhancement along levees and into adjacent park areas.

- * Linkages to surrounding areas via power line rights-of-way and to Mile Square Park via Warner Avenue.

Middle River: 17th Street to Imperial Highway

- * Warner Basin: rehabilitate for water spreading and variety of water recreation, plus Santa Ana River Center -- "water museum" and interpretive facility; modify channel design.
- * Miller Basin: water spreading plus water recreation in retarding basin, plus related land for golf course and other uses.
- * Regional parks - rehabilitate old pits.
- * Agriculture - preserve.
- * Trail enhancement - along levees and into small and large park areas, with trail stops.
- * Linkages: Santiago Creek; power line rights-of-way; via Jefferson to Anaheim Lake/Miller Basin.

Santa Ana Canyon

- * Entire Canyon, the sole significant natural area remaining in the developed half of the County, should be preserved open and natural, retaining riparian ecology, citrus groves, hillsides, natural river bottom (despite the new freeway). Utilize flood plain zoning in flood hazard area, conservation/open space zoning or other measures for hillsides. Permit compatible open space uses subject to site plan review.

To clarify effects of open space vs. development of Canyon, conduct thorough economic/social/environmental impact study, evaluating short- and long-range costs and benefits, of alternate uses of Canyon.

- * Acquire Yorba Park.
- * Freeway: "scenic highway" corridor protection measures, most important of which will be zoning and other measures to retain Canyon open and truly scenic!
- * Santa Ana Canyon and Esperanza Roads to be scenic park roads. Present plans for road extensions, bridges, connections through mountains, etc. should be cancelled or deferred pending results of Canyon study and broad land use decisions.

- * Trail extension and enhancement; linkage via old canal to Yorba Linda and via Coal Canyon to Butterfield Trail and Main Divide.

Santiago Creek

- * Study flood control needs and feasibility of rehabilitating gravel pits as retention basins and regional parks. This would also relieve pressure for channel structure in lower Creek area and open possibility of more natural treatment.
- * Agriculture - preserve.
- * Extend and link existing small parks along Creek.
- * Linkage via abandoned railroad to north and south. Santiago Creek greenbelt itself links to Villa Park Dam Park upstream and via Peters Canyon into Irvine Ranch.
- * Trail extension along Creek and into parks.
- * Preserve and protect hill setting.

General Policies

Retain agriculture.

Site plan review for public and private developments in or near Corridor.

Protect hills.

Discourage sand and gravel mining in or near Corridor; rehabilitate existing pits.

Extend and enhance trails as continuous element -- for riding, hiking, biking.

Encourage educational-recreational facet in connection with public works.

Provide running stream wherever possible.

Plan River landscaping to establish continuity and character (general tree types are given).

Special design treatment for freeways and all roads in Corridor area.

Retain all publicly held land and use in accordance with Plan.

Retain and support Santa Ana River Citizens Advisory Committee as core for ongoing citizen participation; involve other groups and individuals.

Implementation

Overall Priorities

- * Santa Ana Canyon open and natural.
- * Rivermouth park and estuary: secure land, study feasibility.
- * Trail expansion and improvement.
- * Warner Basin rehabilitation.

Interim Measures

- * Defer actions on land use and public projects pending Plan adoption.
- * Appoint Santa Ana River Corridor Coordinator, plus Advisory Council, to expedite and to lay groundwork for joint River Agency.
- * Begin further studies.
 - Santa Ana Canyon economic/social/environmental cost-benefit study
 - Rivermouth study
 - Santiago Creek study
 - River Agency formation study
- * Develop site plan review procedure, criteria; advise on current private and public projects early.
- * Zoning review, to coordinate local city and County zoning with Plan.
- * Coordinate with Riverside County to preserve large, valuable upper Canyon ecological area.
- * Support new "beneficial uses" being considered by Santa Ana River Regional Water Quality Control Board.

Administrative Structure

A joint Agency, involving County and cities, is

needed to implement Corridor Plan coherently, avoid fragmentation and conflict, develop equitable financing, seize opportunities, maintain Plan, site plan review and possible permit procedures, etc.

Securing the Land

A review of methods, from Acquisition to Zoning.

Funding Sources

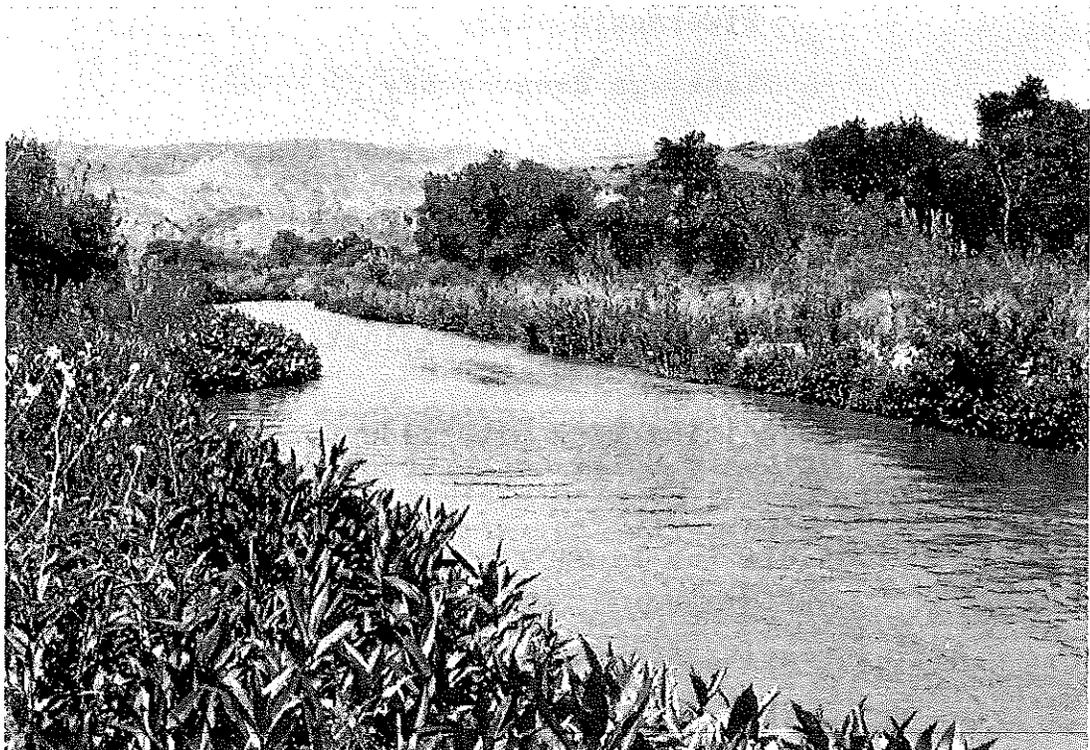
A review of federal, state, local sources.

Acres . . . and Dollars

The Plan's proposed greenbelt totals 8,400 acres, exclusive of Flood Control District channel, along and around 37 miles of River and Creek. Of that total, 29 percent is public and quasi-public, the remainder private; over half the private land is agricultural.

Based on crude cost estimates for non-agricultural land, certain areas were designated "marginal" in terms of probable recreation/open space benefit.

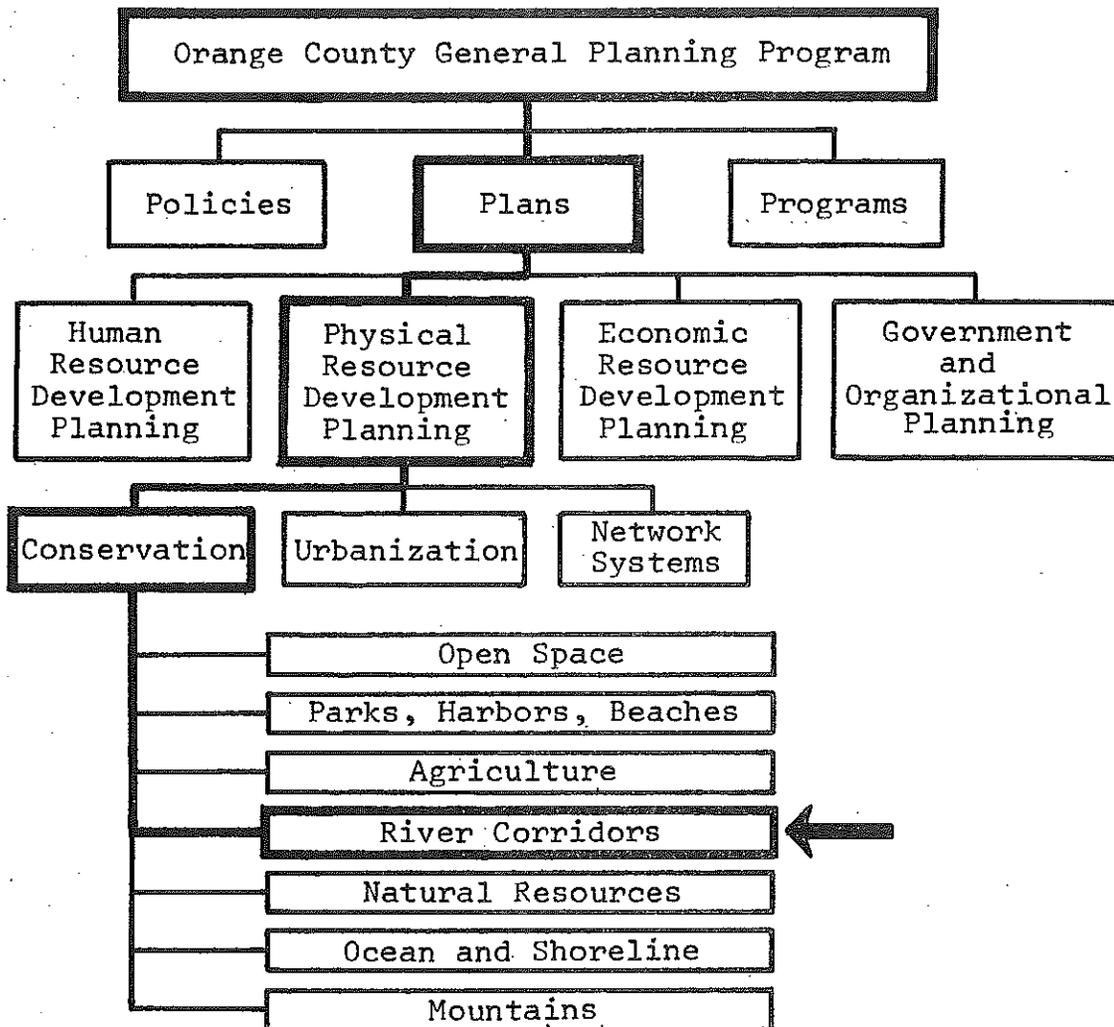
Unavailability of reliable land value figures and the general nature of the Plan make land and development cost estimates impossible at this time.



INTRODUCTION

The Santa Ana River and the General Planning Program

This Santa Ana River-Santiago Creek Corridor General Plan is one of a series of County Planning Department studies within the Conservation Element of the General Planning Program. The Conservation Element is receiving priority attention due to public interest and to the awareness that decisions on natural resources, including open space, are irreversible. This Plan falls in the component grouping called River Corridors, but interrelates with all the other groupings: Open Space; Regional Parks, Harbors and Beaches; Agricultural Preserves; Natural Resources; Ocean and Shoreline; even Mountain Development.



Santa Ana River: Threat, Commodity, or Resource?

After decades of treating the Santa Ana River as a threat, a nuisance, or a commodity, the last three years have

brought the beginning of reconsideration of this River as a many-faceted resource, and particularly as a rare recreation and open space resource.

This recognition comes late, but not too late. Many important opportunities remain. Many have been lost. Some are in immediate danger. Recognition of the Santa Ana's recreation and open space potential is part of the growing recognition of Orange County's environmental crisis. The explicit, implicit, unquestioned growth-is-progress slogan is being questioned. The newly emerging yardstick is environmental quality.

It has always been easier to divide the water environment by function and administer each function, than to respond to the totality of the environment and its interrelationships. This approach is now being challenged by new capabilities in management and environmental modeling.

Orange County's Santa Ana River comes from San Bernardino and Riverside Counties. The need to consider the whole River as a system on a basin-wide scale has been discussed in the three counties for the past few years¹ as an idea whose time had not yet come. It is coming fast. The major water districts have taken a positive step by joining together as SAWPA (Santa Ana Watershed Planning Agency) for water quality management planning. The limitations, however, are immediately apparent, and stated bleakly by SAWPA's consultant ecologists in their overview statement.

It is our strong feeling that the resilience of the Watershed is so constricted that it will be impossible to reverse the historical inertia of the responsible institutions soon enough. We anticipate accelerating erosion of the quality of life in the area for the next decade. By itself, a single agency like SAWPA has a hopeless task.²

The Santa Ana River-Santiago Creek Corridor Open Space and Recreation Plan addresses itself to recreation/open space opportunities presented by the River resource as one of its multi-uses. The concept of a Santa Ana River greenbelt corridor from coast to crest was proposed more than 20 years ago. Those years have had particular impact in Orange County!

Yet the concept is still valid in terms of a linear pattern -- sometimes severely constricted by urban develop-

¹ Proposed in Santa Ana River Regional Park Study, prepared for Riverside by Eckbo, Dean, Austin & Williams, May 1968.

² C. S. Holling and A. D. Chambers, Report to the Santa Ana Watershed Planning Agency Concerning Resource Management in the Santa Ana Watershed, July 1970.

ment and channelization -- linking major and minor park nodes and linking via other linear elements -- power lines, railroad lines, and streets -- to other parts of the County.

Santa Ana Canyon from Prado Dam to Imperial is the last significant open natural area in the urbanized north half of the County. The beautiful natural river bottom is now and is proposed to remain unchannelized, the agriculture preserved, the hillsides open, encouraging only uses compatible with the open natural character and, in the flood hazard area, with that hazard. Here is a significant chance to act pro environmental quality, accentuating the positive values of open space, parks, and agriculture and other open-type uses, and eliminating the negatives -- increased traffic, air pollution, water demand and pollution, wastes, energy demand, runoff, and ecological disturbance.

Study Purpose and Phases

The purpose of the Santa Ana River-Santiago Creek Open Space and Recreation Study is to develop a general plan maximizing recreation and open space potential, in terms of multi-use possibilities and linkages among open spaces in and near the Corridor.

Phase I of the work, completed in July 1970, yielded a tentative design plan with policies and guidelines, for transmittal to the Department of Water Resources which is coordinating inputs to the Corps of Engineers' River studies.

Phase II has afforded the opportunity for more detailed plan development, together with implementation proposals.

Study Area

The Study area encompasses 27⁺ linear miles of the Santa Ana River in Orange County from the sea up to the Riverside County line, plus consideration of the 3-mile portion up to Prado Dam in Riverside County. Santiago Creek winds 10 miles from its confluence with the River up to Villa Park Dam, the limit of the study area.

Research

While the "corridor" was arbitrarily defined as 1-1/2 miles either side of the River and Creek, we researched and inventoried lands far beyond that limit in order to identify potential linkages and open space. Lands so indicated on the plan have existing uses with multi-use potential and/or proximity to open spaces, parks, or recreational attractions. In Santa Ana Canyon, the "corridor" was construed as crest to crest.

Data was furnished by the Planning Department, the cities along the River and Creek, and the many agencies involved. Full information on land use zoning, and plans was solicited. We have tried, in the course of the work, to assure completeness and keep up to date, but this is a constant problem in such a large and developing area of so many jurisdictions. We are grateful for the prompt and full cooperation of all. Map data was supplemented by visual and photographic tours and, somewhat late in the program, by current aerial photographs from the Department of Water Resources.

The Phase I report was presented and reviewed by the agencies involved and by City representatives. Phase II brought frequent opportunities for ideas, review, and comments from officials and from citizens, which are incorporated in this report.

Santa Ana River Citizens Committee

Following completion of Phase I, a citizens' advisory committee was appointed to help guide the planning. Mayors of each city in the County selected four citizen representatives, including park and planning commissioners and others of demonstrated interest and involvement, including members from the Citizens' group advising on Route 57 Freeway design studies.

This committee of 100 reviewed and commented on the Phase I report, toured the River, reviewed and modified the Consultants' proposals for uses and implementation, presented them to their City officials, and provided valuable comment and input through the second phase of the work. Many of their ideas have been incorporated. Others, which the Consultants felt were incompatible with the assignment of maximizing open space potential, are acknowledged in this Report.

Other Studies in Progress

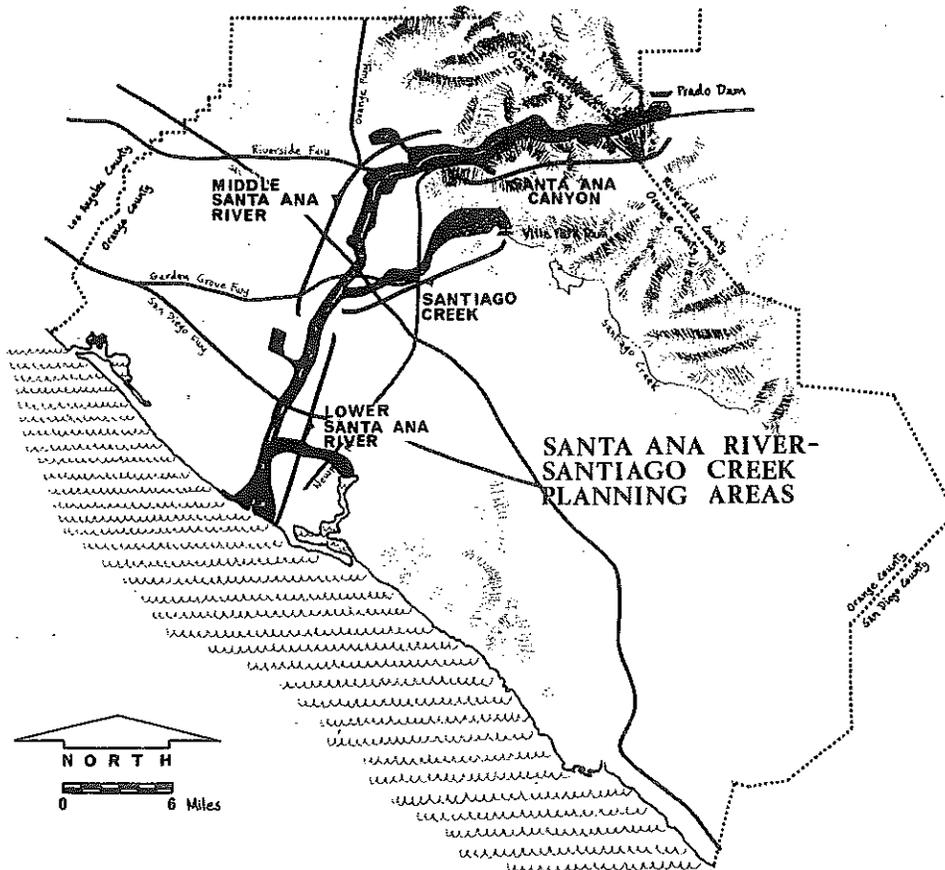
As work on this Plan progressed, it became apparent that there were too few "givens" to develop solid design alternatives. Route 57 (Orange) Freeway: route under study. Pacific Coast Freeway: indefinite, in conflict. River channel needs: awaiting Corps work, but with County consensus on requested maximum outflow of 20,000 cfs from Prado. Santiago Creek flood control measures: in need of thorough engineering study. Ecological evaluations: in progress, not definitive. And so the original assignment -- to maximize the Corridor's recreation/open space potential by identifying opportunities, "best bets", policies and guidelines, with emphasis on multi-uses and linkages -- was reaffirmed. Continuing coordination with the freeway, flood control, and other studies is vital to realizing the Corridor's open space and recreation potential.

A LOOK AT THE SANTA ANA RIVER-
SANTIAGO CREEK CORRIDOR -- 1970

Here is a brief description of the Corridor and some of its qualities and landmarks, pressures and trends.

Four distinct areas, each with its own character and potential, have been identified.

- Santa Ana Canyon: From Prado Dam to Imperial Highway
- Middle River: From Imperial Highway to 17th Street
- Lower River: From 17th Street to the Ocean
- Santiago Creek: From Santa Ana River to Villa Park Dam



Canyon Area: From Prado Dam to Imperial Highway

The upper portion of the Canyon is narrow, heavily wooded, and dramatically beautiful. In the riverbottom area, fine stands of cottonwood, willow, and elderberry provide habitat for birds and small animals of many species. Areas washed out in the 1969 flood already show natural restoration. No definitive ecological study has yet been made,¹ but the species, sequences, and dependencies would probably be comparable to those described in the Tri-County Conservation League's study of Riverside County's Riverside Narrows area. The upper Canyon's sides are steep, and access is further restricted by the Santa Fe Railroad on the north and Riverside Freeway on the south side. The only access now is via a dirt road from Green River Golf Course, just downstream. The Golf Course was damaged in the 1969 flood and a temporary channel has been built.

Further downstream Featherly Regional Park lies between the Riverside Freeway and the River; some temporary protective channelizing has been installed here also.

The next point of interest is Horseshoe Bend, where the River turns abruptly north and then southwest again. Horseshoe Bend's dense native vegetation along the River is a significant riparian habitat that the Department of Fish and Game has determined to be of outstanding importance. Adjacent to this area are extensive and healthy citrus orchards. The remainder of the River, 21 miles to the Sea, is channelized. The lush growth and magnificent hills and mountains, the impressive vistas into and out from the Canyon have incalculable environmental and ecological benefits.

They are, however, fragile and must be handled with care -- especially with the completion of the Riverside Freeway. The Freeway and other urban developments in the vicinity have altered and injured the Canyon quality, but immense value remains and citizens and public officials will have choices to make: regarding restoration and enhancement of environmental quality or continued erosion of it.

The next area downstream is agricultural land; the portion north of the River has been proposed as Yorba Regional Park.

¹ Orange County Flood Control District has engaged Dr. Gordon Marsh to inventory flora and fauna along the River in Orange County. Santa Ana Watershed Planning Agency has engaged ecologists C.S. Holling and A.D. Chambers for an ecological overview of the entire River basin. Their report on "Resource Management in the Santa Ana Watershed", dated July 1970 has recently been published.

Middle River: Imperial Highway to 17th Street

The River in this area is characterized by a very wide sandy channel within built-up levees and water spreading grounds within the channel. Along the River, vegetation is sparse. There are many sand and gravel pits outside the channel on both sides, some still being mined. There has been no rehabilitation of abandoned pits with one notable exception: Anaheim Lake, where a deep pit has been filled with water for spreading -- and for fishing.

Between Imperial Highway and the Riverside Freeway crossing over the River, industry is developing along the north side, housing along the south side. Downstream from the crossing is the huge Warner gravel pit with adjacent residential development on the west side, open lands on the east side, with some industry nearby. Further downstream a few healthy citrus groves remain, amid drive-in theatres and industrial plants. Anaheim Stadium is adjacent to the west.

This area is in transition, but without clear direction, and with no attention to environmental concerns. Its appearance is barren -- empty parking lots, empty channelized River, empty neglected land. The need is great -- for human scale, order, unifying elements, some refreshing things to look at, some shady and pleasant places to be. The challenge in this area is to repair existing environmental damage and create a pleasing environment and sense of place. There are outstanding open space possibilities, if gravel pits and "waste" areas along the River can be rehabilitated and related to the adjacent areas.

Lower River: 17th Street to the Ocean

The River here is even more constricted than above. It is a sand-bottom, leveed channel, slightly narrower than upstream, passing through an intensively urbanized area -- residential back yards, commercial uses, golf courses, three freeways.

This River area is, for the most part, treeless, except for a pleasant area at the confluence with Santiago Creek where Alona Park and Riverview Golf Course offer a welcome green look. Urbanization in Santa Ana and Garden Grove is well established and expanding; there are mature trees in residential areas. The Flood Control District has planted trees and ground cover on the outer slope of the levee in some areas.

Several stables are situated adjacent to the River; the Flood Control District allows horseback riding along the top of the levee subject to permit, and has provided access from the stables. The "trail" is straight, sunny, monotonous, perhaps, but it is the only long riding trail

in the area and is much appreciated by users, whose numbers are increasing dramatically each year.

Near the San Diego Freeway crossing are extensive open lands with scattered industrial plants; industrial expansion is probable. South of the crossing Costa Mesa and Huntington Beach are rapidly developing housing near the River, but with no planned linkage or orientation toward it.

Below Victoria Street three channels empty into the sea. The Greenville Banning Channel joins the Santa Ana River near the San Diego crossing and parallels it to the sea. The Talbert Channel joins from the west at Pacific Coast Highway, where a large sewage treatment plant is located, and joins the other two. Along the Talbert Channel, open lands extend from the Southern California Edison Plant at Huntington Beach to the River, parallel to but separated from Huntington Beach State Beach by Pacific Coast Highway. Shellfishing in the Channel is allowed subject to permit. Near the beach east of the River are some apartments. Just inland, across Coast Highway and a slough-like drainage canal, is a large area of open land, some above and some below a bluff. The land is currently used for oil extraction.

The surrounding area is heavily urbanized, but open space linkage possibilities are promising.

Santiago Creek: From Santa Ana River to Villa Park Dam

Santiago Creek is the River's only Orange County tributary having some "nature" of its own. The upper area is mainly wilderness. Irvine Lake and Irvine Park are in this portion, and Villa Park Dam Regional Park is being developed. Downstream from Villa Park Dam, the character is rural, with small orchards and scattered homes, but development is making inroads. The Creek has been heavily sand-and-gravel-mined all the way downstream to the Newport Freeway, with no rehabilitation whatsoever. Some pits are more than 100 feet deep and subject to flooding.

South of Orange, the Creek links a number of small parks and golf courses. The parks, many years old, have the intimate scale of the Creek itself and relate well to the surrounding neighborhoods. The Creek itself has been modestly and handsomely channelized within the park areas (WPA vintage) and parking is allowed within the channel.

The portion nearest the River is an earth levee channel, narrow and wooded (though less heavily than before '69), with homes adjacent. The confluence with the Santa Ana River is at Riverview Golf Course.

PLAN PROPOSALS

LOWER RIVER: OCEAN TO 17TH STREET¹

Urbanization has pressed hard on the lower portion and mouth of the River, with few open lands remaining. The mighty Santa Ana, after its 90-mile trip from lofty mountains through boulder-strewn wash, sandy valley, verdant banks, broad Prado Basin, Dam, and beautiful Canyon, has been single-, double-, and triple-channeled for its final tame and inconspicuous exit to the sea, amid a jumble of oil wells, apartments, barren land, parked cars, and industrial operations.

Regional Park: Rivermouth

A significant terminus is needed for this major river system which for eons has profoundly influenced the coastline from Bolsa Bay to Newport Bay.

The park area proposed encompasses both low-lying portions and bluffs, with their outstanding views and recreational opportunities, and also proposes preservation of open space and access in the small finger canyons which are part of the landform.

The Plan proposes re-creation of an estuary-marsh in the low-lying lands at the River's mouth, to restore to some extent the natural appearance of a rivermouth and to serve as a much needed bird and wildlife sanctuary and nursery for the sea, and as the focus of a unique regional park.

Preliminary opinions indicate feasibility, and public interest has been broadly expressed. Physical problems are many and complex. Financial problems likewise, for the land is costly and much of it is still under lease for oil drilling operations.

Planning and implementation will be complicated, but opportunities are at hand. Present channelization has been determined to be inadequate; total replanning is needed, and can provide the opportunity for ecological area redevelopment with compatible recreation, possibly including some limited and carefully located marina facilities.

The Plan proposes a detailed Rivermouth area study of problems and potentials to be conducted under the auspices of the County or a joint River agency, in conjunction with the Army Corps of Engineers. Cost/benefit

¹ These notes supplement the Lower Santa Ana River Area map, following p. 31.

analysis must be broadly scoped, recognizing the recent destruction of most of our Southern California estuaries. Detailed ecological studies are required, but general ones have already demonstrated the immense value of marshlands. So great is their value that this study should be made even if Upper Newport Bay and Bolsa Chica could be preserved.

Related lowland areas along the River can offer equestrian facilities and overnight camping as well as nature study and "exploring". Bluff and upland areas offer fine view points and active recreation and might also be favorable for limited resort use and related concessions. Newport Beach has expressed concern with potential traffic which a regional park in this location might generate plus additional pressure on the beach. These concerns deserve consideration as part of the proposed detailed study. Because of the topography and present development, this park would not relate directly to the beach but would offer a different kind of interesting environment as well as the open space and recreation facilities which are in such desperately short supply in this part of the County. Special beach access, via tram for example, could be provided if and when desired.

Newport Beach owns a dump site within the proposed regional park area. The Plan recommends that the City not dispose of this land now, but seek to transfer it to the Santa Ana River joint agency proposed in the Implementation section and receive credit for it. Second choice would be transfer or sale to County Parks. The State has no funds for park purchase at present, but should consider this location in the future.

Pacific Coast Freeway

From a recreation/open space viewpoint, a freeway through this area would not be welcome. Access to and circulation within the proposed park spaces should be handled on their own terms. If, however, the Coast Freeway does go through, it should be designed for maximum compatibility with the recreation uses, views, and ecological preserves, with services of a special design team.

Talbert Channel Area

Open land between Talbert Channel and the beach should be developed as beach-related upland area (not far up!). Lest it and the beach be destroyed by parking, we propose parking-service centers relating to the Pacific Coast Freeway, if it goes through. The route has yet to be selected; it should be studied in conjunction with a system of parking, beach access, services, and Channel related uses.

State-owned Surplus Land at Fairview

State-owned surplus land at Fairview State Hospital is an outstanding regional park and greenbelt link opportunity and has important archaeological value. An archaeological facility on the bluff portions would relate to two adjacent schools. The County and/or Costa Mesa should acquire and then transfer it, for credit, to the River joint agency which should be the centralized landholder. (See "Implementation: Administrative Structure")
Former Federal Communications Commission land with good park potential at Edinger Avenue has been acquired by Santa Ana and should be pooled eventually.

Linkages

Linkages are exciting possibilities in this reach:

- * from Mile Square Regional Park to the River, along Warner Avenue -- a wide (100 feet) specialized "parkway" treatment with curving paths, dense landscaping, pleasant rest spots.¹
- * along wide power line and railroad rights-of-way west of the River, extending deep into heavily urbanized areas as a potential greenbelt network.
- * to Newport Bay via Fairview Hospital lands, Orange Coast College, Te Winkle Park, County Fairgrounds, Santa Ana Country Club, and Airport Clear Zone. Hiking, biking, riding trails through these open lands would be one of the County's great recreation opportunities.

Channel

Present channelization is inadequate for a 20,000 cfs release, and improvements are being planned. Substantial recreation use or even substantial landscaping of the channel itself appears to be unfeasible, but levees and edges have some potential. Additional lands along the River could offer valuable recreational opportunities. If a live stream is feasible in this area, it could be either inside or outside the channel, depending on channel

¹ Alternatives are: (1) creating a greenbelt through residential areas north of Warner via park dedication legislation and (2) creating a greenbelt through future industrial development south of Warner via site plan requirement, but this special design for the avenue itself seems best able to be implemented and is the one the City prefers. Alternatives (1) and (2) would be valuable additions.

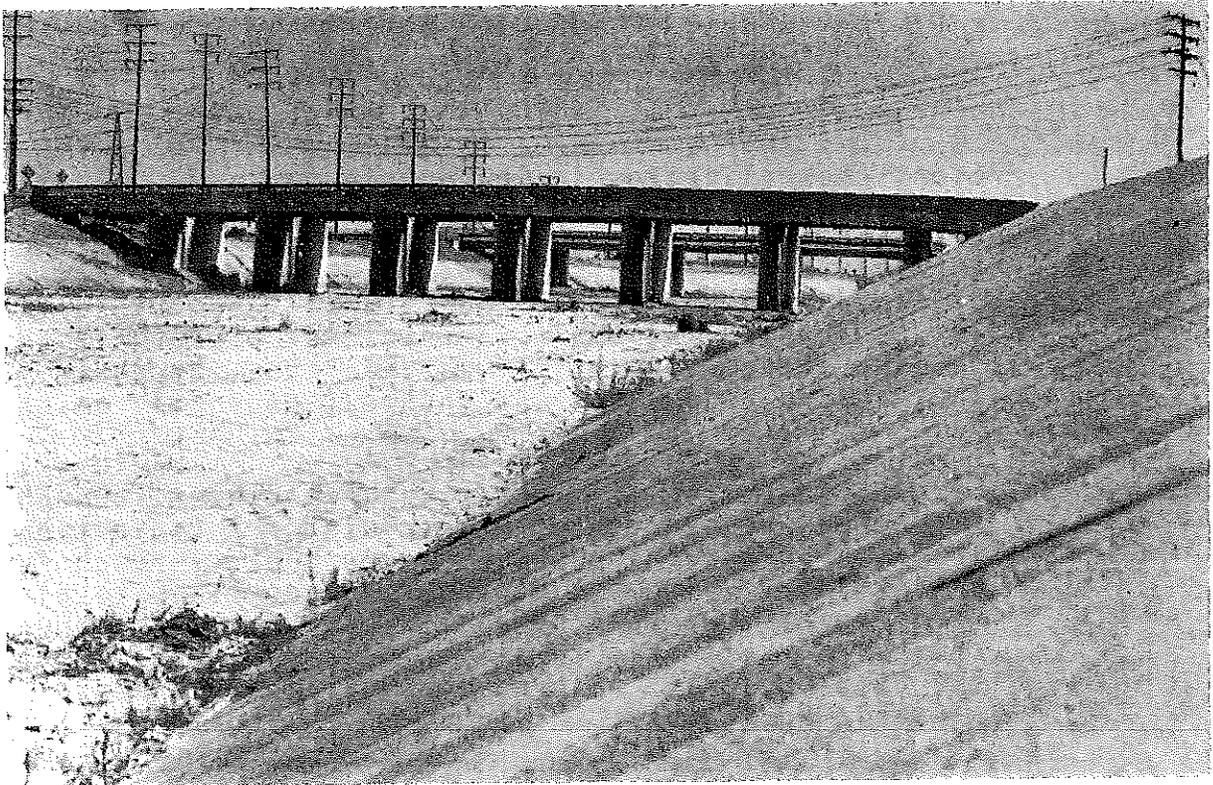
treatment and on what additional lands might be secured. The potential of a stream for enhancing the trails and park areas is very great, especially where amenities are so few.

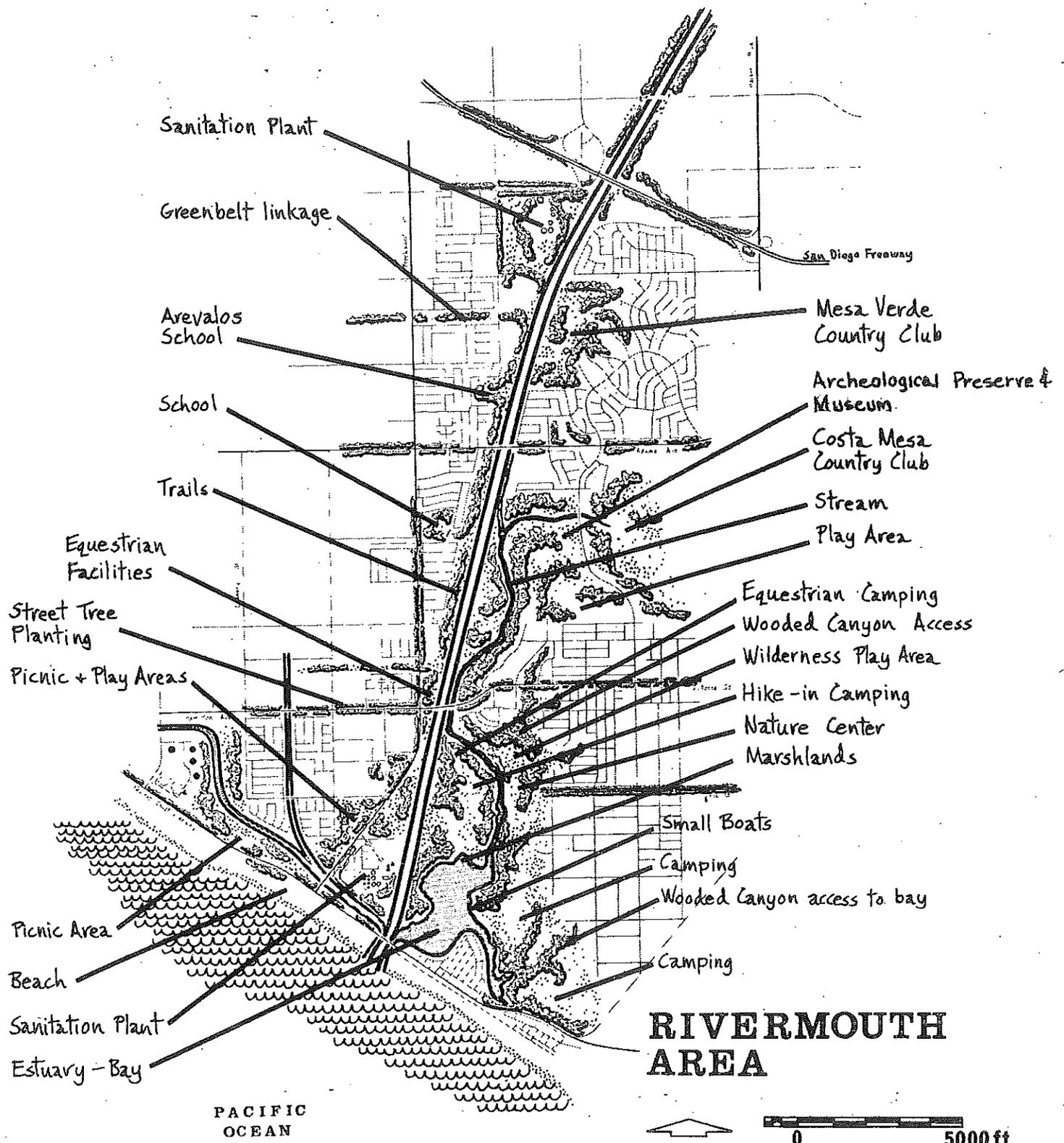
Channel-fronting Greenbelt Areas

Channel-fronting greenbelt areas are proposed -- using the Edison right-of-way between Victoria and the San Diego Freeway and along industrial areas on both sides of the River between the San Diego Freeway and Warner Avenue. Implementation of the latter would be by dedication, by grant of easement or development rights, by public agency purchase in fee or by contract, by excess condemnation in conjunction with flood control and possible freeway projects, or a combination. Since it may be some time before these major public projects are in final plan stage, the other methods -- in conjunction with site plan review -- should be utilized. Site plan review of industrial development is urgent now to assure setback, landscaping, height control and related measures for greenbelt protection. A width of 200 feet is recommended for greenbelt each side.

Trails

Present trails along the levee are of great value, but small parks, rest stops, detours through larger parks, and landscaping are needed to punctuate the long, straight trail.





PLAN PROPOSALS

MIDDLE RIVER: 17TH STREET TO IMPERIAL HIGHWAY¹

Uses

In contrast and balance to the quiet natural Canyon area upstream, and the close press of development right up to the channel downstream, this portion of the River, set in a heavily urbanized area with excellent access, is suited to a variety of intensively developed recreation opportunities, with emphasis on water-oriented activities.

Among the possibilities:

- Fishing
- Boating (limited power)
- Canoeing and kayaking
- Swimming -- perhaps "water hole" style
- Large lawn areas for picnicking and sports
- Trails for riding, hiking, biking
- Equestrian facilities
- Special facilities for minibikes and other motorized vehicles
- Active sports and games
- Day camping
- Arboretum and demonstration gardens
- Santa Ana River Center and Museum, including historical and nature exhibits and exhibits on all aspects of water science and technology
- Golf courses
- Community recreation and cultural facilities

A series of regional parks and smaller areas is proposed on the Plan, with possible activities listed. These are not definitive, for the areas are large and diverse enough to accommodate many specialized activities in addition to those noted.

Of Sand, Gravel, Water, and People

Realization of the potential outlined above will require major rehabilitation of mined-out gravel pits for water spreading and for recreation, building on the pioneering example of Anaheim Lake, where a deep empty pit is now filled with water and used for percolation and for trout fishing, through the cooperative efforts of the Orange County Water District, Anaheim Parks Department, the concessionaire, and (next season) State Fish and Game.

¹ These notes supplement the Middle River Area map.

Warner Basin -- owned by the Water District and suitable for spreading, is a top-priority opportunity. Rather than continue to spread water in shallow rectangular basins in the River channel, the Water District, Flood Control District, and Parks Departments have expressed enthusiasm for the Plan's proposals to realign the levee and provide for the spreading and recreational uses of water outside the main channel in gentle lake forms appropriate for a park instead of a geometry book.

A complex of moderate-size lakes and streams appears to be more feasible than a single large lake. Then necessary periodic drainage and cleaning can be programmed so that water-oriented recreation is available all year round, rather than having to close down for a two- or three-month period, as Anaheim Lake must.

The Burris pit area, now in litigation, may offer similar possibilities, depending on the outcome of the case and on very thorough engineering studies.

Pits still being mined should be zoned immediately to require preparation and implementation of rehabilitation plans for recreational re-use.

Miller Basin, adjacent to Anaheim Lake, is a Flood Control District-owned retarding basin suitable for water spreading and recharge, and for water recreation as well. The Plan recommends securing the adjacent open space for possible golf course, for supporting recreation activities and as a "setting". (Anaheim Lake use and its feeling and quality as a recreation place is somewhat limited by lack of related shore-land space.) Miller Basin should link to Anaheim Lake and down Jefferson to the River.

Linkages

The power line rights-of-way offer outstanding opportunities for greenbelt links into surrounding urban areas. These, together with the River as a spine or core, might one day have potential for a transportation system connecting the many commercial/recreation attractions in the area.

Santiago Creek is perhaps the most important linkage. The confluence of the Creek with the River deserves special design treatment as a landmark.

Channel

The existing channel is adequate for a 20,000 cfs release, according to the agencies concerned, and no redesign for

flood control has been discussed. The wide sand-bottomed, leveed channel has little permanent recreational value per se at present. Modification of a portion of it in the Warner Basin and Burris pit areas is very promising, as described earlier and shown on the special study.

Stream

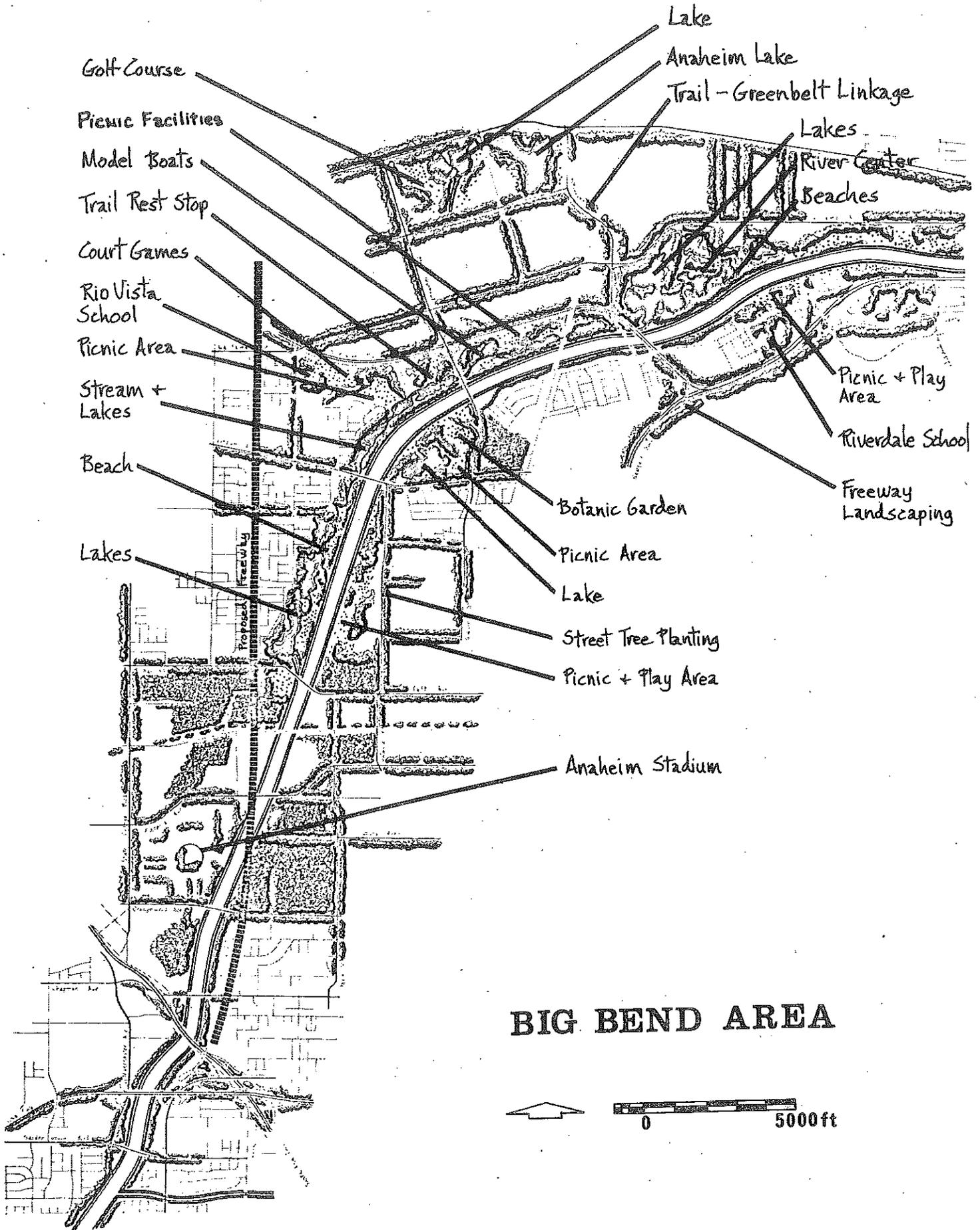
A live stream year-round may be possible in this area and and upstream. The environmental and recreational value would be greater if the stream were diverted and pumped to recreational areas outside the flood channel, rather than within it.

Agriculture

In terms of maximizing open space opportunities, the substantial agricultural areas bordering the River between Orangewood and Ball should remain agricultural. One preserve has already been secured. The pressures for development are enormous and are recognized but careful consideration and reconsideration of agricultural and/or recreational use is in order. This could be an oasis in the urban desert.

If development is economically inevitable, however, the Plan recommends that it be recreational in nature and, whatever the use, that it be green and open in feeling, affording access to the River greenbelt and providing extensions of that, through site plan review.





Golf Course

Picnic Facilities

Model Boats

Trail Rest Stop

Court Games

Rio Vista School

Picnic Area

Stream + Lakes

Beach

Lakes

Lake

Anaheim Lake

Trail - Greenbelt Linkage

Lakes

River Center

Beaches

Picnic + Play Area

Riverdale School

Freeway Landscaping

Botanic Garden

Picnic Area

Lake

Street Tree Planting

Picnic + Play Area

Anaheim Stadium

BIG BEND AREA



PLAN PROPOSALS

SANTA ANA CANYON: IMPERIAL HIGHWAY TO PRADO DAM¹

Last Significant Open Space

Santa Ana Canyon must be considered as a visual whole, crest-to-crest; the arbitrary 1-1/2 mile planning area no longer applies. The Canyon, from Imperial Highway to Prado Dam, is a magnificent natural open space resource, the last in the developed portion of the County. The Plan recommends conservation of both flood plain and hillsides as an open, natural area crest to crest. Uses compatible with this desired character are listed below. Implementation methods, including purchase, agricultural and open space preserves, open space easements, and zoning are discussed later in the report. Development pressures are intense, stimulated by the new Freeway and by many other actions and inactions. If no action is taken, the Canyon will probably be urbanized, the River channelized, with short-term benefits to a few -- and the total loss to the many of an irreplaceable resource. It is within this context that the County should decide to act or not to act.

Natural Area

This entire area should retain and enhance its natural quality, with emphasis on open space rather than active recreation. The upper canyon area, lying mainly within Riverside County is proposed as an ecological preserve, with walking trails, interpretive facilities, and strictly limited access. In addition to its ecological, esthetic, and environmental values, this area can also serve as an educational opportunity unmatched in the area. The 520 acre area is large enough to be meaningful for ecological study and observation.

The smaller area at Horseshoe Bend designated as ecological preserve is also very beautiful, very valuable, and very vulnerable because it is only some 60 acres. The Flood Control District has recognized its importance and has presented a no-channel alternative for this area. Both have been designated priority areas by the Department of Fish and Game.

The natural qualities would be retained and enhanced by a year-round running stream of at least 50 cfs. Various

¹ These notes supplement the Santa Ana Canyon Area Map.

agencies have indicated this possibility.

Compatible Uses

The goal of a natural open canyon does not exclude people and use, but offers contrast to the urban-suburban pattern. Among the uses compatible with open space character are:

- agriculture
- nursery stock growing
- horse ranching
- stables and equestrian facilities
- fish hatcheries
- game bird ranching
- educational facilities
- conference center
- agricultural and horticultural experiment stations
- camping, picnicking, trails
- botanic gardens
- golf courses - not in River bottom, but possibly
in side canyons
- resort facilities

all carefully sized, sited, and planned for compatibility with the open natural canyon "look", with rigorous review, as discussed in "Implementation".

Canyon Entrance

Imperial Highway marks the westerly entrance to the Canyon. Here the development pressures on open land now agricultural are extreme, but the value of the Canyon area and the Canyon "experience" rests on retaining open space, agriculture, and the handsome eucalyptus trees which mark and characterize the area in order that the Canyon's special feeling be preserved.

The easterly "entrance" below Prado Dam requires the continuing attention of Riverside County.

The Canyon itself is absolutely unique and incalculably precious. The 10 mile Canyon drive is a significant door to both counties. The surrounding hills are a part of the scenic setting and the look and nature of them must be preserved. So much has already been lost. The opportunities remaining today, if not taken, will be lost tomorrow morning.

Channel or No-Channel

We recommend that the Canyon area serve as floodway, rather than cut the ecologic preserves and park areas

with a 400-foot-wide channel, even one designed to "fit into" such a setting and provide for recreation outside the channel. The Canyon is the County's only opportunity to preserve a natural area. Recreation of all kinds will be provided downstream. Here we recommend risking an occasional washout and waiting for the natural restoration, perhaps helping it along, rather than "artificialize" this last remaining natural area.

Corps of Engineers' estimates indicate that the Riverside Freeway would be clear of the 20,000 cfs release level. Also noteworthy is the Corps' estimate that uncontrolled release would rise only slightly higher than 20,000 cfs in this area. Our recommendations for retaining a natural area in the Canyon, with the fewest possible permanent facilities, coordinate with the no-channel proposal.

Just as development in the Canyon would and has created demands for channelization, channelization in the Canyon would tend to open to urban development precious Canyon open spaces which would then be protected from flood hazard. Almost any such development would be incompatible with the natural qualities we are recommending be retained and enhanced here. Sand erosion and deposition problems must be met by imaginative engineering measures other than channels.

A Corps of Engineers official has stated:

"We consider the Santa Ana Basin to be an irreplaceable resource. Because it is an irreplaceable part of the environment we hope to avoid making any irreversible decision concerning the development of the basin that we will all be sorry for at some future date."¹

To channelize all, or even part, of the Canyon portion of the River would, we believe, be an irreversible decision for urban sprawl. The Corps and the Flood Control District have indicated that flood plain management is a feasible alternative for the Canyon. We recommend it as the most desirable one in the long run, and urge the Board of Supervisors to endorse the flood plain management (no-channel) recommendation and transmit it to the Department of Water Resources and Corps of Engineers.

Freeway: Scenic Highway?

The new Riverside Freeway is at present a harsh intruder

¹ Talk by Seldon P. Kramer of the Corps, at UC Riverside, May 1969.

in the Canyon, but need not destroy it. We recommend heavy landscaping along and around the Freeway, utilizing materials harmonious with those native to the Canyon. Heavy landscaping should also mitigate air and noise pollution emanating from freeway traffic. For the freeway driver, the 8-mile Canyon portion can be the delightful and relaxing highlight of his trip. Scenic outlooks can give him a chance to get out of his car for a closer look at the natural scene below and at the hills and mountains which define the Canyon.

Freeway access points at Weir, Gypsum, and Coal Canyons, planned in anticipation of unlimited urbanization of Santa Ana Canyon, should be thoroughly restudied if the Canyon is to be preserved as an open space resource. The interchanges can provide useful access to compatible open space uses on the south side of the River, but the Plan recommends no bridges across to the north side, in the interest of preserving the Canyon open, natural, and as quiet as possible. Access via Imperial and Esperanza should be sufficient for north side uses. Interchange "stub-out" areas can be used for rest stops.

This Freeway has been designated a Scenic Highway; a full corridor protection program implementing that designation is needed immediately. Such programs usually encompass grading, landscaping, signing, and roadside land use controls. As mentioned elsewhere, however, the real "scenic" question here is whether the Canyon shall remain an open, natural area.

Roads

With the Riverside Freeway carrying through traffic, the role of Santa Ana Canyon Road needs re-study. The Plan recommends conversion of Santa Ana Canyon Road to a two-lane scenic road plus separated trailways for hiking, biking, and horseback riding. The fine trees should be carefully preserved. The County Road Department has expressed interest in this proposal, providing the area remains open and without major traffic generating development, for this will serve as a frontage access road.

Esperanza Road should also be considered a scenic road for park access only.

La Palma should not be extended past Imperial.

Plans for bridging the River and opening roads into the surrounding hills and mountains -- which would have the effect of inviting development of the entire area -- need to be re-studied in terms of land use and open space goals and general policies on growth and further urbanization.

The current idea of linking Jamboree Road through Weir Canyon to the Freeway and across the River is a major example of plans which need thorough re-evaluation, for this would surely invite prompt urban development.

Green River Golf Course

The present temporary channelization measures should not be augmented or "improved" further. We recommend that if the golf course is severely damaged again by floods, it should be relocated to the Middle River area location designated "Regional Park" on the east side of the River south of Lincoln and the present golf course allowed and assisted to revert to natural conditions, with trails, picnicking, and perhaps camping areas, relating to the facilities at Featherly.

Featherly and Yorba Parks

Featherly Park has been planned to complement its natural setting and is very successful. Further channelization is not recommended and further permanent facilities should be minimized or avoided entirely. Action on the planned Yorba Regional Park should proceed promptly. This will be a fine addition to public open space in the Canyon. Groves should be preserved and other portions designed to reflect the Canyon's natural and quiet character.

The land between Esperanza and the River east of Imperial should be flood-plain-zoned and perhaps acquired as part of Yorba Park. The Corps of Engineers reports that that land, though no longer subject to 100-year-flood, would be subject to "disastrous results" from "floods of larger magnitude such as the standard project flood".¹ (As this report states later, flood plain zoning should be delineated on the basis of the standard project flood.)

Canals

The Anaheim Union Canal portion shown is still in use for water transport. If and when that use is abandoned, the Orange County Water District's easement should be transferred to a public agency for use as a trail linkage, following the excellent example set by Yorba Linda. Parts of the Santa Ana Valley Irrigation canals are of visual and historic interest and should also be a trail feature of this area.

¹ Letter from Edward Koehm, Chief, Engineering Division, Los Angeles District, Corps of Engineers, to Mr. Charles W. Roberts, Zoning Supervisor, Anaheim, dated January 8, 1971.

Trails

The Plan proposes the extension of trails through this Canyon area, linking to Yorba Linda via the old Anaheim Union Canal, and to the Butterfield and Main Divide Trails via Coal Canyon. A network of trails through the hills is possible and desirable.

Agriculture

The groves close to the River in the Canyon area are now an integral part of the environment and "look" of the Canyon and are a productive and pleasing open space use. Every effort should be made toward their preservation, utilizing all available methods. If for any reason the agricultural use is terminated, these lands should be secured as public open space.

Rancho Santa Ana (Bixby-Bryant Ranch) on the north edge of the River, opposite Featherly Park, is one of Orange County's last great ranches, much cherished by the family whose home it has been for generations. The famous Rancho Santa Ana Botanic Garden, since relocated to Claremont, originated here.

Because of its outstanding beauty and ecological value, secluded location, magnificent trees including the superb pomegranates lining the entrance road, and handsome buildings bespeaking the style and hospitality of an earlier age, the Plan proposes a historic-agricultural preserve.

An agricultural preserve could be an immediate first step. A scenic easement could be more permanent. If State legislation can be accomplished for it, contractual purchase would be effective here. Whatever the method, the continuing production of oranges should be a matter of public policy to preserve this most significant link with the past. Oranges in this northerly part of the County are nearly extinct and are endangered in the southerly half.

In time, limited public use might be arranged -- certain areas, certain times, certain numbers of people.

Development or Conservation

From the point of view of maximizing open space and recreational opportunities and conserving environmental values, this Plan emphatically recommends the preservation of the Canyon as natural, open area crest to crest with its fine riverbottom habitat area and beautiful hillsides. However, much of this valuable area is within the City of Anaheim, which has encouraged urban

development for the past several decades. Continuation of Anaheim's traditional policy would close off alternatives; would contradict -- in fact, invalidate -- this Study's recommendations as well as those of the Holling and Chambers report to SAWPA on Resource Management in the Santa Ana Watershed.

The Plan recommends immediate reconsideration of land use policy for the Canyon area, from a regional concern and from a local financial concern. This critical area certainly needs a closer look than was permitted within the constraints of this general planning assignment. An economic/social/environmental study such as the City of Palo Alto has recently completed¹ would clarify policy choices. Such a study should encompass the entire Canyon crest to crest and from Imperial to Prado Dam, an area of some 26 square miles, 21 in Orange County. The study should define potential land use combinations and alternatives, select those most feasible and desirable, subject them to cost revenue studies including cash flow projections (for cities, counties, school districts), evaluate social impact, fire hazard, geologic-seismic-soils-hydrologic-water quality factors.

The product could be a detailed policy guide and plan, soundly based on economic, social, and environmental values, including a "corridor protection program" for the scenic Riverside Freeway.



¹ City of Palo Alto, Foothills Environmental Design Study, Livingston and Blayney, City and Regional Planners, a series of four reports, 1970-71.

PLAN PROPOSALS

SANTIAGO CREEK: SANTA ANA RIVER TO VILLA PARK DAM

Character

The parks along Santiago Creek south of Orange should be extended so that the entire Creek becomes a greenbelt park. The intimate scale of the present parks should be retained in new ones. The delightful natural character, some of which washed away in the 1969 floods, should be restored and enhanced. Open lots and new developments along the Creek should relate to the proposed greenbelt with access, linkages, etc.

Upstream, the intimate, enclosed character gives way to a combination of barren gravel pits and lush groves. The visual feeling in this area is "valley", strongly and beautifully defined by the surrounding hills. The present quiet rural character and feeling that one now enjoys driving Santiago Canyon Road should be the key-note for park development in this area -- lots of trees, views of hills, open, green space. As urban development presses on this area, the need for this kind of contrasting, refreshing place and experience will escalate. The significance of this "Santiago Greenbelt" is augmented by its linkage to Peters Canyon and into Irvine Ranch.

Sand and Gravel Pits

There are eight to ten large gravel pits between Newport Freeway and Villa Park Dam, some abandoned, some still operating, all in need of major rehabilitation. The following multi-use possibilities have been explored:

1. Water. In terms of geology and soils this area is not ideally suited for water spreading, but could still be used. At present there is no permanent water source. If in the future, Orange County utilizes water reclamation or another permanent water supply can be obtained, possibilities of large-scale water use and water-oriented uses are desirable and can be planned, but on a less ambitious scale than a multi-use for water spreading would allow.
2. Fill. Sanitary landfill as a method for rehabilitating pits has become less and less acceptable due to deleterious effects on groundwater quality. In this location sanitary landfill would clearly not be

† These notes supplement the Santiago Creek Area map.

allowed, as verified with the Regional Water Quality Control Board staff.

Clean fill, dirt, building materials, etc., might be a possibility in some pits, but is not a practical large-scale solution, economically or timewise, to rehabilitation problems.

3. Flood control. Multi-use for flood control and recreation is very promising and needs and warrants thorough study immediately, for flood hazard is clearly severe.

A low wide dam and retention basin -- or a series of them -- upstream from the Newport Freeway could be developed by rehabilitating several pits, regrading for the necessary capacity and for desirable non-geometric forms and contours.

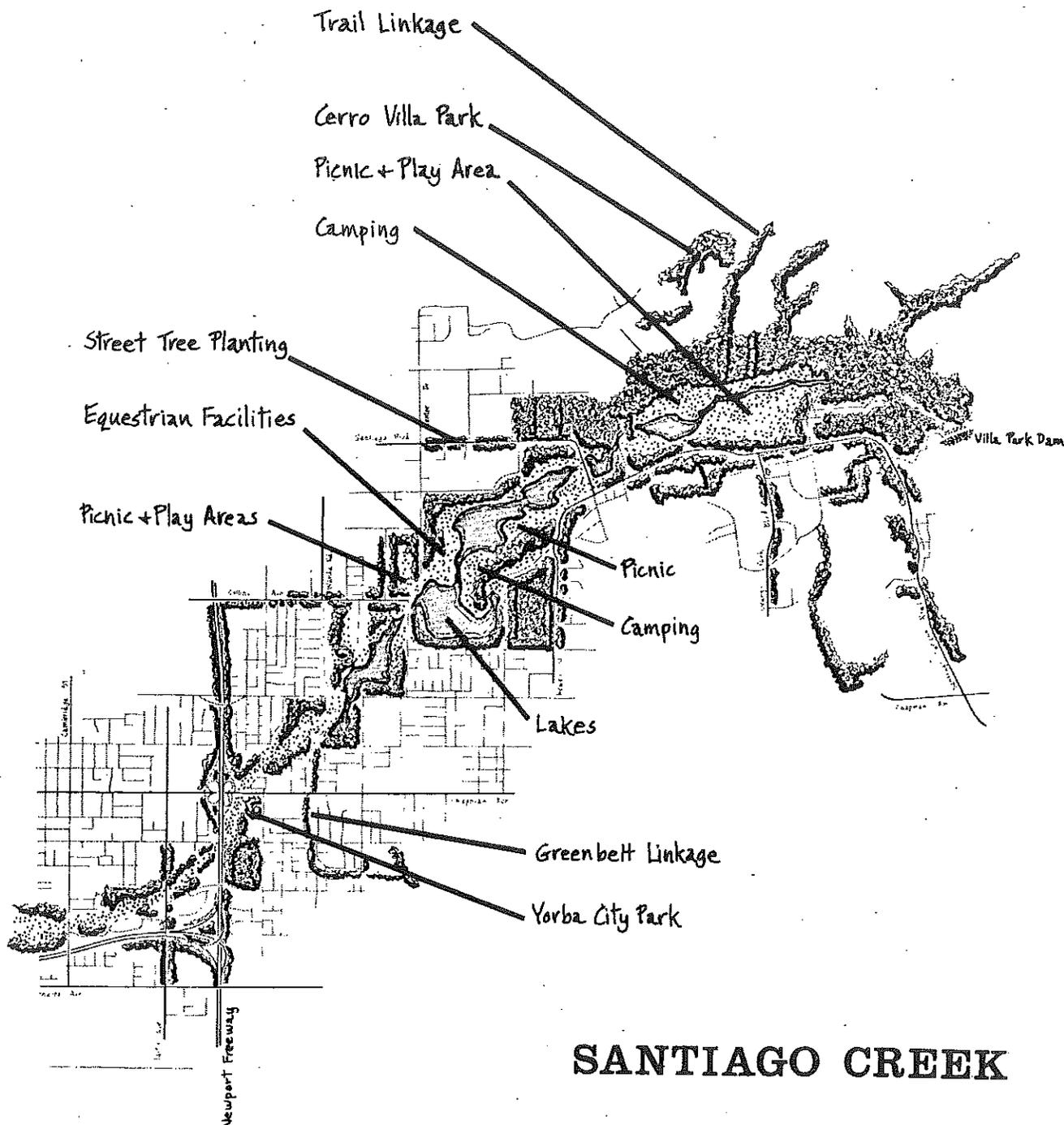
Holding flood waters here upstream would relieve the constricted lower Creek portion, perhaps removing the need for a harsh and very costly concrete box channel (covered or uncovered) and opening the possibility of re-establishing the natural creekbed character by recontouring and landscaping with native trees and shrubs.

Hopefully, enough width can be gained for a pleasant trail and linear greenbelt treatment. If any channel structure is needed it should be carefully designed to enhance the natural character, in the best WPA tradition!

Inundation of the basin areas would be intermittent, and they could be planned for landscaping and uses which would be compatible with those conditions, as was done for Featherly Park, Whittier Narrows, and soon -- on a much larger scale -- Prado Basin.

Uses of abandoned pits in their present unrehabilitated condition are severely limited. Feasibility will vary with pit size, depth, configuration, flood hazard, access, surrounding uses, and topsoil importing potential. Among the possibilities are:

- Golf driving range
- Archery
- Model planes
- Minibike track
- Ball fields
- Garden plots
- Nursery stock growing or storage
- Stables, exercise rings, show rings
- Training area for earth-moving equipment operators!



SANTIAGO CREEK



Some of these could be developed as interim uses, pending later rehabilitation.

Despite their present despoiled condition, these areas have regional park potential (and little else) provided regrading to more usable forms can be accomplished either in connection with flood control measures or by other means.

Agriculture

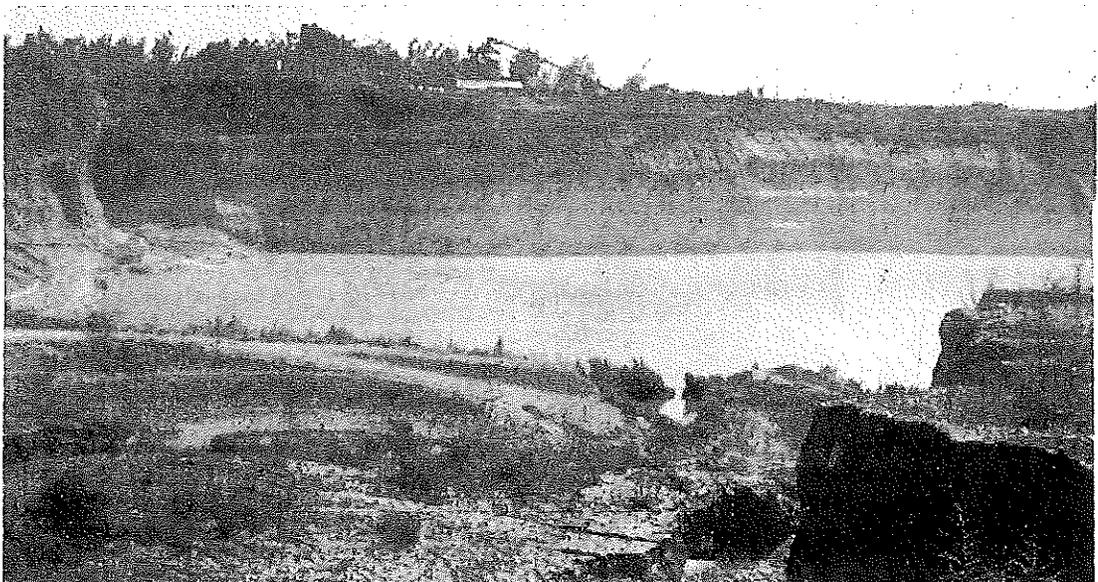
Existing groves along and near the Creek are a vital functional and visual element in the environment. Agriculture preserves or, better, scenic easements should be sought at once. Those just below Villa Park Dam are of critical importance and value for agriculture first or, second, for park land. Those further down are subject to even greater pressures; if urban development is necessary, it must respect and relate to the greenbelt with access and with an open, green setting.

Linkage

The Southern Pacific right-of-way intersects the Creek, offering an additional link back to the River and south into the surrounding areas. As mentioned above, the Santiago Creek greenbelt itself links to Villa Park Dam Park and, via Peters Canyon, into Irvine Ranch lands.

Hills

The surrounding hills forming Santiago Canyon and Peters Canyon, the Peralta Hills and Santa Ana Mountains, are open spaces of great visual, ecological, and recreational importance. Measures to insure their preservation should be planned and implemented rapidly. They are the setting for this whole portion of the County.



LOWER SANTA ANA RIVER GREENBELT

FOUNTAIN VALLEY

HUNTINGTON BEACH

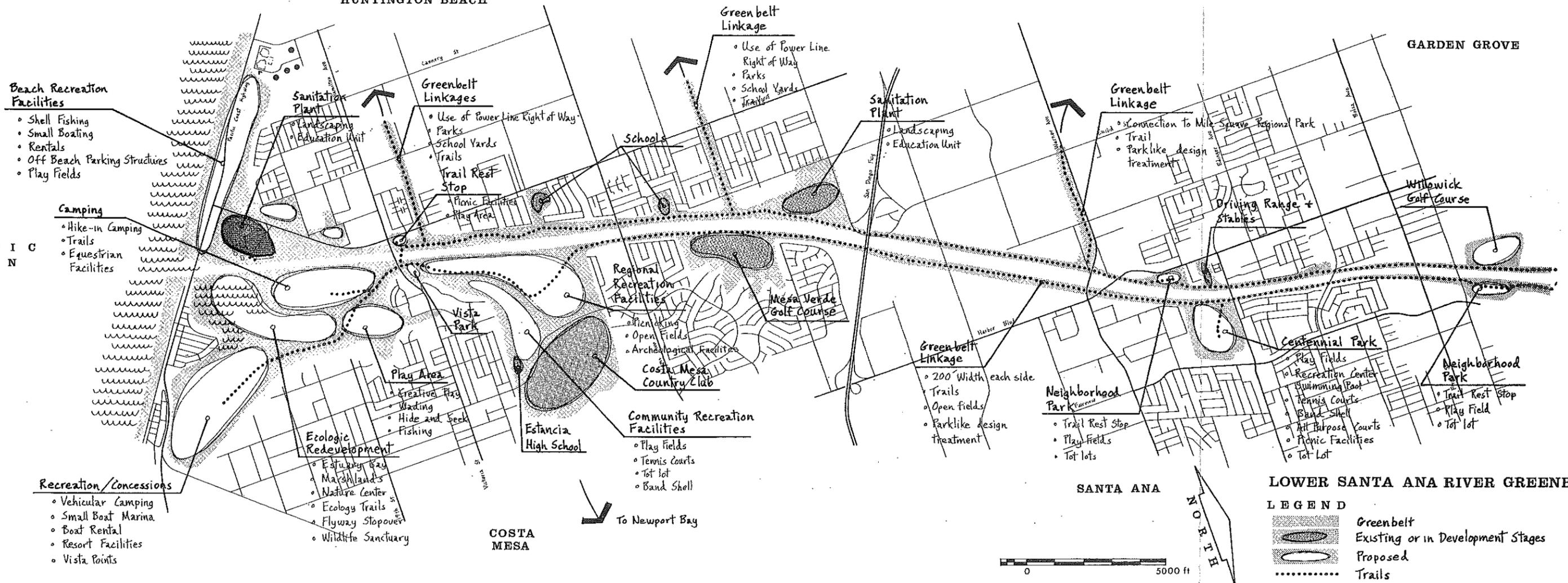
GARDEN GROVE

PACIFIC OCEAN

SANTA ANA

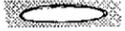
COSTA MESA

NORTH

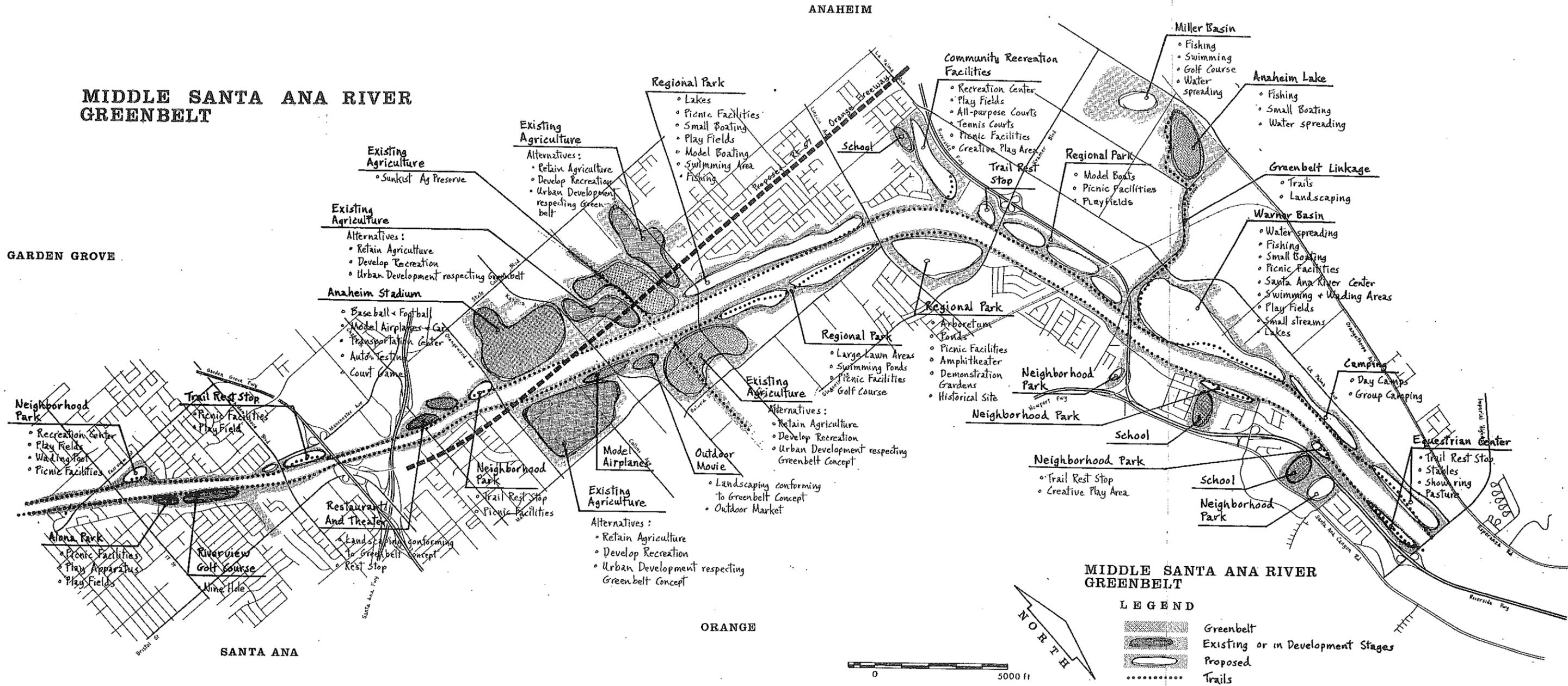


LOWER SANTA ANA RIVER GREENBELT

LEGEND

-  Greenbelt
-  Existing or in Development Stages
-  Proposed
-  Trails

MIDDLE SANTA ANA RIVER GREENBELT



ANAHEIM

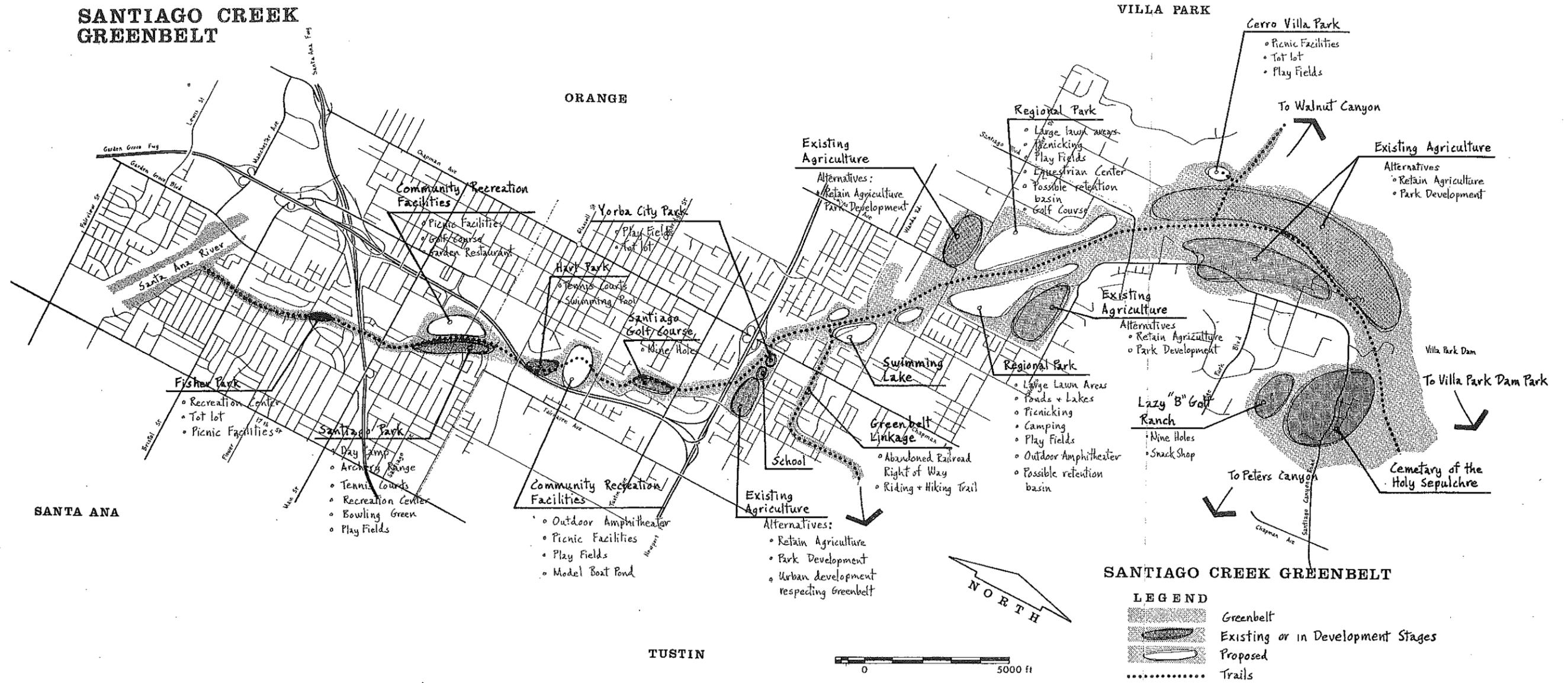
GARDEN GROVE

ORANGE

SANTA ANA

MIDDLE SANTA ANA RIVER GREENBELT

SANTIAGO CREEK GREENBELT



PLAN PROPOSALS

GENERAL POLICIES AND DESIGN GUIDELINES

The following concerns are general, relating to the River corridor. More specific ones are included in the area descriptions and recommendations.

Agriculture

The Plan shows existing agricultural areas relating to the Corridor. Preservation of these areas in agricultural use is urgent. Possible future recreational or other open space use should be the only alternative to agriculture. Urban development should not intrude further. The County must be flexible and imaginative in finding ways to preserve these spaces. The legal powers exist -- the commitment, the administrative responsibility, and the energy are needed.

Site Plan Review

Site plans for all public works and private developments in or near the River corridor or having visual or other impact on the River corridor should be carefully reviewed, with reference to appearance, access, relation to parks and open spaces along the Corridor and to linkage possibilities, multi-use possibilities.

Hills

The visual quality of the hills which are the setting and backdrop for the River and Creek must be protected. If some development is necessary or unavoidable, it must at least be design-controlled to avoid any scarring of hillsides.

Sand and Gravel

Further excavation of sand and gravel should be discouraged in or near the Corridor. Major rehabilitation of existing pits is already needed and will be very costly and difficult, especially since existing pits were not planned with re-use or redevelopment in mind. Even with advance planning for re-use, additional pits nearby are questionable. Existing pits still in operation should be so zoned to require prompt preparation of rehabilitation plans in keeping with this Plan.

Trails

Trails along the River and Creek are the backbone of this entire greenway and recreation system. They are the

significant continuous element. Where possible, trails should be provided on both sides of the River, with occasional crossings. It is best to plan separate trails for horseback riders, bike riders, and walkers.

Public Works

Public works should, whenever possible, invite the public! All River-related projects -- flood control facilities, sewage treatment plants, gaging stations, MWD outlet, water installations, Edison plant, etc. should be developed for their educational-recreational value as well as their special function, and should be well landscaped. Picnic tables, benches, water fountains, perhaps play facilities, as well as exhibits, explanatory signs, tours, etc. would be welcome and welcoming.

Stream

A running stream would be of immense ecological, recreational, and amenity value in any or all areas of the corridor. This is not a question of restoring nature, for the Santa Ana River, especially in the lower areas, is far from natural; besides, it is the nature of Southern California rivers to be dry most of the time. Rather, running water is of interest and pleasure to people any time, any place, and would be especially welcome here. Orange County Water District is interested and indicates that water quality would be satisfactory for general use, assuming, of course, that recreation and esthetic enjoyment and fish and wildlife maintenance are added to the Water Quality Control Board's "beneficial uses". (See "Implementation: Interim Measures").

River Landscaping

The following general landscape guidelines are offered as a guide to present or immediate-future planning. The intent is to help establish continuity and River character, with a sense of sequence, of change, from upper canyon down to mouth.

- | | |
|---------------|---|
| Canyon Area: | Sycamore, oak, cottonwood, willow, similar natives. |
| Middle River: | Continue Canyon trees, gradually giving way to eucalyptus species. |
| Lower River: | Eucalyptus, in this constricted area which offers limited opportunity for impact. |

Rivermouth: Eucalyptus, mixing into cottonwood, willow, sycamore, alder, California bay, and marsh-typical plants and grasses.

Santiago
Creek: Dense sycamores, alders, eucalyptus in lower narrow part; sycamores, eucalyptus, oaks, plus native shrubs above in pit rehabilitation areas.

Freeways

Freeway areas in the Corridor should be heavily landscaped with materials harmonious with those used along the River. Several new freeways are being planned, for which we can only cite the following design guidelines:

- * Do not divide park lands
- * Do not cut off linkages
- * Avoid noise pollution of quiet areas, parks, open spaces
- * Avoid the visual disturbance to quiet areas of seeing whizzing cars
- * Do not locate in greenbelt; if near, incorporate intervening space as part of greenbelt
- * Special design treatment to relate to greenbelt and to make the freeway beautiful for both driver and neighbor

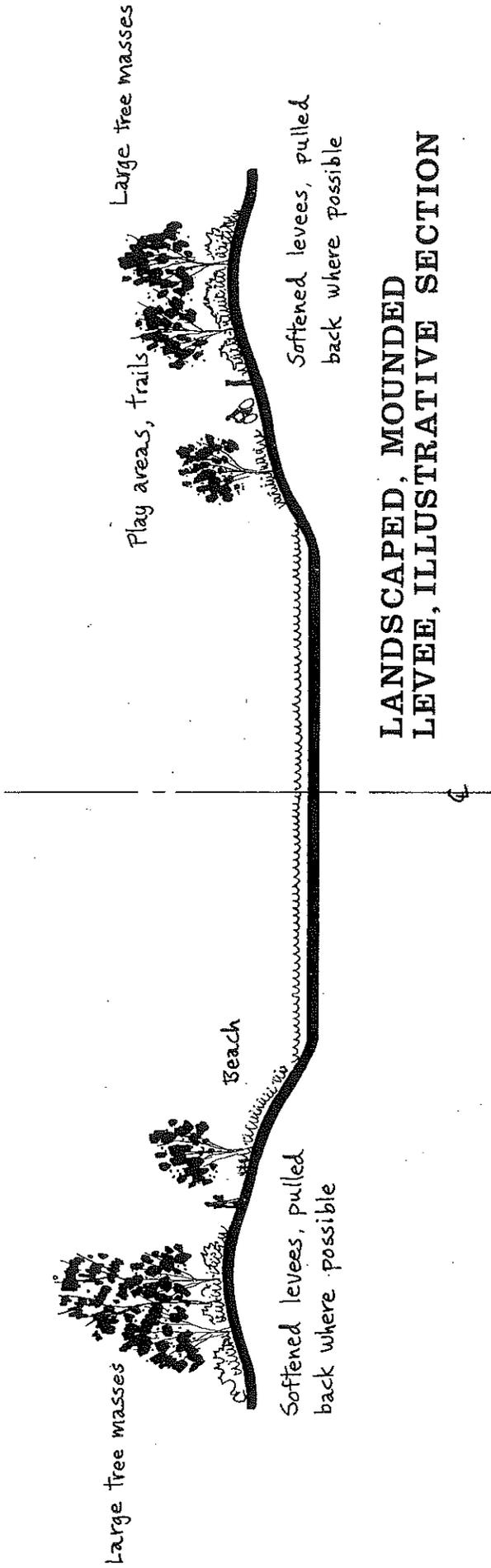
Street and Highway Design in Corridor

All major and secondary highways which now cross the River should have special landscape design treatment relating to the River corridor. Regular street trees might give way to or blend with "river" trees within a mile or two of the River. Crossing areas should feature tree plantings adjoining the channel as well as some softening landscape treatment of the bridge.

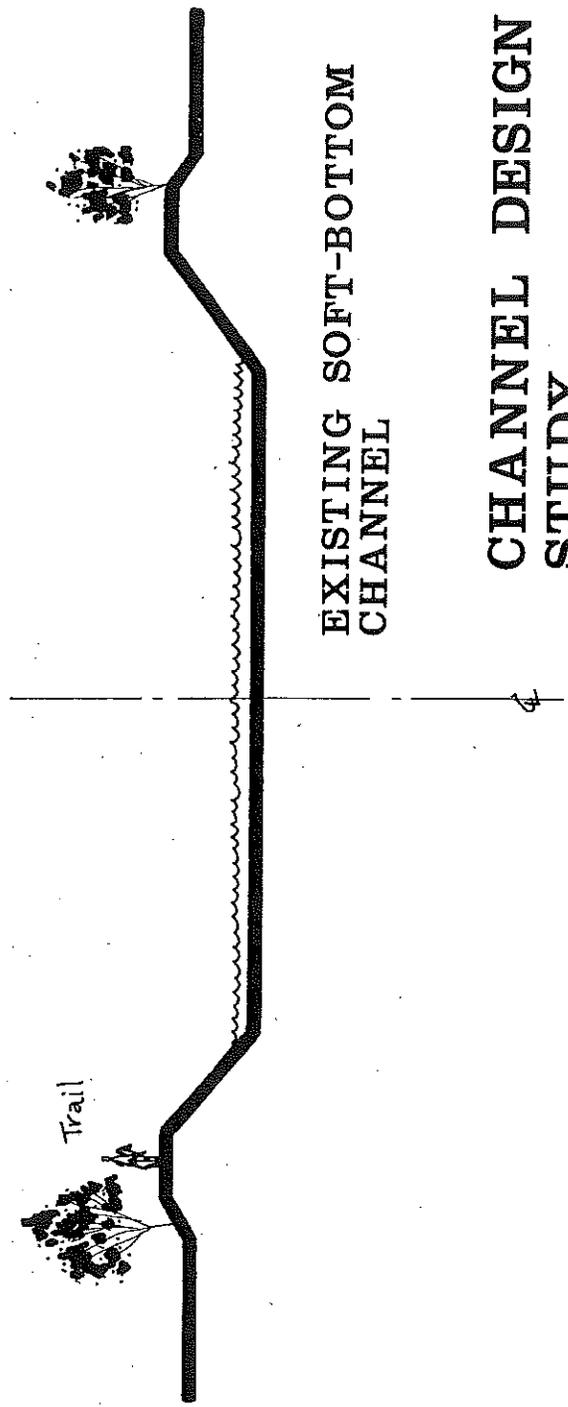
Certain streets are indicated on the Plan as specific linkages, needing generous parkway widths and special design treatment including paths and parklike landscaping. Gas tax funds may -- and should -- be used for landscaping streets, as recommended in Open Space in Orange County.

Public Owned Lands

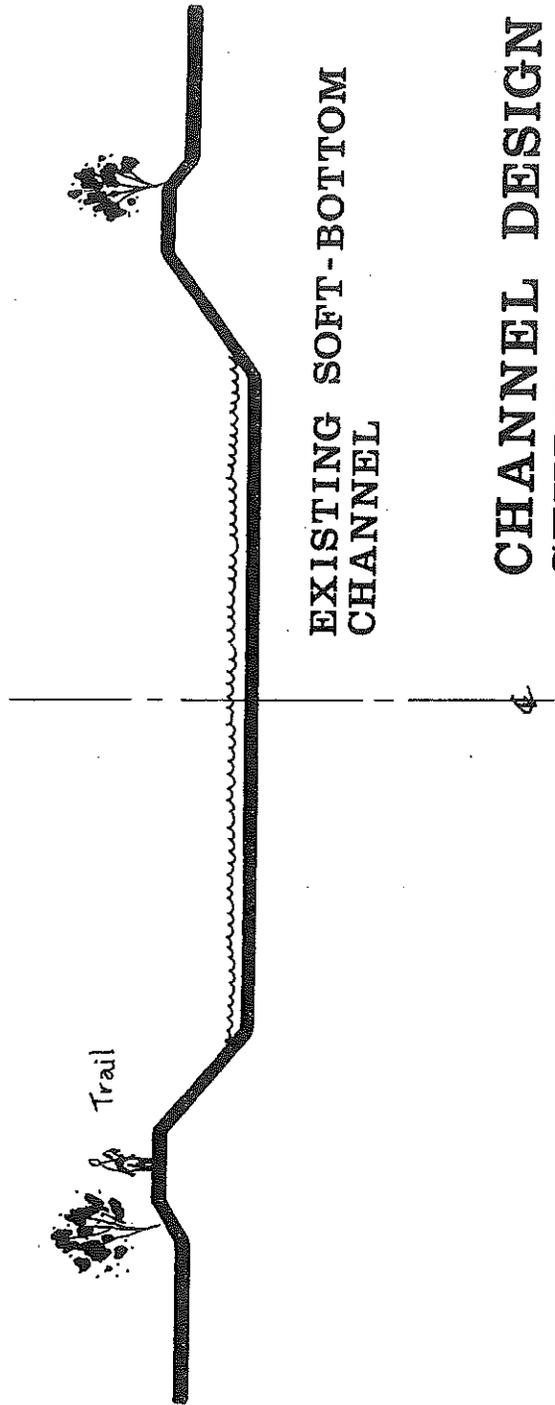
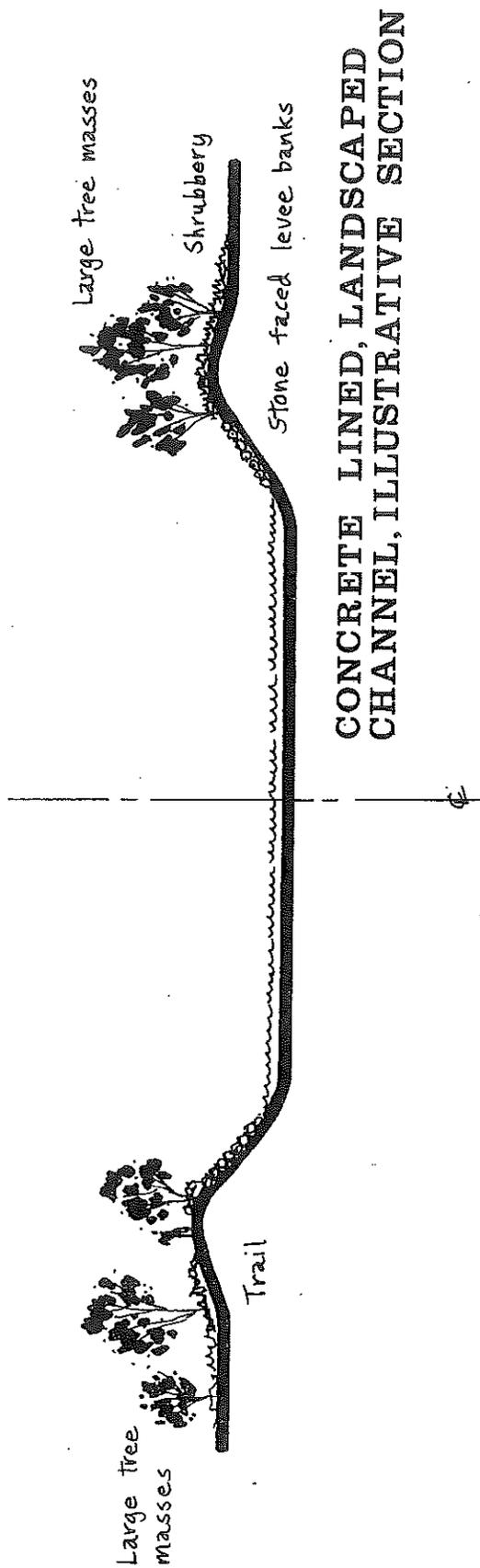
All publicly held lands should be retained and used in accordance with the Plan.



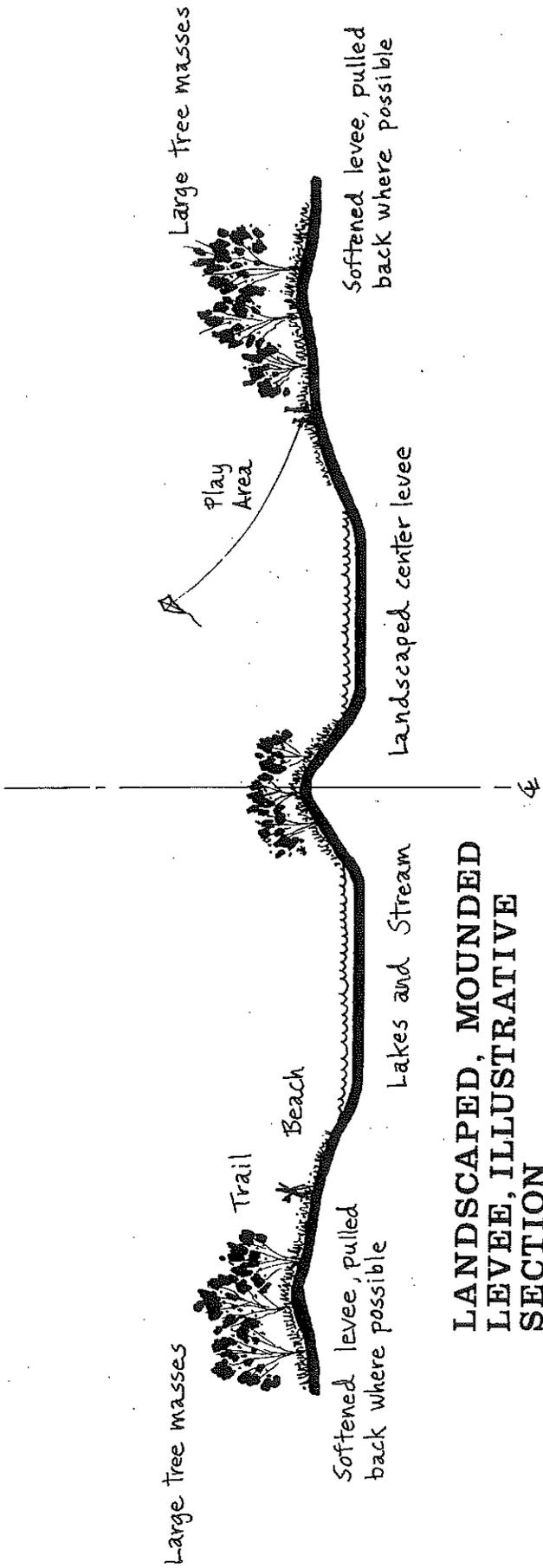
**LANDSCAPED, MOUNDED
LEVEE, ILLUSTRATIVE SECTION**



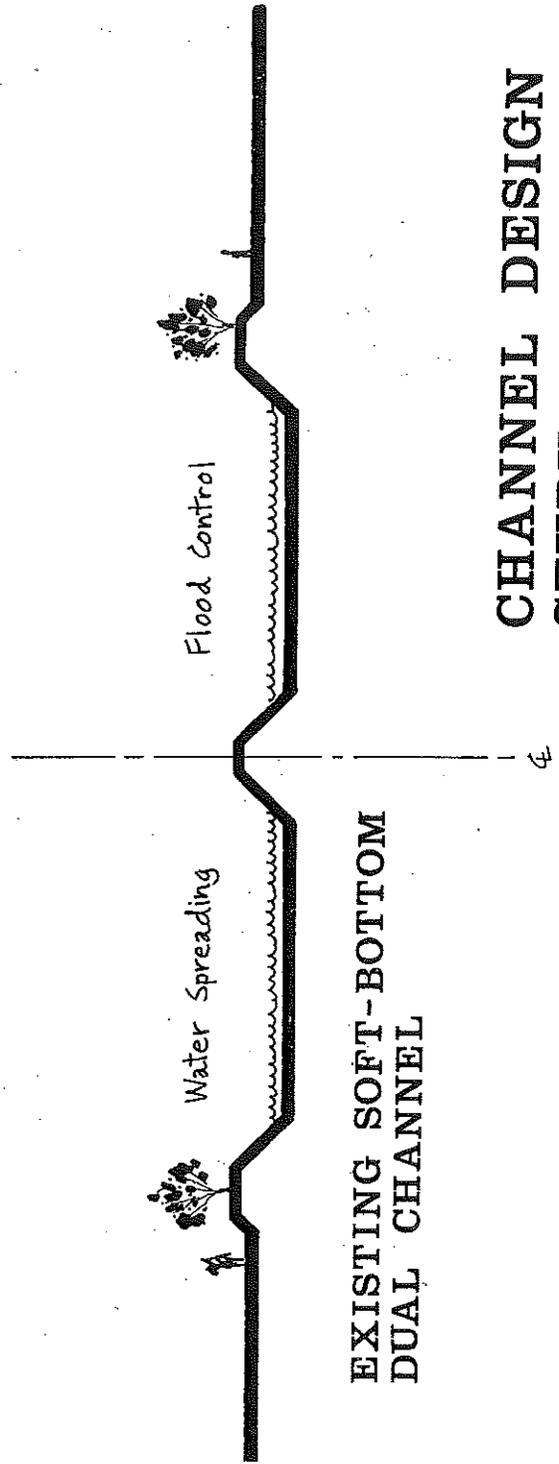
**CHANNEL DESIGN
STUDY**



CHANNEL DESIGN STUDY

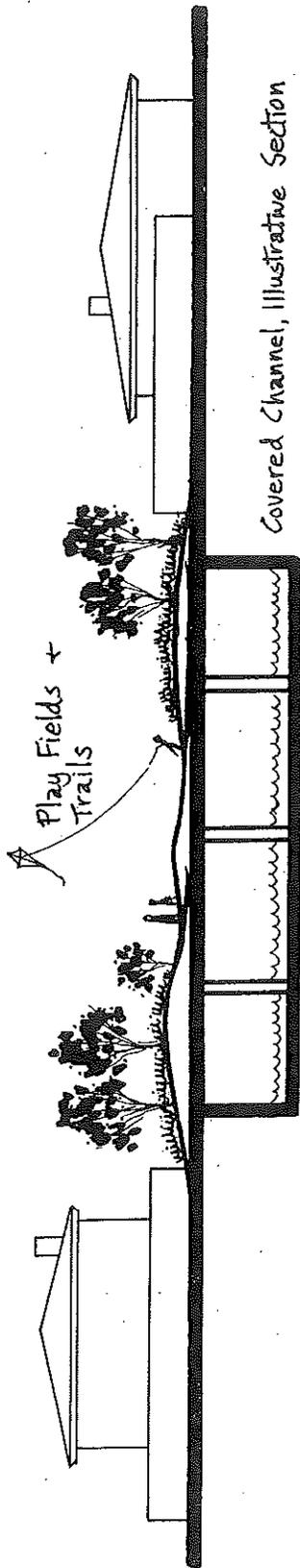


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SECTION**

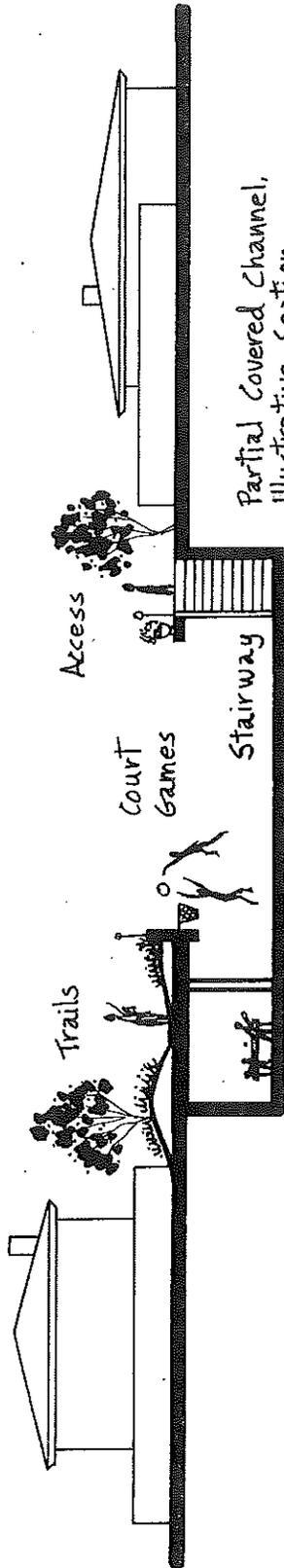


**EXISTING SOFT-BOTTOM
DUAL CHANNEL**

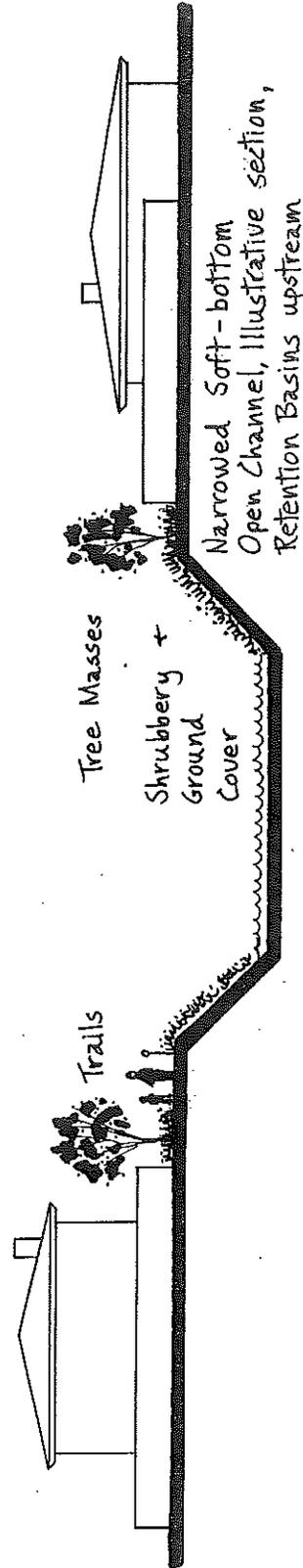
**CHANNEL DESIGN
STUDY**



Covered Channel, Illustrative Section

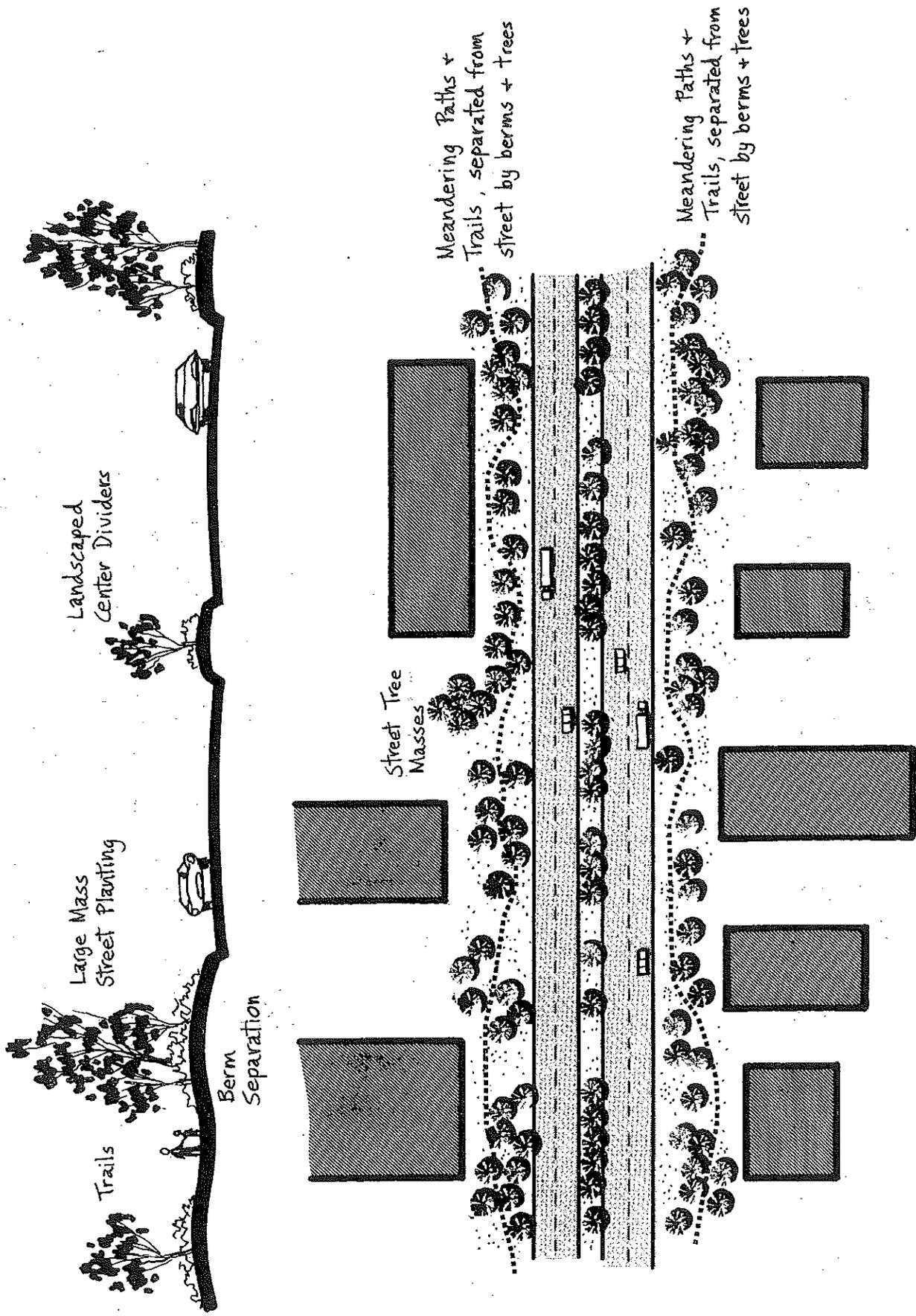


Partial Covered Channel, Illustrative Section

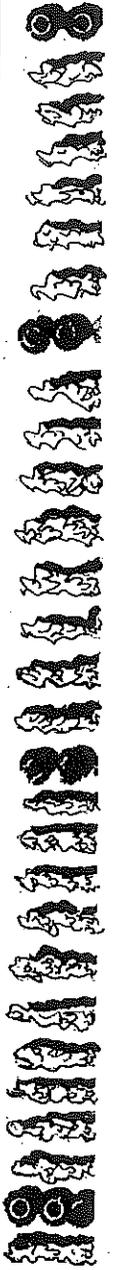
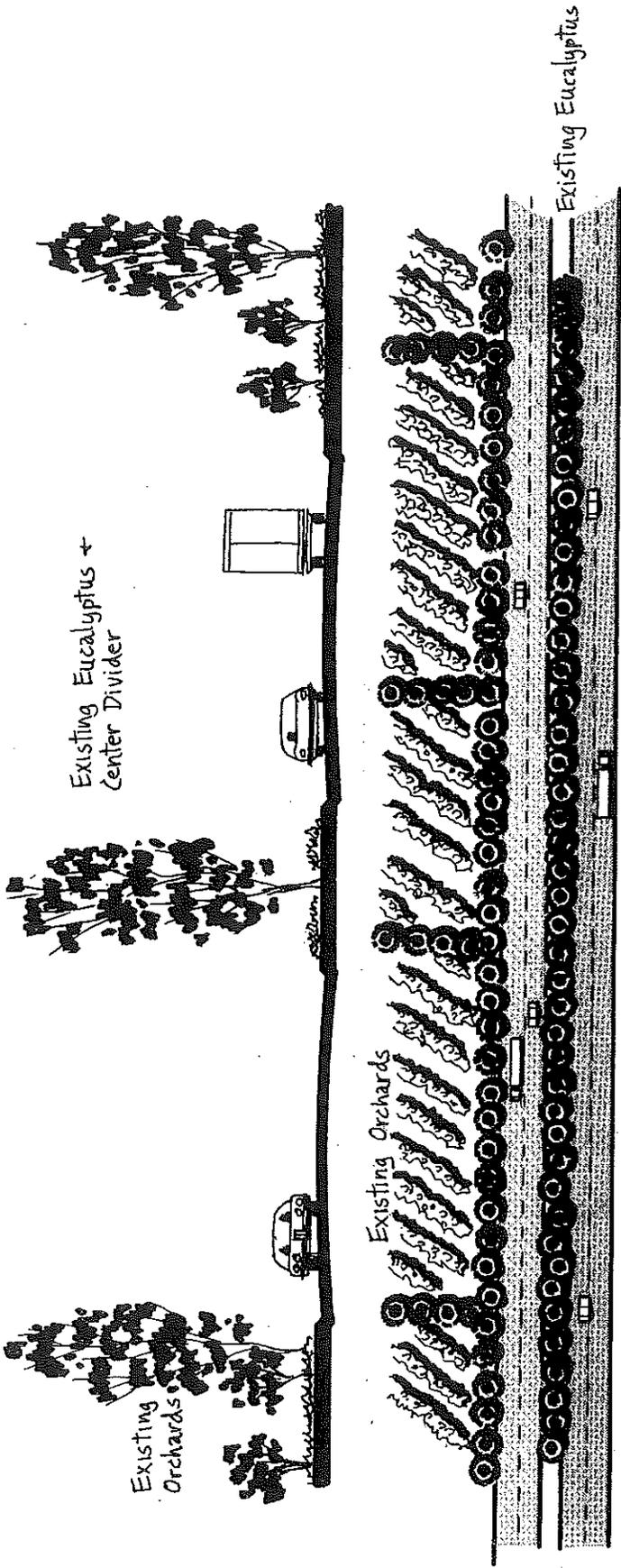


Narrowed Soft-bottom Open Channel, Illustrative section, Retention Basins upstream

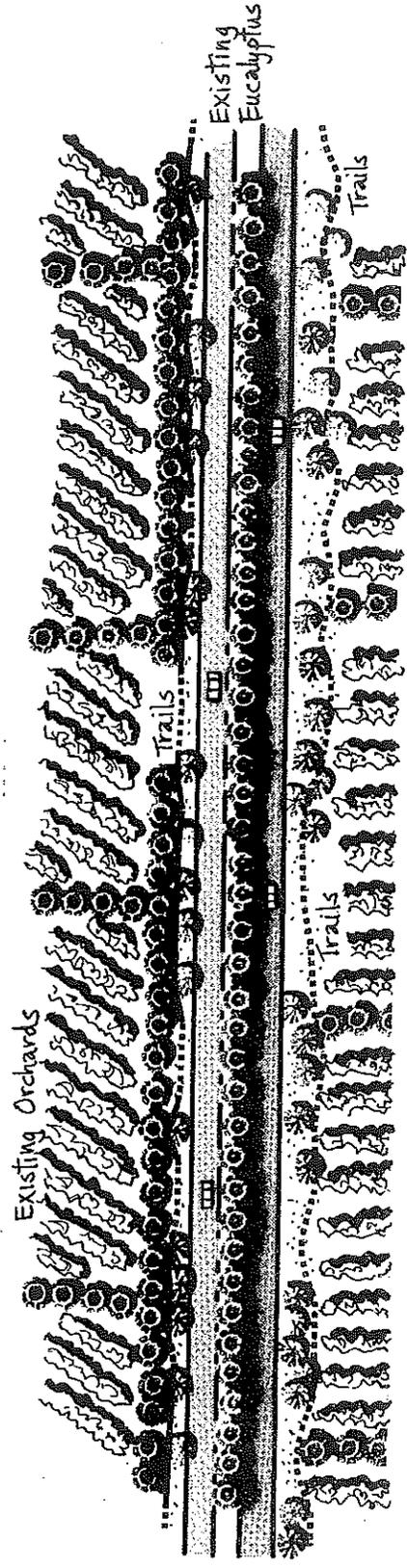
SANTIAGO CREEK CHANNEL STUDIES



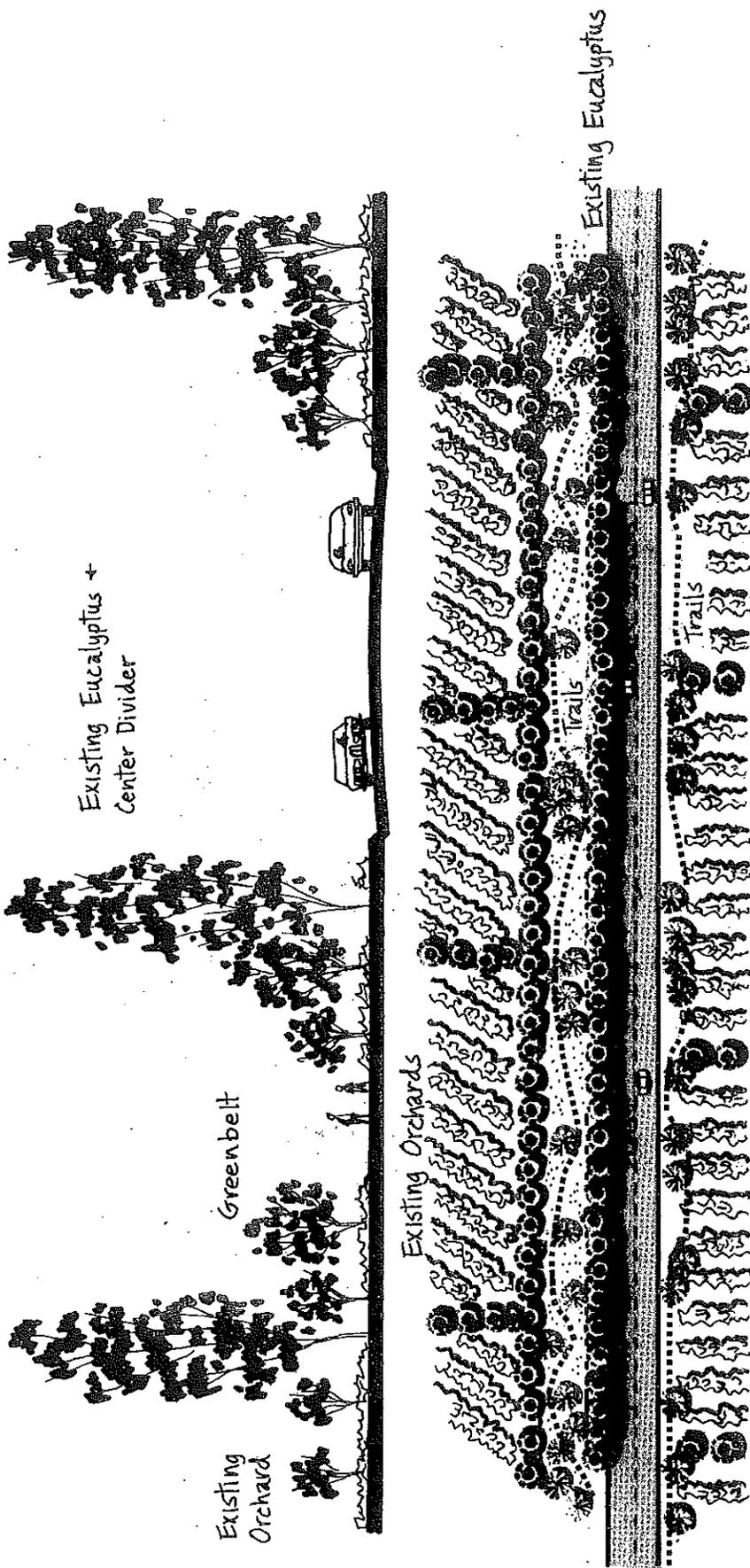
**STREET DESIGN,
ILLUSTRATIVE PLAN**



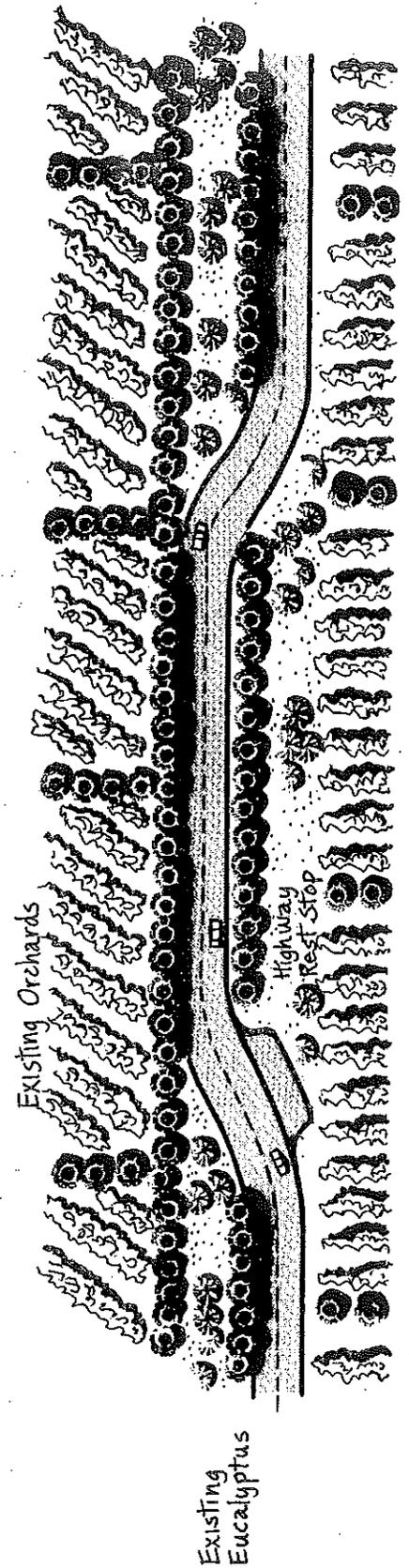
OUTER LANE REMOVAL, ILLUSTRATIVE PLAN



SANTA ANA CANYON ROAD STUDY



TWO LANE REMOVAL, ILLUSTRATIVE PLANS



IMPLEMENTATION

The priorities which follow are simply a selection of emphasis. They mean: spend most of your energy here, here, and here. But implementation of this Plan will be extremely complex and cannot be conceived in a "linear" way, in a simple order.

The greatest need is for flexibility, for seizing -- or creating -- opportunities to effectuate proposals, using a broad palette of methods and funds, and ever cognizant of the overall concept. That is why we recommend first: Put someone in charge! (See "Interim Measures")

The next need is for administrative authority, a means to overcome the fragmentation that has brought the River to its present desperate condition. That is why we recommend: a joint agency. (See "Administrative Structure")

The need for money hovers over all, non-linear, in fact non-quantifiable, at this time and within the scope of this planning task. With a someone-in-charge and a joint agency, there should be a substantial revolving fund -- for necessary studies, for purchase of fee or less-than-fee interests when urgent, for matching funds. (See "Securing the Land" and "Funding Sources")

IMPLEMENTATION: PRIORITIES

In the difficult task of selecting priorities within the Santa Ana River-Santiago Creek corridor overall and by segments, we must not overlook the enormous "priority" which belongs to the overall corridor greenbelt concept.

"There is a good chance that these river corridors will be the only open space elements in western Orange County; therefore we enthusiastically endorse the Phase I report," wrote Chairman Ron Yeo of the UCI Project 21 Open Space Study Team in November, 1970. (Emphasis added)

Within the Santa Ana River-Santiago Creek Corridor as a whole, the following projects and areas blend top significance, heavy pressures, and potential realization and therefore deserve immediate implementation priority. Reserving and securing land must take precedence, with development of trails and selected parks soon, remembering William Whyte's wise counsel to "use it or lose it".

1. Santa Ana Canyon - open and natural.
Flood plain zoning of areas subject to Standard Project Flood hazard.
Conservation/Open Space Zoning around and above flood plain -- interim pending recommended economic/social/environmental impact study.
Yorba Park acquisition.
Agriculture preservation.
2. Rivermouth estuary-marsh and regional park: reserve land; expedite study.
3. Trail expansion and improvement.
4. Warner Basin rehabilitation and multi-use.

Focusing on each of the four segments, the following deserve top priority:

Lower River

Rivermouth estuary-marsh and regional park: reserve land, expedite study.

Fairview land acquisition from State.

Channel-fronting greenbelt areas: secure use of utility rights-of-way and develop site plan review procedure for reserving and protecting greenbelt.

Middle River

Warner Basin - site plan and develop for multi-use.

Secure small parcels.¹

- * at Ball Road and the River: small gravel pit area
- * north side of River between Taft and Lincoln
- * north side of River south of La Palma from edge of Warner Basin to Imperial Highway
- * south side of River opposite Warner Basin

Secure large parcel on south side of River between Lincoln and Glassell, rehabilitate pit for park.

Santa Ana Canyon

Preserve open and natural: flood plain zoning, open space/conservation zoning, agricultural preservation. Economic/social/environmental study. Yorba Park acquisition.

Santiago Creek

Secure parcels.

- * along Creek between Cambridge Street and Hart Park, rehabilitate
- * adjacent to pits, west of Prospect, east of railroad

Preserve agriculture.

Study flood control needs and measures, potential for rehabilitation of some pits as retention basins, etc.

¹ Other small parcels, shaded on Implementation Plan, are also desirable but, based on land value information received, excessively expensive. These are designated "marginal".

IMPLEMENTATION: INTERIM MEASURES

The following implementation measures and policies can be undertaken at once. They look to and lead to other implementation recommendations for joint administrative structure and securing the land.

1. Defer Action

Defer action by all public agencies and jurisdictions on zoning, uses, projects, and facilities pending adoption of this Plan.

2. Interim Santa Ana River Coordinator and Council

The most effective first step toward implementation is: -- put someone in charge! The County should appoint a Santa Ana River Plan Coordinator, pending more formal arrangements, with the following tasks:

- * Expedite adoption of Plan by County and cities.
- * Centralize information.
- * Identify threats and opportunities, alert relevant agencies, coordinate and expedite appropriate action.
- * Develop, coordinate, and administer further studies.
- * Organize and report to Interim Santa Ana River Council, Board-appointed, including but not limited to:

Regional Parks Advisory Team
Orange County Water District
Corps of Engineers
Planning or Park Directors of Newport Beach, Huntington Beach, Costa Mesa, Fountain Valley, Yorba Linda, Anaheim, Orange, Villa Park, Santa Ana, Garden Grove and other interested Orange County cities
Citizen groups: UCI-Project 21 Open Space Study Team, Santa Ana River Citizens Advisory Committee, Tri-County Conservation League, and others

As soon as the Plan is official, the Coordinator should be assigned to move toward implementation through securing the land and laying groundwork for a joint River Agency, as described later.

3. Begin Further Studies

- a. Santa Ana Canyon - economic/social/environmental study of open space and development alternatives; long and short range costs and benefits.
- b. Santa Ana Rivermouth regional park - feasibility study and development of detailed plans.

- c. Santiago Creek - flood control needs, feasibility of retention basins and gravel pit rehabilitation.
- d. Organizational structure of joint River Agency for implementation of Plan.

4. Site Plan Review

Following adoption of this Plan, site plans for all public works and private developments in or near the River corridor (including Santiago Creek) having environmental/visual impacts on the River corridor should be carefully reviewed with reference to:

- * setback, dedication, or scenic easement along channel (200 feet)
- * appearance: landscaping, building, signing, fences and walls
- * access, circulation, traffic
- * relation to parks and open spaces
- * multi-use possibilities

Pending more formal organizational structure, it is recommended that zoning changes, use permits, subdivision plans, and project plans of all kinds be submitted for review and advisory action by the Interim Santa Ana River Council, investigation and staff work to be by Coordinator and/or Consultant. Where possible, seek early contact for review and input before plans are well advanced.

5. Zoning Review

Where existing zoning by a city or the County conflicts with the Plan, it should be reviewed and adjusted to carry out the Plan. Principal responsibility for this rests with the city or County having jurisdiction, but should be coordinated and expedited by the SAR Coordinator.

In addition, the present SG Zone should be applied to operating excavation areas so that rehabilitation plans will be begun.

6. Riverside County

Initiate or assist coordination with Riverside County to:

- * Preserve the large (520 acres) and immensely valuable ecological area lying just below Prado

- * Continue to seek flood plain management, rather than any channelization whatsoever, below Prado
- * Coordinate plans for an open natural Canyon by zoning, preserves, or such measures as are most feasible, to preserve the Canyon as a scenic open space and beautiful doorway between the two counties.

7. Beneficial Uses and Water Quality

The Santa Ana River Water Quality Control Board plans February hearings on adding to its list of "beneficial uses" of River water two new items:

Recreation and aesthetic enjoyment
Fish and wildlife maintenance

This is a must; County, cities, agencies, groups, and individuals who support the River-Creek green-belt concept should explicitly support these amendments to the Board's list, so that quality standards may be set appropriate for these very desirable and necessary uses.

8. Citizen Participation

The Santa Ana River Citizens Advisory Committee ("Committee of 100") which has participated so effectively in the development of this Plan should continue as the core of an on-going coalition of groups and individuals interested in the Santa Ana-Santiago Corridor. Citizen assistance will continue to be needed to develop city and County support for the Plan (or modify it as needed). Citizen assistance, inspiration, and drive will be essential to implementation of the Plan.

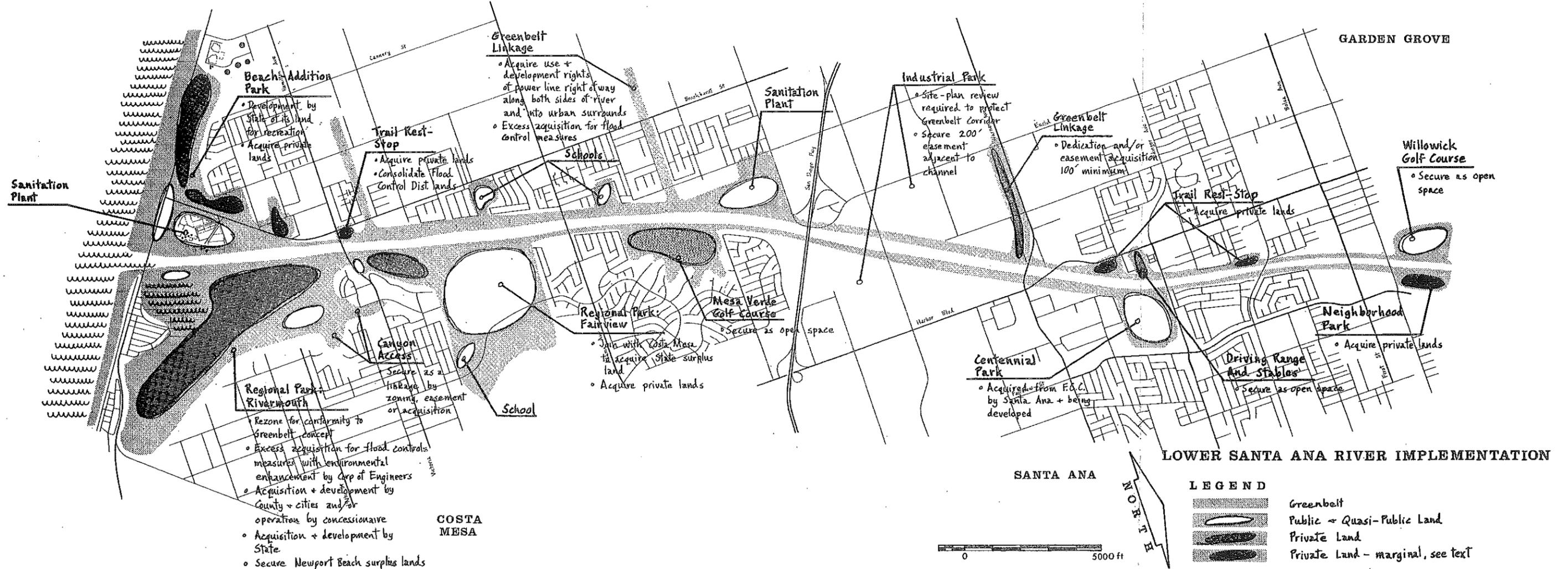
LOWER SANTA ANA RIVER IMPLEMENTATION

FOUNTAIN VALLEY

HUNTINGTON BEACH

GARDEN GROVE

PACIFIC OCEAN

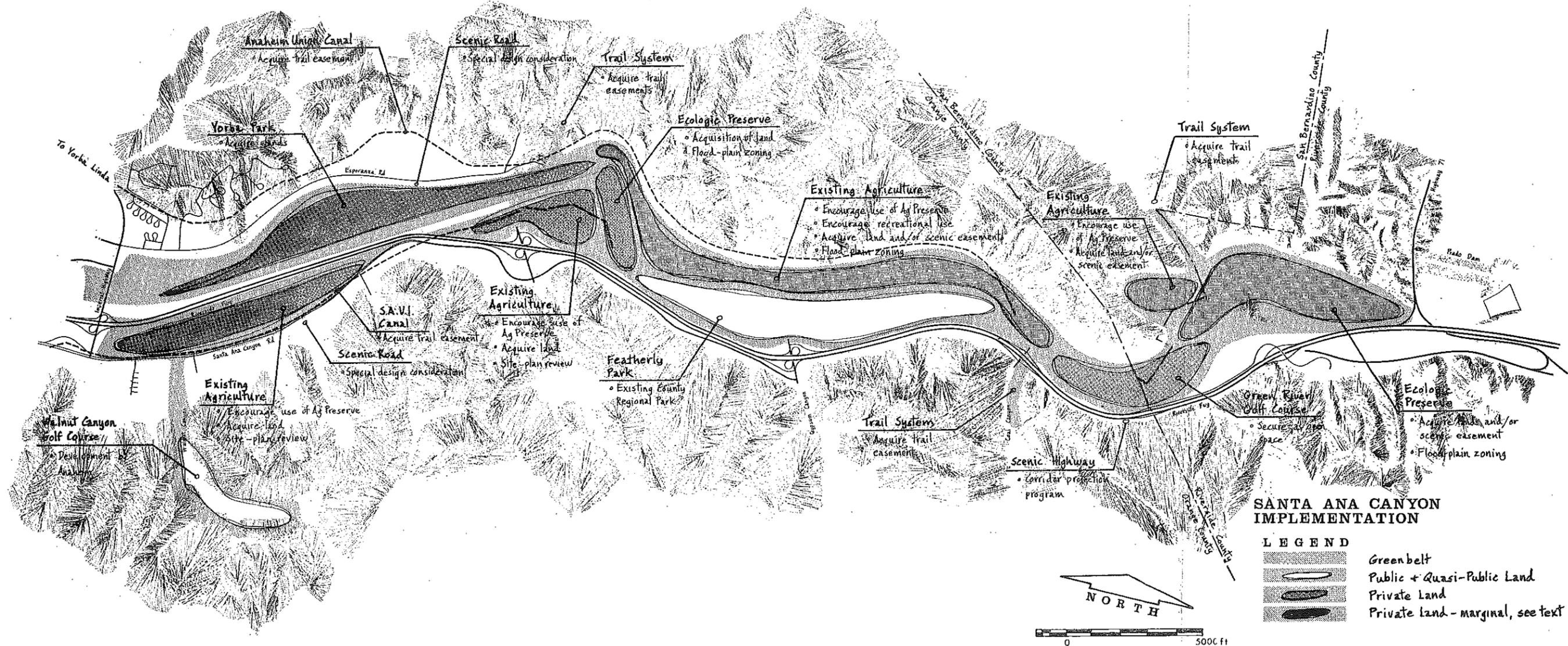


- Beach Addition Park**
 - Development by State of its land for recreation
 - Acquire private lands
- Trail Rest-Stop**
 - Acquire private lands
 - Consolidate Flood Control Dist. lands
- Greenbelt Linkage**
 - Acquire use + development rights of power line right of way along both sides of river and into urban surrounds
 - Excess acquisition for flood control measures
- Regional Park: Rivermouth**
 - Rezone for conformity to Greenbelt concept
 - Excess acquisition for flood controls measured with environmental enhancement by Corp of Engineers
 - Acquisition + development by County + cities and/or operation by concessionaire
 - Acquisition + development by State
 - Secure Newport Beach surplus lands
- Canyon Access**
 - Secure as a linkage by zoning, easement or acquisition
- Regional Park: Fairview**
 - Join with Costa Mesa to acquire State surplus land
 - Acquire private lands
- Mesa Verde Golf Course**
 - Secure as open space
- Industrial Park**
 - Site-plan review required to protect Greenbelt Corridor
 - Secure 200' easement adjacent to channel
- Greenbelt Linkage**
 - Dedication and/or easement acquisition 100' minimum
- Trail Rest-Stop**
 - Acquire private lands
- Willowick Golf Course**
 - Secure as open space
- Neighborhood Park**
 - Acquire private lands
- Driving Range And Stables**
 - Secure as open space
- Centennial Park**
 - Acquired from F.C.C. by Santa Ana + being developed
- School**

LEGEND

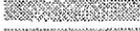
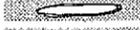
	Greenbelt
	Public - Quasi-Public Land
	Private Land
	Private Land - marginal, see text

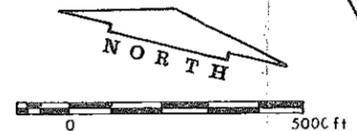
SANTA ANA CANYON IMPLEMENTATION



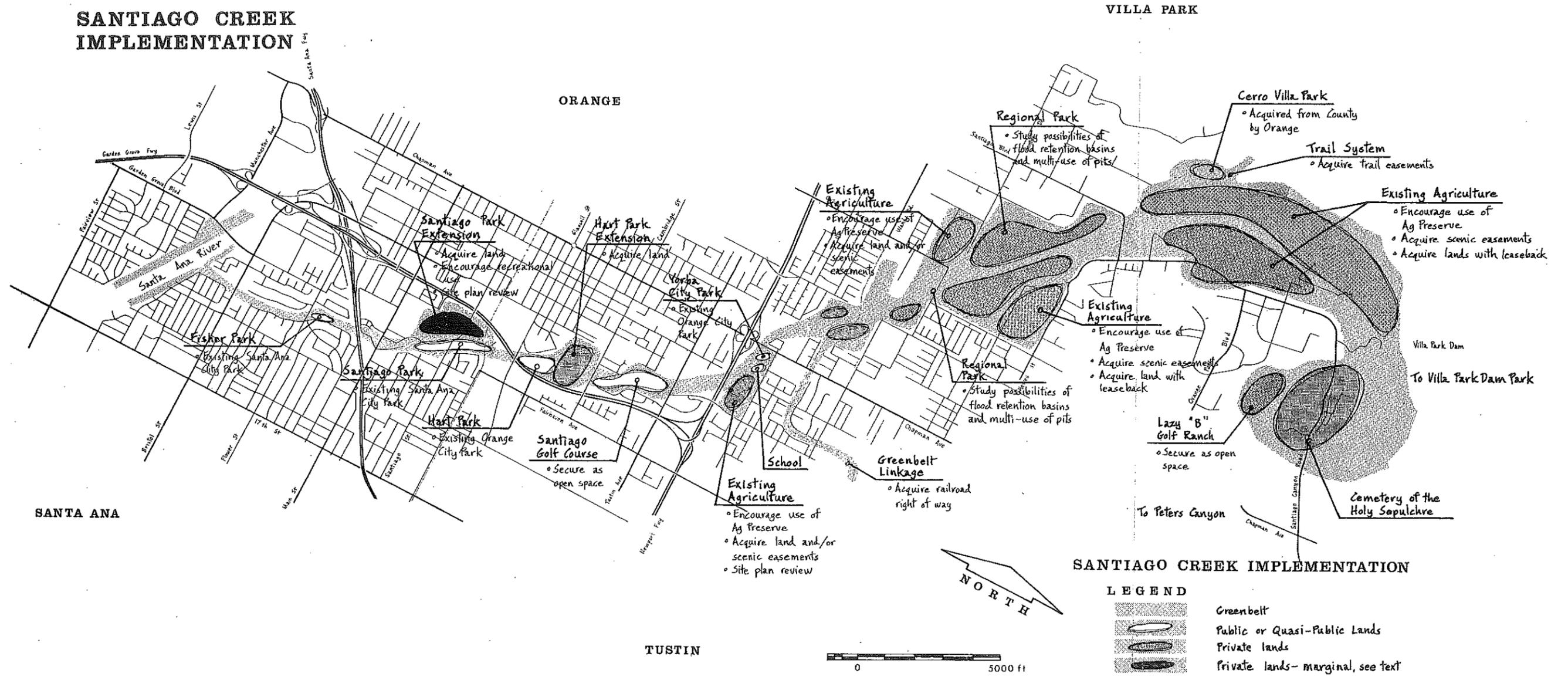
SANTA ANA CANYON IMPLEMENTATION

LEGEND

-  Green belt
-  Public + Quasi-Public Land
-  Private Land
-  Private land - marginal, see text



SANTIAGO CREEK IMPLEMENTATION



IMPLEMENTATION: ADMINISTRATIVE STRUCTURE

Needed: A Joint Agency

To treat the River-Creek Corridor as a unified resource, to realize the remaining opportunities, to bring together the fragmented jurisdictions and functions of multiple County and city departments, special districts, State and federal agencies, a partnership is needed. Not another government, but a formal cooperative structure for dealing with the Corridor. A joint powers agreement would be appropriate. Where implementation maps say "acquisition by County and cities", a partnership agency is meant. (This would supersede the interim Coordinator and Council.)

Powers and Responsibilities

The Agency (as we shall refer to it) should have the following powers and responsibilities:

1. Interrelate the multiple agencies involved, set and coordinate policies and priorities.
2. Buy, receive, and hold land. Pool all or some publicly held lands and devise a system of equalization or credits to donating agencies. Where title transfer is unfeasible, unify development and operation.
3. Financing.

Raise funds.

Apply for funds.

Devise formula whereby member jurisdictions and agencies have proportional financial responsibilities based on population, assessed value, distance from Corridor, and other factors. . .

to share the burden of acquisition or development costs, of special regional facilities

to raise matching funds toward State and federal grants

to finance administrative and staff work, special studies

4. Respond to opportunities: negotiate, combine related needs, etc.
5. Identify threats and deal with them.

6. Manage land use.

Decide what needs design review.

Develop review procedure, possible permit or approval procedure, and detailed guidelines.

Negotiate and manage zoning, leasing, preserves, easements.

Develop sand and gravel excavation policy and conditions, rehabilitation guidelines.

7. Review and amend or revise Plan periodically, preferably every two years.

8. Advise publicly on development proposals, legislative, or other measures that would affect the Corridor.

9. Tie in to tri-county or Basin-wide organization oriented to the River resource, or tie in to County-wide organization for open space and other environmental aspects.

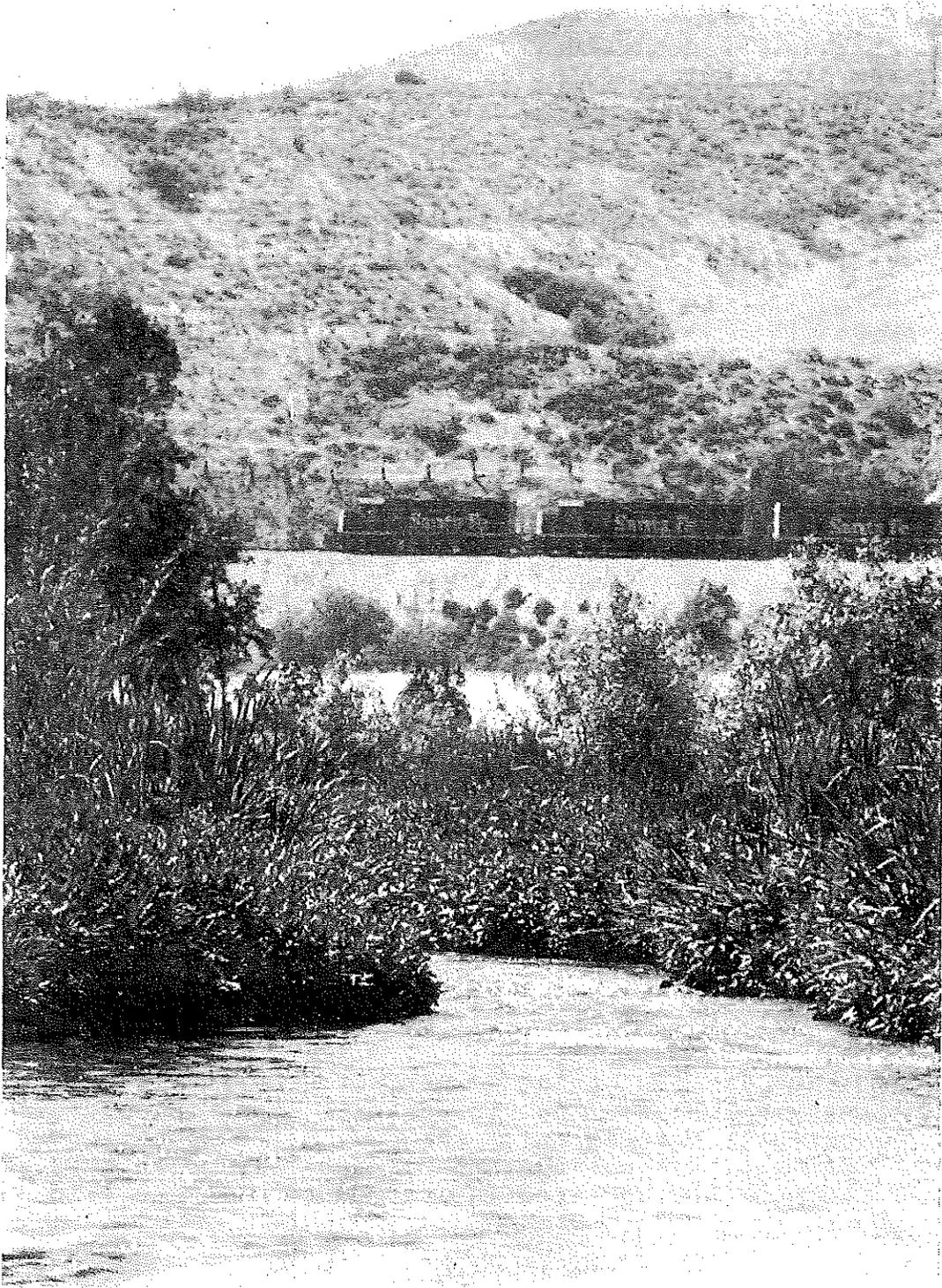
Why Is Such an Agency Needed?

To realize the opportunities remaining before they too are lost to conflicting local policies and expectations, conflicting fiscal needs and financial capabilities, conflicting recreation demands, varying or competing standards, interests and constraints.

The proposed plan identifies opportunities and proposes lands and uses which represent a broad balance of resources with needs and interests, insofar as these can be satisfied within the Orange County portion of the River.

The Plan is not a definitive statement but an indication of direction for detailed planning. There will be room to accommodate many specialized needs and interests, including concession or commercial interests, but the interested party's question should be put to the Agency in terms of "Where would be the best place for this use?" rather than "We want to develop this here!" A single land-holding, planning, and management agency makes it possible to put the question properly, identify and evaluate alternative answers, and make a selection based on a broad view and thoughtful balance of all factors, not just local and vocal needs and pressures. A single administrative agency avoids confusion and competition among jurisdictions and agencies. By structuring the interested parties, it expedites implementation of desirable public or private projects.

We propose the County Board appoint a task force to develop such a unified administrative agency with appropriate financial plans, perhaps with the assistance of government organization and financing consultants. Initial financing should be sufficient for administrative and staff costs, selected further studies, and some kind of revolving fund so that the Santa Ana River Corridor Coordinator can move quickly when opportunities arise.



IMPLEMENTATION: SECURING THE LAND

Securing the land is urgent. So little is left. The parcels identified are only part of the little that is left which relates significantly to the corridor; we have not included developed parcels, except insofar as their development can be designed for compatibility with the corridor.

Privately-owned Lands

Privately-owned lands to be secured are identified on the maps, with indication where lease, leaseback, commercial-recreation concession, etc. might be appropriate.

"To be secured" usually means acquisition.¹ In the middle and lower reaches urbanization pressures are so intense that easements, preserves, zoning, and similar measures are not secure and are probably not even economically preferable. Private golf courses need to be secured as permanent open space through scenic or open space easement, purchase or donation, or by "limited lease" (see below).

Publicly Held Lands

Publicly held lands identified for park/open space use must also be secured, not taken for granted. The Flood Control District and Orange County Water District are already committed and sympathetic and have played major roles in developing this Plan. On their lands planning and design are needed to implement the Plan. Ultimately, these publicly held lands plus County and city-owned portions might be pooled and held by a single Santa Ana River corridor agency, as discussed later.

Federal surplus land east of the River at Edinger has been acquired by Santa Ana as its Centennial Park. State surplus land is available west of Fairview State Hospital which the County should immediately join with Costa Mesa to secure, for it is of outstanding value as a major regional park in the constricted lower reach of the River. Freeway remnants have been identified and incorporated. The future Route 57 (Orange) Freeway must be carefully located and designed to respect, implement, perhaps expand the greenbelt.

¹ There is, of course, no perfect security. There are too many examples of public agencies eager to, or forced by narrowly conceived law to, sell off excess land, hence the explicit policy that all publicly held lands should be retained and used in accordance with the Plan

Excess Condemnation

Excess condemnation -- for freeways, flood control, sewer, water and similar projects can yield usable open space/recreation lands. To take full advantage of such opportunities, the proposed "SAR Coordinator" has to "centralize information" and initiate or assist joint planning among the involved agencies.

Land Management

Land management measures for securing the land include:

Flood plain zoning, which should be applied at once in the Santa Ana Canyon flood-endangered area and Upper Santiago Creek as proposed in Phase I and in the UCI-Project 21 Open Space Study Team report, Open Space in Orange County. Agriculture and open space/recreation uses can be allowed with certain conditions.

The flood plain zone should be delineated on the basis of the Standard Project Flood, even though these floods are rare and development is often permitted in such areas -- with disastrous results. As the Corps itself says:

Many . . . local agencies have adopted regulations to control and direct future development of flood plains. However, if restricted development is allowed in the selected flood limit and standard project zones, as prescribed by local agencies, pressure will probably be applied to permit encroachment upon the open space. Therefore, open space in the flood plains should be limited to open space and related uses. No loopholes that would lead to other development should be sanctioned.]

Conservation/Open Space zoning, which should be applied at once to the Santa Ana Canyon hillsides. The County and the cities of Anaheim and Yorba Linda must determine mutually acceptable language which can be applied uniformly. The no-channel and open-natural-canyon proposals for the Canyon are interdependent and relate together to the protection of this natural resource area for the public safety, health, and welfare. Firm commitment by the jurisdictions plus coordination with the Assessor is again needed, for, to quote Open Space in Orange County (page 73), "land can still be assessed at its value for subdivision or other improved

1 U. S. Army Corps of Engineers, Los Angeles District, Open Space and the Flood Plain, 1969, p. 13.

uses if there is a reasonable possibility that the zoning restriction will be removed".

A Conservation and Open Space Zone could allow, by permit, compatible agricultural, recreation, and institutional uses. A natural open Canyon is the recommended "look" and atmosphere. Among the uses compatible with this objective are:

- Agriculture
- Horse ranching
- Nursery stock growing
- Game bird ranching
- Fish hatcheries
- Agricultural-horticultural experiment stations
- Conference center
- Botanic garden
- Stables and equestrian facilities
- Camping, picnicking, trails
- Resort facilities, carefully sited, planned, and sized for compatibility with natural open Canyon look
- Golf courses - not in River bottom, but possibly in side canyons
- Nature interpretive facilities
- Educational facilities

Site plan review must be a requirement of the Zone or superimposed as an overlay assuring detailed consideration of visual impact, flood hazard, ecological impact, access, traffic generated, etc. Uses must not be so located or so sized as to create the need for channelizing the River or for anything more than modest "improvements" in the side canyons. All uses must be planned for minimum intrusion on the open space character sought here.

In Santa Ana Canyon, at least, such zoning would be in the public interest in many ways: preservation of watershed, safeguarding water quality, preserving open space natural areas, ecologically valuable areas, as well as scenic and aesthetic values.

"The present rule, in California, seems to be that while aesthetic purposes alone are insufficient, they will be considered along with other factors of public welfare in determining whether there has been a proper exercise of the police power."¹

¹ Open Space in Orange County, UCI-Project 21 Study Team, p. 73.

"According to our higher courts, the danger in expanding these controls, and particularly zoning, is that we rapidly approach the prohibited 'taking' of private property without compensation. While there is reason for genuine concern, it is also remarkable how elastic the decisions of our courts have been in this area of the law. The more 'reasonable and necessary' the enactment becomes, the more willing our courts have been to permit regulations which have resulted in the loss of value to property."¹

Public agencies are not obligated to sustain speculative property values. They are responsible to do what is reasonable and necessary for the public welfare.

Agricultural and open space preserves under the Williamson Act should be used wherever possible, for 10 years or more of bought time is very worth while if the landowner is willing. One of the weaknesses of this method is its voluntary nature.

The argument that this method unfairly shifts the tax burden seems little applicable to the Canyon area. Open space requires minimum public services and is, in fact, the most "economic" use of land, while taxation at some guessed-at subdivision potential here stimulates the kind of urban sprawl which is most costly and unpredictable -- on unstable, impermeable, steep hillsides. As Los Angeles has found to its expense and dismay with Santa Monica Mountains subdivisions, unforeseen public costs arise later as engineering proves an imperfect art, as grading ordinances assist safety but produce ugliness, as lawsuits, new ordinances, and citizen upsets proliferate.

Limited Lease. This method is appropriate for securing golf courses as open space, and might apply to other present and future privately developed outdoor recreation facilities as well as privately owned undeveloped areas identified on the Plan.

"The County could lease private property having open space recreational value. The lease would provide the option of either buying at a future date with interim county operation of the recreation facilities, or private operation with joint control over the facilities, operations and charges and a lower lease payment to the private landowner to reflect taxes that would otherwise be assessed against the land and improvements."²

¹ Open Space in Orange County, p. 79.

² Ibid.

Easements. Everybody talks about the great potential of the scenic and open space easement technique, but no one locally has much experience with it. (In the East easements are being used more and more, particularly for golf courses.) They are thoroughly legal and available in California and constitute an enforceable restriction under which the owner may be relieved of the tax burden of possible higher uses. And it is -- or can be -- permanent. Yet it has been little used, and the conventional wisdom that has arisen is that this method doesn't work in urban fringe areas for the cost of development rights would approximate full fee. The cost would, of course, be simply the value of the rights sold, which will vary widely from property to property. The person in charge of securing open space should test this method's feasibility, not reject it out of hand. Experience gained will be of broad interest.

Site Plan Review. The need to review all public and private projects impacting the River corridor is urgent and is discussed under "Interim Measures". It is also a long-term, continuing need. An overlay zone, not necessarily defining use but requiring review for conformity to Plan, guidelines, and standards (which need some detailing) would accomplish this. Such zones are commonly used for architectural control in Civic Center areas, historical areas, etc. Such review can largely be handled by the staff of the proposed Santa Ana River joint agency. The staff could also consult on and encourage site enhancement on private and public properties adjacent to the River as proposed for sewage treatment and flood control facilities, and the restaurant, theater and Anaheim Stadium.

Scenic highway corridor implementation measures. As urged in Open Space in Orange County, the County should take the initiative in instituting corridor protection measures including most of the above techniques to protect the scenic quality of the new Riverside Freeway. Here the major issue surfaces again: will this highway be "scenic" only in terms of prohibiting billboards and planting some trees to help screen urban sprawl (hard to do with hillside sprawl), or will it be scenic in the fine old-fashioned way -- traversing a dramatic and beautiful natural open area where rest and view stops afford real rest and real view, a magnificent entrance to the County. The State would, of course, be expected to fulfill its responsibility in terms of prompt Freeway landscaping.

Contractual purchase is a proposed method described in Open Space in Orange County requiring State enabling legislation, which the County should actively seek.

Briefly, it allows counties to acquire regional open spaces of 50 acres or more under contract providing:

- * county will pay all taxes on property until title passes to it
- * owner is restricted to certain open space uses
- * term would be 40 years minimum, after which property is deeded to county without additional payment

As mentioned earlier, for open space preserves, easements and zones, open space uses could include not only agriculture but also recreational uses, possibly even resort-recreation under controls, which might be sufficient to make this deal attractive to the owner. For the public it would effectively preserve open space for 40 years or longer and without immediate large capital outlays. Presumably the Assessor would set taxes based on the open space uses.

There are many ways the public can preserve open space, not all of them given here. More important than the individual techniques is devising combinations with initiative and flexibility.



IMPLEMENTATION: FUNDING SOURCES

HUD Open Space Grants

50/50 matching funds for acquisition of open space and basic improvements such as roadways, signs, landscaping, but not major construction. HUD judges applications according to the following priority system:

1. Low income neighborhoods are first priority. Applications for such areas have never been turned down, but little open space money is actually channeled to such neighborhoods; often they lack the capability to provide matching funds.
2. "preservation of the last remnant of open space available in an area."
3. "preservation of any natural features which will help to preserve the identity of any given area . . . Too often, runaway growth has resulted in one urban development blurring into another. . . Here the acquisition of stream valleys and ridge lines can help guide growth and give a needed sense of harmony and compatibility with the natural terrain."
4. "preservation of at least a few of those historic spots which can help provide the kind of association with the past that can make the present more meaningful."
5. "provision of the kind of access to public open space opportunities needed to make them more useful. For example, the opening of a shore line area."¹

The priorities clearly indicate HUD's change of emphasis from large remote tracts to lands providing visual and recreational relief in heavily populated areas. HUD is also interested in the use of innovative methods and less-than-fee techniques, and looks with great favor on collaborative efforts among agencies and jurisdictions. In the years we have worked on the Santa Ana River for Riverside and now for Orange County, we have had constant encouragement from HUD but, to our knowledge, no applications have ever been filed.

There is also a fund reserved for Demonstration Grants under this program whereby larger grants -- up to 100% in certain cases -- may be sought if there are unique aspects or techniques which HUD would like to experiment with. . .

¹ National Recreation and Park Association, Guide to New Approaches to Financing Parks & Recreation, Acropolis Books, Washing, 1970, pp. 17-18.

Bureau of Outdoor Recreation (Department of Interior):
Land and Water Conservation Fund

50/50 matching funds for acquisition and development. The Fund derives from motor boat fuel taxes, National Park revenues, surplus federal real property sales, and certain off-shore mineral leases. The Fund is administered through the State, which gets a proportional amount which it in turn allocates within the State. Projects must be eligible under the State's Outdoor Recreation Plan. Priorities are as follows:

1. High quality, well-documented projects.
2. Fund will assist in basic, rather than elaborate, projects.
3. Project must serve public's best interest in most economic manner and provide most extensive opportunity.
4. Fund will only consider assistance after all other types of assistance have been sought.

The Secretary of the Interior retains contingency funds for special projects. Riverside County Parks has applied for such funds to acquire 900 acres in the River corridor, as the amount needed exceeds what might reasonably be expected through regular allocation channels.

Title III, Elementary and Secondary Education Act (HEW)

This title has been used to help establish outdoor teaching areas in some localities.

Small Business Administration

When loans are not available privately at reasonable terms, SBA finances by various methods small businesses including resorts and other recreation enterprises which contribute to the health or general well-being of the public. (Private golf courses, for example, are not included.)

Availability of financing may enable owners of open or agricultural land to look favorably upon land management and less-than-fee techniques outlined above, and will also assist potential concessioners.

Water and Waste Facilities Planning
Water Quality Control Measures
Water Reclamation Projects

With the crescendo of public and Congressional-Presidential

interest in pollution control and prevention and the re-organization of federal agencies under the Environmental Protection Agency, funding will be available for water and waste management projects. Studies being made by SAWPA, Orange County Water District, Sanitation Districts, and others should be tied in to this Santa Ana River Open Space and Recreation Plan so that multi-use opportunities can all be coordinated.

Trail Funding

The new State-enabled tax on horses, with funds earmarked for trail acquisition should be investigated. (The State has not yet enacted laws enabling local jurisdictions to use eminent domain and condemn for trails, but this is still being sought.) Equestrian groups are trying to get the Santa Ana River trail, long a feature of County and city plans, designated on the State plan, which would make it eligible for 50/50 matching funds from State sources. Among the criteria are scenic quality and relationship to urban areas. The latter is clear; the former is the essence of this Santa Ana River Corridor Plan.

Wildlife Restoration Fund

This fund, amounting to \$750,000 statewide, is administered by the State Wildlife Conservation Board of the Department of Fish and Game for land acquisition, development, and preservation of key wildlife areas. The regular pari-mutuel funding supporting the program has been enhanced by matching funds from the Federal Land and Water Conservation Fund and other federal and local sources. Projects have included fish hatchery and stocking, fish habitat development and improvement, fishing access, fishing piers, wildlife habitat development and improvement, hunting access, and a few wildlife-related studies. In Orange County the Fund has been used mainly for fishing piers and reefs, but may have potential for fishing project development and wildlife enhancement along the Santa Ana River corridor.

U. S. Army Corps of Engineers

Corps projects are allowed 3% of total cost for beautification and enhancement. Needless to say, the more costly the project, the larger the amount for beautification. However, since estimated time to construction is eight to ten years, and since project feasibility and desirability must be judged on its merits and its benefit/cost ratios, this source of funds should not be over-valued.

Tax Sources

Open Space in Orange County lists several possible tax

sources for funds to preserve open space which are applicable to the Santa Ana River acquisition and development needs.

Sales Tax on sporting goods: an additional sales tax of one-half to one percent could be placed in a trust fund.

Increase of existing Sales Tax: at the state level or possibly at the local level. The report cites as an example just one Orange County shopping center which could produce \$1 million per year at a 1% rate.

Highway Users' Tax increase: a one cent per gallon charge would produce about \$6 million per year for Orange County . . . but would require state legislative action. Temporary use of this cent-a-gallon is the favored method for raising funds for repairing flood damage. The popularity of recreational driving and the fact that the automobile is the means of access to regional recreation facilities validates this as a potential source for regional recreation facility funds.

Recreational Vehicle License could be state-required and receipts reallocated to counties for regional open space and recreation.

Horse Tax: recent State enabling legislation permits cities and counties to tax riding horses and earmark funds for trail acquisition. Riverside has already drawn up such legislation. On Board request, the Regional Parks Advisory Team is investigating its usefulness for Orange County.

Real Estate Transfer Tax, now available to state and local governments, is considered a feasible source for open space funds according to Open Space in Orange County, (page 78) which finds that the tax rate, even if raised to 25¢ per \$100 valuation would amount to a total of \$62.50 (only 1/4 of 1%) on a \$25,000 home, \$35 above the present tax, and probably not enough to adversely affect sales. The report also considers capital gains tax and improvements-only ad valorem taxes but makes no favorable comment.

General Funds, General Obligation Bonds, Revenue Bonds: are well understood and need not be reviewed here. They are both traditional and modern. The people of Orange County have been showing increasing concern for open space in their rapidly urbanizing area. The administration of Orange County has been showing increasing concern with the revenue gap caused by postponed and also unforeseen costs of growth. A major bond issue to secure a "coast to canyon" greenbelt would, we feel, have an

excellent chance of success if the economics prove reasonable. The recommended Canyon Environmental Design Study would clarify the economic-social-environmental costs and benefits of that portion.

Gifts

'Tis blessed to give, and there are tax advantages too! For insight into the opportunities and complexities of gifts and of foundations, see Guide to New Approaches to Financing Parks and Recreation, National Recreation and Parks Association, pp. 75-83 with particular reference to "unlimited deduction", pp. 81-82, whereby a donor can receive credit beyond the usual 30% limit when his donation is to a public agency for open space, park, recreation purposes.

The key to the gift box is an individual whose specific job it is to secure lands along the corridor for public use and enjoyment, present and/or future, who is familiar with all methods and with the owner's situation enough to know when and how a gift might be "solicited".

The season for giving is all year, every year, and does not stop when land is secured. Development should be managed in such a way that gifts of land, easements, special facilities, materials, and services are always welcome and are actively solicited.

IMPLEMENTATION

ACRES . . . AND DOLLARS

The charts which follow give a detailed acreage analysis of the Plan proposals, area by area and overall.

The Plan as presented is a modest proposal in terms of its goal -- a Santa Ana River-Santiago Creek Corridor Greenbelt -- and the assignment to maximize recreation/open space potential and identify opportunities. Developed land has been excluded. Land fully committed to development has, for the most part, been excluded.

The Plan proposes a greenbelt area of approximately 8,400 acres, or 13 square miles (excluding the Flood Control District channel) along and around 37 lineal miles of River and Creek. The overall breakdown is as follows:

	<u>Acres</u>	<u>Percent</u>
Publicly owned land	2,163	26%
Quasi-public (SAVI, SCE, etc.)	293	3%
Private	5,916	71%
Agricultural	3,165	37%
Gravel pits	805	10%
Vacant	1,562	19%
Marginal	384	5%
	5,916	
TOTAL GREENBELT	8,372	100%
CHANNEL	<u>2,000</u>	approx.
TOTAL GREENBELT-PLUS-CHANNEL	10,372	

The figures are for Orange County only, excepting Green River Golf Course which lies in all three counties. The large and extremely valuable 520-acre ecological preserve in the upper Canyon in Riverside County and the adjacent 75-acre agricultural area in San Bernardino County are vital parts of this coast-to-Prado link of the projected tri-county Santa Ana River Greenbelt Park, "coast-to-crest", which may yet prove the possible dream.

The obvious question is: how much will it all cost? This Plan cannot answer that question. Land costs and private ownership information were specifically excluded from the Consultants' scope of work at the outset due to limited time and funds. Moreover, most areas and projects proposed

in the Plan can be implemented in various ways, as indicated on the Implementation maps and in the report. Difficult as it is to make sound market value estimates, even with time and funds, it is next to impossible to estimate easement costs, leasing costs, and other less-than-fee techniques without actual negotiation. Hence the recommendation for immediate appointment of a Santa Ana River Corridor Coordinator empowered to negotiate, with a revolving fund.

Marginal Lands

At the conclusion of the planning effort, when greenbelt areas and implementation ideas generally acceptable to the planning participants had been worked out, the Planning Department supplied assessed value data for those areas (non-agricultural) designated for acquisition -- acknowledging problems of (1) estimating market value from assessed value and (2) Plan area designations not corresponding to Assessor's parcels. Nonetheless, the assessed value data served as a preliminary check on economic feasibility of some of the areas shown on the Plan. As a result, several were designated "marginal".

Lands designated "marginal" on the Implementation maps are those private lands which, in light of assessed valuation data provided, were judged excessively costly relative to their probable open space/recreation value.

This judgment was made in terms of the overall Plan, its relationships, and the recommended priorities. For example, certain River mouth area lands had values as high as some designated "marginal" but were deemed critical to one of the Plan's great potentials, while a relatively minor node along the narrow channel greenbelt portion was put in the marginal group.

Lands designated "marginal" total 384 acres, with an estimated value (at four times assessed value) of over \$13,500,000, upwards of \$35,000 per acre average.

Marginal lands are retained in the Plan, however, since this preliminary check method is crude. These lands are integral and desirable in the greenbelt scheme and should be secured if possible at reasonable cost.

CORRIDOR GREENBELT TOTALS: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP							TOTAL PUBLIC	QUASI PUBLIC	PRIVATE	SUBTOTAL
	Flood Control	Sanitation	Water District	School Districts	State	Cities	County Parks				
Lower River	18.1	206.8		10.88	307.9	223.7		767.38	30.93	1,022.60	1,820.91
Middle River	52.9		429.84	60.81	31.94	232.87		808.36	26.87	1,247.48	2,082.71
Santa Ana Canyon	16.46					205	265	486.46	235.15	2,315	3,036.61
Santiago Creek				10		92		102		1,330.23	1,432.23
Total Greenbelt	86.46	206.8	429.84	81.69	339.84	753.57	265	2,163.20ac	292.95ac	5,915.31*ac	8,372.46 ac

* The breakdown of the total private land is:
 Totals vary due to rounding.

Agricultural	3,165
Gravel pits	805
Vacant	1,562
Marginal	384

LOWER SANTA ANA RIVER: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP							QUASI PUBLIC	PRIVATE	SUBTOTAL
	Flood Control	Sanitation	Water Dist.	School Districts	State	Cities	County Parks			
Beach Addition		97			38.2 Hwys.			3.93 SCE** 27. SCE** 30.93	79.49 * 46.80 126.29	292.42
River Mouth				10.88		47.7 Wwpt. Bch.			608.5	667.08
Fairview Area	1 ⁺ 17.1				269.7 Hosp.				12.23 * 131.03 143.26	431.06
Industrial Park Area		109.8							11.5 linkage 68.0 along 79.5 channel	189.30
Centennial Park Area						66 Santa Ana			25.12 * 6.00 31.12	97.12
Willowick Golf Course Area						110. Garden Grove			33.93 *	143.93
Totals	18.1	206.8		10.88	307.9	223.7		30.93 ac	150.77 * 871.83 1,022.60 ac	1,820.91 ac

* Marginal Land
 ** Southern California Edison

MIDDLE SANTA ANA RIVER: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP					QUASI PUBLIC	PRIVATE	SUBTOTAL
	Flood Control	Water District	School District	State	Cities			
Alona Park Area					10 Alona Pk. 33 Riverview 43 Santa Ana		19.86* 9.56 off Manchester 29.42	72.42
Anaheim Stadium Area					154 Anaheim Stadium		33.44* 408.39 Agri. 91.70 Sunkist Agri. 533.44 Preserve	687.44
Burris Pit		9.43		19.94 Rt. 57 Frwy.	19.87 Anaheim		138.19 Pits	187.43
Lincoln Taft Area		25.37				26.87 SAVI***	52	104.24
Rio Vista School Area		16.74	13.51				91.64* 9.01 100.65	130.90
Motor Model Minibikes Area		69						69
Warner Basin Area		224.3					10.00* 18.29 28.29	252.59
Lincoln-Glassel Area							113.78 Pits	113.78

MIDDLE SANTA ANA RIVER conti.: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP					QUASI PUBLIC	PRIVATE	SUBTOTAL	
	Flood Control	Water District	School District	State	Cities				
Riverdale School Area			13.3				57.61	70.91	
Crescent-Vista Del Rio School Area			34	12 Rt. 91 Frwy. Surplus	16 Anaheim			62	
La Palma Area							116.60	116.60	
Miller Basin	52.9						70	122.90	
Anaheim Lake		85						85	
Jefferson Linkage							7.5	7.5	
Totals	52.9	429.84	60.81	31.94	232.87	26.87 ac	251.97 Pits 500.00 Agri. 154.94* 340.57 Private 1,247.48 ac	2,082.71 ac	
		808.36 ac							

* Marginal Land
 *** Santa Ana Valley Irrigation Co.

SANTA ANA CANYON: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP			QUASI PUBLIC	PRIVATE	SUBTOTAL
	Flood Control	County Parks	Cities			
Yorba Park Horseshoe Bend Area	16.46			10.15 SAVI***	880 Agri. 270 1,150	1,176.61
Walnut Canyon Golf Course			205 Anaheim			205
Featherly Park Area		265			570 Agri.	835
Green River Golf Course Area				225 SAVI***	595 Agri.	820
Totals	16.46	265	205	235.15 ac	2,045 Agri. 270 Private 2,315 ac	3,036.61 ac
	486.46 ac					

*** Santa Ana Valley Irrigation Co.

SANTIAGO CREEK: ACREAGE ANALYSIS

	PUBLIC OWNERSHIP		QUASI PUBLIC	PRIVATE	SUBTOTAL
	School	City			
Santiago Park		30 Santa Ana		77.89*	107.89
Hart Park Area		21 Hart Park 30 Golf Course 5T Orange		54.54	105.54
Yorba City	10	9 Orange		25	44
Above Newport Freeway				552.8 Pits 620 Agri.	1,172.8
Fisher Park		2.0 Santa Ana			2.0
Totals	10	92		77.89* 552.80 Pits 620.00 Agri. 79.54 Private 1,330.23 ac	1,432.23 ac
	102.00 ac				

* Marginal Land

THE SANTA ANA RIVER CORRIDOR IN THE
REGIONAL OPEN SPACE PICTURE

SCAG's recently adopted Interim Open Space Element contains figures significant to consideration of the Santa Ana River-Santiago Creek Corridor Plan.

The following figures are from three tables showing regional recreation deficiencies currently, in 1980, and in 1990.¹

	<u>1970 Pop.</u>	<u>Acres Req'd.</u> ²	<u>Existing Acres</u> ³
Orange County	1,460,000	8,760	2,489
Los Angeles County	7,206,000	43,236	16,341
	<u>1980 Pop.</u>	<u>Acres Req'd.</u>	
Orange County	2,275,000	13,650	
Los Angeles County	8,313,000	49,878	
	<u>1990 Pop.</u>	<u>Acres Req'd.</u>	
Orange County	2,834,200	17,005	
Los Angeles County	9,839,900	56,339	

The proposed greenbelt is approximately 8,400 acres, excluding the channel. Recreation space would be less than 5,000 acres, of which about one-fifth would be local facilities.

Furthermore, the River cuts right through areas identified as among the ten areas facing greatest density increases in the next two decades. The Anaheim, Buena Park, and Santa Ana areas are also among the ten expected to have highest densities in the entire SCAG region by

¹ Southern California Association of Governments, Interim Open Space Element, Southern California Regional Development Guide, September, 1970, p. 15.

² At a standard of six acres per thousand.

³ Developed and partly developed county and city facilities only.

1990.¹

The Santa Ana River, significantly, is one of only four major rivers identified on the "Open Space Concept Plan". The others are the San Gabriel, Los Angeles, and Santa Clara Rivers. Goals and policies stated in the SCAG Plan are carried out very thoroughly in this Santa Ana River Corridor Plan. In brief, they are:²

- "1. Preserve the physical characteristics of the region. . ."
- "2. Promote open space within the urban areas to provide contrast and relief from the forces and effects of the urban environment . . . exemplified at the regional scale by the Santa Monica Mountains, Santa Ana River flood plain, etc."
- "3. Encourage preservation of productive agricultural land not only for its value in providing food and fiber but also as open space relief from urbanization."
- "4. Urban parks -- promote development of neighborhood and community parks . . ."
- "5. Promote coordination and integration of open space and urban development policies, especially those policies directed at bringing about desired urban growth."
- "6. Preserve and protect historic, scenic, geological, and archeological sites . . ."

The Santa Ana River Corridor Greenbelt is clearly of regional significance and urgency. Ideally, there should be a regional method for implementing such projects, and this may come. Meanwhile, Orange County and its cities have the challenge and responsibility to move ahead before the opportunities are further diminished or lost entirely.

¹ SCAG, Interim Open Space Element, pp. 18-21.

² Ibid. p. 22.

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Orange County Planning Department
Forest Dickason, Planning Director

General Planning Program
Richard E. Ramella, Program Manager

Environmental Planning Division
Participating Staff:

William Laubly, Senior Planner
Bill Cunningham, Project Director
Richard Bailey, Graphics
Brian Greenberg, Research
John Allday, Photography
Gary Voorhest, Cover Design

Prepared by:

ECKBO, DEAN, AUSTIN & WILLIAMS
Landscape Architects, Environmental Planners
7440 North Figueroa Street
Los Angeles, California 90041

Francis H. Dean, Partner-in-charge
Jared Ikeda
Royce Neuschatz

"Dear Sir or Ladies,

In regard to the 'hobo jungle' -- I hope you leave a little spot for them. Because a lot of people ~~think~~ know feel know that S.A. River is a real 'groovy place.' Or being that one likes to get next to nature every once & awhile. So don't make it look too bare when you decide to use your vacuum cleaner. Make it good for hikers, bikes, or generally park. Hope they don't sweep all of the rocks away etc.

"When you's sick at heart -- go forth under the open sky & list to Nature's teaching."

--Anonymous note to Anaheim City Hall, in red ballpoint scrawl on postcard.