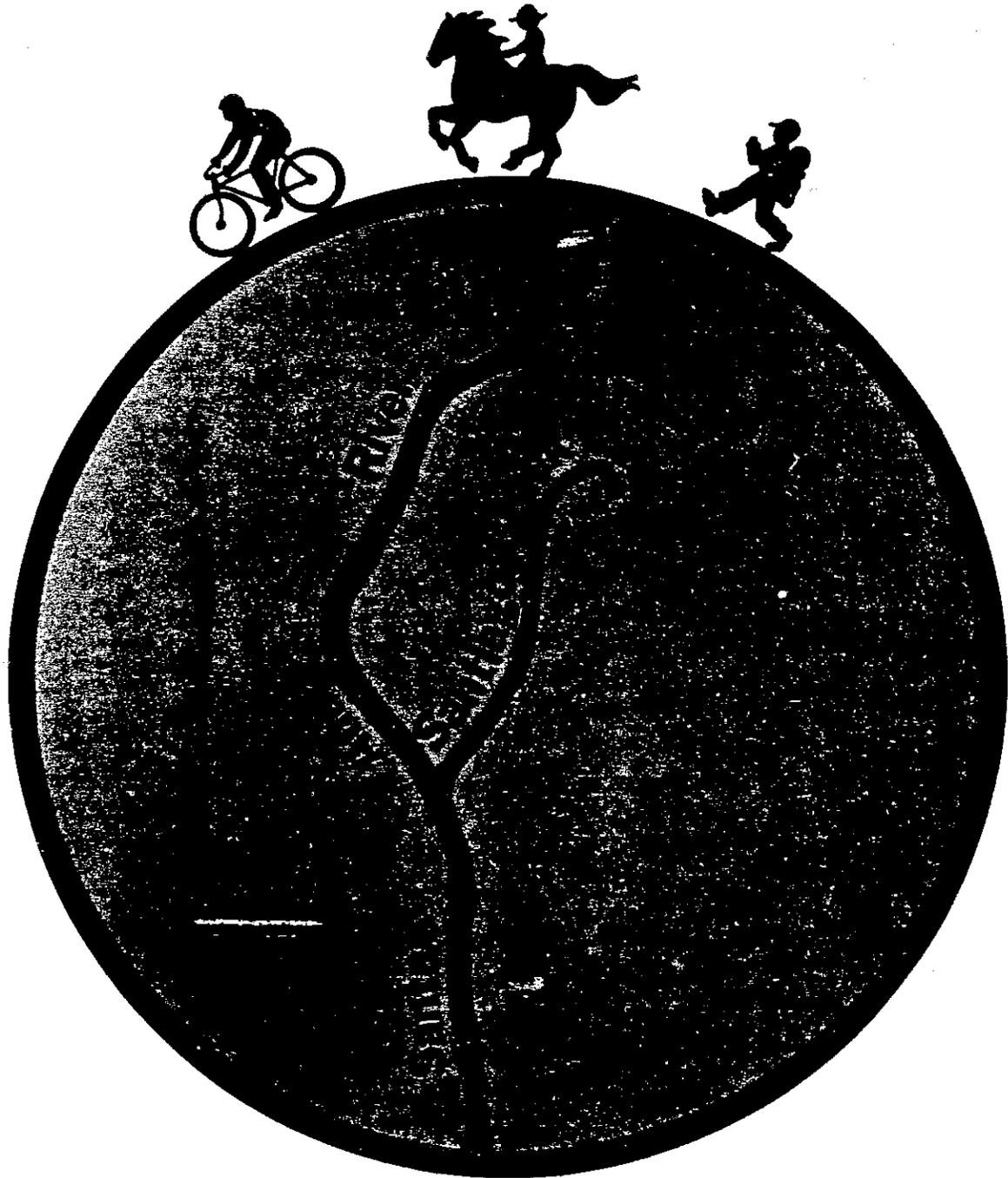


Santa Ana River/Santiago Creek

GREENBELT



IMPLEMENTATION PLAN

THE
SANTA ANA RIVER/SANTIAGO CREEK
GREENBELT
IMPLEMENTATION PLAN

Preparation coordinated
by the
Santa Ana River/Santiago Creek
Greenbelt Commission
1976

SANTA ANA RIVER/SANTIAGO CREEK
GREENBELT COMMISSION
625 North Ross Street, Suite B110
Santa Ana, California 92701

9 September 1976

To: Distribution list

Subject: Transmittal of the Santa Ana River/Santiago Creek
Greenbelt Implementation Plan

It is a pleasure to transmit copies of the Santa Ana River/Santiago Creek Greenbelt Implementation Plan to the public officials of the participating jurisdictions, their respective staffs, and to the members of the Citizen Greenbelt Committees, and others, who devoted so much time towards its development.

This Implementation Plan is a follow on action to the Santa Ana River/Santiago Creek Greenbelt Plan, which has been adopted by the Orange County Board of Supervisors as a Component of the Open Space Element of the County's General Plan. The Greenbelt Plan set a goal of establishing a greenbelt corridor along the river and the creek, and recommended the formation of a separate agency to coordinate the planning and actions for achievement of that goal. This separate agency became a reality in the form of the Greenbelt Commission.

This Implementation Plan has been developed by a multijurisdictional effort under the overall coordination of and in accordance with a procedure prescribed by the Greenbelt Commission. The procedure provided for each participating jurisdiction to prepare its own portion of this Plan within its respective area. Existing facilities have been included and consideration given to the plans of neighboring jurisdictions. Thus, this Plan is a coordinated composite of local plans for greenbelt areas and/or facilities which have been developed by the participating jurisdictions.

The development and publication of this Greenbelt Implementation Plan does not mean that the goal of the Greenbelt Plan has been determined in specific and final detail. This Plan reports the considerable progress that has been accomplished to date, and then describes the plans that currently envision what remains to be done for goal achievement.

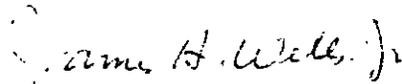
It should be recognized that this Plan, like any plan concerned with an extensive, multijurisdictional project area, must be periodically updated. The updating action will keep this Plan current by the incorporation of changes

based upon lessons learned through past experience and a subsequent determination of refined requirements for the future.

The successful execution of this Plan is dependent, in part, upon the same critical factors which contributed to its development, i.e., the centrally coordinated cooperative efforts of all concerned.

It is therefore recommended that the governing bodies of all participating jurisdictions approve and adopt this Plan for execution.

Very truly yours,



JAMES H. WELLS, Jr.
Chairman

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Santa Ana River/Santiago Creek

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I. INTRODUCTION

The purpose of this publication is to describe the planning, the progress made to date, and the planning for future progress in the development of a greenbelt.

Ordinarily, one thinks of a greenbelt as being the result of a natural occurrence, and not as something that must be developed. Because of its location, the climate, and the changes made in the natural environment by man's increasing presence, this greenbelt is an exception to the ordinary. By planning for the conservation, preservation and enhancement of the remaining natural features and resources, this greenbelt is being developed as a project.

The location of this greenbelt project is in Orange County, California, along the Santa Ana River and Lower Santiago Creek. The climate in this part of Southern California is semiarid and except during the winter months, when there is usually only moderate rainfall, the river and the creek are normally dry. The mild climate and the proximity of the ocean, mountains, and deserts have contributed to Orange County having, during the past twenty years, one of the highest population growth rates in the nation. Much of the residential, commercial and industrial development in support of this population growth has been constructed in the flood plains of the river and the creek. Historical and modern records of events tell us that many times "unusually" heavy rains have caused the river and the creek to rage and overflow their normal channels, therefore, there is justifiable concern for the protection of lives and property. This need for protection has resulted in the construction of various forms of flood control measures which often eliminate or severely alter the natural features of the area that are essential to the existence of a greenbelt.

This gradual elimination of the natural beauty of the river and the creek became a matter of increasing concern to many citizens, who then expressed their concern to their respective elected officials at the city and county levels of government. This citizen action resulted in the preparation of a plan, in 1971, for the purpose of maximizing the recreation and open space potential of the greenbelt corridor along the river and the creek. Then in 1973, a multijurisdictional, separate public agency was established to coordinate the implementation of the plan.

Considerable progress has been made to date. Included in this IMPLEMENTATION PLAN are descriptions of the many greenbelt projects that have been completed, or, are under construction. Also included, are the coordinated plans which have been jointly prepared by the many jurisdictions along the river and the creek for the purpose of making additional progress in the continued development of this greenbelt.

Effective execution of this IMPLEMENTATION PLAN will require periodic updating and refinement to ensure that it includes opportunities for improvements and/or other currently unforeseen changes.

II. BACKGROUND

A. The Santa Ana River

1. General

a. Area of Origin. Near the eastern end of the San Bernardino Mountain Range, San Gorgonio Mountain rises to a height of 11,485 feet. At about the 8,800 foot level, the melting snow from this towering peak and the winter rains converge in the vicinity of Slushy Meadows, above Barton Flats, and form the beginning of the Santa Ana River. The river received its name from the Spanish explorers along the coastal plain who initially believed that it originated in the nearby Santa Ana Mountains.

b. Basin. The Santa Ana is the largest river system in Southern California. Its basin is approximately 3,200 square miles in area and is formed by the San Gabriel, San Bernardino, San Jacinto, and Santa Ana Mountains. The upper basin has approximately 1,100 square miles of mountains and hills, and includes the towering peaks of San Antonio (10,080 feet), San Gorgonio, San Jacinto (10,805 feet), and Santiago (5,680 feet). The lower basin is formed by the Santa Ana Mountains and Chino Hills dropping sharply down into the valley and coastal plain in Orange County. FIGURE 1.

c. Route of Flow. From its area of origin, the river flows down the mountain forming its own beautiful natural course as it begins its 80 miles plus journey to the Pacific Ocean. Near the base of the mountain its course changes to wide and rocky, sandy and narrow, and wide and shallow. Between the cities of San Bernardino and Riverside, the river's course is controlled by levees to protect residential, industrial and other developments. From La Loma Hills to Mount Rubidoux, levees have been constructed to protect the densely populated Riverside area. Downstream of Mount Roubidoux, the river passes through the flat agricultural lands of the middle Santa Ana Valley to the Prado Dam, which was constructed in 1941, following the flood of 1938. Below Prado Dam the river enters Orange County, via the Santa Ana Canyon, and again follows a natural meandering course for approximately 8 miles. From Imperial Highway to the ocean, a distance of about 20 miles, the river flows initially through a series of water spreading basins and then in a south-south-westerly direction through flood control channels.

d. Santiago Creek. Along its route to the ocean, there are numerous tributary streams that flow into the river during the rainy seasons from the surrounding mountains and hills. Santiago Creek has its headwaters in the Santa Ana

Mountains. It initially flows northwestward through Santiago Canyon and then southwestward through the cities of Orange and Santa Ana into the Santa Ana River. In 1963, Villa Park Dam was constructed on the creek at a point approximately 9 miles upstream from the river. This reach of the creek is known as the Lower Santiago Creek and is a major segment of this greenbelt project.

2. Flood Menace

a. Types of Floods. The U.S. Corps of Engineers has defined a flood as "an overflow of lands not normally covered by water and that are used or usable by man." Floods have two essential characteristics: the inundation of land is temporary; and the land is adjacent to and inundated by overflow from a river, a stream, or other watercourse, an ocean, or a lake or other body of standing water. Three types of floods have been defined by the Corps of Engineers as follows:

(1) Intermediate Regional Flood - A flood having an average frequency of occurrence of once in 100 years, although the flood may occur in any year or more than once in any one year.

(2) Standard Project Flood - The flood that may be expected from the most severe combination of meteorologic and hydrologic conditions that is considered reasonably characteristic of the geographic area in which the drainage basin is located, excluding extremely rare combinations. Peak discharges for these floods are generally about 40 to 60 percent of the probably maximum floods for the same basin. As used by the Corps of Engineers, standard project floods are intended as practicable expressions of the degree of protection that should be sought in the design of flood control works, the failure of which may be disastrous.

b. History. The semiarid climate of this area, and the normally dry riverbeds, may easily mislead those who have not seen or otherwise become aware of the ability of the Santa Ana River, and its tributaries, to rage and flood beyond their natural and man-made channels. Evidence of these floods has been found in the records of missions and other sources. The river's course at one time entered Anaheim Bay, and then changed to Newport Bay where the sand deposits formed the Newport/Balboa Peninsula. Perhaps the greatest flood in the area occurred in 1861-62, when much of Orange County became an inland sea. Following a drought that began in 1856, the heavy rains began on Christmas Eve, 1861, and continued until 22 January 1862. There are estimates that the water depth in the Santa Ana Canyon reached approximately

25 feet, and portions of the coastal plain were under 4 feet of water.

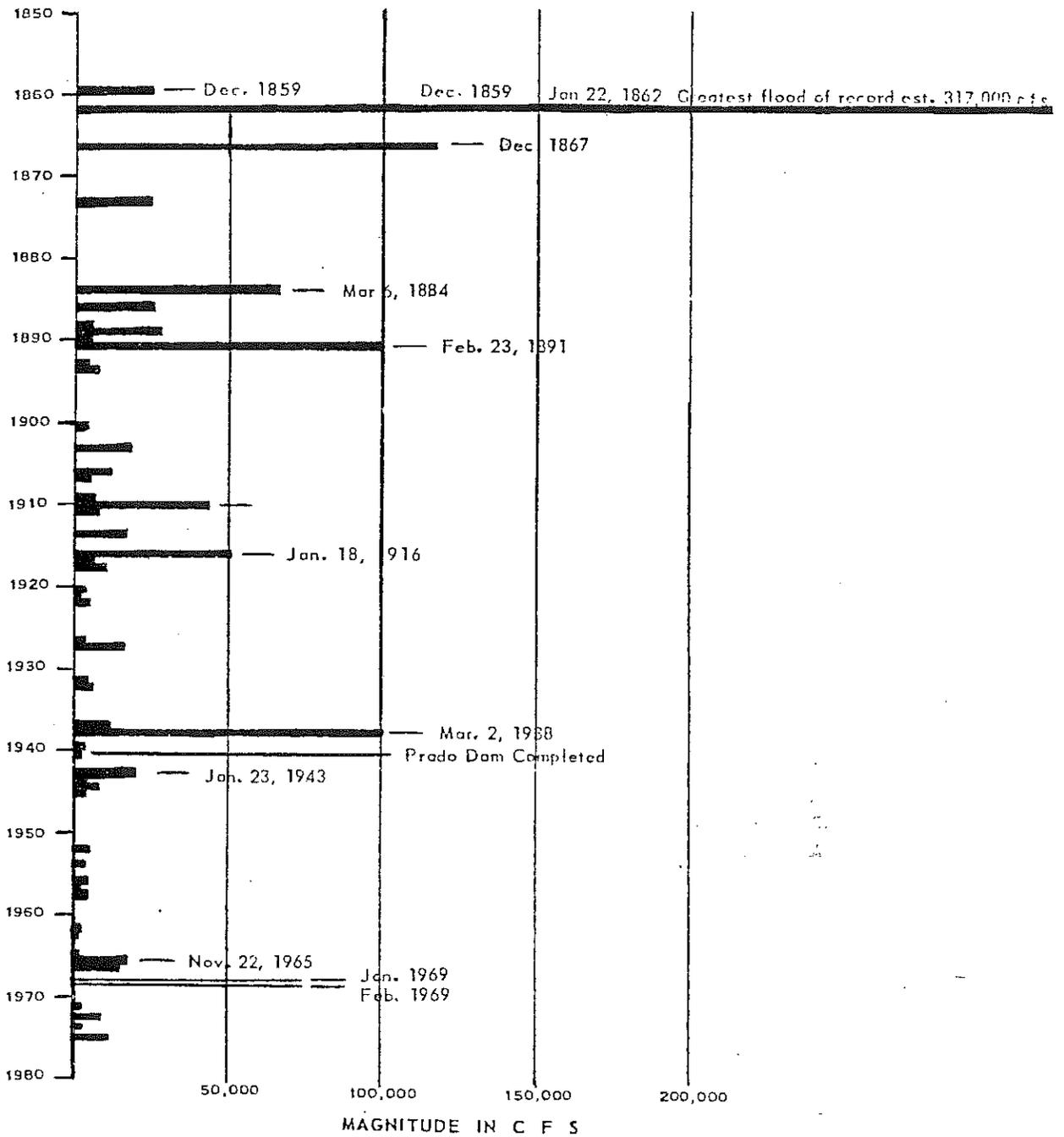
c. Record of Floods. The dates and magnitude of floods occurring in the Santa Ana River Basin, since the year 1850, are depicted in FIGURE 2. The magnitude of a flood's peak discharge is recorded on the graph in cubic feet per second (CFS).

d. Population and Growth in Flood Plain. Since the early 1950's, the population and development growth rate in the Santa Ana River flood plain has been one of the fastest in the nation. Most of the growth occurring in Orange County, before the late 1960's, was centered in the flood plain. The population in the area affected by the potential of a flood has grown from about 198,000 in 1950 to over 1,300,000 in 1970.

e. Potential Flood Loss. The Corps of Engineers has estimated that under today's conditions, the direct damages from a standard project flood in Orange County would total \$3.3 billion, and \$540 million from an intermediate project flood. Hundreds of thousands of homes, thousands of businesses and factories, and hundreds of schools would be inundated by a standard project flood, and because of the problems of achieving timely and complete evacuation, an untold number of lives could be lost.

f. Flood Protection. With the increase of development in the Santa Ana River Basin, there has been an effort to provide adequate flood control and protection for the lives and property within the flood plain. Levees have been constructed and strengthened, and following the disastrous floods of 1938, Prado Dam was completed in 1941. Then, in 1963, Villa Park Dam was constructed to provide protection along the lower reach of Santiago Creek. The floods of January and February 1969 were the most destructive of record in Orange County. Previous floods had greater potential for destruction, but the county was then relatively undeveloped. Rainfall was practically continuous from 18-25 January, and the widespread flooding resulted in the county being declared a national disaster area on 5 February. Then, the storm of 21-25 February culminated in the disastrous flood of 25 February. The graph in FIGURE 2, shows that there have been several other floods of even greater magnitude than that of January and February 1969. The Corps of Engineers has recognized the need for improved flood protection along the Santa Ana River, and during the past several years has developed a plan which includes an additional dam at Mentone (in San Bernardino County), enlargement of Prado Dam and Reservoir, and an increase in the capacity of the flood control channels. The plan was recently submitted to Congress for approval.

INFLOW INTO PRADO RESERVOIR



Record of Floods in Santa Ana River Basin

3. Natural Resource

a. General. For several years there has been a genuine and well-founded concern by certain individuals and organizations that our efforts to provide adequate flood control protection would result in the loss of one of our major natural resources. The river and its tributaries are a source of beauty, as well as an area for the preservation of open space and the natural habitat of native flora and fauna. The river also provides a means for capturing water from rainfall, and through a percolation process our underground water basins are replenished. Thus, millions of dollars are saved annually that would otherwise have to be spent on imported water. The true value of the river may also be realized in the forms of scenic beauty, recreational facilities, preservation of historic and archeological sites, and the conservation of natural materials that are essential to the maintenance and/or improvements of our local economy.

b. Scenic Beauty. From the county line to the river-mouth, the scenic beauty of the river varies considerably. The Santa Ana Canyon is generally recognized as the most beautiful, natural area remaining in the developed portion of the county. The concern for the continued preservation of this beauty has been manifested in several ways. For example: The freeway that traverses the length of the canyon floor has been designated as a "Scenic Highway" by the State of California. In a similar action, the City of Anaheim has established a "Scenic Corridor" for that part of the canyon within the boundary of its city limits. In response to the urging of many citizens, the county and several cities jointly funded the conduct of a study to determine the environmental cost/benefits of various plans for development or non-development of the canyon. Portions of the Lower Santiago Creek are also rich in scenic beauty, and this area was included in the study conducted for the canyon. Most of the remaining areas of the river and creek have been encroached upon by developments and/or mining operations which have eliminated or severely reduced any forms of natural beauty. Some of these degraded areas are being restored or enhanced considerably by greenbelt projects.

c. Source of Water. Because of the semiarid climate and barely 12 inches of annual rainfall, the Santa Ana River has long been a major source of water for those who have settled in Orange County. In the 1920's it became apparent that the demand for water was exceeding the supply available from the river and groundwater. The Metropolitan Water District of Southern California was formed in 1928, and a 242 miles long aqueduct was constructed during the 1930's, with a capability of furnishing a billion gallons per day from the Colorado River to Southern California. In 1933, the Orange

County Water District (OCWD) was formed by an act of the California Legislature to provide for the management and conservation of the groundwater basin, including both quality and quantity of water, and the protection of Orange County's water rights in the natural flows of the Santa Ana River. The OCWD owns and utilizes approximately 750 acres of the Santa Ana riverbed between Katella Avenue and the Imperial Highway for ponding imported water and natural flows of the Santa Ana River. The diverted water sinks into the ground, replenishing the underground basin. The water is then pumped from the underground basin, processed and distributed to users.

d. Santa Ana Regional Interceptor. The quality of the water flowing in the Santa Ana River, in Orange County, has been degraded by sewage plants in upstream cities using the river as a facility in which to discharge secondary effluent. For over 30 years there have been legal battles between Orange County and upstream agencies regarding the quality and quantity of water flowing via the river into Orange County. To solve the problem, the Santa Ana Watershed Project Authority (SAWPA) was formed, and a project was developed to construct an underground interceptor or brine line, which will intercept residential, industrial, and agricultural wastes normally dumped into the river by cities and businesses in Riverside and San Bernardino counties. The wastes will then be transported via the line to the Orange County Sanitation District's treatment plant, in Fountain Valley, for processing prior to being piped into the ocean. The project is planned to be fully operational by 1986, and portions may be in use in 1977.

e. Open Space. The State Legislature has declared that the preservation of open space land is necessary not only for the maintenance of the economy of the State, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources. The river and the creek, and their related green-belt facilities, all contribute to meeting this recognized need for the preservation of open space.

f. Recreation. The demand for recreational facilities is directly related to the increasing population, a higher standard of living and more leisure time for recreational pursuits. The river and the creek help to meet this demand by providing a natural setting for bicycle, equestrian and hiking trails systems, linear parks, water oriented recreational facilities and linkages to other parks and recreational areas.

g. Flora and Fauna. Vegetation along the Santa Ana River varies considerably, ranging from conifer forests and

mixed woodlands in the mountains to an almost total lack of vegetation in lower areas, especially near the coast. In Orange County, the Santa Ana Canyon and upper reaches of the Lower Santiago Creek include a natural riparian growth that provides ideal living conditions for over 200 species of animals and birds. A landscape guide has been published which identifies the trees, shrubs and ground covers that are most likely to thrive in specified zones of climate and soil conditions along the river and creek.

h. Mining. Within Orange County, the output from sand and gravel mining operations along the river and the creek has at times (1972) been the second highest in the state. There are other minerals to be found, especially in the canyon, however, the quantities are apparently not sufficient to allow profitable mining operations. The names of Coal Canyon and Gypsum Canyon, which enter the Santa Ana Canyon, are indications of earlier mining operations in those canyons between the river and the creek.

B. Planning for a Greenbelt

1. Citizens and Government Interest and Actions

a. Tri-County Conservation League. Following a 1964 Pacific Coast magazine article about the success of the Save the American River Association, several citizens formed the Tri-County Conservation League (TCCL), with its headquarters in Riverside. The founders of the TCCL viewed the Santa Ana River as a priceless asset for the residents of three counties through which the river flows. After adopting a goal to "Save the Santa Ana," the TCCL's individual members increased in number to more than 1,000, and soon there were more than 100 supporting organizations. The members began tours of the river, visualizing and identifying the various actions that were needed to not only save the river, but to preserve, conserve and enhance its many natural resources. It was during these tours that once again the long sought dream of a "coast to crest" or "mountains to the sea" trail system was revitalized. It soon became apparent that the need for the preservation of the river was indeed a regional issue, and the league's supporters increased to include members of the governing boards and staffs of the three counties and their cities along the river. By 1969, the concept of a tri-county, joint planning study had been proposed and generally accepted. Subsequent discussions revealed that the study should be conducted by a private firm, and the purpose and scope should include other considerations that would be related to preservation of the river, e.g., recreation, ecology, historical sites, and, in general, a greenbelt. The likelihood of the study qualifying for federal funding for implementation was recognized.

b. Government Actions. On 7 April 1969, the Riverside County Board of Supervisors initiated official action by approving a tri-county joint powers agreement for a proposed Santa Ana River Regional Conservation and Park Study. Included among the provisions of the agreement were the following: Each county would spend an equal sum of money, not to exceed \$6,000 each, for the joint employment of consultants to review the scope and pursue a program of implementation of the study; the study would be coordinated with all agencies having interest in the Santa Ana River; and, the County of Riverside would administer the contract and do the actual hiring, in coordination with the Administrative Officers of the Counties of San Bernardino and Orange. Copies of the agreement were sent to Orange and San Bernardino Counties for execution. Within Orange County the proposed study was staffed by the planning department and referred to the Regional Parks Advisory Team (RPAT) for consideration and recommendation. The membership of RPAT, at that time, included the directors of appropriate county districts and departments, and the State Forest Ranger and County Fire Warden. During a special meeting on 6 March 1970, the team agreed with a recommendation from the planning director that the county should participate in the study, but, because of the importance of the program to Orange County, the degree of participation should be more comprehensive than originally proposed. On 19 May 1970, the Orange County Board of Supervisors approved the awarding of a \$30,000 contract to the firm of Eckbo, Dean, Austin and Williams (now EDAW, Inc.) for the Tri-County Santa Ana River Study. The contract stated that the goal of the study is to plan for the maximization of the recreational and open space potential of the Santa Ana River/Santiago Creek Corridor; and the consultant, among other requirements, must maintain planning coordination with Riverside and San Bernardino Counties, as well as the ten Orange County cities adjacent to the corridor. The proposed tri-county study continued to receive wide and enthusiastic support, including a resolution adopted on 12 June 1970, by the State Park and Recreation Commission. That resolution noted that the Director of the Parks and Recreation had recommended to the U.S. Department of the Interior that federal assistance in the amount of \$1,260,000 be authorized for the project in order to meet the increase in recreational demands in this area of California, and resolved that the Commission fully supported the efforts of San Bernardino, Orange, and Riverside Counties in their acquisition and development plans for the Santa Ana River Basin for park and recreational purposes.

c. Committee of 100. The contract for the completion of the Santa Ana River/Santiago Creek Study required the consultant to provide briefings to cities and other groups on the progress being made, and the completed study. In addition to the staffs of the cities in the study area, many citizen groups were interested in the conduct and results of the

study. A group of citizens from each of the cities formed what became known as the Santa Ana River Study Advisory Committee of 100. Other interested organizations included the UCI - Project 21 Study Team on Preserving Open Space in Orange County; Izaak Walton League; League of Women Voters of Orange County; California Outdoor Recreation League, Inc. (CORL); League of Cities; Sierra Club Angeles Chapter, Orange County Group; Environmental Coalition; homeowners and landowner associations along the Santiago Creek and the Santa Ana Canyon; Girl Scout Council of Orange County; Orange County Section, TCCL; Audubon Society; and the Associated Riding Clubs of Orange County. The members of these organizations supported the greenbelt study in many ways, including touring the river and the creek and providing comments and recommendations to their city staffs, and to the consultants, and later writing and/or appearing before their respective planning commissions and governing boards at the city and county levels. Much of the success of this greenbelt program may be directly attributed to the sincere concern and active personal involvement of many, many private citizens in the cities and unincorporated area of Orange County. At the annual meeting of the TCCL in Riverside, in December 1971, Supervisor Ralph Clark, Fourth District, County of Orange, praised the members and other groups for their efforts in support of the project.

2. Greenbelt Plan

a. General. By Resolution No. 71-724, of 23 June 1971, the Orange County Board of Supervisors approved the Santa Ana River/Santiago Creek Greenbelt Plan as a component of the Orange County Master Plan of Land Use. The Board's resolution contained other provisions in support of the plan, including: announced intention to appoint a coordinator and a council to implement the plan; directed the director of real property services and the county surveyor to conduct a detailed inventory of all public or semi-public lands owned within the study area so that a data base is available for acquisition of recreational and open space land within the area for said plan; and allocated \$500 for printing additional copies for public dissemination.

b. Features of the Plan

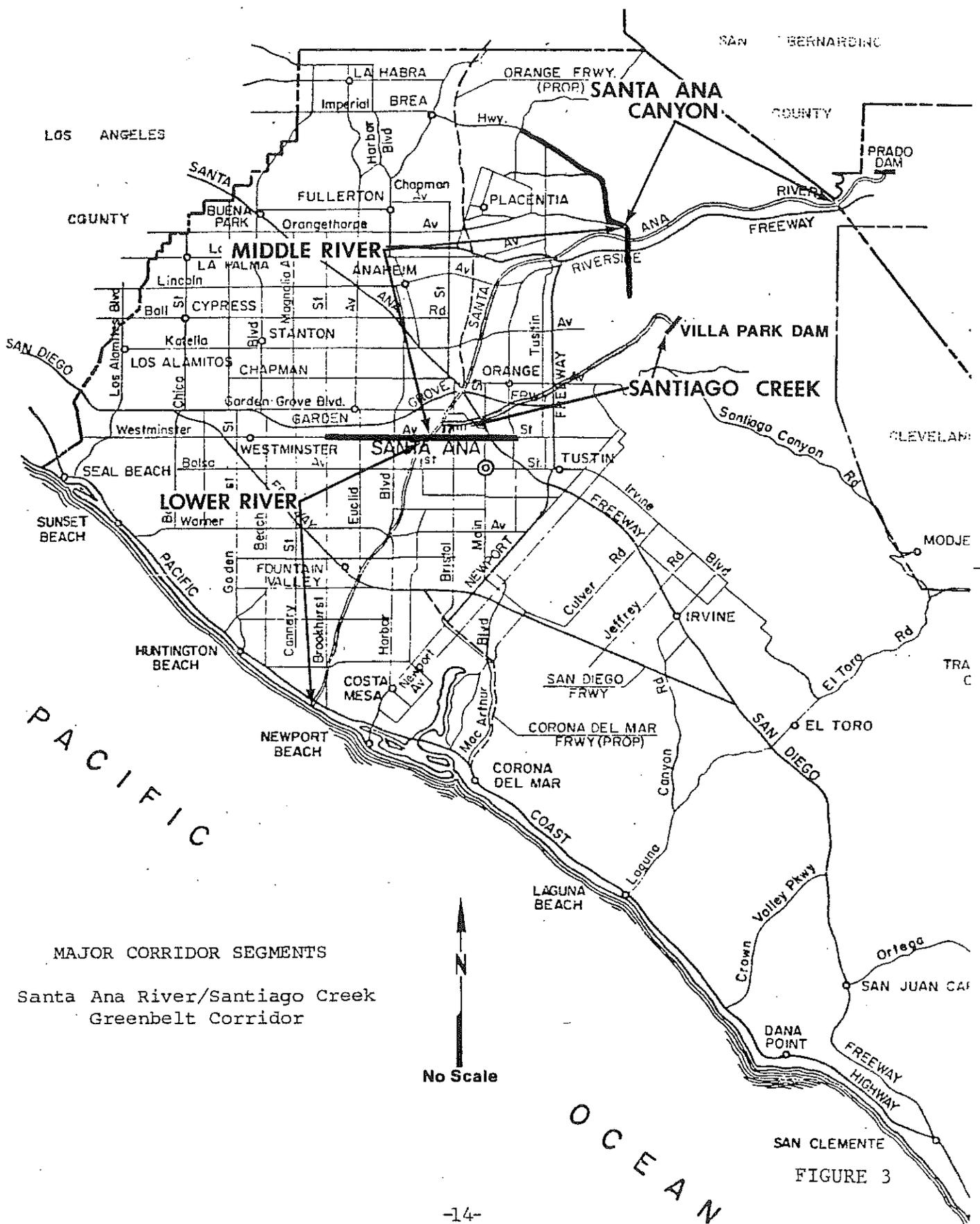
(1) Purpose. The stated purpose of the plan is to maximize the recreation/open space potential of the corridor, in terms of multi-use possibilities and linkages among open spaces in and near the corridor.

(2) Greenbelt Corridor. The greenbelt plan is concerned with the river from its mouth to the county line, and the creek from its confluence with the river to the Villa Park

Dam - a reach of the overall creek known as the Lower Santiago Creek. A greenbelt corridor was arbitrarily defined as being one and one-half miles either side of the river and the creek, except in the Santa Ana Canyon where the corridor is construed as being from crest to crest. The corridor is divided into four segments, i.e., the Lower River, from the rivermouth to 17th Street in Santa Ana; the Middle River, from 17th Street to Imperial Highway; the Santa Ana Canyon, from Imperial Highway to the county line, and the Lower Santiago Creek. The corridor comprises approximately 37 miles of river (27) and creek (10), within which - at the time the plan was prepared - there were over 8,000 acres of undeveloped land, exclusive of the river and creek channels. See FIGURE 3.

(3) Concept. The Santa Ana River/Santiago Creek corridor should be viewed as a linear greenbelt, linking park nodes and significant open spaces by a bicycle, equestrian and hiking trails system. The river look and atmosphere should be saved or restored, as appropriate, with an emphasis on trees, informal space, and quiet contrast to the surrounding urban texture and "busy-ness." The demands for open space and recreation should be balanced according to the potential of the corridor, i.e., some areas of intensive use, some of natural preserve, many in-between. The Santa Ana River/Santiago Creek corridor would be Orange County's link of the "coast to crest" greenbelt along the Santa Ana River.

(4) Principal Proposals. Lower River: Construct trail systems along the levees; develop regional parks at the river mouth (with restored natural estuary - marsh and small boating) and on the state surplus (Fairview) land, possibly linking to Upper Newport Bay; and trail linkages to surrounding areas of greenbelt/recreational interest, e.g., Mile Square Park. Middle River: Continue the trails system and utilize rehabilitated old sand pits for water spreading basins that would be recreationally oriented. Santa Ana Canyon: In its entirety, to be preserved open and natural, retaining riparian ecology, hillsides, and natural river bottom, and without bridges crossing the river to the north side at the freeway access points at Weir, Gypsum, and Coal Canyons. Scenic highway/corridor zoning to be utilized to retain the canyon truly open and scenic. The property at the site of proposed Yorba Regional Park to be acquired, and the trails system extended through the canyon and linked to Yorba Linda via the old canal, and to the Butterfield Trail and Main Divide via Coal Canyon. Santiago Creek: Study flood control needs and feasibility of rehabilitating gravel pits as retention basins and regional parks; extend and link existing small parks along creek; extend trail system along creek and into parks, and preserve and protect hill setting.



MAJOR CORRIDOR SEGMENTS

Santa Ana River/Santiago Creek
Greenbelt Corridor



SAN CLEMENTE
FIGURE 3

c. Implementation. The plan gave recommendations for interim and long range implementation measures, e.g., the appointment of a greenbelt coordinator and an advisory council to expedite and lay the groundwork for the eventual establishment of a joint river agency. The plan viewed the agency as a formal cooperative structure, formed by a joint powers agreement and while not constituting another government, providing the coordination of the many jurisdictions in the corridor as needed for implementation of the plan. The agency would supersede the interim coordinator and council (Note: The agency eventually became a reality in the form of the Greenbelt Commission). Special studies were also recommended for the rivermouth, the Santiago Creek and the Santa Ana Canyon.

d. Distribution and Awards. The number of copies authorized for the first and second printings of the plan were not adequate to meet the demand. The third printing brought the total to 1,700 copies, all of which were distributed by the end of 1975. Requests for the plan were received from all over the United States, Canada, and as far away as Cape Town, South Africa. The excellence of the plan was further recognized in the form of two awards; one from the American Society of Landscape Architects, and the other from the American Institute of Planners.

e. Current Status. On 27 June 1973, the plan was adopted as a component of the open space element of the Orange County General Plan (Reference: Board of Supervisor's Resolution No. 74-1151).

3. Joint Environmental Cost Benefit Study. One of the interim implementation measures recommended in the greenbelt plan was the conduct of studies for specific areas within the greenbelt corridor that may be endangered, from a greenbelt viewpoint, by various forms and methods of development. The Santa Ana Canyon and the Santiago Creek were identified as two areas in need of study. Then, in August 1972, several citizens expressed concern that the growth in these areas may be taking place without a real understanding of its impact on public costs and revenues, public safety, the environment, jobs and low cost housing. The Orange County Board of Supervisors and the City Councils of Anaheim, Orange, and Yorba Linda authorized a joint study of the two areas. The organization for conduct of the study included a steering committee, with the county administrative officer and city managers as members, and a working committee consisting of staff representatives from participating jurisdictions, augmented by a project coordinator. The study was conducted in three phases: Phase I. Development of a manual method for analyzing the public costs and revenues associated with five possible development configurations for the project area.

Phase II. Development of a manual method for analyzing the impact of the alternative developments on non-dollar factors (public safety, environment, and socioeconomic factors) for the same five development configurations. Phase III. "Generalizing" of the model, and its adaptation to electronic data processing implementation. The study was initially in a low budget category, however, in July 1975, a \$30,000 HUD 701 federal grant was received and in June 1976 a "Land Use Decision Model" was completed and published. An additional HUD 701 grant for \$20,000 was received for a FY 1976-77 joint effort by the county and City of Anaheim to demonstrate the model in an application to the Santa Ana Canyon. This application of the model will use updated input for the numerous variables required, and will further prove the validity of the methodology employed in the development of this tool for land use decision making.

III. GREENBELT COMMISSION

A. Establishment

1. Greenbelt Plan Recommendations. Within the plan adopted by the Orange County Board of Supervisors, there is a stated need for the establishment of a joint agency. The plan views the agency as a formal cooperative structure to bring together the fragmented jurisdictions and functions of multiple county and city departments, special districts, state and federal agencies, to treat the river-creek corridor as a unified resource. According to the plan, the agency could be established by a joint powers agreement, and would have the following powers and responsibilities: Interrelate the multiple agencies involved, set and coordinate policies and priorities; 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; raise and 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; share the burden of acquisition or development costs of special regional facilities; raise matching funds toward state and federal grants; finance administrative and staff work, and special studies; respond to opportunities by negotiating and combining related needs, etc.; identifying threats and dealing with them; 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, and rehabilitation guidelines; review and amend or revise the plan periodically, preferably every two years; advise publicly on development proposals, legislative, or other measures that would affect the corridor; tie in to tri-county or basin-wide organization oriented to the river source, or tie in to county-wide organization for open space and other environmental aspects. The plan proposed that the Board of Supervisors appoint a task force to develop such a unified administrative agency, with appropriate financial plans. The agency would then supersede the interim coordinator and council.

2. Board of Supervisors Actions. On 17 August 1971, the Board of Supervisors adopted Resolution No. 71-925 for accomplishment of the following: appointment of an ad hoc committee, consisting of representatives of the Orange County Water District, Orange County Sanitation District, the ten corridor cities, the county personnel and planning departments, county counsel, county director of parks, and the Orange County Flood Control District; submission by the ad hoc committee to the Board of the names of three candidates for the position of

coordinator; and development by the ad hoc committee and the coordinator of a recommendation for the creation of a permanent coordinating council to oversee implementation of the greenbelt plan. Following the selection of a coordinator on 21 December 1971, the Board, by Resolution No. 72-287, on 21 March 1972, approved a greenbelt implementation program that provided for the preparation of a program plan, and the establishment of various committees, including an organization committee for the purpose of defining the functions and responsibilities of a permanent greenbelt organization.

3. Organizational Considerations. The greenbelt plan recommended that the permanent greenbelt organization be established by a joint powers agreement, and function as a formal cooperative structure with specific powers and responsibilities. While the organization committee was developing a definition of the new agency, a suggestion was made, by at least one of the members of the Board of Supervisors, that the greenbelt program be assigned to the Intergovernmental Coordinating Council of Orange County. The organization committee did not agree with this suggestion and completed the drafting of a joint powers agreement for the establishment of the Santa Ana River/Santiago Creek Greenbelt Commission. Copies of the agreement were transmitted to all of the potential members of the new agency and ratification was accomplished on 14 March 1973. A copy of the agreement is provided in APPENDIX A.

B. Organizational Structure

1. General. The agreement for establishment of the Commission was made pursuant to Title 1, Division 7, Chapter 5 of the Government Code of the State of California, which provides for joint powers agreements. The Commission constitutes a separate public agency pursuant to the provisions of Government Code Section 6507.

2. Original Membership. The original membership consisted of the County of Orange, Orange County Flood Control District, Orange County Water District, and the cities of Anaheim, Huntington Beach, Orange, Santa Ana, Villa Park, and Yorba Linda. There were four other cities that were in the project area, and therefore eligible for membership, however, for various reasons e. g., concern that the Commission would constitute another layer of government, they declined to join, initially. The four cities did express their general support for the greenbelt program.

3. Governing Body. Each of the members of the Commission is a public agency having some jurisdiction in the greenbelt project area, and the Commission's governing body consists of a member from each of the governing boards of its membership.

The names of the present and past members of the governing body are listed in APPENDIX B.

4. Bylaws. The Commission has adopted its own bylaws, to govern its functions. A copy of the bylaws is provided in APPENDIX C.

5. Citizen Greenbelt Committees. These committees perform an essential function within the Commission's organizational structure, and contribute significantly to its overall effectiveness. Each commissioner representing a city member of the Commission, nominates a committee of not less than five members to their respective city councils for appointment to the city's Citizen Greenbelt Committee. In many instances the committee members have been active in the greenbelt program for several years, even prior to the establishment of the Commission. The functions and duties of the committees are to: Coordinate and work with the planning staff of their respective city, the Citizen Greenbelt Committees of neighboring cities in the greenbelt corridor, the County of Orange and the Greenbelt Commission in the development of plans for the greenbelt corridor; provide input to the various planning staffs that will represent the desires of the citizens of their respective city regarding greenbelt facilities; and provide information to the citizens of their respective city regarding the status of the planning and development of greenbelt facilities. A Citizen Greenbelt Committee has been appointed by the Board of Supervisors for the unincorporated areas along the greenbelt corridor, and has the same functions and duties as the city committees. A list of present and past Citizen Greenbelt Committee members is provided in APPENDIX B.

6. Staff. The Commission's staff consists of a coordinator, planner, and secretary. The responsibilities and functions of the coordinator are specified in the bylaws - see APPENDIX C.

7. Current Membership. The need for and value of the Greenbelt Commission was recognized by a majority of the citizens and an adequate number of their elected officials; otherwise it would never have been established. Within the organizations of some of the original members there were those who did not share the belief of the majority. By letter dated 19 March 1973, the Clerk of the Council, City of Santa Ana, informed the Board of Supervisors that on 12 March 1973, the City Council had approved membership in the Commission, with a stipulation that the approval was for a trial period of one year ending 30 June 1974. On 25 February 1974, the Santa Ana City Council approved continuance of membership for the following fiscal year ending 30 June 1975. During that year the city staff completed a plan for its portion of the greenbelt corridor and presented it to the Commission on 3 April 1975. On 21 April 1975, the City Council voted to withdraw from the Commission effective 1 July 1975. The city has

continued to cooperate with the Commission in keeping the plan current and working with adjacent jurisdictions in the development of plans for compatible greenbelt facilities. On 9 June 1975, the Newport Beach City Council voted to join the membership of the Commission, effective 1 July 1975. During its meeting on 30 March 1976, and by Resolution No. 76-415, the Board of Supervisors notified the Commission of its intention to withdraw the membership of the county and the flood control district, effective 1 July 1976. On 18 August 1976, and by Resolution No. 76-1267, the Board authorized financial support for the Commission. The cities of Costa Mesa and Fountain Valley have not applied for membership in the Greenbelt Commission, but have authorized their respective staffs to work with the staffs of neighboring cities along the greenbelt corridor, and the Greenbelt Commission, in development of the IMPLEMENTATION PLAN.

C. Purpose, Powers, and Functions

1. General. The joint powers agreement states that its purpose is to establish an agency which will coordinate the general plans and other land use policies and decisions of the contracting parties insofar as they pertain to the project area (greenbelt corridor), with the ultimate objective of providing the optimum amount of open space. The mutual cooperation of the members, in the planning for the appropriate use of land in the greenbelt corridor, constitutes the basis for the common powers to be exercised. It is understood that the power of the Commission to plan for the appropriate use of land in the greenbelt corridor shall not limit the power of any member to zone and rezone property at variance with the recommendations of the Commission.

2. Powers. The Commission has such powers as are necessary to carry out its purpose, including, but not limited to, the power to make and enter into agreements; to incur debts and obligations; to employ necessary personnel, experts, and consultants; to appoint advisory committees; to lease and dispose of office space; to acquire and dispose of personal property; to accept gifts and loans of cash and personal property; and to apply for and accept grants for operating funds, studies and surveys. Any decision or determination by the Commission is advisory, not mandatory, as to any member, except as otherwise provided in the agreement.

3. Functions. The specific functions of the Commission are to review and comment on proposed land use decisions of the members affecting the greenbelt corridor and to conduct studies and formulate plans for the use of the greenbelt corridor with the objective of providing the optimum amount of open space. To allow accomplishment of its specific functions, the Commission must have access to proposed land use documents prior to approve/deny decisions by its members.

All members are required to provide the requisite information in a timely manner.

4. Meetings. The Commission holds regular monthly public meetings to consider and make decisions regarding items of business presented by its staff, members, and other agencies and individuals having an interest in the greenbelt corridor. The date, time, and place of each meeting, and the items of business are published by an agenda, which is mailed to each commissioner and other appropriate addressees by the last day of the week preceding the meeting.

D. Administration and Logistics

1. General. During the early stages of attempting to determine the organizational structure and means of obtaining revenue for operation of the new agency, consideration was given to possibly establishing it as a special district with tax levying authority. There was concern that the new agency, in the form of a special district, would be viewed as an additional layer of government and thus reduce the likelihood of general acceptance and approval.

2. Membership Assessments. The joint powers agreement specifies that contributions in the form of membership assessments shall be made by the members of the Commission to defray its costs of operation. Membership assessments are determined on the basis of the number of acres in the originally defined project area. Each member's portion of the operating budget is determined by dividing the total number of acres the member has in the project area by the total number of acres of all of the members in the project area. The number of acres considered for assessment purposes are updated annually to reflect changes resulting from annexations or acquisitions by another public agency. A list of each member's acreage in the project area at the beginning and end of FY 1975-76, as needed for determination of assessments to meet the FY 1976-77 budget, is provided in FIGURE 4. A list of member's assessments for each fiscal year, from FY 1973-74 through the end of the first quarter of FY 1976-77, and totals thereof, is provided in FIGURE 5. The figure also includes total revenue and expenditures for the same time period.

3. Logistic Support. By Resolution No. 73-745, on 26 June 1973, the Board of Supervisor's approved a request from the Greenbelt Commission for logistic support, at no expense to the county. A budget unit was established by the county administrative officer and auditor-controller to allow the Commission to operate from the county general fund for all procurement, payroll, and other routine expenditures. Members assessments are deposited in a special trust fund and periodic transfers are made therefrom to offset expenditures from the

Santa Ana River/Santiago Creek
GREENBELT PROJECT AREA

MEMBERSHIP ACREAGE CHANGES
(1Jul75 - 30Jun76)

<u>JURISDICTION</u>	<u>Former Acreage</u>	<u>Change</u>	<u>Revised Acreage</u>
Anaheim	11,170	+149	11,319
Huntington Beach	3,414	-	3,414
Newport Beach	560	-	560
Orange	10,858	+197	11,055
Orange County	24,014	-1,135 (1)	22,879
OCFCD	1,295	-55 (2)	1,240
OCWD	929	+135 (3)	1,064
Villa Park	1,303	-	1,303
Yorba Linda	<u>213</u>	+709	<u>922</u>
	<u>53,756</u>		<u>53,756</u>

- (1) 149 (Anaheim) + 709 (Yorba Linda) + 197 (Orange)
+ 80 (OCWD) = 1,135
- (2) 55 (OCWD - Old Santa Ana Regional Park - North).
- (3) 135 (80 Old Santa Ana Regional Park - South + 55
Old Santa Ana Regional Park - North).

MEMBERSHIP ASSESSMENTS/GREENBELT COMMISSION EXPENDITURES

<u>City/ Jurisdiction</u>	<u>FY 74</u>	<u>FY 75</u>	<u>FY 76</u>	<u>*FY 77</u>	<u>TOTAL</u>
Anaheim	\$12,600	\$ 3,250	\$ 7,312	\$ 3,738	\$ 26,900
Huntington Beach	5,000	1,340	2,228	1,116	9,684
Newport Beach	-	-	617	177	794
Orange	15,400	4,019	7,103	3,649	30,171
Orange County	22,200	5,831	15,703	** 6,000	49,734
OCFCD	2,000	532	836	** -	3,368
OCWD	1,000	256	627	354	2,237
Santa Ana	14,800	3,841	-	-	18,641
Villa Park	1,600	473	871	425	3,369
Yorba Linda	600	158	139	301	1,198
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	\$75,200	\$19,700	\$35,436	\$15,760	\$146,096
Interest earned	4,130	4,205	6,783	-	15,118
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total revenue	79,330	23,905	42,219	15,760	161,214
Expenditures	27,876	53,723	53,352	11,836	(146,787)
					<hr/>
					\$ 14,427

* 1st Quarter only

**Assessments for Orange County and OCFCD were \$7,547 and \$408 respectively, however, Board of Supervisors authorized total of \$6,000.

general fund. The logistic support also includes: services by the personnel department (Commission employees are county employees, subject to Commission funding); auditor-controller; tax collector-treasurer; purchasing agent; county counsel; and the provision of office space.

E. Accomplishments

1. General. Although functioning in an advisory capacity, the Greenbelt Commission has been responsible, in whole or part, for many significant planning and actual development accomplishments within or related to the greenbelt corridor. Since it was established the Commission has reviewed and provided comments and recommendations on over 200 proposed changes in land use throughout the corridor. The referrals to the Commission have been in the form of environmental impact reports, use permits, variances, conceptual and specific project plans, tentative tracts, zone changes, general plan amendments, etc. The Commission's comments and recommendations have frequently resulted in the proposed changes in land use being more compatible with or even making a constructive contribution to the overall greenbelt program. The Commission has consistently encouraged and endorsed the development and operation of appropriate greenbelt related facilities by private enterprise, e. g., golf courses, equestrian centers, trail user support functions such as bicycle rentals, sales and repairs, and refreshment concessionaire operations at trail rest stops, etc. The Commission's staff has made numerous presentations to college/university classes, service clubs, civic groups and professional organizations, providing information on the progress made and planned in the greenbelt program.

2. Tri-County Master Plan for Santa Ana River. The efforts made in 1969 and 1970, in support of a tri-county, jointly developed master plan of the river, were unfortunately not successful. On 1 November 1975, the TCCL and the University of California Extension, Riverside, jointly sponsored a one-day conference at the university on the subject "The Santa Ana Basin as a Recreational System." The purpose of the conference was to bring together public officials and citizens from Orange, Riverside, and San Bernardino counties to discuss past and present plans for the river, how well plans are being coordinated and what remains to be accomplished. There were approximately 100 attendees including: members or representatives from the three Boards of Supervisors, TCCL, Corps of Engineers, Orange County Water District, Izaak Walton League, Greenbelt Commission, and the county staffs. Mr. Herbert J. Rhodes, Director, Department of Parks and Recreation, State of California, was present, and he advised the conference that of the 48% of the state's parks and recreation funds allocated to Southern California projects, only 22% were spent. He suggested that the three counties enter into a joint powers

agreement for the coordinated development of a master plan for the river. During its meeting on 8 January 1976, the Greenbelt Commission adopted Resolution No. 76-101, recommending that the Boards of Supervisors of the three counties enter into a joint powers agreement which will provide for the coordinated development of a master plan for the conservation of the natural resources and enhancement of the recreational potential of the river. The resolution was transmitted to each of the three Boards. Although a joint powers agreement has not been entered into, staff meetings, under the direction of the three Boards, have been held on 24 May, 14 June and 15 July 1976, for the purpose of jointly developing a master plan for the river.

3. Special Studies. The Commission has participated in membership on a number of committees and special task forces with an objective of developing and/or improving various aspects of the greenbelt, e. g., Technical Task Force for the Rehabilitation of Sand and Gravel Pits; Committee for the Development of Trails for the Orange Park Acres, Cowan Heights and El Modena Area; Lower Santiago Creek Task Force; and the City of Orange Equestrian Trails Committee. The Commission also provided membership and administrative support to the Joint Environmental Cost/Benefit Study, for development of the Santa Ana Canyon and Santiago Creek land use decision model.

4. Recognition. In response to a directive from the Board of Supervisors, the Citizen Direction Finding Commission (CDFC) conducted an evaluation of Orange County committees, boards and commissions regarding their performance of duties and whether they are needed. In its report (dated 8 May 1975) to the Board, the CDFC divided the groups evaluated into seven categories, number one of which was described as: "Groups which are needed and determined to be performing in a satisfactory manner." In addition to rating the Greenbelt Commission in category number one, the CDFC reported that of the 35 groups rated, the Greenbelt Commission achieved the fourth highest grade in "quality of response to the private citizens needs." During its annual awards presentation meeting on 19 December 1975, the Orange Section of the American Institute of Planners presented a "Certificate of Recognition" to the Greenbelt Commission for excellence in planning as exhibited in the Santa Ana River/Santiago Creek Greenbelt Plan and Program. A summary of accomplishments in the greenbelt corridor, with Greenbelt Commission relationship, is provided in APPENDIX D.

IV. GREENBELT IMPLEMENTATION PLAN

A. General. The Santa Ana River/Santiago Creek Greenbelt Plan's recommendations for interim and long range implementation measures included the appointment of a river plan coordinator and the eventual establishment of a joint River Agency (now the Greenbelt Commission). The reason for these recommendations was the recognized need for overall coordination of the many jurisdictions in the project area, in the actual implementation of the basic greenbelt plan. Prior to the establishment of the Greenbelt Commission, and for some time thereafter, an effort was made to centrally prepare project plans for the various segments of the greenbelt corridor. Progress was made in the form of funds appropriated for greenbelt purposes, completed sections of trails, land acquisitions for parks, and multijurisdictional agreements for the development of various greenbelt projects. It became apparent to the Greenbelt Commission, however, that the overall progress of implementation could be expedited, and the likelihood of acceptance of related plans enhanced, if, the plans were developed by the individual jurisdictions for their respective portions of the greenbelt corridor. In August 1975, the Commission approved a procedure and time schedule for completion of the various phases that would lead to accomplishment of the objective. The procedure required the combined efforts of the Citizen Greenbelt Committees and the professional staffs of each member jurisdiction, and coordination with the committees and/or staffs of neighboring jurisdictions as well as the staff of the Commission. It was recognized that completion of the plan would require an expenditure of time and effort by the professional staffs in addition to their normal workloads. Therefore, the Commission transmitted a letter to the governing boards of each member requesting that their staffs be directed to complete the development of the plan in accordance with the prescribed procedure and schedule. The cooperation of non-member jurisdictions was also requested. The Commission provided overall coordination in plan development.

B. Procedure. The procedure provides for the development of the plan in four phases, and includes additional guidance.

1. Phase I - Define the physical limits of the greenbelt corridor and a related impact area. The Santa Ana River/Santiago Creek Greenbelt Plan arbitrarily defined the greenbelt corridor as being one and one-half miles either side of the river and the creek, except in the Santa Ana Canyon it was construed as crest to crest. (Note: The "crest to crest" portion of the definition was later affirmed as being the watershed line of the canyon). The joint powers agreement, which established the Greenbelt Commission, used this same definition to describe the project area (or "corridor"). It was recognized that the prescribed limits were a starting point for planning purposes, and there

was a need for the participating jurisdictions to refine the limits to reflect natural, physical features as well as existing and planned facilities within their respective areas of the corridor. Once the corridor was refined and accurately depicted on a map, an impact area would be established in extension of the corridor. The impact area will serve as a transition area and an introduction to the fact that a greenbelt is being approached, and may include natural areas which will provide a visually aesthetic backdrop. The depth of the impact area may vary, and will be a matter of local determination. The need for foresight and thoroughness in completion of this phase is essential since it results in a precise description of the area within which the greenbelt corridor and all of its facilities will be located. In determining the refined limits, consideration should be given to the following: Trails along the river and the creek are the backbone of this entire greenway and recreation system, and thus provide the significant continuous element. Where possible, trails should be planned for construction independent of streets and roads, and bicycle and equestrian trails physically separated. Include property already owned by public agencies; planned or proposed for acquisition or already developed for greenbelt purposes; zoned for mining; located within the flood plain zone; privately owned but planned or being used for recreation purposes; privately owned (undeveloped or developed) and highly desirable for greenbelt use; and property directly visible from the corridor and thus constituting a potential favorable or unfavorable visual impact.

2. Phase II - Within the limits of the greenbelt corridor and impact area described in Phase I, locate and describe specific recreationally oriented facilities and open space areas; depict the route of the trail system and linkages to major facilities within and beyond the corridor; identify projects most suitable for private development, e. g., golf courses, equestrian centers, etc., indicate areas where landscaping is desired along the trail system and approaches through the impact area, and where screening is needed to minimize any adverse visual impacts caused by existing developed areas (The Santa Ana River/Santiago Creek Landscape Guide will be a valuable reference in this effort); and using the prescribed numbering system assign numbers to specific projects.

3. Phase III - Identify current ownership of specific project properties, determine estimated acquisition and development costs, and indicate responsibility for operation and maintenance. The estimated costs may be based on recent experiences with like facilities. Responsibility for operation and maintenance will ordinarily be directly related to ownership, unless otherwise indicated in a lease contract or other form of agreement.

4. Phase IV - Each project should be assigned a priority number which will be used as a guide in the application of funds as they become available for development of the greenbelt corridor. In determination of priority assignments, consideration may be given to the following: Expressed desires of the residents/taxpayers having an interest in the project area; individual project costs versus total funds expected for greenbelt purposes during any given time period; availability of like facilities in the immediate area; and the need for coordination with neighboring jurisdictions in the timely completion of interrelated facilities, e. g., connecting trail system.

5. Definitions of Facilities and Other Areas

a. Trails.

(1) Bicycle. The bicycle trail system should include existing and planned trails, either local or regional; linkages to the trail systems of neighboring jurisdictions; linkages to local parks, schools and other desirable facilities, and the arterial bikeway system.

(2) Equestrian. The equestrian trail system should be depicted as existing and planned.

b. Parks. All parks within a greenbelt jurisdiction's CORRIDOR or IMPACT area should be depicted. Other parks, including regional, nature preserves or others possessing highly desirable facilities, and accessible via an existing or planned trail system, should also be depicted. It is recognized that the following definitions may not be precisely the same as those of all participating jurisdictions, therefore, they are offered as an initial guide.

(1) State. Parks which are owned, operated and maintained by the state. Available facilities should be described, e. g., overnight camping, hostels, etc.

(2) Regional. County parks of sufficient size and offering facilities which attract potential users from the entire county and even from the entire region. These parks ordinarily include an area of 50 to 500 acres and are often located near or outside urban limits.

(3) Nature Preserve. A park area of varying size established for the purpose of preserving such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of native plant or animal communities, and geological features illustrative of geological processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns. Access to these parks is normally limited to designated tour trails marked by signs identifying certain species or areas of valued interest.

(4) Community. Size ranges from 20 to 50 acres and its facilities are designed to meet the recreational needs of many neighborhoods up to a radius of three miles. Facilities may include a tennis complex, swimming pool, community center and off-street parking. School playgrounds and athletic fields which are open to the public after school hours may be included in this and the following category, i.e., neighborhood.

(5) Neighborhood. Size ranges from two to 20 acres and is designed to serve the needs of a neighborhood up to a radius of one-half mile. Facilities may include children's play area, restrooms, storage and recreation office buildings, open turf areas and lighting for night use.

(6) Mini. Size limited from one to two acres and vary in design according to the characteristics and needs of the neighborhood. Facilities may include children's play areas, quiet game areas, landscaping and sports activities.

c. Trail Rest Stops. Where practical these facilities should be part of existing or planned parks and therefore benefit from the resulting cost benefits to be realized in land acquisition, development, operation, and maintenance, and improved security. In some instances these facilities may be provided by private enterprise, e. g., as part of an equestrian center or a concessionaire operation.

d. Trail Park and Ride Facilities. The primary purpose of these facilities is to support the use of the trail system by providing off-street areas where vehicles may be parked and bicycles, children and horses safely unloaded. They and trail rest stops may be combined as one facility.

e. Water Areas. Water conservation facilities will normally be developed, operated and maintained by water districts. In some instances the facilities will be expanded to provide varying degrees of recreational features. Small-craft harbors may be oriented primarily for recreation or combined with a nature preserve.

f. Equestrian Centers. These facilities will ordinarily provide on-site services in extension of the boarding of horses, e. g., riding instructors, training rings, tack shops, etc.

g. Golf Courses. Development of these facilities by private enterprise on leased public land should be encouraged.

h. Open Space. Areas within an urban or rural environment, which are not used for buildings or structures, and may become a place of active recreation, a vista, a watershed, a geologic hazard, a natural resource area, etc. Specific greenbelt

projects may not be visualized for these areas at this time, but it is recognized that the location and nature of these areas are so critical to the integrity of the greenbelt corridor that they must be reserved for future uses that are compatible with the greenbelt concept.

i. Wilderness Area. An area where the earth and its community of life are untrammled by man, where man himself is a visitor who does not remain. It is an area of undeveloped land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which 1 generally appears to have been affected primarily by forces of nature, with the imprint of man's work substantially unnoticeable; 2 has outstanding opportunities for solitude or a primitive and unconfined type of recreation; 3 is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and 4 may also contain ecological, geological, or other features of scientific, educational, scenic or historical value.

6. Project Numbering System. The procedure included a standardized system for numbering projects within the corridor. The system allows identification of individual projects by major corridor segments, as established by the greenbelt plan; as well as the location of projects in relation to their respective jurisdictional boundaries. Each project number includes a three letter prefix followed by three digits. The prefix structure will change in accordance with the location of the project in relation to the segment of the corridor and the jurisdiction. The first of the three digits also changes according to the corridor segment. The last two digits of the project number always remains the same as the project traverses jurisdictional boundaries and corridor segments. The project numbering system is described in FIGURE 6.

7. Map Legends. The procedure provided a legend with samples of symbols to be used to depict the various greenbelt facilities and areas on the Phase I and II maps. The legends used for the Phase I and II maps, in the implementation plan, are provided in FIGURE 7.

8. Project Summary Sheets. Standardized sample formats were provided in the procedure for the preparation of summary sheets that included detailed information pertinent to individual projects. The summary sheet entitled "Summary of Existing/Planned Projects' Current Status," lists each project by number; describes the current and planned use; provides property identification by assessor's parcel numbers, or other description; plus acreage; the zoning jurisdiction and designation; and the ownership and any appropriate amplifying remarks. (Note: In most projects the acreages will be listed

SANTA ANA RIVER/SANTIAGO CREEK
GREENBELT IMPLEMENTATION PLAN

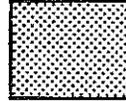
PROJECT NUMBERING SYSTEM

<u>LOWER RIVER</u> = L		<u>SANTA ANA CANYON</u> = C	
Project Numbers: 001-199		Project Numbers: 400-599	
Huntington Beach LHB-001	HB	Yorba Linda CYL-400	YL
Newport Beach LNB-001	NB	Anaheim CAN-400	AN
Costa Mesa LCM-001	CM	County of Orange CCO-400	CO
Fountain Valley LFV-001	FV		
Santa Ana LSA-001	SA	<u>SANTIAGO CREEK</u> = S	
County of Orange LCO-001	CO	Project Numbers: 600-799	
		Santa Ana SSA-600	SA
		Orange SOR-600	OR
<u>MIDDLE RIVER</u> = M		Villa Park SVP-600	VP
Project Numbers: 200-399		County of Orange SCO-600	CO
Santa Ana MSA-200	SA	Orange County Water District SCW-600	CW
Orange MOR-200	OR		
Anaheim MAN-200	AN		
County of Orange MCO-200	CO		
Orange County Water District MCW-200	CW		

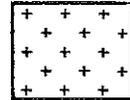
MAP LEGENDS

PHASE I

1. Greenbelt Corridor



2. Impact Area



PHASE II

1. Trails

Bicycle

Existing



Planned



Equestrian

Existing

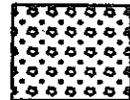


Planned



2. Parks, Trail Rest Stops, Trail Park/Ride Facilities

Existing

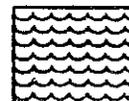


Planned



3. Water Areas: Conservation and/or Recreation
Conservation

Existing



Planned

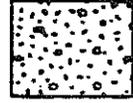


4. Equestrian Centers

Existing

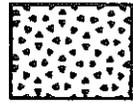


Planned

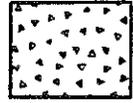


5. Golf Courses

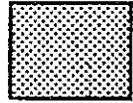
Existing



Planned



6. Open Space



for each assessor's parcel, however, in some instances only the total acreage for the entire project will be provided due to partial parcels and parcels less than one acre being used). The summary sheet entitled "Summary of Projects' Acquisition, Development and Operation Responsibility" also lists each project by number; describes the planned use; identifies the jurisdictions responsible for acquisition, development, and operation/maintenance, and an estimated cost for each; appropriate remarks are also included. The summary sheets for the implementation plan are provided in the APPENDICES.

9. Zoning Designations. The zoning designations used by the participating jurisdictions vary between jurisdictions. An explanation of the zoning designations used in the project summary sheets is provided in APPENDIX E.

C. Greenbelt Corridor

1. General. In 1963, the California Legislature added a section to the Orange County Flood Control Act, that authorized recreational use of district property to the extent that such use will not impair or diminish the requirements for flood prevention and water conservation. By Resolutions No. F63-99 (1963), and F65-9 (1965), the Board of Supervisors authorized the use of parts of the Santa Ana River, and other channels, for horseback riding and hiking. On 29 September 1971, the Board approved an Orange County Bicycle Trails Program; it was recognized that the background of the program would be a bicycle trail along the entire length of the Santa Ana River. By Resolution No. 71-1088, the Board authorized the expenditure of \$100,000 for the purpose of constructing a "pilot" bicycle trail along the Santa Ana River. Then, on 27 June 1972, the Board adopted Resolution No. 72-739 (Implementation of Santa Ana River Corridor Bicycle Trail Operations and Maintenance), which specified the permitted and prohibited uses, hours of use, fees for use by stables, and other administrative and financial requirements concerning the recreational use of the river corridor. These actions, plus the Board's adoption of the Santa Ana River/Santiago Creek Greenbelt Plan, collectively form the legal foundation for the development of a greenbelt corridor, or linear park, along the Santa Ana River. For planning purposes the corridor has been divided into the four major segments shown in FIGURE 3.

2. Trails System. The trails along the greenbelt corridor are the backbone of this linear park and recreation system. The significance of the system was given recognition on 21 September 1976, when the Regional Director, Bureau of Outdoor Recreation, presented the County of Orange with a certificate designating the Santa Ana River Trail as a national recreation trail.

a. Bicycle Trail. Construction of the bicycle trail was started in the Lower River segment of the corridor, and the

first section, from Atlanta Avenue in Huntington Beach to Edinger Avenue in Santa Ana, was completed in the fall of 1972. The sections from Atlanta Avenue down to the Talbert Channel and Brookhurst Street, and from Edinger to Katella Avenues were completed in the fall of 1973. The trail proved to be very popular and in 1974 the monthly usage gradually increased as more people, of all ages, heard about this wonderful recreational system along the river. A counter was installed in the trail on the west levee, just south of Adams Avenue, and in August of 1975, a monthly high of over 35,000 was recorded. The total usage for that year was 331,440. In September 1975, the beautiful Imperial Woods trail segment was completed for the three mile reach from Tustin Avenue to Imperial Highway. In the Canyon, along the Santa Ana Canyon Road and beginning at Quintana Drive (just east of Imperial Highway), there is a striped and signed bicycle lane which continues on to Gypsum Canyon Road, across from the entrance to Featherly Park. Near the entrance to Featherly Park is the beginning of the 2.5 mile trail completed by the State Department of Transportation (CALTRANS). This trail extends to and beyond the county line. All together there is a total of approximately 23 miles of existing bicycle trails or lanes along the river. A new trail is under construction for the four mile reach from Katella to Tustin Avenues, and is scheduled for completion in the fall of 1976. Engineering studies are underway for determination of trail routes along the river from Imperial Highway to Featherly Park.

b. Equestrian Trail. Since the river is normally dry, its channel and levees have been used as a trail by equestrians for many years. On 15 November 1954, County Ordinance No. 715 became effective and permitted horsemen to use the Santa Ana River levee for recreational purposes. On 9 February 1966, by Resolution No. 66-192, the Board of Supervisors designated the east levee of the Santa Ana River, downstream from Santiago Creek, as the Forrest S. Paull Memorial Trail. In its resolution the Board noted that Mr. Paull was an outstanding county equestrian, serving as the first President of the State Horseman's Association, Inc., to be chosen from Orange County, and also that he had made outstanding contributions to state and local equestrian legislation, the county's trail system, and riding activities for and in behalf of the crippled and unfortunate children of the county. The Board authorized the Associated Riding Clubs of Orange County to install a memorial marker to Mr. Paull along the trail. The equestrian trail extends up the river along the levees and presently terminates at the edge of private property in the Santa Ana Canyon, in the vicinity of Weir Canyon. Routing of the trail beyond this point to Featherly Park is under study. The routes of existing trails are marked by signs posted by the county.

c. Rest Stops. The very length of the trails system (eventually 27 miles along the river and another 10 miles along

the creek) requires a number of rest stops. As a minimum, each rest stop should provide water for trail users, restroom facilities, trash containers, bicycle racks, and shaded rest areas. For equestrian use, hitching posts or rails and a means for providing water for horses should be included. Other facilities such as parking areas for trail access, and picnic areas with benches and tables, may be provided where funds are available and/or otherwise feasible. In determining the need and location of trail rest stops, various factors must be considered. The number of and distance between rest stops must be balanced by the costs involved; therefore, an effort should be made to select sites where the lowest possible costs may be realized. These cost factors include: site acquisition; design of the facility, development or construction, and operation and maintenance.

(1) Site Acquisition. Costs for site acquisition may be eliminated by using existing or planned facilities, which are adjacent to or in close proximity, to the Santa Ana River/Santiago Creek trail system. Where rest stops are needed, and park sites are not available, sites on publicly owned land should be incorporated into a plan.

(2) Design. Rest stops should be of a design that blends in with the existing environment and yet is low in cost. Design plans originated or contributed to by volunteer action should be encouraged. Designing of rest stops should also allow facilities to be easily viewed by adjacent roads or streets which are patrolled. This may decrease the likelihood of vandalism.

(3) Development. The use of existing parks will not require additional development costs except possibly for trail linkages. Planned parks will not require any additional funds above those projected for the facility development. Any rest stops that require new construction should incorporate building materials that blend with a natural environment, have a low maintenance cost and are less susceptible to vandalism.

(4) Operation and Maintenance. Restroom facilities located in planned or existing parks will have the lowest operation and maintenance costs due to the availability of committed maintenance personnel. A rest stop that is independent of a park would result in higher maintenance costs than a rest stop located in a park facility. Also, rest stops that are located outside parks are likely to have a higher rate of vandalism, due to less patrolling and fewer people who may be witnesses to such acts.

d. Trail Park and Rides. There is a need for well located facilities along the trail where citizens may park their automobiles and safely unload their children and/or bicycles and

enter the trail system. A like need also exists for equestrian users of the trail who transport their horses by trailer to the greenbelt. The size and locations of these facilities will determine whether or not they should be limited to bicyclists or equestrians, or, a combination of the two groups. These facilities may also be concessionaire operated. A charge for protected parking plus income from the sale of refreshments, etc., may offset the costs of operation and maintenance of the facilities.

e. Trail Linkages to Related Features. The river portion of the greenbelt corridor traverses the width of the entire County of Orange, from its eastern boundary to the Pacific Ocean; and the Santiago Creek branches from the river extending easterly toward the foothills of the Santa Ana Mountains. There are several areas of recreational or greenbelt interest along the corridor's route that may be easily reached by bicycle trails or lanes, and in some instances equestrian trails. Although not a part of the greenbelt, the proximity and accessibility of these related features enhance the greenbelt's overall value.

3. Lower River Segment.

a. General. A tour of the greenbelt corridor may well begin in the Lower River segment, since, near the rivermouth there is a bicycle lane linking the Pacific Coast bicycle trail to the river trails system. The rivermouth is recognized in the Santa Ana River/Santiago Creek Greenbelt Plan as a critical area of the greenbelt corridor, and a recommendation is made that the area be the subject of a special study. In addition to the local jurisdictions, there are several agencies that have shown interest in how various parts of the area may be developed, preserved and/or conserved. The Greenbelt Commission has expressed its concern for the area by recommending in letters to its members, the Corps of Engineers, the Coastal Zone Conservation Commission, and the Southern California Association of Governments, that final planning for the area be a coordinated effort, including representation from all concerned public agencies as well as the private sector. The greenbelt plan's principal proposals for the Lower River segment are described herein in Section II, B, 2, b, (4). The jurisdictions in the Lower River segment have considered these proposals in the construction of projects and development of plans for their respective portions of the corridor. Their projects and plans are summarized as follows:

(1) County of Orange. The County's Master Plan of Regional Parks refers to the adoption by the Board of Supervisors of the greenbelt plan for the Santa Ana River/Santiago Creek Greenbelt Corridor, and lists the projects therein as being in

Priority Group One (1972-1980). The county has made considerable progress towards execution of its portion of the plan, e. g., construction, landscaping, irrigation, and improvements of the river trails system; acquisition of property for Fairview Regional Park; joint planning with other agencies for a bicycle bridge across the rivermouth, and development plans for Fairview and Centennial Regional Parks.

(2) Huntington Beach. The city's portion of the Santa Ana River Greenbelt Implementation Plan was approved by the city council on 17 May 1976. In addition to a revised greenbelt corridor and related impact area, and several projects within the corridor, the plan includes a number of trail linked related features. The city borders the Pacific Ocean, and the Pacific Coast bicycle trail parallels its coastline; thus, the area is very popular for visitors and tourists. Many of the related features are recreationally-oriented and therefore make a significant contribution to the recreational aspects of the greenbelt corridor.

(3) Newport Beach. The city council approved the plan for its portion of the corridor on 12 April 1976. A major project within the city's plan is a "Water-Related Recreation and Conservation Area." It includes a variety of individual projects that are viewed as being collectively appropriate for the several hundred acres of land along the east side of the Lower River segment, near the rivermouth. Newport Beach is also an exceptionally popular area for visitors and tourists, and its recreationally-oriented related features will be accessible to the greenbelt corridor via a linking trail system.

(4) Costa Mesa. The city council authorized its staff to work with the Greenbelt Commission and its neighboring jurisdictions, and on 20 September 1976, the council approved its portion of the Santa Ana River Greenbelt Corridor Implementation Plan. This plan also includes a "Water-Related Recreation and Conservation Area," which has been coordinated as a conceptual continuation of a like project in the Newport Beach plan. One of the many related features enhancing the greenbelt corridor is identified as the "Institutional Open Space Corridor," which is a broad band of approximately 1,250 acres of publicly owned land extending from the river easterly across central Costa Mesa. This corridor is viewed as being developable as a major linkage between the river trails and upper Newport Bay, and the University of California at Irvine.

(5) Fountain Valley. The city's staff was authorized to cooperate with the staffs of neighboring jurisdictions and the Greenbelt Commission in developing a plan for Fountain Valley's area along the west side of the river. A corridor and related impact area were identified, and the routes of an existing bicycle trail and a planned equestrian trail were

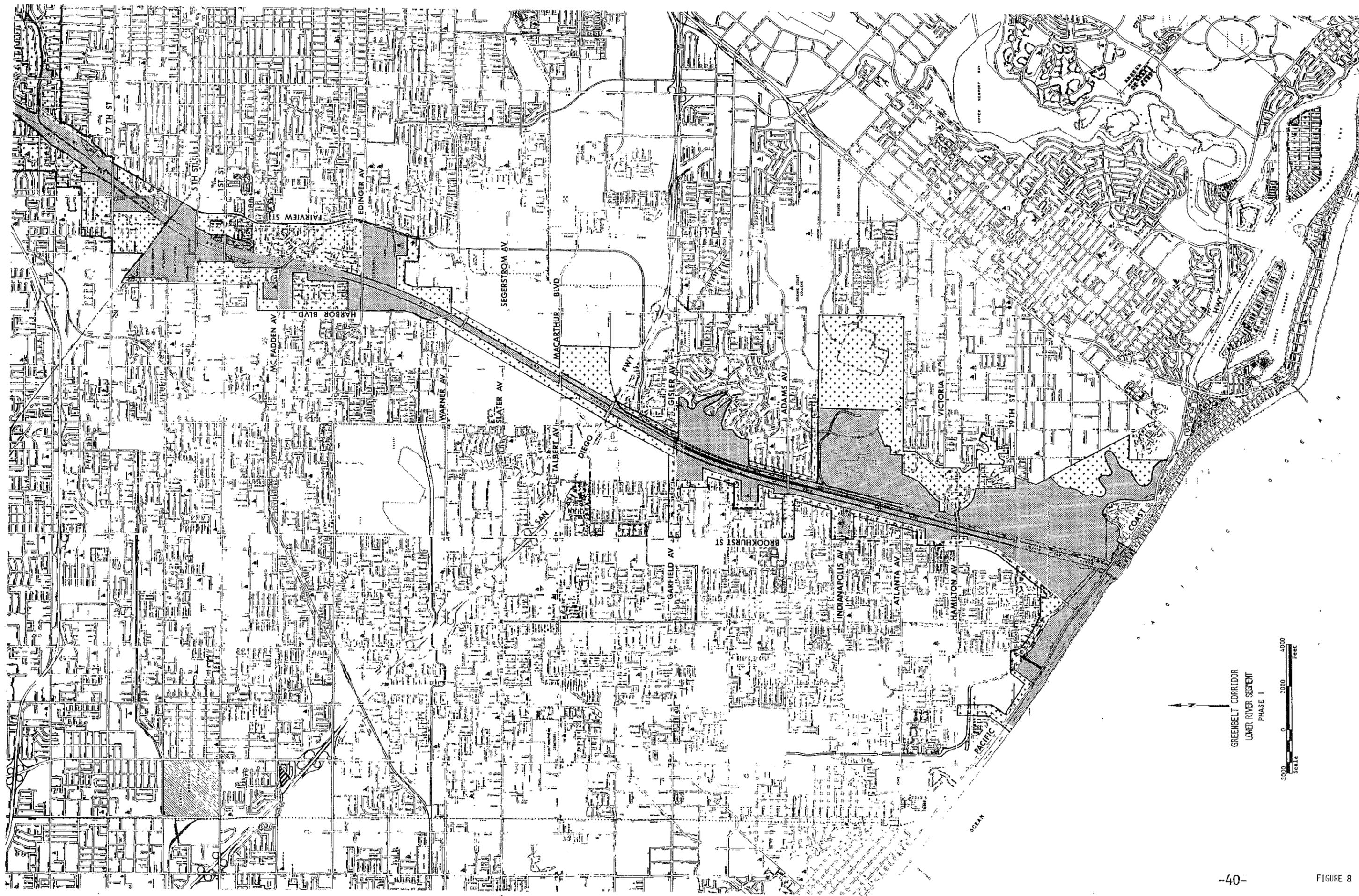
provided, which link the river trails to nearby Mile Square Regional Park.

(6) Santa Ana. The jurisdictional limits of the city are included in the three segments of the corridor, i. e., the Lower River, Middle River, and the Santiago Creek. The city's staff completed a greenbelt plan, which was presented to the Greenbelt Commission during its meeting on 3 April 1975. The plan provides the goals, policies, programs and specific performance and development standards for the future development of a greenbelt park made up of a variety of public and private facilities. By letter dated 7 November 1975, the Mayor of Santa Ana advised the Greenbelt Commission of the city's intention to continue to cooperate in the greenbelt program. The information in the city's plan has been updated, as necessary, for incorporation into this implementation plan.

b. Greenbelt Corridor and Impact Area. The original greenbelt corridor width of one and one-half miles either side of the river, in the Lower River segment, included large land areas of high density residential, industrial and commercial developments. The original boundary also bisected Mile Square Regional Park, and the Civic Center in downtown Santa Ana. Refinement of the corridor to a configuration that was compatible with current general plans, and reality, had to be accomplished by the jurisdictions concerned. The same requirement was true for the related impact areas. A Phase I map of the Lower River Greenbelt Corridor and Impact Area is provided in FIGURE 8.

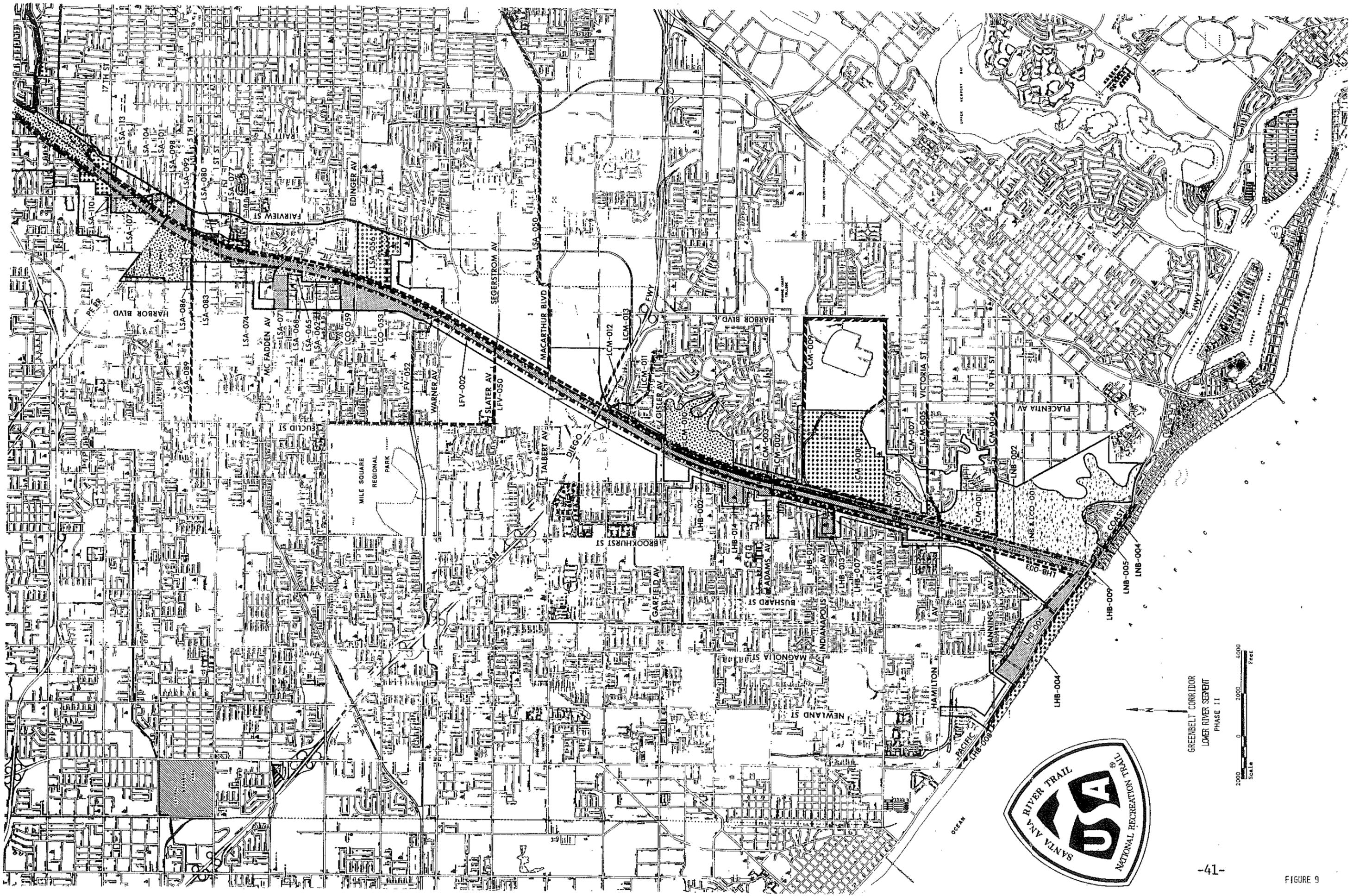
c. Existing, Under Construction, and Planned Projects. A description of the individual projects along the Lower River segment, is provided herein in an order commencing at the rivermouth area and generally progressing upstream. Refer to FIGURE 6 for an explanation of the project numbering system. The system allows identification of individual projects by major corridor segments. The project number does not indicate responsibility for eventual ownership, development, operation or maintenance. Each project's location is shown on the Phase II map in FIGURE 9. Some projects, especially trails, have more than one prefix in their number, because they traverse the boundaries of more than one jurisdiction.

(1) Water-Related Recreation and Conservation Area (Planned. LNB-001; LCO-001; LCM-001): This project area is located along the east side of the river with its northern boundary along the southern edge of the Fairview Regional Park site. The project extends southerly therefrom to the Pacific Ocean, paralleling the Greenville-Banning Channel on its west side and making irregular projections to the east. The specific dimensions of the project area have not yet been determined, however, it is estimated that it will cover approximately 1,000 acres. Within the area the ground elevation ranges from about



GREENBELT CORRIDOR
 LOWER RIVER SEGMENT
 PHASE I





GREENBELT CORRIDOR
LOWER RIVER SEGMENT
PHASE II



5 feet above mean sea level to the top of a 70 foot bluff, and at various times the lowland has been the bed of the Santa Ana River. The area is generally unoccupied except for a producing oil field south of 19th Street. The southern-most portion is a salt marsh providing a natural habitat for three endangered species of birds. The County's Master Plan of Regional Parks views 830 acres of the area as the site for Talbert Regional Park, and would include camping, picnicking, trails, vista point, wildlife area and botanical gardens. The Newport Beach plan includes the following facilities in the project area: Small craft harbors, bicycle, equestrian and hiking trails, rest stop, neighborhood and view parks, play lot, scenic areas, landscaped entry, private development, and rerouting of Pacific Coast Highway. The Costa Mesa plan is conceptually supportive of the Newport Beach plan.

(2) Equestrian Trail (Existing. LHB, LNB, LCM, LFV, LSA-002): This equestrian trail is located on the east and west levees and is continuous for the entire length of the Lower River segment of the corridor. In addition to several stables located alongside the river levees, access points to the trail are at the following streets: Brookhurst Street and Talbert Channel in Huntington Beach; Hamilton Avenue/Victoria Street; Atlanta Avenue (west levee); Adams Avenue; Talbert Avenue/MacArthur Boulevard; Slater/Seegerstrom Avenues; Warner Avenue; Harbor Boulevard; Edinger Avenue; McFadden Avenue; 1st Street; 5th Street; Fairview Street, and 17th Street.

(3) Bicycle Trail (Existing and Planned LHB, LCM, LSA-003): The existing portion of this trail begins on the west levee, approximately 100 yards north of the Pacific Coast Highway bridge, and continues northerly thereon to Adams Avenue where it crosses to the east levee, and then continues upriver to 17th Street. A trail is planned to extend southerly along the east levee from Adams down to an extension of 19th Street. Immediately south of Adams Avenue, there is an automatic mechanical counter built in to the bicycle trail on the west levee. The trail is constructed of asphalt and the width varies from 8 to 10 feet depending upon the width of the levee and space available for the parallel equestrian trail and maintenance road. Street identification signs are posted on all bridges crossing the river. Access to the trail is available at all street crossings listed for the equestrian trail, plus, Lebard Park (Huntington Beach); Suburbia Park (Costa Mesa); Centennial Park (Santa Ana), and Spurgeon Intermediate School in Santa Ana.

(4) Neighborhood Park (Planned. LNB-004): The project site consists of approximately 11 acres located east of the river and south of the Pacific Coast Highway. The planned name is West Newport Park, and construction is expected to commence soon.

(5) Huntington State Beach Development (Planned. LHB-004): This project site is located west of the rivermouth on the beach side of Pacific Coast Highway, and will be an expansion and redevelopment of existing facilities on the state beach.

(6) Primary Highway and Bicycle Lane (Planned. LCM-004): The Master Plan of Highways calls for an additional river crossing at the extension of 19th Street and Banning Avenue, and the Master Plan of Bikeways (Costa Mesa) includes a proposed bicycle lane in conjunction with this extension to provide an additional access point to the greenbelt corridor.

(7) Bicycle Trail (Planned. LNB-005): This trail will parallel the ocean side of Pacific Coast Highway and provide a linkage between West Newport Park (LNB-004) and the river bicycle trail (LHB-003).

(8) Santa Ana Rivermouth Open Space Development (Planned. LHB-005): This project is located west of the river and north of Pacific Coast Highway and includes approximately 38 acres of state owned property and 45 acres of private property. It is an existing and restorable marsh and wetlands area of open space, and has an excellent potential as a habitat site for endangered species, plus, a nature preserve, and areas for recreational uses in support of beach activities.

(9) Primary Highway and Bicycle Lane (Planned. LCM-005): The Master Plan of Bikeways (Costa Mesa) includes a proposed bicycle lane on Victoria Street. This will provide an additional access point to the greenbelt corridor.

(10) Trail Landscaping (Planned. LHB, LCM, LSA-006): The southern-most portions of the Lower River segment are practically devoid of natural and appealing vegetation. This project will provide landscaping along the existing and planned bicycle trails in the Lower River segment.

(11) Bicycle Trail (Existing. LHB-007): This is a bicycle trail link between Lebard School and Park, and the river trail. Although only about 200 feet long, it is a monument to the interest and enthusiasm of the citizen's for the greenbelt program. The trail link was actually constructed by high school students from Estancia High School in Costa Mesa, who were assisted in many ways, including money and materials donated by members of a homeowner's association, a contractor, school children, and by the expertise from the public works personnel of Huntington Beach. Over 12,000 plastic bottles were collected, ground-up, and mixed with the cement as part of the student's ecological project to find a way to better dispose of materials that are normally non-recyclable. The students and supporters completed construction of the trail link to the base

of the levee in June 1974, and in October, the Board of Supervisors authorized construction of the final link up to the top of the levee and the river trail. The linkage allowed access to the park and its recreational and restroom facilities, and thus provided the first rest stop for the thousands of users of the river trail.

(12) Vista Park (Existing. LCM-007): This 6.3 acre park is located north of Victoria Street on the bluffs overlooking the river and adjacent lowlands. The park is linked to the river trails by LCM-005.

(13) Pacific Coast Highway Bicycle Trail (Planned. LHB-008): This trail will parallel the ocean side of Pacific Coast Highway, and extend from Brookhurst Street to Beach Boulevard. It will thus contribute to the two-way access between the river trail and the related features in Huntington Beach.

(14) Fairview Regional Park (Planned. LCM-008): The project site is located in Costa Mesa, along the river, south of Adams Avenue and west of the Costa Mesa Golf and Country Club. The major portion of the project's 285 acres is owned by the county (253.15 acres) and the remainder by the city. The Harbors, Beaches and Parks District (HB&PD) is currently acquiring the county's portion with 20 annual payments of \$290,157 each. Preliminary plans and a draft environmental impact report (EIR) have been completed, and indicate the park is planned primarily as a scenic greenbelt and archaeological preserve rather than as a conventional urban recreational park. Planned land uses include a nature study area (117 acres), wilderness area (18 acres), aquatic features (15 acres), meadow areas (14 acres), family activity facilities (103 acres), and circulation and parking (18 acres). Development will be phased, and Phase I may be completed in 1977 at an estimated cost of \$2.9 million. Future development phases will result in the total project cost exceeding \$5 million, which will be in addition to the acquisition and operating costs. In April 1976, the Board of Supervisors authorized the negotiation of an agreement with the City of Costa Mesa concerning the acquisition, development, maintenance and operation of the park.

(15) Bicycle and Pedestrian Bridge Crossing at Rivermouth (Planned. LHB-009): The existing Pacific Coast Highway bridge is too narrow for a bicycle lane and a county ordinance prohibits the riding of bicycles on the bridge. Pedestrians may legally walk their bicycles between the city limits of Huntington Beach and Newport Beach along the south side of the bridge, but not along the north side. The State Department of Transportation (CALTRANS) and the county have held meetings and corresponded to develop plans and agree to joint funding for construction of a separate bicycle bridge on the ocean side of the highway.

(16) Bicycle Trail Loop (Planned. LCM-009): This proposed bicycle trail loop will allow transit from the river trail through Fairview Regional Park, Costa Mesa Country Club, and Fairview Hospital.

(17) Upgraded Bicycle Trail Linkages to River Trail (Planned. LHB-010): This project provides for the upgrading of various trails in Huntington Beach that link to the river trail. Because of the general nature and varied locations of the project, it is not depicted on FIGURE 9.

(18) Golf Course (Existing: LCM-010): The Mesa Verde Country Club and Golf Course includes 143 acres of attractive visual open space along the east side of the river and adjacent to the river trail.

(19) Trail Signing (Planned. LHB-011): This project will provide signs along the trails in Huntington Beach leading to the river trail.

(20) Bicycle Lane (Planned. LCM-011): The Costa Mesa Master Plan of Bikeways includes a proposed bicycle lane on California Street, providing access to the river trail at Suburbia Park.

(21) Lebard Park (Existing. LHB-012): This five acre park is alongside the west river levee, and south of Adams Avenue. It is linked to the river trail by LHB-007, and its facilities (restrooms, water, picnic tables, barbecues, tennis courts, and bicycle racks) provide an excellent rest stop for bicyclists on the river trail.

(22) Suburbia Park (Existing. LCM-012): This two acre park is located in Costa Mesa, immediately south of the San Diego Freeway and adjacent to the river trails on the east levee. Limited rest stop facilities (water) are available.

(23) Lebard School (Existing. LHB-013): This elementary school in Huntington Beach is linked to the river trail by LHB-007.

(24) Bicycle Lane and Trail (Planned. LCM-013): The planned bicycle lane will be located on South Coast Drive, Hyland Avenue, and Sunflower Avenue. The lane will connect to a bicycle trail to be constructed adjacent to and north of the San Diego Freeway, and then link to the river trail.

(25) Arevalos School (Existing. LHB-014): This elementary school is immediately north of Adams Avenue and adjacent to the equestrian trail on the west levee. A bicycle trail link to a northerly extension of the bicycle trail now ending on the west levee at Adams Avenue, would allow students to use the river trail for commuting.

(26) Golden Loop Bicycle Lane and Trail (Planned. LSA-050): The City of Santa Ana plans to start construction soon on the "Golden Loop" combination bicycle trail and lane. The "Golden Loop" will be approximately 8.3 miles long and will connect the river trail (at MacArthur Boulevard) to the Santiago Creek (at Santiago Park).

(27) Bicycle Lane (Existing. LFV-050): This striped and signed bicycle lane connects the river trail to Mile Square Regional Park via Slater Avenue and Euclid Street.

(28) Equestrian Trail (Planned. LFV-052): The City of Fountain Valley is planning construction of an equestrian trail from the river trail on the west levee to Mile Square Regional Park, via an offstreet route and generally following the Ocean View flood control channel.

(29) Camping Area (Planned. LCO-053): The City of Santa Ana's Greenbelt Plan includes a project for camping areas along the west levee river trail. The project site is on property presently in the county's unincorporated area, south of Edinger Avenue, east of Harbor Boulevard, and north of Warner Avenue.

(30) Centennial Regional Park (Planned. LSA-056): The site for this planned 100+ acre regional park is adjacent to the east levee and south of Edinger Avenue in Santa Ana. On 14 January 1976, the Board of Supervisors, executed an agreement with the City of Santa Ana for development, operation and maintenance of the park, and selected a landscape architectural firm to develop a plan. The City of Santa Ana has provided a water fountain on the park site property adjacent to the river trail, and a bicycle trail link to a small park on the east end of the property that has restrooms and athletic fields, thus providing another rest stop for bicyclists using the river trail.

(31) Stadium (Planned. LCO-059): The City of Santa Ana Greenbelt Plan envisions a stadium constructed on approximately 17 acres of land presently in the unincorporated area of the county, adjacent to the west levee and north of Edinger Avenue. Acquisition of the property and operation of the stadium would be by the city, with a total project cost of \$1,304,800.

(32) Equestrian Centers (Planned. LSA-062 & 065): Within the City of Santa Ana Greenbelt Plan there are two equestrian centers contiguously located along the west levee, with the city limits on the southern boundary and McFadden Avenue on the north. The southernmost center would consist of approximately 15 acres and the northernmost would be almost 8 acres. Property acquisition, development and operation, would be entirely by private enterprise, at a total cost of \$1,374,300 (LSA-062) and \$1,100,000 (LSA-065).

(33) Polo Fields & All-Purpose Areas (Planned. LSA-068 & 071): On the western boundary of the equestrian center immediately south of McFadden Avenue, the City of Santa Ana Greenbelt Plan proposes two combination polo fields and all-purpose areas. LSA-068 will be on approximately 13 acres, and land acquisition, and facility development and operation will all be by the city, at a total cost of \$960,000. Some operating costs may be defrayed by lease contracts. LSA-071 will be contiguous to the western boundary of LSA-068 on approximately nine acres. Land acquisition and development will be accomplished by the city, however, operation will be by private enterprise. Total cost to the city is estimated to be \$683,200.

(34) Equestrian Centers (Planned. LSA-074 & 083): There are two more equestrian centers proposed in the City of Santa Ana Greenbelt Plan that share 1st Street as a common boundary. LSA-074 is along the west levee, between McFadden Avenue on the south and 1st Street on the north. The plan proposes that private enterprise acquire the 15 acres and develop, operate and maintain the facility. LSA-083 is also along the west levee, with 1st Street on the south and 5th Street on the north of its 17 acres. This project will also be completely accomplished by private enterprise.

(35) Parks and Recreation (Planned. LSA-077 & 080): These two park sites are shown in the City of Santa Ana Greenbelt Plan adjacent to the east levee and lying north and south of 1st Street. Land acquisition, development, operation and maintenance will be entirely by the city. LSA-077 will consist of 13 acres immediately south of 1st Street, and LSA-080 will include 11 acres between 1st and 5th Streets. Their total costs will be \$1,185,300 and \$974,700 respectively.

(36) Campesino Park (Existing. LSA-086): This 8.6 acre park is located west of the river and north of 5th Street. Recently completed, the City of Santa Ana accepted maintenance responsibility on 10 September 1976. Originally named Harper Park, the city council has changed the name to "Campesino" in recognition that the site was formerly used as a campground by travellers along the river and through the area. Phase I facilities include: Restrooms, soccer and softball field, basketball and volleyball courts, playground and sandlot, picnic area, and a parking lot. Phase II will include a recreation building with food serving facilities.

(37) Bicycle Lane (Planned. LSA-089): This striped and signed lane along 5th Street is planned to link the river trail from Euclid Street (west of the river) and Raitt Street (east of the river). Linkage will also be provided to Campesino Park.

(38) Bicycle Linkage (Existing. LSA-092): This link connects the western boundary of the Spurgeon Intermediate School's playground to the bicycle trail on the east levee. Students have ready access to the trail for recreation and offstreet commuting.

(39) Willowick Golf Course (Existing. LSA-095): This 18 hole golf course is located along the west levee between 5th Street and the Pacific Electric Railroad right-of-way. The course is leased by the City of Garden Grove to private enterprise for operation. The 101 acres constitute an attractive open space enhancement to the greenbelt corridor.

(40) Parks (Planned. LSA-098 & 101): The City of Santa Ana Greenbelt Plan includes two city parks along the east levee, generally located north of the Pacific Electric Railroad right-of-way, and west and south of Fairview Street. LSA-098 is the southernmost of the two and includes approximately 30 acres, while LSA-101 is slightly over two acres in size. Both parks will be city acquired, developed, operated and maintained, and are estimated to cost \$2,200,000 and \$205,000, respectively. It is likely that these projects are in the long range category since the site of LSA-098 is presently occupied by an active commercial business, and a tract map is being processed for the LSA-101 site.

(41) Bicycle Lane (Planned. LSA-104): The City of Santa Ana plans a bicycle linkage to the river trail from the intersection of 5th Street and Fairview Street, via Fairview Street.

(42) Stables (Planned. LSA-107): The City of Santa Ana Greenbelt Plan proposes a privately operated stable on 11.73 acres of city-owned (to be acquired) land, west of the river and south of 17th Street.

(43) Accessory Commercial Uses (Planned. LSA-110): The site of this project, in the City of Santa Ana Greenbelt Plan, is located generally west of the river and south of 17th Street, and adjacent to the site of LSA-107. The plan indicates that this 6.2 acre site will be used for private operation of commercial centers servicing greenbelt attractions.

(44) Park (Planned. LSA-113): This 3.1 acre park is included in the City of Santa Ana Greenbelt Plan as city-owned and operated, and located east of the river and south of 17th Street. Total cost is estimated to be \$280,000.

d. Summary of Projects' Current Status. The project summary sheets for the Lower River segment, listing each project by number and indicating the current and planned use of the project's property, assessor's parcel numbers and acreage, zoning, and ownership, are provided in APPENDIX F. Supplementary information for Newport Beach projects is in APPENDIX G.

e. Summary of Projects' Acquisition, Development, and Operation Responsibility. The project summary sheets for the Lower River segment, listing each project by number, and indicating the planned use and the jurisdictions responsible for property acquisition, project development, and project operation/maintenance, and the estimated costs for each, are provided in APPENDIX H.

f. Planned Project Priorities. Each jurisdiction has assigned a priority number or category to the planned projects in the Lower River segment. A summary of the project priority assignments, by each jurisdiction, is provided in APPENDIX I.

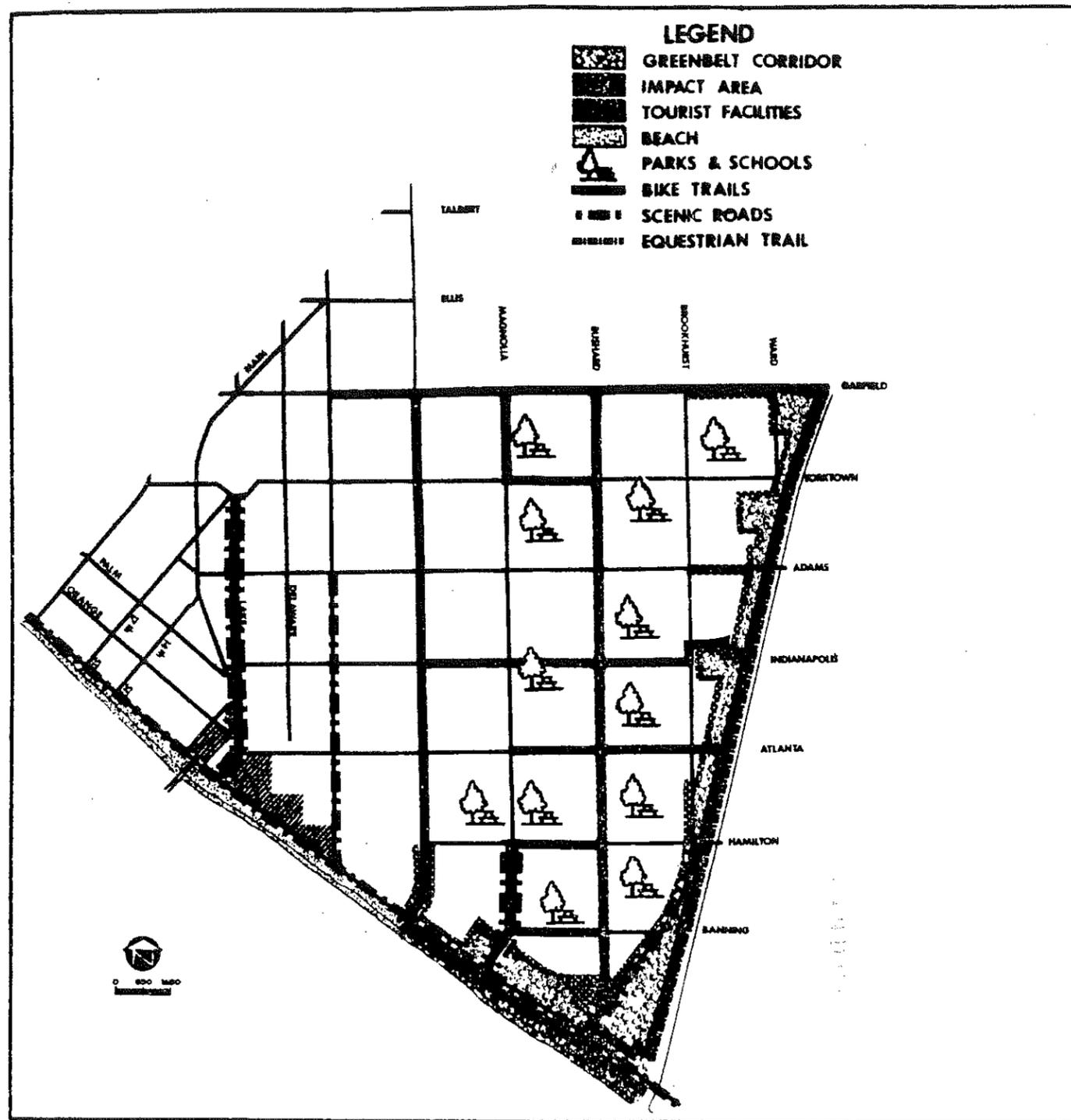
g. Related Features. Existing recreationally oriented facilities, visitor/tourist attractions, and greenbelt oriented open space areas that are linked to the greenbelt corridor, are included in the category of a related feature. A description of these related features, by jurisdiction, is as follows:

(1) Huntington Beach. The Huntington Beach Santa Ana River Greenbelt Corridor Implementation Plan included a map of its related features (FIGURE 10), and described them as being: Tourist facilities, pier, specialty commercial, hotels/motels, mini-theme park, beach, parks and schools, bicycle trails, and proposed scenic highways and landscape corridors.

(2) Newport Beach. The City of Newport Beach Santa Ana River/Santiago Creek Greenbelt Implementation Plan included a related feature as being "Trails Linkage (Upper Newport Bay-Costa Mesa Corridor)."

(3) Costa Mesa. The Costa Mesa Santa Ana River Greenbelt Corridor Implementation Plan provided a map (FIGURE 11) which identified related greenbelt facilities and described them as the Institutional Open Space Corridor that is a broad band of approximately 1,250 acres of publicly owned land extending to the east across central Costa Mesa. The area could be developed as a major linkage between the greenbelt and upper Newport Bay and the University of California at Irvine to the east. Other related features identified include California Street School, TeWinkle School, Mesa Verde School, Mesa Verde Park, Adams School, Estancia Park, Balearic School, Tanager Park, Wilson School, Victoria School, Marina View Park and the city's bicycle network.

(4) Fountain Valley. A major related feature along the greenbelt corridor is Mile Square Regional Park. The former Marine Corps Helicopter Training Facility is approximately one mile west of the river trail. Approximately one-half of the mile square area has been developed for recreation, including a county and city park, and a 145 acre golf course privately operated on leased land. A general development plan is being prepared for the remainder of the total area. FIGURE 12.

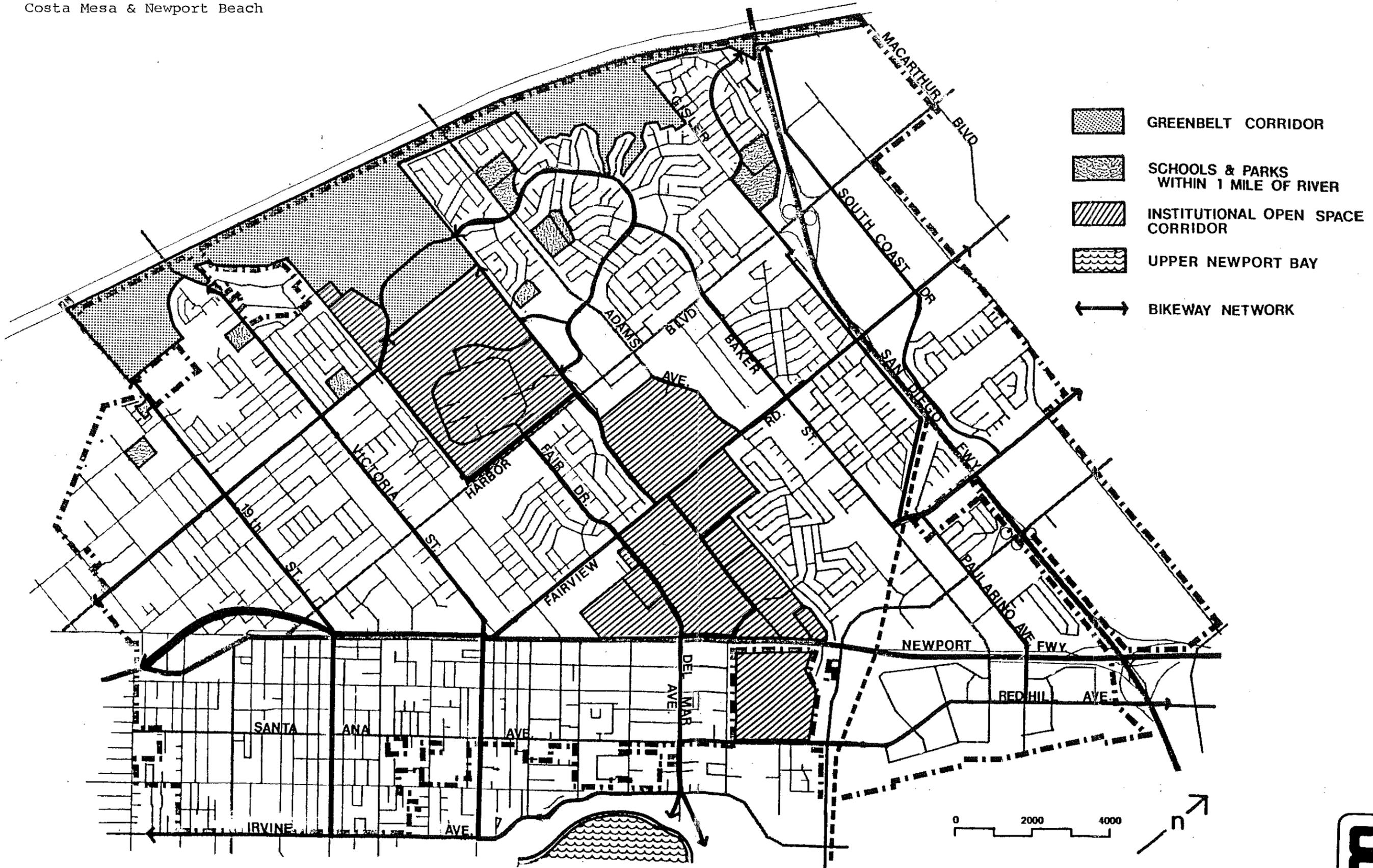


**PROPOSED SANTA ANA RIVER
GREENBELT CORRIDOR
AND RELATED AREAS**

huntington beach planning department

GREENBELT & RELATED FEATURES

Costa Mesa & Newport Beach

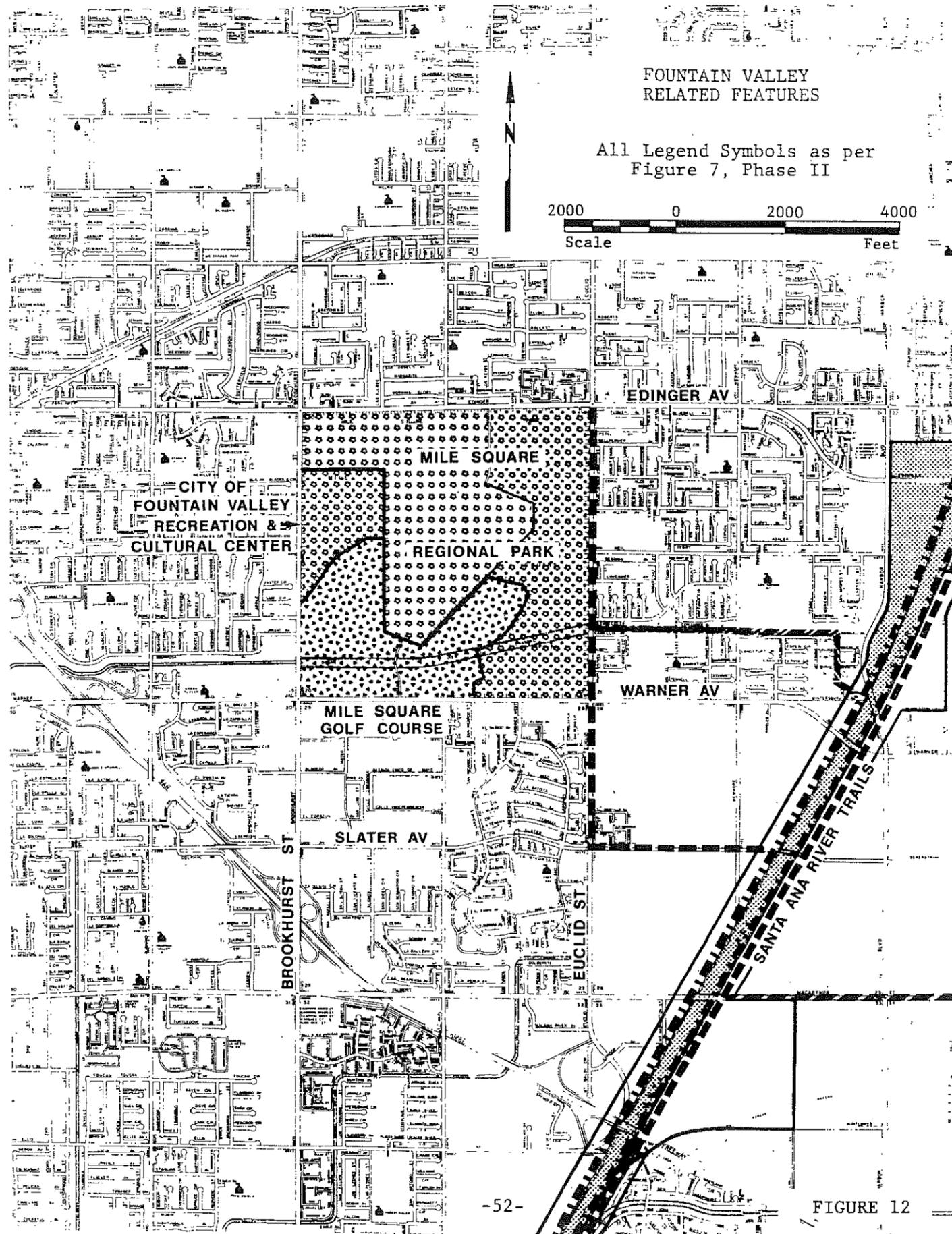


-  GREENBELT CORRIDOR
-  SCHOOLS & PARKS WITHIN 1 MILE OF RIVER
-  INSTITUTIONAL OPEN SPACE CORRIDOR
-  UPPER NEWPORT BAY
-  BIKEWAY NETWORK



FOUNTAIN VALLEY
RELATED FEATURES

All Legend Symbols as per
Figure 7, Phase II



4. Middle River Segment

a. General. Back in 1971, the Santa Ana River/Santiago Creek Greenbelt Plan made the following observation about this segment of the greenbelt corridor:

"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."

This observation was obviously not ignored. Shortly after publication of the greenbelt plan, the Orange County Water District (OCWD) contracted with a consulting engineering firm for the preparation of the "Environmental Enhancement Plan - Middle Santa Ana River Greenbelt." This latter plan is compatible with and complementary to the greenbelt plan, and proposes specific projects that would allow the coexistence of water conservation, flood control, and open space and recreation uses in the Middle River. In 1972, Amendment No. 3 of the County's Master Plan of Regional Parks was published. It made reference to the greenbelt plan, and also included several greenbelt projects within or nearby the Middle River. In 1974, the Orange County Board of Supervisors approved the "Santa Ana River Environmental Plan," which included several projects for the Middle River, and also identified funds for their development. The initial inertia towards improvement of the greenbelt potential of the Middle River has progressed beyond planning, and on to the completion of actual projects. Construction of the landscaped trail system between Katella and Tustin Avenues, which is nearing completion, will provide a continuous trail system for the entire length of this segment of the greenbelt corridor. Other projects include parks and rest stops, and landscaped, open space water conservation areas, that collectively contribute to the gradual development of this segment of the corridor into a linear park. It is within the Middle River segment that the OCWD owns over 700 acres of land that is used primarily for groundwater recharge and conservation. The OCWD is developing plans that will allow several of their water-spreading basins to be converted into landscaped, water-oriented recreational facilities, while still maintaining their water conservation function. The projects and plans for the Middle River segment of the greenbelt corridor are summarized as follows:

(1) County of Orange. All of the trails along the levees of the Middle River segment were constructed either by the County alone, or by the County in cooperation with the OCWD and other jurisdictions. The same is true for the landscaping, irrigation, maintenance and patrolling of the trails. The County includes two parks for this segment in its Master Plan of Regional Parks, and its Santa Ana River Environmental Plan has funded construction of a riverbed trail crossing, and a landscaping project, and also includes plans for trail rest stops and additional landscaping along the trails.

(2) Orange County Water District (OCWD). The OCWD is a major landowner in the Middle River segment, owning most of the land in the river area between the Southern Pacific Railroad crossing (south of Ball Road) and the Imperial Highway crossing. It is within this area that the OCWD has most of its water-spreading facilities for recharging of the underground water basin. The underground water basin is Orange County's greatest natural resource, and the OCWD is responsible for its management and conservation, including both the quality and quantity of the water. The OCWD has used its Environmental Enhancement Plan as a basic reference in the development of greenbelt projects. Expenditures for recreation and enhancement features upon District lands are financed through the establishment of the District's Environmental Enhancement Account, whereby 25% of royalties received from sand and gravel operations and 100% of all recreation lease fees are set aside for enhancement purposes. The District has entered into joint powers agreements with neighboring jurisdictions for the development of greenbelt projects, e. g., the Imperial Woods Trail which was a joint project with the Orange County Flood Control District.

(3) Anaheim. The city's portion of the Santa Ana River/Santiago Creek Greenbelt Implementation Plan was approved by the city council on 20 January 1976. The city has consistently supported the greenbelt program through its charter and continuing membership in the Greenbelt Commission, and also by cooperating with neighboring jurisdictions and homeowners' associations in the planning and development of greenbelt projects. The city's area of concern extends along the west and north sides of the Middle River segment on into the Santa Ana Canyon.

(4) Orange. The city's portion of the Santa Ana River/Santiago Creek Greenbelt Implementation Plan was approved by the city council on 18 May 1976. Long before becoming a charter member of the Greenbelt Commission, the city and especially its citizens strongly supported the greenbelt program. The city's area of concern in the Middle River segment is along the east side of the river, and it has participated in the joint planning of several projects.

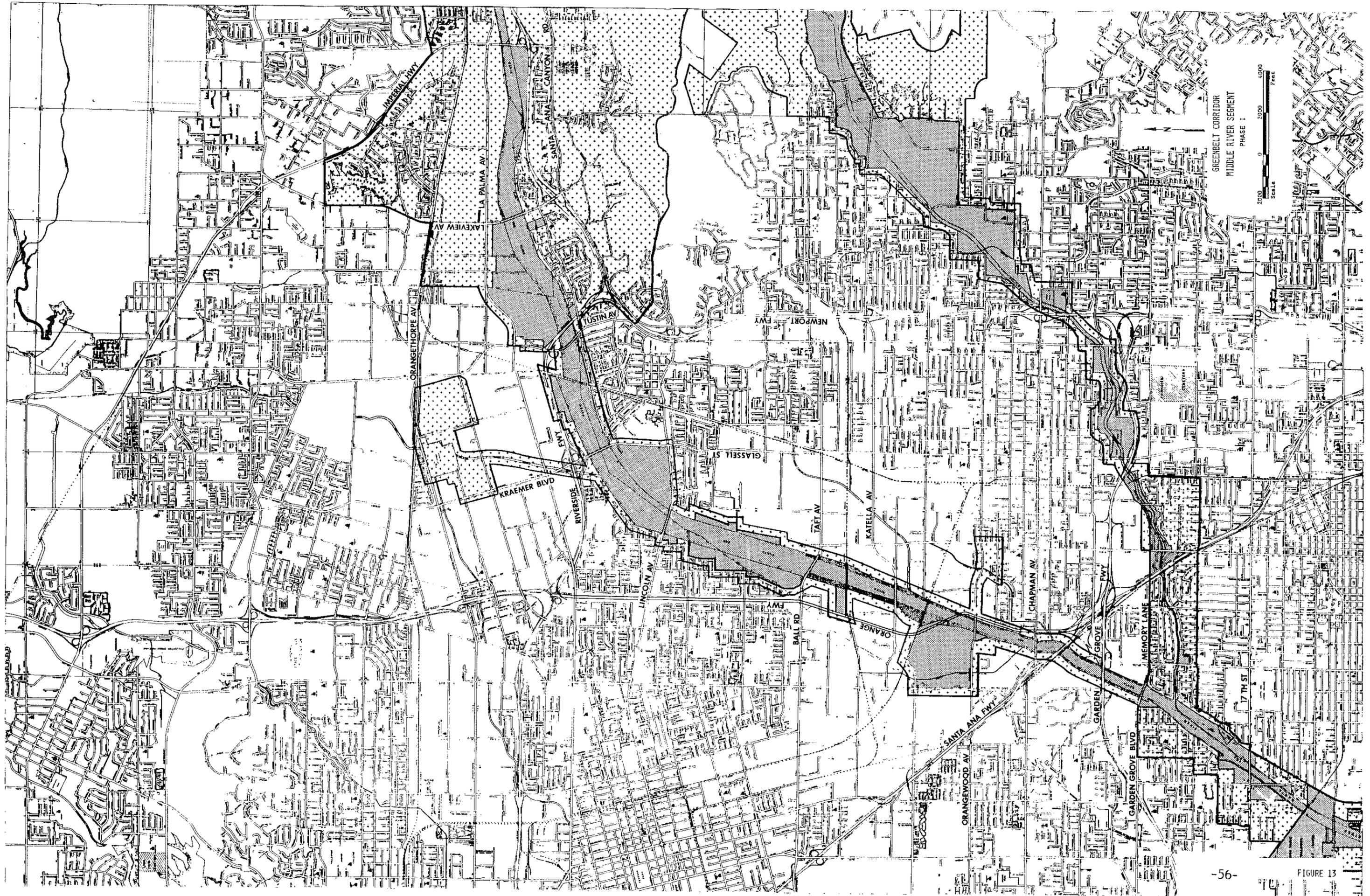
(5) Santa Ana. The jurisdiction of the City of Santa Ana extends into the Middle River segment, and its greenbelt plan includes several projects in that segment.

b. Greenbelt Corridor and Impact Area. The boundaries of the refined greenbelt corridor and impact area for the Middle River segment are depicted on the Phase I map provided in FIGURE 13. These boundaries were determined by and reflected in the greenbelt plans of the cities of Santa Ana, Orange and Anaheim.

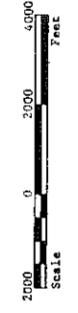
c. Existing, Under Construction, and Planned Projects. The location of each project in the Middle River segment is shown on the Phase II map in FIGURE 14. The numbering system is a continuation of that used in the Lower River segment and described in FIGURE 6.

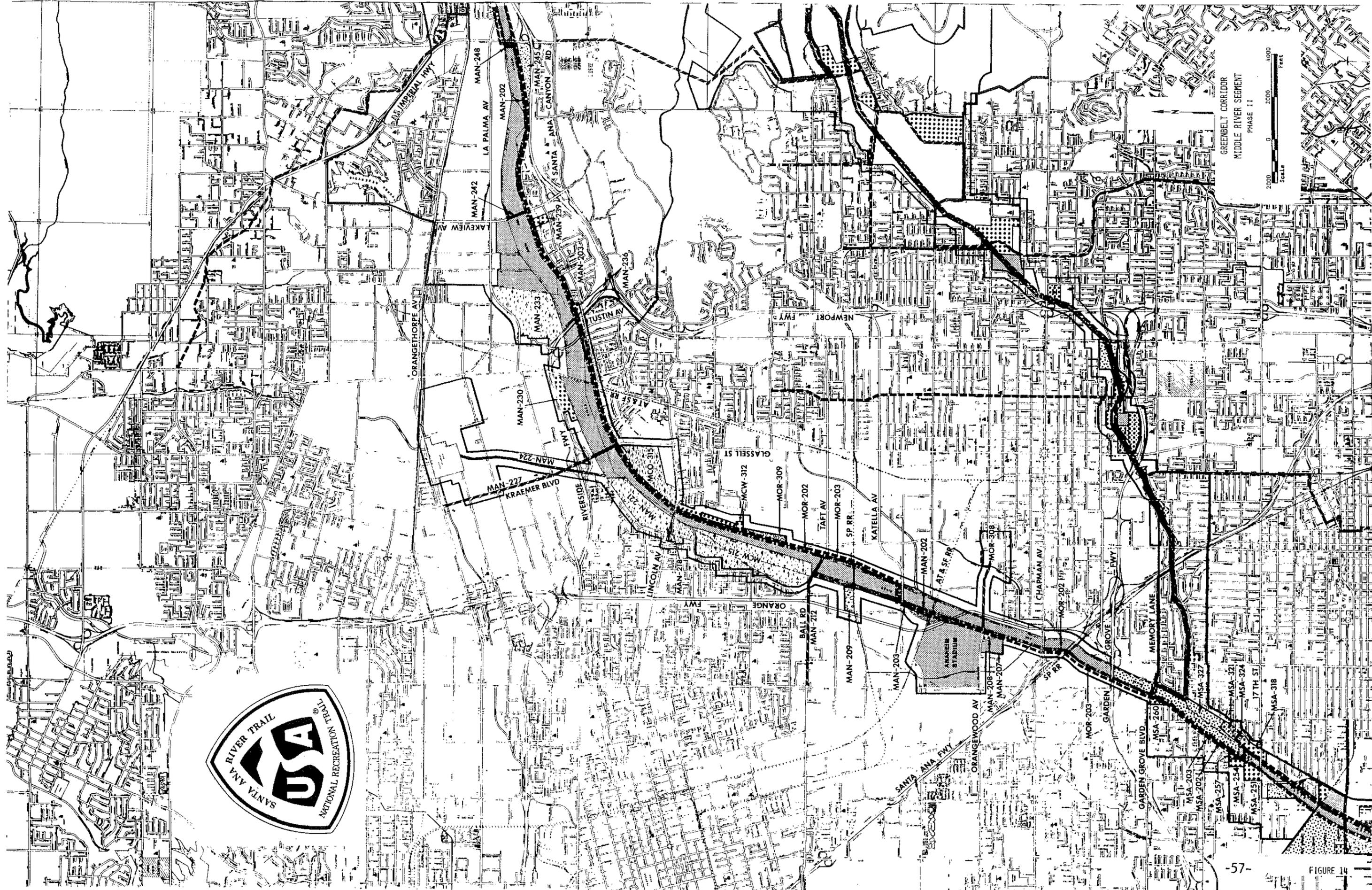
(1) Equestrian Trail (Existing/Under Construction. MSA, MOR, MAN-202): The equestrian trail is nearly complete for most of the entire length of the Middle River segment from 17th Street to Imperial Highway. To avoid conflict with the River View Golf Course (MSA-327), the trail crosses from the east to the west levee approximately 100 yards upriver of 17th Street. It continues upriver on the west levee to the Ball Road/Taft Avenue crossing, and then follows a middle levee (marked by trail signs) upriver between the water spreading basins of the OCWD. Back at Katella Avenue, a crossing is under construction over to the east levee where a new trail system is being constructed on up to Tustin Avenue. This new section of the river trail is expected to be completed in late 1976 or early 1977, and will feature separation of the equestrian and bicycle trails, especially under the overpasses, plus extensive landscaping. At Tustin Avenue, the trail will connect with the Imperial Woods trail, and continue on the east levee up to Imperial Highway. In addition to Rancho del Rio and River Trails Stables, access points to the trail are at the following streets: 17th Street; Garden Grove Boulevard/Memory Lane; Chapman Avenue; Orangewood Avenue; Katella Avenue; Ball Road/Taft Avenue; Lincoln Avenue; Glassell Street; Tustin Avenue; Lakeview Avenue, and Imperial Highway. When completed as a trail park and ride, El Parque del Rio (Orange) will also be an access point.

(2) Bicycle Trail (Existing/Under Construction. MSA, MOR, MAN-203): The bicycle trail also crosses over from the east to the west levee slightly upstream of 17th Street along the southern boundary of the River View Golf Course. The crossing is in the river bed and was originally asphalt concrete. The winter rains have caused several wash outs, resulting in new designs and the use of Portland cement concrete in certain sections of the crossing. The crossing ramp rises out of the river bed at Edna Park (MSA-257) and continues on the west levee upriver to a termination at Katella Avenue. A new crossing is under construction to the east levee where the new trail system is also under construction up to Tustin Avenue. Upon completion in late 1976 or early 1977, the trail will connect with the Imperial Woods trail and continue on up to Imperial Highway. The plans for the new trail system from Katella to Tustin Avenues provide for extensive landscaping, and when completed this section of the river trail may well be the most beautiful in the corridor.



GREENBELT CORRIDOR
MIDDLE RIVER SEGMENT
PHASE I





GREENBELT CORRIDOR
MIDDLE RIVER SEGMENT
PHASE II



Access to the trail is available at all street crossings listed for the equestrian trail, plus, Alona and Edna Parks (Santa Ana); and when completed El Parque del Rio (Orange) and the Riverdale Rest Stop and Riverdale Park (Anaheim).

(3) Recreation (Planned. MAN-207): This 16 acre parcel is located near the west levee and south of Orangewood Avenue in an area zoned PR (Public Recreation). The property has recently been considered by private interests as a possible site for a recreational facility.

(4) Trail Rest Stop (Planned. MAN-208): This project is included in Part "B" of the county's Santa Ana River Environmental Plan. The location is adjacent to the trail on the west levee, south of Orangewood Avenue. The property immediately adjacent, to the west, is being considered as the site of a tri-city (Anaheim, Garden Grove, Orange) fire-training facility, which may be funded by the federal Public Works Bill. Informal discussions with officials planning this facility indicate that a mini-rest stop may be included in the plans, plus provisions for requesting medical aid or similar assistance in the event of accidents along the trail.

(5) Rancho del Rio (Existing. MAN-209): According to a recently filed application for a use permit, this stable, located west of the river and south of Ball Road will be expanded to an approximate 10 acre equestrian center. The owner's letter accompanying the application indicates his intention to provide rest stop facilities for users of the trail, and also dedicate a portion of the property as a trail linking the river trail with the areas to the west.

(6) Bicycle Lane Crossing (Planned. MAN-212): This bicycle lane will cross the river on the Ball Road/Taft Avenue bridge crossing and link to the river trail.

(7) Old Santa Ana Regional Park - South (Existing/Planned. MCW-215): This former sand and gravel excavation site (Burris Pit) located west of the river between Ball Road and Lincoln Avenue, is included in the OCWD's Environmental Enhancement Plan and the county's Master Plan of Regional Parks. The OCWD acquired the 80+ acre pit in 1975, and began construction to convert it into a multi-purpose water conservation facility. Restoration of the hazardous side slopes was completed in November 1975, by placing five million cubic yards of material along the steep west bank. The upper portion of the bank has been landscaped and a paved bicycle trail now extends the full length of the pit along the top of the west bank. Future construction will include the relocation of a Southern California Edison power line as well as a complete reshaping of the pit by removing the existing east bank and widening the reservoir storage area to the river's west levee. Ultimate development is planned for 1979, and it will

then serve as an additional multipurpose facility providing water recharge, fishing, boating, picnicking, and riding and hiking trails.

(8) Bicycle Lane (Planned. MAN-218): This bicycle lane will cross the river on the Lincoln Avenue bridge, and link to the Santa Ana River trail.

(9) Old Santa Ana Regional Park - North (Planned. MAN-221): This 65 acre basin is also owned by the OCWD, and is located along the west side of the river between Lincoln Avenue and Glassell Street. It is also included in the OCWD's Environmental Enhancement Plan and the county's Master Plan of Regional Parks for development as part of the Old Santa Ana Regional Park. At an earlier date it was called Five Coves, since five jurisdictions (Anaheim, OCWD, Orange County Flood Control District (OCFCD), Harbors, Beaches and Parks District (HB&PD), and the County of Orange), had entered into a joint powers agreement for the purpose of developing the area into a water-oriented recreational facility. On 20 July 1976, the Board of Supervisors authorized preparation of an agreement between the county, OCWD, Anaheim, and HB&PD, to conduct a feasibility study and general development plan to determine the recreational potential of the area. The study will also include MCW-215.

(10) Equestrian Trail (Planned. MAN-224): The county's Master Plan of Regional Parks indicates that Miller Basin may be linked to the Santa Ana River Greenbelt via Carbon Canyon Channel. The channel may be usable by equestrians without the need to cross surface streets enroute.

(11) Bicycle Lane (Planned. MAN-227): This bicycle lane will cross the river on the Glassell Street bridge and link to the river trail.

(12) Recreation (Planned. MAN-230): This county owned, 21 acre former dump site (Newkirk) is located on the north side of the river between Newkirk Road and the Atchison, Topeka and Santa Fe Railway (AT&SF, Ry). In 1972, it was considered as a possible site for a motorcycle park, however, an environmental study to evaluate the community impact of such a facility, indicated the noise levels and related costs of attempted suppression would be too high. A proposal has since been made to exchange the property for the City of Anaheim's Shorb Wells in the Santa Ana Canyon. If the exchange is made, discussions indicate the city may use the property for recreational use, e. g., soft ball, etc.

(13) Warner Basin (Existing/Planned. MAN-233): This sand and gravel mining area of over 100 acres is being converted into another of the OCWD's water recharge facilities. The

property is located on the north side of the river and generally east of Tustin Avenue, and has been considered by the District as a possible water-oriented recreational facility. The District has already landscaped a portion of the property viewable from the greenbelt, and estimates an additional \$18,000 expenditure during FY 1976-77 for more landscaping.

(14) Riverdale Trail Rest Stop (Planned. MAN-236): This 2.2 acre surplus parcel was purchased by the OCFCD from CALTRANS, and plans have been completed for its development as a much needed rest stop and neighborhood park. The location is adjacent to the Imperial Woods Trail, east of the Riverside Freeway crossing of the river and north of Riverdale Avenue. Negotiations are underway for the City of Anaheim to operate and maintain the facility after its completion by the county.

(15) Riverdale Park (Planned. MAN-239): This park site of 9.3 acres is located adjacent to the Imperial Woods Trail, westerly of Lakeview Avenue. By Resolution No. 73-708 on 19 June 1973, the Board of Supervisors appropriated \$125,000 from revenue sharing funds in support of the acquisition of the property by the City of Anaheim. On 1 July 1975, the Board authorized an agreement with the City of Anaheim to share the acquisition costs not to exceed \$125,000 each. Subsequent to the agreement the city has acquired the property.

(16) Bicycle Lane (Planned. MAN-242): This bicycle lane will cross the river on the Lakeview Avenue bridge and link to the river trail.

(17) Imperial Woods Equestrian Center (Planned. MAN-245): The site for this 10.5 acre project is located adjacent to the south side of the Imperial Woods Trail and west of Imperial Highway. The OCWD owns the property and has had plans prepared for a \$1.25 million equestrian center to be developed and operated by a private lessee. Advertising for bids is pending approval by CALTRANS of an access to the area.

(18) Bicycle/Equestrian Trail River Crossing (Planned. MAN-248): The river trail presently terminates on the south levee at Imperial Highway. There is a need to cross the river from the south to the north levee for access to Yorba Regional Park. The point of crossing has not yet been determined, and consideration has been given to construction of a separate bicycle/equestrian bridge on the west (downstream) side of Imperial Highway bridge. A rustic, low-clearance bridge has been discussed, with the design including provisions for it to be anchored on one side and capable of swinging or floating clear of the main channel in the event of a debris carrying flood flow. In the county's Arterial Bikeway System Plan for FY 1976-77, Facility No. ABS 6B proposes that the crossing be made a short distance upstream of the Imperial Highway bridge.

(19) Edna Park Expansions (Planned. MSA-251 & 254): The City of Santa Ana Greenbelt Plan includes two separate expansions of the existing Edna Park. MSA-254 would add almost six acres on the south side, and MSA-251 an additional 8.5 acres.

(20) Edna Park (Existing. MSA-257): This 2.5 acre park is located adjacent to the west levee between 17th Street and Garden Grove Boulevard. The park was constructed by the City of Santa Ana and completed in July 1975. It is the first and most attractive park along the river trail offering rest stop facilities to both bicyclists and equestrians.

(21) Forrest Paull Park (Planned. MSA-260): The site for this 3.4 acre trail park and ride facility is adjacent to the west levee and south of Garden Grove Boulevard. For several years the project was identified as "Los Alisos Park;" however, on 13 April 1976, the Board of Supervisors approved the above name. On 9 December 1975, the Board approved the concept of developing the site for recreational trail uses, including parking and rest stop facilities and realignment of equestrian and bicycle trails through the site. On 1 September 1976, the Board approved the selection of an architectural-engineering firm to prepare design plans and specifications for total facility development; authorized negotiation of cooperative agreements for various project features with the City of Orange; authorized negotiation of a cost sharing agreement covering restroom construction with River View Golf, Inc., and authorized disposal of the existing buildings by sale to the highest bidder.

(22) Bicycle Trail (Planned. MOR-308): This bicycle trail is included in Part "B" of the county's Santa Ana River Environmental Plan. The trail will link El Camino Real Park (formerly known as West Orange Park) to the river trail.

(23) River Trails Stables (Existing. MOR-309): This 7.5 acre equestrian facility was developed by, and owned and operated by, private enterprise on land leased from the OCWD. The site is adjacent to the east levee, south of Lincoln and north of Taft Avenues. The owners have made rest stop facilities available to users of the river trail.

(24) El Parque del Rio (Planned. MCW-312): This three acre parcel is adjacent to the east levee and south of Lincoln Avenue. The OCWD's Environmental Enhancement Plan and the county's Master Plan of Regional Parks have included the property as a planned park along the greenbelt. A proposal was prepared in 1972 providing for joint development of the park by the county, OCWD, OCFCD and the City of Orange. The latter was to have ultimate responsibility for maintenance of the park. In May and June 1972, the Board of Supervisors and Board of Directors (OCWD), respectively, approved the proposal in principle and authorized preparation of necessary agreements. Several drafts of a proposed

four-party agreement were prepared but never consummated. Since portions of the property were owned by the OCWD and the Santa Ana Valley Irrigation Company (SAVI), a property exchange was required to ensure continuity of the land in the park project. The land exchange was contingent upon the filling of the mined-out sand pits on the properties. The pits have since been filled and the land exchange completed, with the OCWD now owning the property. On 13 June 1976, the Orange City Council approved a proposed concept that the property be developed as a trail "park and ride" facility. On 18 August 1976, the Board of Directors, OCWD, also approved the concept for a "park and ride" facility on the El Parque del Rio site. On 21 September 1976, the Board of Supervisors directed its Environmental Management Agency to incorporate the "park and ride" concept in the planning and development of El Parque del Rio.

(25) Water Conservation Basin/Park (Planned. MCO-315): This privately owned property is presently the site of a sand and gravel mining operation alongside the east levee, north of Lincoln Avenue. The county's Master Plan of Regional Parks includes the area as part of the Old Santa Ana Regional Park. In its final environmental impact report for the Burris Pit Water Conservation Facility, the OCWD depicts the property as one of the potential sites for additional water spreading basins. If the property is eventually acquired for a water spreading basin, the planning for its conversion will likely include landscaping, and possibly some park-like amenities, for enhancement of the greenbelt.

(26) Park and Recreation Facility (Planned. MSA-318): The City of Santa Ana Greenbelt Plan includes this project as an apparent southerly extension of the existing Alona Park (MSA-321). The property is presently privately owned and covers approximately nine acres along the east side of the river north of 17th Street.

(27) Alona Park (Existing. MSA-321): This City of Santa Ana Park is located north of 17th Street, along the east side of the river and adjacent to the River View Golf Course (MSA-327). The park has been connected to the river trail by a bicycle link and is therefore another rest stop. The facilities include restrooms, bicycle racks, play and picnic areas, water, and tennis courts.

(28) Bicycle Trail (Existing. MSA-324): This bicycle trail along the east river levee, links the river trail to Alona Park (MSA-321).

(29) River View Golf Course (Existing. MSA-327): In 1961, Novel B. James leased a solid waste dump from the City of Santa Ana. On this site, located south of the mouth of the Santiago Creek and east of the river, he built a nine hole golf course. By 1969, there was a need for expansion, however, the only available open space adjacent to the course was the sandy, summer-dry bed of the Santa Ana River. In spite of the doubts

of others, James leased the nonrevenue producing riverbed acreage from the county until the year 2011, for a minimum of \$2,400 a year, plus a percentage of the gross. The county now assesses taxes on this property. The sandy riverbed proved ideal for construction of an additional nine holes. With generous irrigation and fertilization, the bermuda fairways and bent greens thrive, and are easier to maintain than the turf on the original nine holes. The net result is a beautiful free enterprise addition to the greenbelt corridor, with a profit instead of a cost to the taxpayer. James has made a part of his leasehold available for the river trail system, which parallels the western edge of his golf course.

d. Summary of Projects' Current Status. The project summary sheets for the Middle River segment, listing each project by number and indicating the current and planned use of the projects property, assessor's parcel numbers and acreage, zoning, and ownership, are provided in APPENDIX J.

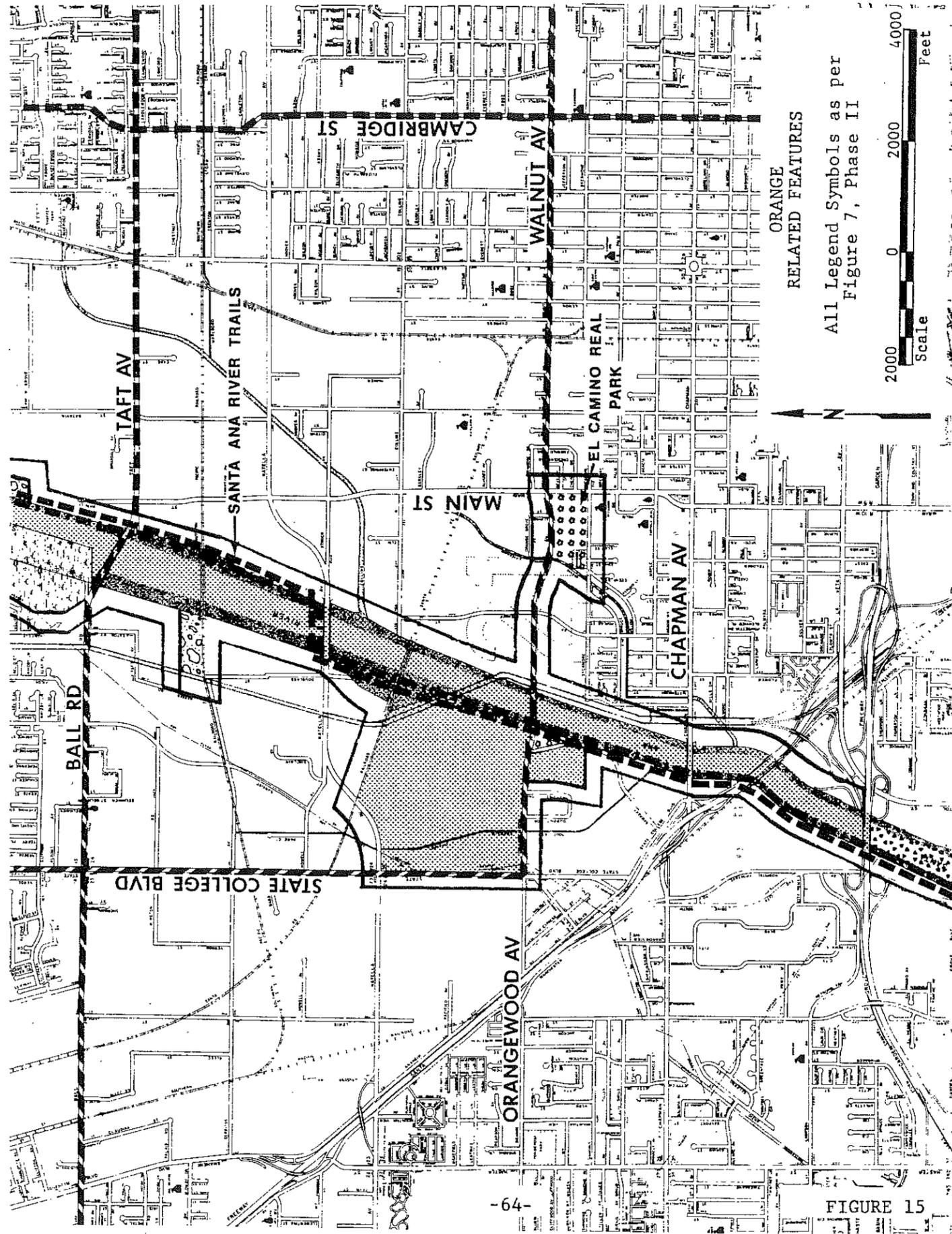
e. Summary of Projects' Acquisition, Development, and Operation Responsibility. The project summary sheets for the Middle River segment, listing each project by number, and indicating the planned use and the jurisdictions responsible for property acquisition, project development, and project operation/maintenance, and the estimated costs for each, are provided in APPENDIX K.

f. Planned Project Priorities. Each jurisdiction has assigned a priority number or category to the planned projects in the Middle River segment. A summary of the project priority assignments, by each jurisdiction, is provided in APPENDIX L.

g. Related Features. Existing recreationally oriented facilities, visitor/tourist attractions, and greenbelt oriented open space areas that are linked to the greenbelt corridor, are included in the category of a related feature. A description of these related features, by jurisdiction, is as follows:

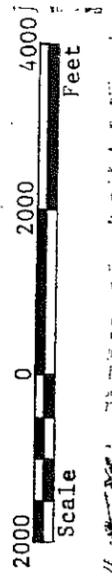
(1) Orange. The Citizen Greenbelt Committees for the City of Orange and the Unincorporated Areas of the County, listed El Camino Real Park (formerly known as West Orange Park) as the related feature in the Middle River segment. The park is to be developed on a 20 acre site located approximately one-half mile east of the river, south of Orangewood Avenue, west of Main Street, north of Sycamore Avenue, and east of Olive/Orange flood control channel. Present conceptual planning includes the following facilities: Lake, docks, baseball and football fields, amphitheatre, paved courts, picnic facilities and tot lot. The park will be connected to the river trail by bicycle trail MOR-308. FIGURE 15.

(2) Anaheim/OCWD/County. The Citizen Greenbelt Committee for the City of Anaheim listed the following projects as related features in the Middle River segment: Kraemer Water Conservation Basin, planned by the OCWD for location southwest of



ORANGE
RELATED FEATURES

All Legend Symbols as per
Figure 7, Phase II



the existing Miller Retarding Basin, east of Kraemer Boulevard, north of Miraloma Avenue, and west of Carbon Creek Channel; Miller Retarding Basin, which is being jointly planned by the OCFCD and the OCWD for combined use with Kraemer Basin for greater recharge capacity; Anaheim Lake, an existing water spreading basin and recreational lake, located north of Miraloma Avenue, south of Orangethorpe Avenue and east of Miller Street; and the Izaak Walton Nursery, located south of La Palma Avenue, west of Lakeview Avenue, and north of the river. The Kraemer and Miller Basins will be landscaped, and connected to the river trail by a bicycle trail along Kraemer Boulevard (MAN-227), and an equestrian trail along the Carbon Creek Channel (MAN-224). FIGURE 15A.

5. Santa Ana Canyon Segment

a. General. The Santa Ana Canyon segment of the corridor is generally bounded by the Chino Hills on the north, the Santa Ana Mountains on the south, Imperial Highway on the west and the county line on the east. There are a number of tributary canyons entering from the north and south sides, including Blue Mud, Bee, Box, Coal, Gypsum and Walnut. The freeway along the canyon floor has a Weir Canyon interchange, however, Weir Canyon drains into the Santiago Creek, upstream of Villa Park Dam, and not into the Santa Ana Canyon. In earlier days the river flow through the canyon was clear and swift, and Indians camped and hunted along the banks and into the canyon and its tributaries. Historical records indicate that in 1769, members of the Spanish expeditions entered the canyon, and after experiencing an earthquake, Father Crespi named the river "El Rio del Dulcissimo Nombre de Jesus de los Temblores," or, "The River of the Sweetest Name of Jesus of the Earthquakes." The name of the nearby Santa Ana mountains, from which, at that time, it was believed the river flowed, has prevailed. In 1810, Governor Arrillaga recognized Jose Antonio Yorba's service to the Spanish Crown, and granted him over 62,000 acres of land along the canyon extending southerly to the ocean. The grant later became known as the Rancho Santiago de Santa Ana. Yorba and his partner, Juan Pablo Peralta, established an extensive ranch consisting of cattle, orchards and crops, and through a system of irrigation ditches they used water from the Santa Ana River to irrigate their lands. In 1868, the ranch was partitioned, and some of the new owners included James McFadden, Columbus Tustin, Alfred Chapman, and Andrew Glassell. Over the years there have been changes in the canyon, especially of late, when a freeway was constructed along its entire length, and housing developments started to creep along its sides. Still, the canyon is a magnificent natural open space resource, the last in the developed portion of the county. The Santa Ana River/Santiago Creek Greenbelt Plan urges that the canyon be considered as a visual whole, from crest to crest (the canyon's watershed line on a topographic map of the area), and the arbitrary one and one-half mile planning area for the greenbelt corridor no longer be applied. The plan recommends conservation of both flood plain and hillsides as an open, natural

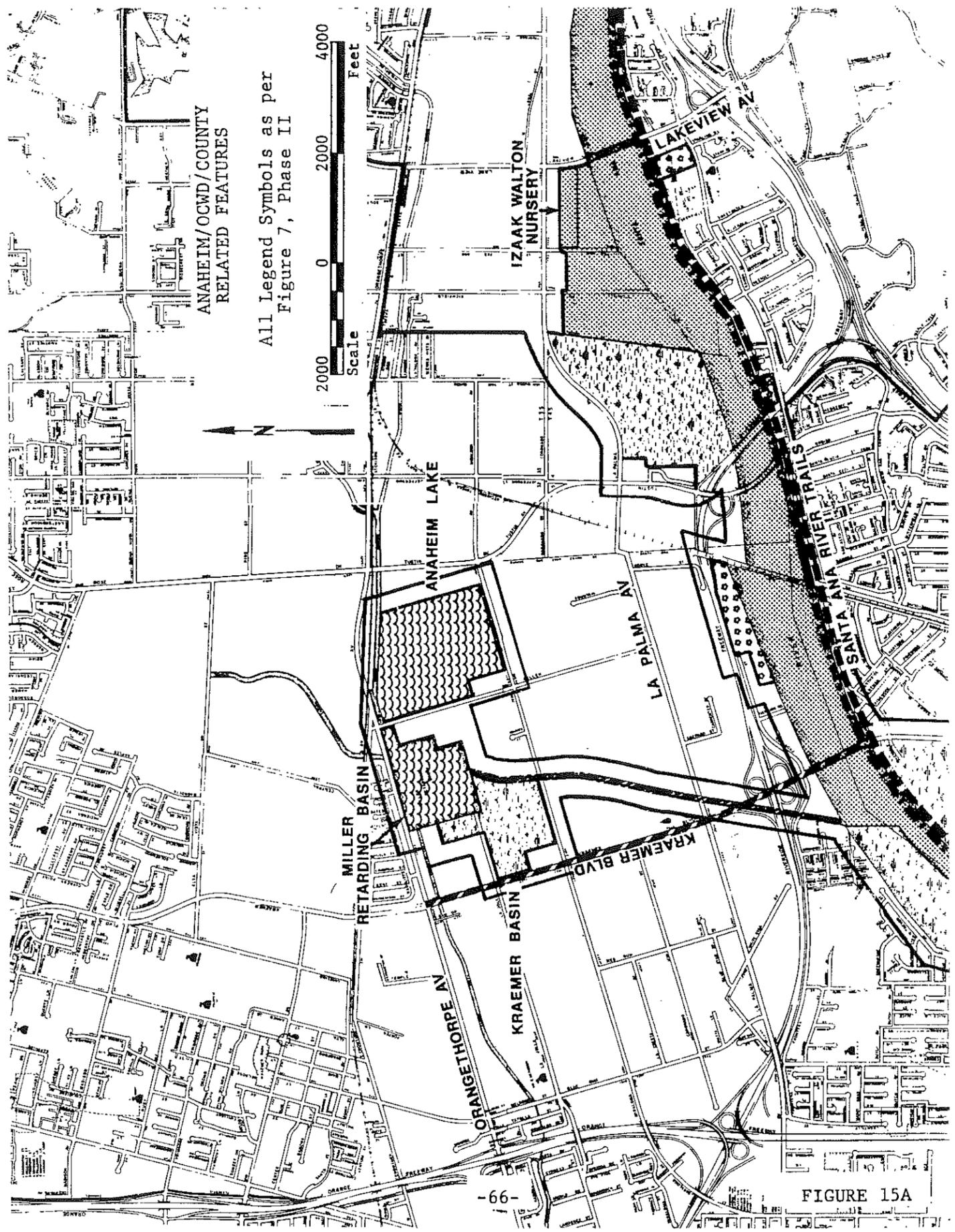


FIGURE 15A

area, crest to crest, and suggests that this objective be accomplished by agricultural and open space easements, zoning, and public purchase of lands. The freeway access points at Weir, Gypsum, and Coal Canyons, are described in the plan as having been constructed in anticipation of unlimited urbanization of the canyon, and it is recommended that they be limited to providing useful access to compatible open space uses on the south side of the river. To deter unlimited urbanization, the plan recommends that bridges not be constructed across the river to the north side. The concern for preservation of the natural beauty of the canyon, and the desire to live within its beauty has resulted in strong conflicting forces. The County and the cities of Anaheim, Orange and Yorba Linda jointly funded and participated in a special study to develop a land use decision model that will hopefully assist in determining how the canyon should be developed, or, left undeveloped. Greenbelt projects have been completed and more are planned, and zoning laws have been effected to ensure that subsequent developments are aesthetically compatible with the greenbelt concept. The projects and plans for the Santa Ana Canyon segment of the greenbelt corridor are summarized as follows:

(1) County of Orange. In the eastern half of the canyon lies Featherly Regional Park, one of the most popular parks in the county. To the west of Featherly is Yorba Regional Park, which is in the final stages of completion. A striped/signed bicycle lane runs along both sides of Santa Ana Canyon Road (beginning at Quintana Drive, which is just east of Imperial Highway) and continues on to Gypsum Canyon Road, at the entrance to Featherly Regional Park. Near the entrance to Featherly Regional Park is the beginning of the 2.5 mile bicycle trail constructed by the State (CALTRANS) along the north side of the freeway right-of-way; it continues easterly to and beyond the county line. The county has contracted with an engineering firm to study various possible routes for a trail system through the canyon from Imperial Highway to Featherly Regional Park. The county is awaiting receipt of land from the State to replace the county land used for construction of the freeway. The land being acquired is privately owned and lies between Featherly and Yorba Regional Parks. When acquired, the land will be used to connect the two parks.

(2) Anaheim. The city has participated in the planning and development of Yorba Regional Park, and granted an easement to the county for trail use across its land at Shorb Wells, in the Weir Canyon area. A significant contribution to the maintenance of the greenbelt, and preservation of the canyon, was the adoption by the city of its "(SC)" SCENIC CORRIDOR ZONE - OVERLAY. The purpose of this zoning is to provide for the orderly development of the city's scenic areas by encouraging a high quality of development in keeping with the natural amenities of these areas and preserving their unique scenic resources as an asset to the community. The boundary of the zoning in the canyon is defined as

that area lying easterly of the intersection of the Newport and Riverside Freeways, westerly of the Orange County line, southerly of the AT&SF Rwy., and northerly of the present or any future south city limits of the City of Anaheim. An extract of the Anaheim Municipal Code, Title Eighteen Zoning, Chapter 18.84 "(SC)" SCENIC CORRIDOR ZONE - OVERLAY, is provided in APPENDIX M. It is recommended that the permitted uses and standards of development established in this zoning action be considered by the controlling jurisdictions as the minimum requirement for all developments within the greenbelt corridor and impact area.

(3) Yorba Linda. The City of Yorba Linda and its citizens have long supported and actively participated in the greenbelt program, and the city is a charter and continuing member of the Greenbelt Commission. The city's eastern boundary extends into the western portion of the canyon, but does not make contact with the greenbelt corridor. The city's sphere of influence does extend on easterly to the county line, and northerly to the crest line and boundary of the impact area. Thus, Yorba Linda will have a definite influence on how the northern portion of the canyon is to be preserved and/or developed. The city has constructed bicycle, equestrian and hiking trails, and plans for extension of this system to include linkages to the river trails.

b. Greenbelt Corridor and Impact Area. The boundaries of the refined greenbelt corridor and impact area for the Santa Ana Canyon segment are depicted on the Phase I map provided in FIGURE 16. These boundaries were determined by and reflected in the greenbelt plan of the City of Anaheim, and by a coordinated effort between the Citizen Greenbelt Committees of Anaheim, Yorba Linda and the County's Unincorporated Areas.

c. Existing, Under Construction and Planned Projects. The location of each project in the Santa Ana Canyon segment is shown on the Phase II map in FIGURE 17. The numbering system is a continuation of that used in the other corridor segments and described in FIGURE 6.

(1) Equestrian Trail (Existing/Planned. CAN, CCO-402): The equestrian trail presently exists along the north levee from Imperial Highway on east to Shorb Wells near the Metropolitan Water District's (MWD) outlet. On 11 May 1976, the Board of Supervisors approved an agreement with an engineering firm to prepare a project report for the Santa Ana River Trail from Imperial Highway to Featherly Regional Park. Access to the existing trail is available at Imperial Highway.

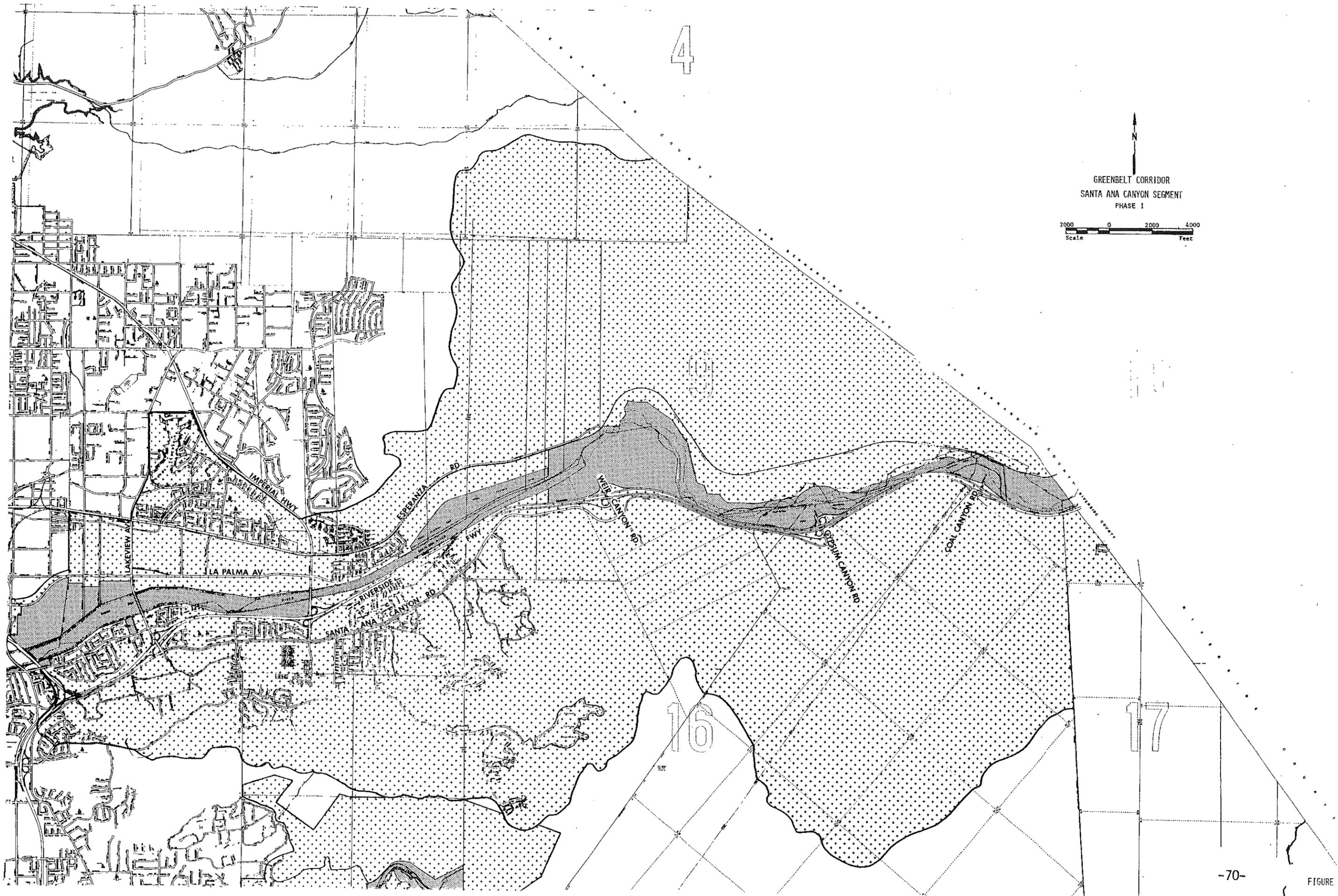
(2) Bicycle Trail/Lane (Planned. CAN, CCO-403 and Existing. CCO-403A): With the exception of the CALTRANS trail at the eastern end of the canyon, there are no off-road trails in the canyon at this time. The County's Program of Planning, Right-of-Way Acquisition and Construction for the Arterial Bikeway System

(ABS) for FY 1976-77, includes project No's. ABS-6B and 6C for the canyon. ABS-6B is planned to progress upstream beginning at the Imperial Highway Bridge, on the southern river levee; thence, it will progress a short distance upstream and will cross the river to the north levee; thence, proceed upstream to the proposed Yorba Park Road. The alignment is within the City of Anaheim and the unincorporated county. A project report currently under preparation will determine the final alignment and requirements for right-of-way acquisition. ABS-6C proposes the construction of an off-road bicycle and equestrian trail in the unincorporated county from proposed Yorba Park Road to Featherly Regional Park at Gypsum Canyon Road. The right-of-way acquisition will be for a strip of land connecting the easterly end of ABS-6B to the existing CALTRANS bicycle trail which extends easterly from Gypsum Canyon Road to beyond the county line. A paved bikeway will be constructed which will be separated from the equestrian trail planned for development under the Regional Recreation Facilities program. In the interim a striped/signed bicycle lane (CC0-403A) runs along both sides of Santa Ana Canyon Road from Quintana, which is just east of Imperial Highway, and continues on to Gypsum Canyon Road, at the entrance to Featherly Park.

(3) Bicycle Trail (Planned. CAN-407): ABS-2B will complete the acquisition of the remaining parcels within the 60 foot wide strip of abandoned right-of-way of the El Cajon Canal between Rose Drive and Fairlynn Boulevard. A 10 foot wide paved bicycle trail, permitting two-way traffic, is envisioned for future year development with signalization at some street crossings. A portion of the trail at the northerly end has been developed by the City of Yorba Linda. The right-of-way to be acquired now is expected to have use for an equestrian trail as well. This trail when completed will connect to the river trail (ABS-6B) which in turn will be located adjacent to and serve Yorba Regional Park.

(4) Yorba Regional Park (Under Construction/Planned. CAN-409): On 18 November 1975, the Board of Supervisors approved an agreement with the City of Anaheim for development and operation of Yorba Regional Park. The agreement included provisions for water, sewage, and drainage assessments, improvement and maintenance of La Palma Avenue, police and fire protection, and city dedication of a trail easement through city property (Shorb Wells) adjacent to the park. The total area of the park is 166 acres, and it is being developed in two phases, with Phase I including the central 100 acres (approximate) and Phase II the ends of the project area. Construction of Phase I is essentially complete, with the remaining work concerned primarily with the final aspects of landscaping. The facilities provided in Phase I are: Lakes for fishing and recreational boating, wading streams, family and group picnic areas, day camping, native area, and equestrian and bicycle trails.

(5) Shorb Wells Easement (Existing. CAN-412): An agreement dated 30 September 1975, and approved by the Board of



GREENBELT CORRIDOR
SANTA ANA CANYON SEGMENT
PHASE I

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Scale Feet

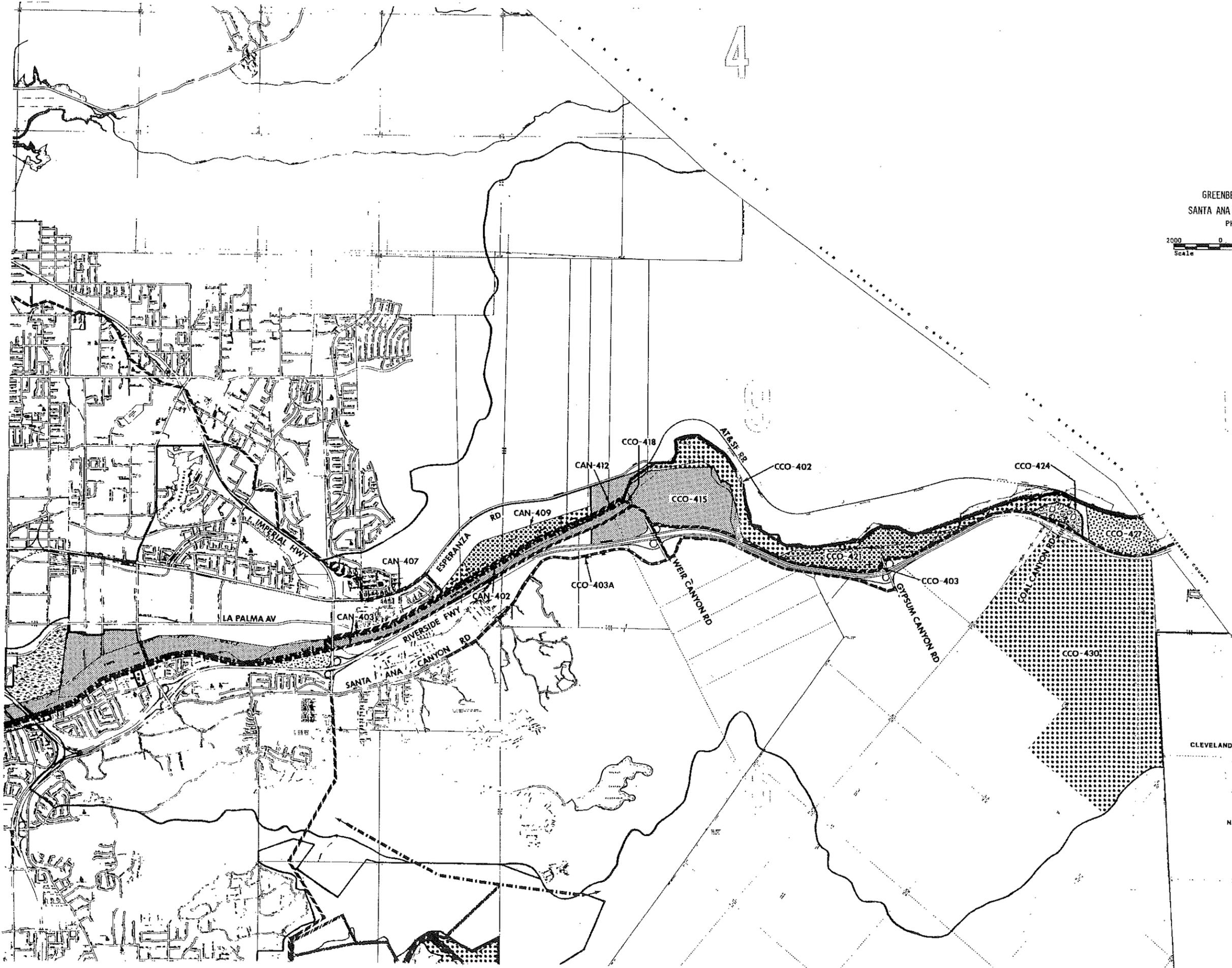
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16

17

4

GREENBELT CORRIDOR
SANTA ANA CANYON SEGMENT
PHASE II



CLEVELAND
NATIONAL
FOREST

maintenance, and the estimated costs for each, are provided in APPENDIX O.

f. Planned Project Priorities. Each jurisdiction has assigned a priority number or category to the planned projects in the Santa Ana Canyon segment. A summary of the project priority assignments, by each jurisdiction, is provided in APPENDIX P.

g. Related Features. Existing recreationally oriented facilities, visitor/tourist attractions, and greenbelt oriented open space areas that are linked to the greenbelt corridor, are included in the category of a related feature. A description of these related features, by jurisdictions, is as follows:

(1) Anaheim. An Equestrian and Hiking Trails Component of the Trails Element of the Anaheim General Plan, was prepared by The Hill and Canyon Task Force Trails Committee, working with the city's planning department, and parks, recreation and arts department. Membership on the committee included representatives of the Citizen Greenbelt Committee; Anaheim Hills, Incorporated; Santa Ana Canyon Property Owners Association; and the Peralta Hills, Westridge, and Nohl Ranch Homeowners Associations. The Trails Committee was established on 29 July 1975, by the Canyon Area General Planning Task Force, and charged with the duties of identifying potential trail routes and proposing a trails plan. Initially, the committee prepared a plan consisting of a "backbone" system throughout the canyon area which provided linkage with county regional trails along the Santa Ana River and Santiago Creek. After the city council approved that plan in principle, the committee continued its work and has identified "feeder" trails in various equestrian oriented areas throughout the canyon. The final plan depicts a trail system of approximately 28 miles, and includes information relative to costs, standards, and implementation. On 14 September 1976, the city council approved the plan as a component of the general plan. The location and routes of the trail system are depicted in FIGURE 18.

(2) Yorba Linda. The related features in and near the City of Yorba Linda are as follows: Richard Nixon Lake (formerly known as Yorba Linda Reservoir) consisting of 102 acres of natural open space, and described in the County's Master Plan of Regional Parks as having a potential for linkage via the Old Anaheim Union Water Canal to the Santa Ana River Greenbelt Corridor. Proposed facilities include an arboretum, boating lake and trails. Another significant related feature is the 136 acre (approximate) Yorba Linda Country Club, which includes an 18 hole, 6,432 yard, Par 71, championship golf course, clubhouse and other recreational facilities. The city has an extensive bicycle, equestrian and hiking trails system that has been planned by the Citizen Greenbelt Committee and city/county staffs. Portions of the trail system have been completed, and plans for the remainder are being updated as the city expands its boundaries to the east. The trail system will be linked to the river trail by ABS-2B. FIGURE 19.

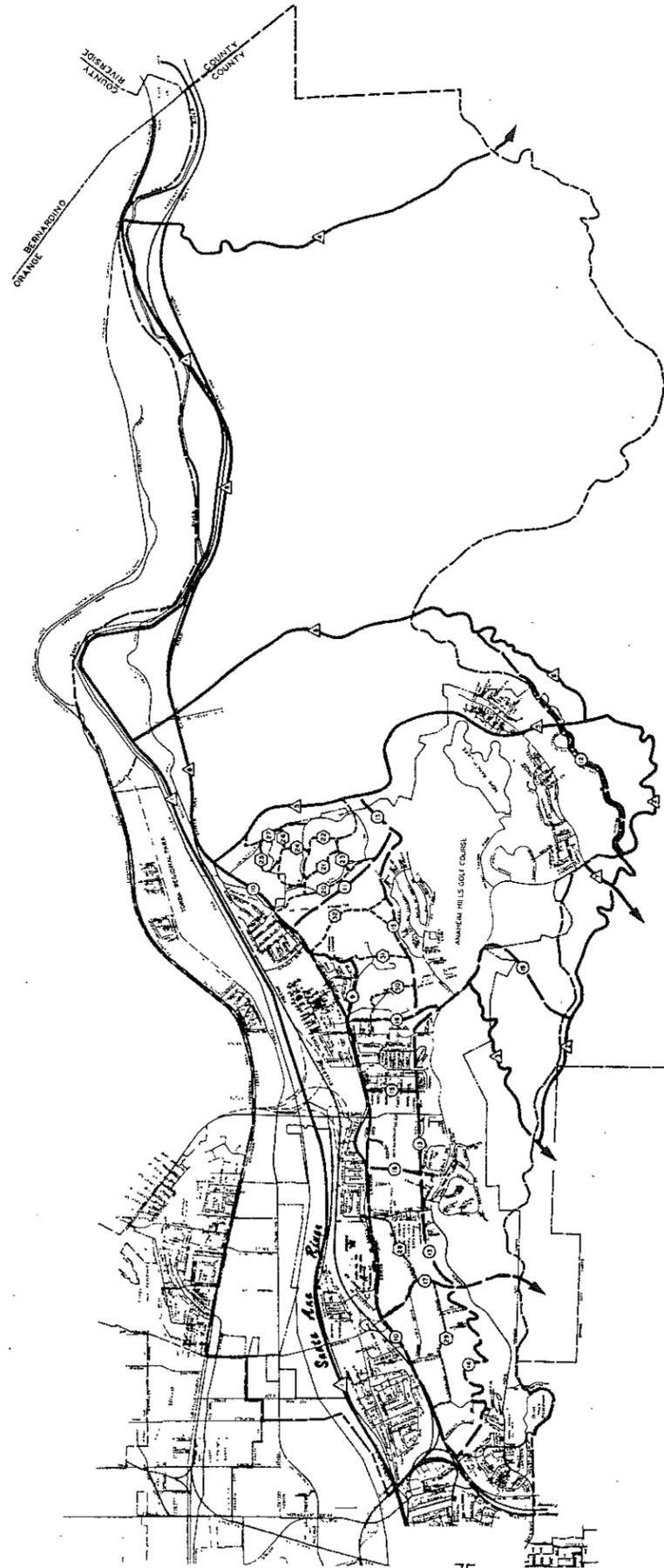


FIGURE 4 HIKING TRAILS COMPONENT
of the
ANAHEIM GENERAL PLAN

- REGIONAL TRAILS
- MIDDLE TRAILS
- FEDERAL TRAILS
- SPHERE OF INFLUENCE BOUNDARY

REGIONAL TRAILS

- ▲ Santa Ana River Trail
- ▲ Ridgeline Trail
- ▲ Anaheim Hills Trail
- ▲ Oak Canyon Trail
- ▲ Hidden Canyon Trail
- ▲ Wild Canyon Trail
- ▲ Serrano Trail
- ▲ Santa Ana Canyon Trail

MIDDLE TRAILS

- ① Sky Level Trail
- ② Santa Ana Canyon Road Trail
- ③ Fairmont Trail
- ④ Santiago Trail
- ⑤ Four Corners Trail
- ⑥ High Ranch Trail
- ⑦ Imperial Trail
- ⑧ Palms Trail
- ⑨ Lakewood Trail
- ⑩ Veritas Canyon Trail
- ⑪ Oak Canyon Trail

FEDERAL TRAILS

- ⑫ Country Trail
- ⑬ Sunset Trail
- ⑭ TFC Trail
- ⑮ Rainbow Trail
- ⑯ Shady Lane Trail
- ⑰ North Loop Trail
- ⑱ Tomcatone Trail
- ⑲ Spur Trail
- ⑳ Crescent Trail
- ㉑ Peralta Hills Trail
- ㉒ Hummingbird Trail
- ㉓ Wilshire Trail
- ㉔ Sycamore Canyon Trail

ANAHEIM

RELATED FEATURES

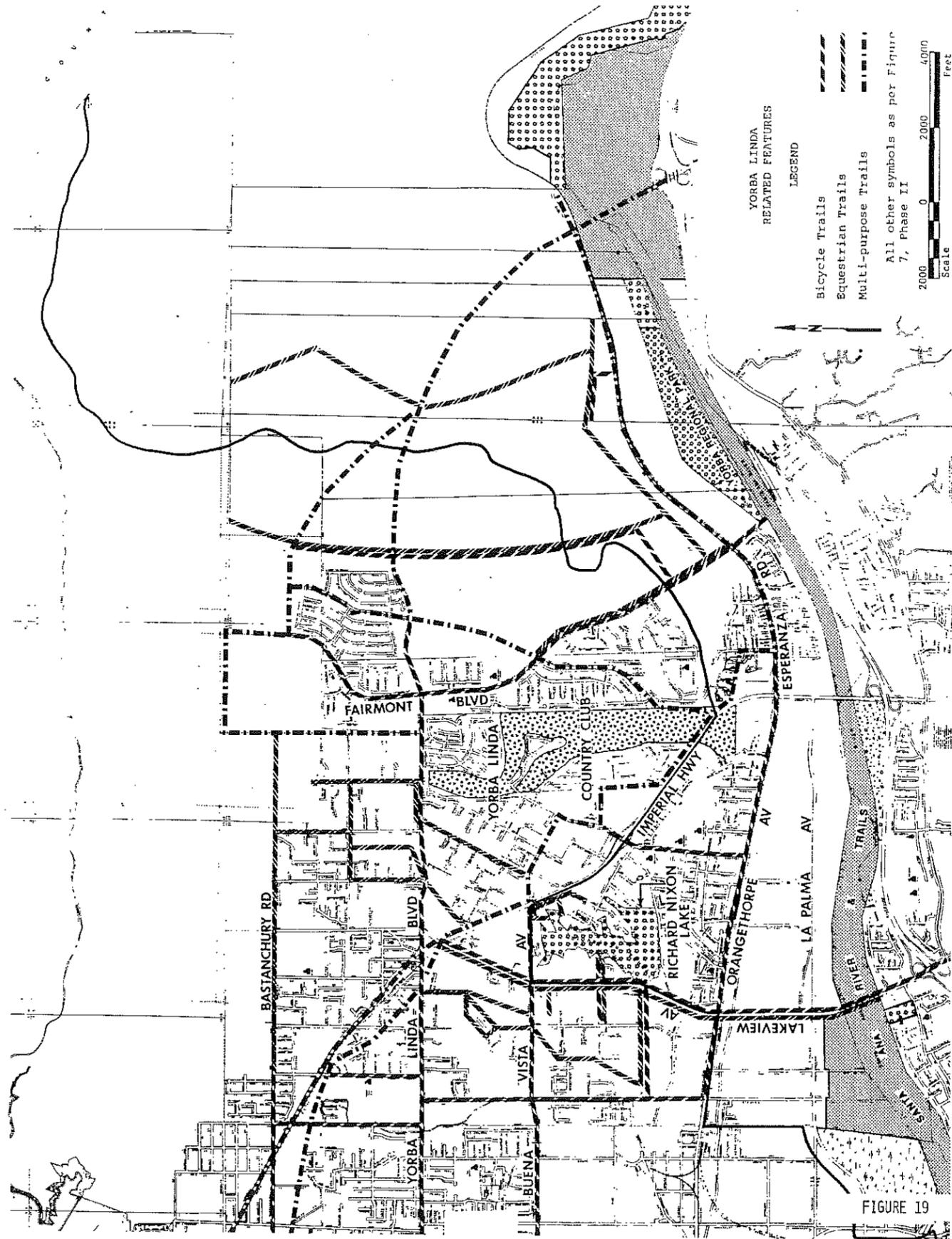


FIGURE 19

6. Santiago Creek Segment

a. General. Santiago Creek has its headwaters in the Santa Ana Mountains. From the mountains the flow is to the northwest through Santiago Canyon, and then southwesterly through the cities of Orange and Santa Ana, and finally into the Santa Ana River. The Santa Ana River/Santiago Creek Greenbelt Plan selected that portion of the creek between the Villa Park Dam and the Santa Ana River as one of the four major segments of the greenbelt corridor. This segment of the corridor was also visited by the Portola expedition; and Father Juan Crespi's diary indicates that the "arroyo of running water--was given the name of the holy apostle and patron of the Spains, Santiago," which means Saint James. The discovery site was near the corner of Chapman Avenue and Prospect Street. The trail blazed by Portola became El Camino Real, which linked the California Missions and permitted settlements to develop along its route. The land grant of 1810, included lower Santiago Creek and the lower Santa Ana River. The present site of the City of Santa Ana was the agricultural center of the Rancho Santiago de Santa Ana. Following the severe drought of 1856-1864, many of the ranchos of Southern California were divided and sold. Two lawyers, Andrew Glassell and Alfred Chapman, participated in the land transactions and they laid out the town of Orange. William Spurgeon bought 76 acres and laid out the town of Santa Ana. In 1877, the Southern Pacific railroad extended its service to Santa Ana, and in 1887, the Santa Fe railroad reached Orange. The population of the area soon increased as people migrated from the East and Mid-west in search of new opportunities. The population growth has continued over the years and has resulted in a definite impact upon the creek. Several times the creek has flooded beyond its normal channels, and Santiago Reservoir and Villa Park Dam were constructed in 1933 and 1963, respectively, to protect the new developments in the area. Portions of the creek are a rich source of sand and gravel, which is used extensively in the construction of the new developments. Today, the nature of the 9.3 miles of the Lower Santiago Creek changes considerably from its confluence with the river on up to Villa Park Dam. The lower reaches of the creek are generally narrow and stony rugged, with the bottom natural except in two parks where concrete channels are used for parking lots. The levees vary from compacted earth material to channel walls constructed of cement rubble or river cobble masonry. From Prospect Street to slightly upstream of Loma Street, the creek is difficult to define among the number of active and abandoned sand and gravel pits. The pit area ends approximately where an extension of Orange Park Boulevard crosses the creek, and from there up to Villa Park Dam it is in a relatively natural condition. The Santa Ana River/Santiago Creek Greenbelt Plan recognizes that the creek is the only tributary of the Santa Ana River having some "nature" of its own. To avoid the continued loss of the remaining natural areas, and to improve damaged areas, the plan proposes the following courses of action: Study flood control

needs and the feasibility of rehabilitating gravel pits as retention basins and regional parks; preserve agriculture; extend and link existing small parks along the creek; construct trail linkages via the abandoned railroad to the north and south; extend trails along the creek and into parks; and preserve and protect the hill setting. The plan offers suggestions for pit rehabilitation, including: Water spreading; sanitary landfill, flood control, and other uses in their present unrehabilitated condition, e. g., golf driving range, archery, model planes, minibike tracks, ball fields, garden plots, nursery stock or storage, stables, and training area for earth-moving equipment. The need for action to preserve, protect, and enhance was apparent to many, and the Lower Santiago Creek was included with the Santa Ana Canyon as part of the joint study area for development of a land use decision model. The Citizen Greenbelt Committees, the professional staffs of their respective jurisdictions, and others, have studied the creek and its surrounding area as a coordinated effort to develop a comprehensive and realistic plan that considers the requirements for adequate flood control measures as well as protection of the greenbelt. A summary of the projects and plans completed and underway is as follows:

(1) County of Orange.

(a) Lower Santiago Creek Regional Park. The County's Master Plan of Regional Parks includes the Lower Santiago Creek Regional Park in its Priority Group One. The area of the park listed in the plan's third amendment is 636.4 acres. Since the third amendment was published in July 1972, the county has acquired additional adjacent property for park/wilderness area purposes, i. e., the former Rinker property (48.9 acres); the Blome property (34.1 acres), and as Amendment No. 6 to the Master Plan of Regional Parks, on 10 December 1975, the county added an additional 68 acres. These additions bring the total area of the Lower Santiago Creek Regional Park to 787.4 acres.

(b) Live Stream. In July 1972, the Orange County Flood Control District (OCFCD), The Orange County Water District (OCWD), and the Irvine Ranch Water District (IRWD), retained the engineering firm of Lowry and Associates to conduct a study on Santiago Creek investigating the feasibility of a groundwater recharge facility below Santiago Dam and a perennial live stream running in the creek from above Irvine Park to Walnut Avenue in the City of Orange. The IRWD had anticipated, at the time of the investigation, a surplus of wastewater which could be used as the source of supply for the live stream. It was later determined that the wastewater would be used for upstream agricultural purposes. Alternate sources of water still being considered are excess Metropolitan Water District (MWD) water, and/or existing water wells along the creek, with sufficient capacity to sustain a small stream flowing through the park and returned to the groundwater basin via a water conservation facility. The OCWD is considering the Bond Street pit as a

possible water conservation facility. The live stream and/or storm flow would be diverted into the north end of a basin at Villa Park Road where it would enter a constant level desilting lake which could also be used for recreational purposes. The desilted water would exit the lake via a small stream and flow into the Bond Street Pit where it would be infiltrated into the groundwater basin.

(c) Sand and Gravel Pit Rehabilitation. In August 1972, the Board of Supervisors appointed The Phase III Sand and Gravel Committee for the purpose of studying and proposing rehabilitation measures for sand and gravel pit excavations in the creek. In November 1973, the committee submitted a proposal for the conduct of an engineering feasibility study which, if approved by all concerned, would permit the filling of certain pits with Class II waste material under controlled conditions that would preclude any adverse impact on underground water quality. In December 1973, the Board, by Resolution No. 73-80, authorized certain actions for conduct of the study. In December 1974, the Board, by Resolution No. 74-1894, authorized deferral of the study until the property which had been selected as a test site was acquired by the county, and directed that a budget level estimate be made for the acquisition cost of the pit test site. On 20 April 1976, the Board authorized negotiations for acquisition of the test site, and on 31 August 1976, the Board approved an agreement with the City of Orange for the appraisal and joint acquisition of the site. As part of a follow-on action to a recommendation from the Phase III Sand and Gravel Committee, the Board, on 11 February 1975, and by Resolution No. 75-196, established a Pit Rehabilitation Task Force to examine the economics of pit rehabilitation, to prepare a priority program for acquisition and to develop a plan for progressive rehabilitation of sand and gravel pits. The task force submitted a report of its findings in November 1975 and recommended that the county acquire the Consolidated Rock Products (Smith) Pit and the combined Hurwitz/Buchheim pits. Both pits are located in the creek between Villa Park Road and Loma Street, and the Hurwitz/Buchheim pits were the pits recommended earlier by the Phase III Sand and Gravel Committee as a test site for Class II waste disposal. The task force indicated that the Smith pit could be rehabilitated by use as a flood retarding or water recharge basin, or after filling with Class III (inert) materials, it may be suitable for recreational purposes compatible with the greenbelt. The Hurwitz/Buchheim pits were recommended for consideration of use as a flood control retarding basin, or inert fill in a portion of the Buchheim property, and using the balance for either Class II or III waste fill. The Class II waste fill would depend upon the results of the pit lining feasibility study proposed by the Phase III Sand and Gravel Committee. On 25 February 1976, the Board adopted a proposed revision to the county's Sand and Gravel Extraction Zoning District Regulations, which required pit operators to develop plans for rehabilitation

of older mining pits. An extracted copy of Section 7-9-104 "SG" Sand and Gravel Extraction" District regulations, of the County Zoning Code, is provided in APPENDIX Q.

(d) Specific Plan and Draft Environmental Impact Report for Lower Santiago Creek. In March 1975, the Project Planning Branch of the Advance Planning Division of the County's Environmental Management Agency (EMA), initiated the preparation of a Specific Plan and Draft Environmental Impact Report (EIR) for Lower Santiago Creek from the Santa Ana River to Villa Park Dam. The main emphasis of the study is to review alternate types of feasible flood control improvements for the creek and to ensure that the improvements are compatible with the present greenbelt-open space plans. The resolution of the flood control deficiencies is expected to significantly contribute to the implementation of the Santiago Greenbelt. The plan is to be of sufficient detail to enable cost estimates to be determined for the different facilities and to prepare a potential schedule of implementation. Adequate detail and guidance will be provided to enable the appropriate public agency to proceed with the acquisition of land and the construction of development projects with the assurance that those actions are in accord with all approved plans for the creek and its immediate area. In recognition of the extensive planning studies that have already been conducted on the creek area and to ensure that the results of those studies are incorporated into the Specific Plan, a task force was formed of members directly involved in planning for the greenbelt, to provide direct input to the Project Planning staff as the study progresses. The membership of the task force includes representatives from the cities of Orange, Santa Ana, and Villa Park, the Orange County Water District, the Greenbelt Commission, and various districts and departments within the EMA. Beginning in May 1975, the task force has met five times. A draft report of the study is in its final stages of completion and is expected to be distributed in late 1976 or early 1977, to interested parties for review and comments. It will then be submitted to the planning commissions of the cities concerned and the county, and eventually to the Board of Supervisors, for approval. The draft EIR is also being prepared and will also be submitted for review. The draft report includes consideration of several alternatives regarding the flood control measures that may be applied to the project area. The flood control measures considered include flood retarding basins, raising the Villa Park and Santiago dams, increasing the controlled release of the Villa Park Dam, and various forms of channelization. Consideration is also given to water conservation (including a live stream), traffic circulation, landfill proposals, and the greenbelt and its related facilities. A "suggested plan" is presented as a guideline, subject to change and modification as the draft report is reviewed by various local agencies and the general public. The "suggested plan" is comprehensive and detailed, and the greenbelt portion is compatible with and complementary to the existing plans for the Lower Santiago Creek Regional Park, the related trail systems and nearby existing and

planned greenbelt facilities. The report describes the ultimate location of trails along the creek, and indicates that until ultimate development of the greenbelt corridor occurs, the development of an interim trail system should be actively pursued. The report estimates that ultimate completion of the greenbelt corridor will occur sometime after 1990.

(2) Orange. The city's portion of the Santa Ana River/Santiago Creek Greenbelt Implementation Plan was approved by the City Council on 18 May 1976. In addition to charter membership in the Greenbelt Commission, the city has provided funds and staff man-hours in support of the joint study to develop the land use decision model for the Santiago Creek and Santa Ana Canyon. The city's Citizen Greenbelt Committee has been exceptionally active in the greenbelt program, and has worked closely with the committees of neighboring jurisdictions and their staffs in the development of greenbelt plans. Members of the committee have attended numerous meetings with developers regarding planned developments along the greenbelt corridor; reviewed and provided comments and recommendations to their city's planning commission and council about the compatibility of plans with the greenbelt, and in general have been a forceful, constructive influence on maintaining the inertia and quality of the greenbelt program.

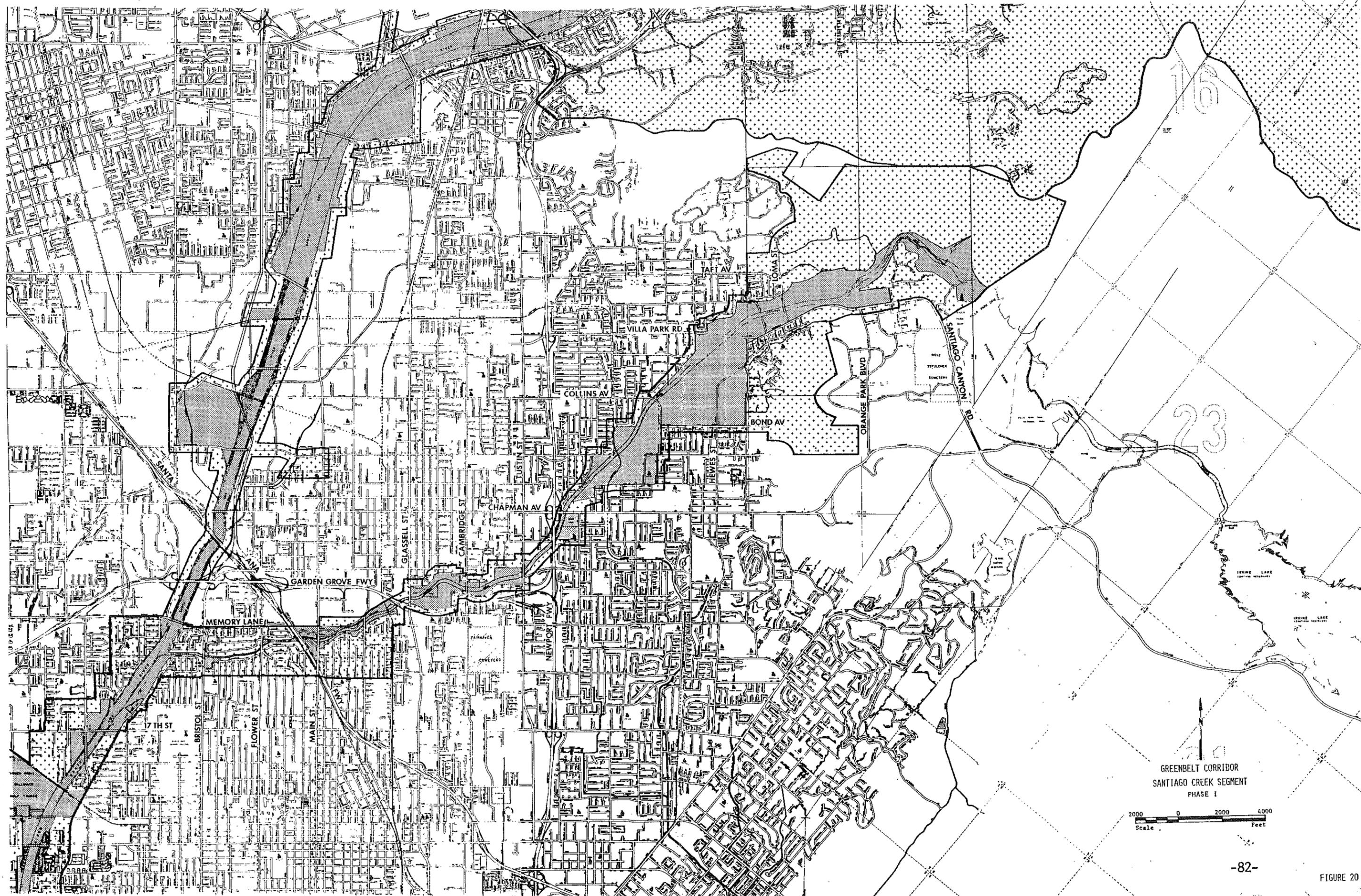
(3) Santa Ana. The jurisdiction of the City of Santa Ana extends into the Santiago Creek segment, and its greenbelt plan includes several projects in that segment.

(4) Villa Park. The city's portion of the Santa Ana River/Santiago Creek Greenbelt Implementation Plan was developed concurrently with the City of Orange's portion, and was approved by the City Council on 20 May 1976. The Citizen Greenbelt Committee has worked closely with and generally participated in the greenbelt program in a like manner, in degree and scope, as the committee of Orange.

b. Greenbelt Corridor and Impact Area. The boundaries of the refined greenbelt corridor and impact area for the Santiago Creek segment are depicted on the Phase I map provided in FIGURE 20. These boundaries were determined by and reflected in the greenbelt plans of the cities of Orange, Santa Ana, and Villa Park.

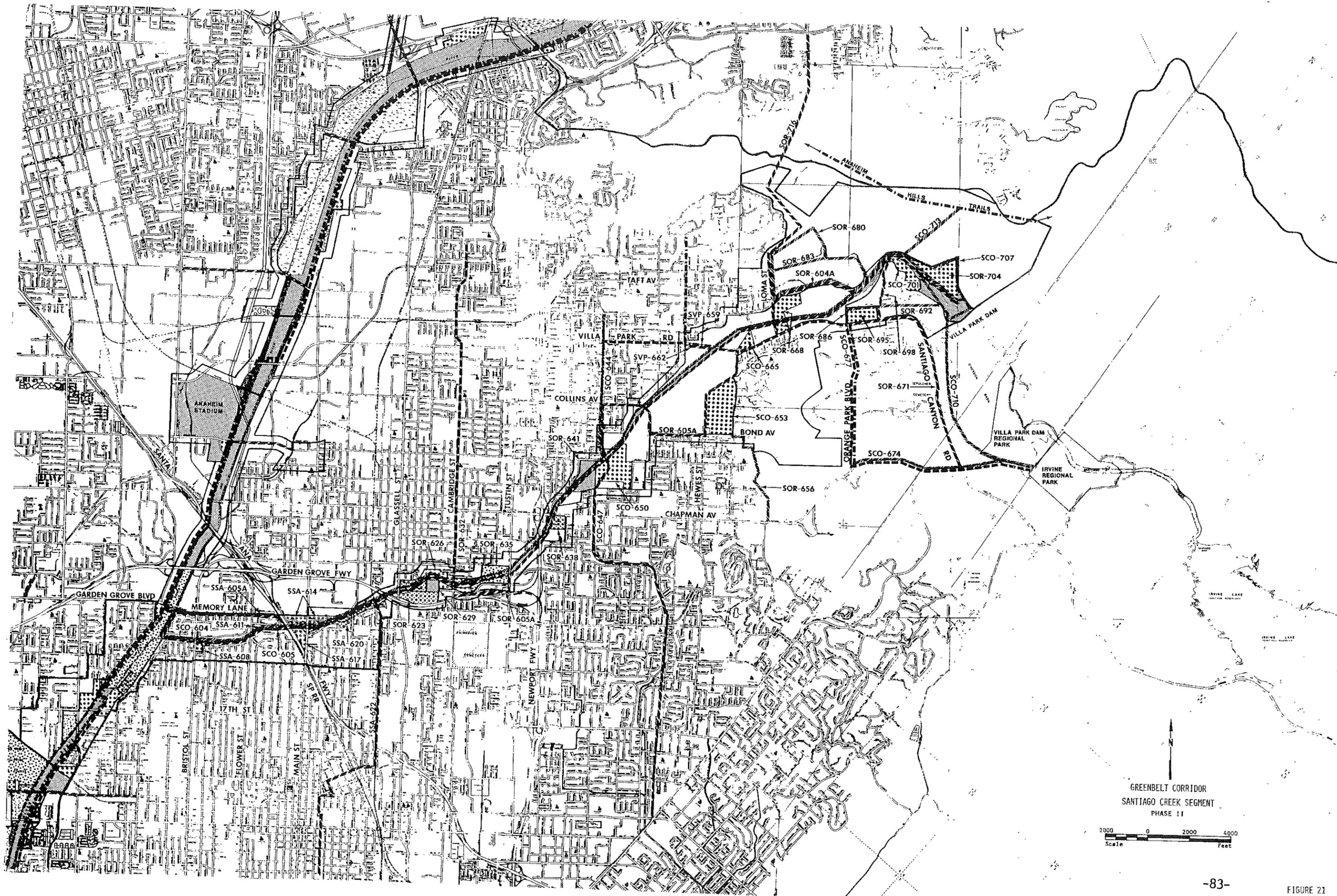
c. Existing, Under Construction, and Planned Projects. The location of each project in the Santiago Creek segment is shown on the Phase II map in FIGURE 21. The numbering system is a continuation of that used in the other corridor segments and described in FIGURE 6.

(1) Equestrian Trail (Planned. SCO-604): This equestrian trail is planned along the entire length of the Lower Santiago Creek, from the Santa Ana River up to the Villa Park Dam.



GREENBELT CORRIDOR
 SANTIAGO CREEK SEGMENT
 PHASE I

2000 0 2000 4000
 Scale Feet



GREENBELT CORRIDOR
SANTIAGO CREEK SEGMENT
PHASE II



The trail's route and responsibility for acquisition, development, operation and maintenance, and related costs, are all dependent upon a determination of the ultimate flood control channel configuration, which is currently under study by the County's Project Planning Branch, EMA. It is estimated that this trail may not be completed until sometime after 1990.

(2) Equestrian Trail (Planned. SOR, SCO-604A): This project is intended to provide an interim trail along a portion of the creek until eventual completion of SCO-604. The trail will begin at Loma Street, along the north side of the creek, and continue generally upstream for a distance of approximately two miles to the eastern end of SOR-704. The route is depicted on FIGURE 21 and described in detail as follows: East from Loma Street to easement along southern boundary of AP 370-11-4, to easement along northwest boundary of AP 370-11-6, easterly along a dedicated trail on southern boundaries of AP 370-11-19 and AP 85-541-5 to AP 93-280-16 in the creek; then northeast in the creek channel to AP 93-280-2; easterly in creek channel to AP 93-250-36, and southeasterly in creek channel to AP 93-250-37, to east end of SOR-704.

(3) Bicycle Trail (Planned. SCO-605): The County's Arterial Bikeway System Program published in June 1975, includes a bicycle trail along the creek from the river upstream to Irvine Regional Park. The trail is programmed for development in increments, i. e., ABS-7A: Santa Ana River to Bristol Street in FY 76/77; ABS-7B: Bristol to Cambridge Streets in FY 77/78; ABS-7C: Cambridge Street to the Southern Pacific ROW in FY 77-78; and ABS-7D: Southern Pacific ROW to Irvine Regional Park ASAP. The County's ABS Program for 1976-77, published in July 1976, does not include ABS-7A. The trail route along the creek and the schedule for completion is, like the equestrian trail SCO-604, dependent upon a determination of the ultimate flood control channel configuration, which is currently under study by the County's Project Planning Branch, EMA.

(4) Bicycle Trail (Planned. SOR, SSA, SCO-605A): This project is intended to provide an interim bicycle trail from the river to the vicinity of Villa Park Dam via a route that is essentially alongside the creek. The route of this interim trail was determined by a coordinated planning action between the Citizen Greenbelt Committees of the cities of Orange, Santa Ana, and Villa Park, the committee for the County's Unincorporated Area, and staff representatives of their respective jurisdictions. The route as approved by the cities and transmitted to the county for adoption is as follows: Beginning at the existing bicycle trail on the west levee of the Santa Ana River, and at a point in the immediate vicinity of the Garden Grove Boulevard bridge, the trail will cross the river to the east levee and enter the City of Santa Ana on Memory Lane, proceed easterly thereon as a striped and signed trail; beyond Flower Street, through an alley to the Southern Pacific Railroad, and then along the railroad

right-of-way to the creek bottom. Within the creek the trail continues upstream along the south levee, with undercrossings at the Santa Ana Freeway and Main Street, and on to Valencia Avenue where the trail crosses to the north levee and continues thereon to an undercrossing at Parker Street, then through the Santiago Day Camp to undercrossings at the Garden Grove Freeway and Glassell Street, through Hart Park to Cambridge Street. At this point, from Cambridge Street to Tustin Avenue, the route may likely require additional study and a public hearing to consider various alternatives and determination of the most acceptable alignment. A recommended route for consideration is as follows: Proceed south on Cambridge Street along an existing striped and signed trail, beyond Fairway Drive, to the northern side of the Garden Grove Freeway right-of-way, then easterly thereon to Tustin Avenue, and north as a striped and signed trail to the creek. Within the creek again, the trail proceeds along the south levee with undercrossings at the Newport Freeway and Chapman Avenue, on to the planned bicycle trail along the Southern Pacific Railroad right-of-way, northerly, to Collins Avenue, then easterly thereon along a striped and signed trail to Prospect Avenue, southerly thereon to Bond Avenue. (Note: the route between Collins and Bond Avenues will likely require a public hearing due to parking restrictions). At Bond Avenue the route proceeds easterly as a signed and striped trail to Hewes Avenue and north/northeasterly along a striped and signed trail to Villa Park/Santiago Canyon Road. The trail then proceeds easterly along Santiago Canyon Road on an existing striped and signed trail to Loma Street where it turns north, and as a striped and signed trail on to Taft/Serrano Avenue. It then continues east as a separate trail along the south side of the planned route of the extension of Taft/Serrano Avenue, as presently depicted on the County's Master Plan of Arterial Highways, to that portion of AP 93-208-15 which is planned for acquisition by the Orange County Flood Control District. (Note: The precise route of this portion of the trail will be dependent upon the final alignment of the Taft/Serrano Avenue extension). The trail then enters the creek and continues to the east end of SOR-704.

(5) Bristol Reservoir Rest Stop (Planned. SSA-608): The City of Santa Ana Greenbelt Plan includes the 3.5 acre Bristol Reservoir, which is adjacent to the south levee of the creek and east of Bristol Street. This property is well located for a rest stop with bicycle racks, hitching posts, drinking fountains and benches.

(6) Jack Fisher Park (Existing. SSA-611): This 3.9 acre city park is located directly east of Flower Street and adjacent to the creek's north levee. The park was constructed in 1932 as part of the Work Progress Administration (WPA). Facilities include restrooms, wood stoves, picnic tables and benches, a log cabin for public meetings, and playground equipment. Parking is available along Flower Street.

(7) Rest Stop-Park & Concession Stand (Planned. SSA-614): The site of this project, in the City of Santa Ana Greenbelt Plan, is located north of the creek and east and west of Main Street. The plan indicates that this 18.3 acre site will be used for private operation of commercial centers servicing greenbelt attractions.

(8) Park (Planned. SSA-617): This park is included in the City of Santa Ana Greenbelt Plan for location on a 7.9 acre site south of the creek and west of Main Street. The park will be city owned and operated and the acquisition and development costs are estimated to be \$711,000.

(9) Santiago Park and Day Camp (Existing. SSA-620): This 27 acre park and day camp is located along both sides of the creek for almost a mile between Main Street and the Garden Grove Freeway. The facility is divided into two use areas: Santiago Day Camp between Santiago Boulevard and the Garden Grove Freeway; and Santiago Park, which is located between Main Street and Santiago Boulevard. The day camp was opened in 1957 for camping purposes, while the park was completed in 1936 as a WPA project. Day camp facilities include hiking trails, picnic tables and restrooms. The park has lighted tennis courts, activity fields, recreation buildings, hiking trails, picnic tables and barbecue pits, playgrounds, lawn bowling courts, offstreet parking, and restrooms.

(10) Bicycle Lane/Trail (Planned. SSA-622): This project is part of the City of Santa Ana's Golden Loop bicycle trails/lane which will commence as LSA-050 at the Santa Ana River and MacArthur Boulevard, and eventually becomes SSA-622 on Lincoln Avenue where it will connect with the creek trail.

(11) Hart Park (Existing. SOR-623): This 38 acre park is located in the City of Orange, north and south of the creek and east of Glassell Street. The park was initially constructed under the WPA program in 1933, and an expansion towards the freeway was completed in 1975. Facilities include activity fields, an outdoor swimming pool with shower and locker rooms, tennis courts, picnic facilities including gas stoves and fire ring, a clubhouse, drinking fountains, concession stands, offstreet parking, and restrooms.

(12) Hart Park Expansion (Planned. SOR-626): This 15 acre site is located directly east of and adjacent to Hart Park, and will be used for expansion of this popular park. The present concept provides for this property to be developed as a passive area of the park. The City of Orange has also indicated a desire to further expand the park easterly of Cambridge Street on to 4.5 acres currently owned by the County (AP No. 390-371-7). Additional expansion may include the creek and adjacent vacant land between Glassell Street and the Garden Grove Freeway.

(13) Recreation Center. (Planned. SOR-629): This 10 acre site, located easterly and southerly of Hart Park, is a former sand and gravel pit that is being planned for private development and operation as a tennis club. The facility will have ten tennis courts, a swimming pool and a clubhouse.

(14) Bicycle Lane (Existing. SOR-632): This signed and striped bicycle lane provides a linkage to the creek via Cambridge Street. Upon completion of the creek bicycle trail (SOR-605A), it will also provide a linkage to Hart Park for residents north of the creek.

(15) Santiago Golf Course (Existing. SOR-635): This nine hole golf course is located within the creek floodplain westerly of Tustin Street, east of Cambridge Street, and north of Fairway Drive. The course is privately owned but open to the public, with an overall length of 2,236 yards covering 26 acres. Facilities include a pro shop, cafe and offstreet parking.

(16) Yorba Park (Existing. SOR-638): This 7.9 acre park, located easterly of the creek and south of Chapman Avenue, was completed in 1968 on land formerly used as a sanitary landfill. Methane gas release and ground settling have been problems in maintaining the park. Facilities include four baseball diamonds, tot lot, restrooms, concession building, and offstreet parking. Adjacent to and south of Yorba Park is a YMCA facility (AP No. 392-071-2, 5.04 acres). It is in an interim stage of development with present facilities limited to a recreation center in which a number of indoor activities are made available. Future expansion is anticipated.

(17) Open Space (Planned. SOR-641): This 28 acre property is located on both sides of the creek, south of Walnut Avenue, and generally west of the SPRR right-of-way. The City of Orange had included the property as a community park in its Master Plan of Parks, however, due to the proximity of the Lower Santiago Creek Regional Park, and its planned facilities, the city has approved the use for open space as part of the greenbelt corridor.

(18) Equestrian Trail (Planned. SCO-644): This equestrian trail will link the creek trail to the City of Villa Park via the Southern Pacific Railroad right-of-way, which is in the process of being acquired by the county.

(19) Bicycle Trail (Planned. SCO-647): The County's Arterial Bikeway System Program includes Project ABS-8A as an offroad bicycle trail along the Southern Pacific Transportation Company's right-of-way from Collins to Newport Avenues. The trail will connect with SCO-605 as it crosses the creek. Signals will be provided at street crossings.

(20) Trail Park & Ride (Planned. SCO-650): This 44.6 acre site is within the Lower Santiago Creek Regional Park,

and is located on both sides of the creek, west of Prospect Street, and north of Spring Street. The site is planned to be developed as an active park/trail park and ride, which will provide offstreet areas where vehicles may be parked and bicycles, children and horses safely unloaded. The facility will also provide a needed rest stop at the intersection of the creek trails with the SPRR trails (SCO-644 & -647).

(21) Park (Planned. SCO-653): This 68 acre site is located south of the creek, north of Bond Avenue, and west of Hewes Street. On 10 December 1975, the Board of Supervisors approved Amendment No. 6 to the Master Plan of Regional Parks which included this property in the Lower Santiago Creek Regional Park, and authorized its acquisition. The site is level and is considered to be ideal for locating the park's high activity recreational facilities, including sports activity fields and courts, tennis complex, swimming pool, picnic areas, trails and landscaping, recreation center building, offstreet parking and restrooms.

(22) Equestrian Trail (Planned. SOR-656): This equestrian trail is planned to link the creek trail to Crawford Canyon Road, thus providing an important linkage from the equestrian oriented areas and trails of El Modena and Cowan Heights to the creek and Lower Santiago Creek Regional Park.

(23) Equestrian Trail (Existing. SVP-659): This trail links the planned creek equestrian trail (SCO-604) with the City of Villa Park equestrian trails system via Villa Park Road and Lemon Street. It will provide additional access to the creek corridor and Lower Santiago Creek Regional Park, and will also link to the Anaheim Hills equestrian trails system.

(24) Bicycle Lane (Existing/Planned. SVP-662): The existing portion of this bicycle lane extends from the SPRR on the west along Villa Park Road easterly to Lemon Street. The planned portion continues along Villa Park Road across the creek to Hewes Street. When completed, the lane will link the Villa Park bicycle trail system to the creek trail and the Lower Santiago Creek Regional Park.

(25) Trail Park and Ride - Vista (Planned. SCO-665): This 6.8 acre site is located north of Santiago Canyon Road, south of the creek and west of Santiago Boulevard, and is within the Lower Santiago Creek Regional Park. The planned use is similar to that of project SCO-650, and also will provide a vista point overlooking the creek corridor.

(26) Trail Park and Ride - Campground (Planned. SOR-668): This 48 acre site is within the boundaries of the Lower Santiago Creek Regional Park and is located north of Santiago Canyon Road, on both sides of the creek and east of Loma Street. Of the total project area, 16 acres are currently

owned by the county and are the former site of refuse disposal station No. 22. This disposal site is presently experiencing methane outgassing and ground settling, and is being considered for some interim practical greenbelt use. In addition to providing a trail park and ride facility, this project will also include an area for organized group camping.

(27) Bicycle Lane (Existing/Planned. SOR-671): The existing portion of this bicycle lane extends from Loma Street easterly along Santiago Canyon Road to Orange Park Boulevard. The planned portion continues along Santiago Canyon Road from Orange Park Boulevard, in an easterly and then southerly direction to Chapman Avenue and a linkage to Irvine Regional Park via SCO-677.

(28) Equestrian Trail (Existing/Planned. SCO-674): The existing portion of this equestrian trail extends from Santiago Canyon Road on south along Orange Park Boulevard to Chapman Avenue. The planned portion continues east along Chapman Avenue to Irvine Regional Park. When completed this equestrian trail will provide a linkage between the creek trail and Lower Santiago Creek Regional Park (via SOR-686) and Irvine Regional Park.

(29) Bicycle Lane (Existing. SCO-677): This bicycle lane links the creek and Lower Santiago Creek Regional Park to the Villa Park Dam and Irvine Regional Parks via Orange Park Boulevard and Chapman Avenue.

(30) Equestrian Trail (Planned. SOR-680): This project will provide an equestrian trail loop linking the creek equestrian trail (SOR-604A) to the City of Villa Park equestrian trails system, Anaheim Hills equestrian trails system, Edison Wilderness Park and Cerro Villa Park.

(31) Equestrian Trail (Planned. SOR-683): This equestrian trail provides a linkage between the west and east portions of SOR-680.

(32) Equestrian Trail (Planned. SOR-686): This equestrian trail, located north of Santiago Canyon Road and south of the creek, will link the creek trail with the planned Handy Creek equestrian trail and SCO-674. This project will most likely be developed in conjunction with SOR-695.

(33) Equestrian Trail (Planned. SOR-692): This planned trail will provide a linkage from SOR-686 and SOR-695 easterly to the creek trail and trail SCO-707.

(34) Park and Ride (Planned. SOR-695): The City of Orange Master Plan of Parks proposes a joint city/Orange Unified School District project to develop a community park in conjunction with planned junior high and elementary schools

located north of Santiago Canyon Road, south of the creek and west of Windes Drive. Facilities proposed include community and recreation buildings, nature areas, picnic areas, athletic fields to be shared with the schools, an equestrian corral, equestrian trails, offstreet parking, and restrooms. The planned park and ride would incorporate the parking areas with the corral and equestrian trails, with linkages to trails SOR-686, 692, and 698.

(35) Bicycle Lane (Planned. SOR-698): This bicycle lane will provide access to the creek greenbelt, specifically projects SCO-701 and SOR-704, via Windes Drive. It will also link the planned park and ride (SOR-695) to these facilities, thus reducing automobile traffic on Windes Drive.

(36) Nature Preserve (Planned. SCO-701): This 34 acre site was acquired by the county in April 1976 and has been included within the Lower Santiago Creek Regional Park. It is generally located south of the creek, west of the Villa Park Dam and at the terminus of Windes Drive. Improvements on the property consist of a 2,000 sq. ft. residence, a 400 sq. ft. guest house, a horseshoe pit, shuffleboard court, barbecue pits and restrooms. In addition, there is an orange grove on the property as well as a number of large oak trees. Plans for this project area include preserving the site in its natural state as a nature preserve, as well as development of a nature interpretive center for the area in conjunction with project SOR-704, with parking, picnic areas and restroom facilities.

(37) Wilderness Area (Existing/Planned. SOR-704): This 49 acre site is located north of the creek, west of the Villa Park Dam and at the terminus of Windes Drive. The project area was acquired by the county in October 1974, as part of the Lower Santiago Creek Regional Park. On 6 April 1976, the area was designated as a "Wilderness Area" by the Board of Supervisors. The property supports a modified riparian woodland, containing dense stands of coast live oak, California sycamore, walnut and arroyo willow trees, as well as many introduced species, including a number of citrus trees, which were planted by the former owner. Plans for this project area include equestrian and hiking trails around the property, as well as an arboretum with nature trails. Additional parking and/or access for this project and, project SCO-701, will be made available at the park and ride facility on Santiago Canyon Road (SOR-695).

(38) Equestrian Trail (Planned: SCO-707): This trail will provide a loop around SOR-704 and adjacent county/privately owned properties to the south and east. Linkages will be provided to the main creek equestrian trail, as well as trails SOR-692 and SCO-710.

(39) Equestrian Trail (Under Construction. SCO-710): This trail will provide a linkage from the main creek equestrian trail and Lower Santiago Creek Regional Park to the Villa Park Dam and Irvine Regional Parks.

(40) Equestrian Trail (Planned. SCO-713): This trail will provide a linkage from the main creek equestrian trail to the Anaheim Hills equestrian trails system, with an ultimate link to the Santa Ana Canyon greenbelt corridor and trails. The precise route of this trail is yet to be determined.

(41) Bicycle Lane (Planned. SOR-716): This planned trail will link the creek bicycle trail with the Santa Ana Canyon greenbelt corridor and trails via a planned northerly extension of Loma Street to Imperial Highway.

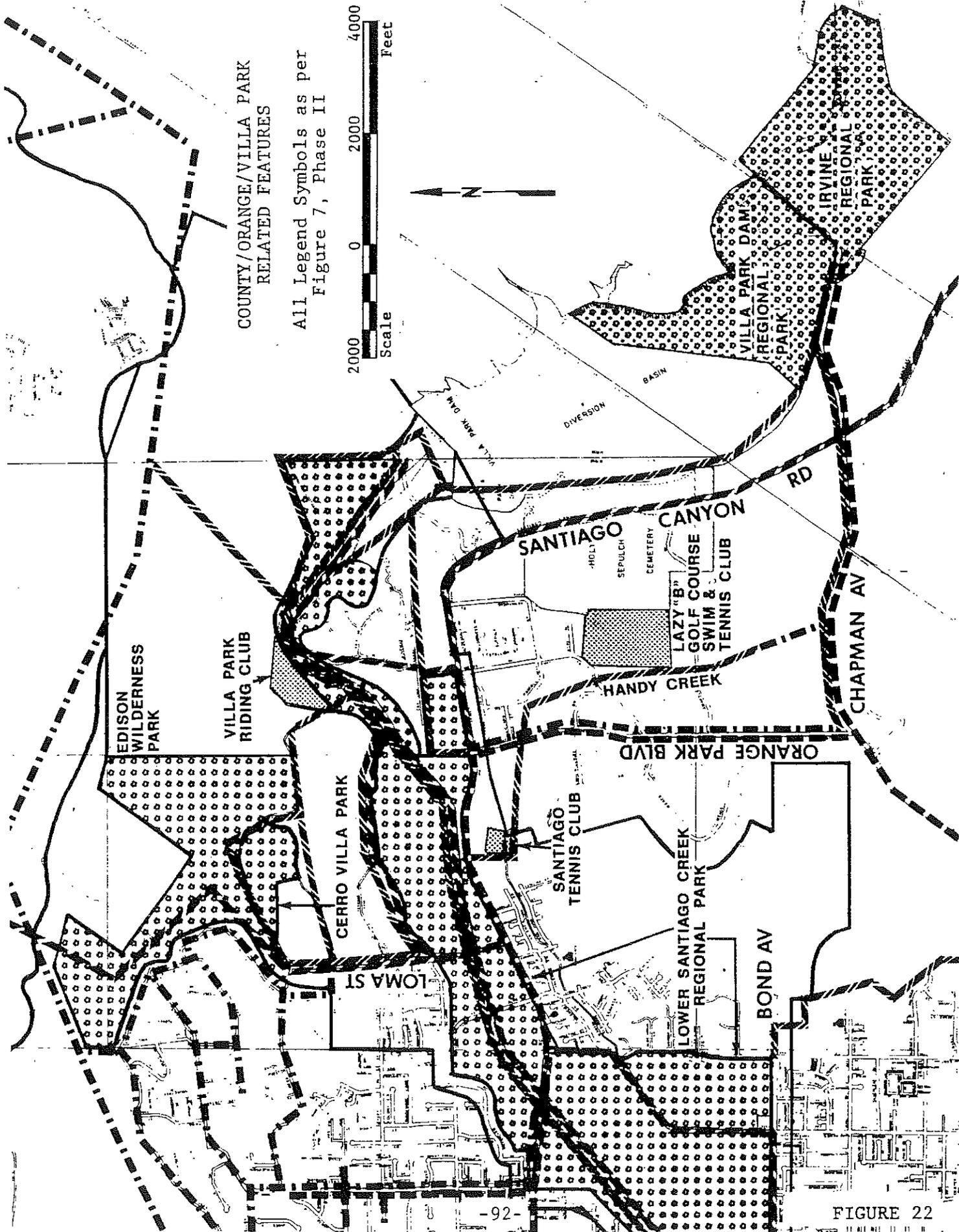
d. Summary of Projects' Current Status. The project summary sheets for the Santiago Creek segment, listing each project by number and indicating the current and planned use of the projects property, assessor's parcel numbers and acreage, zoning, and ownership, are provided in APPENDIX R.

e. Summary of Projects' Acquisition, Development, and Operation Responsibility. The project summary sheets for the Santiago Creek segment, listing each project by number, and indicating the planned use and the jurisdictions responsible for property acquisition, project development, and project operation/maintenance, and the estimated costs for each, are provided in APPENDIX S.

f. Planned Project Priorities. Each jurisdiction has assigned a priority number or category to the planned projects in the Santiago Creek segment. A summary of the project priority assignments, by each jurisdiction, is provided in APPENDIX T.

g. Related Features. Existing recreationally oriented facilities, visitor/tourists attractions and greenbelt oriented open space areas that are linked to the greenbelt corridor, are included in the category of a related feature. A description of these related features, by jurisdictions, is as follows:

(1) County of Orange. Upstream of the Villa Park Dam are two regional parks, i. e., Villa Park Dam Regional Park (291 acres) and Irvine Regional Park (186 acres). Both of these parks will be linked to the Lower Santiago Creek Regional Park by bicycle and equestrian trails. Villa Park Dam Regional Park includes over 200 acres that have been designated as "Wilderness Area," and available facilities are an administration building, restrooms, picnic areas, and a parking area. Irvine Regional Park was one of the original two regional parks in the county and contains picnic areas, a children's zoo, a lake for boating, concessions, maintenance yard, and other related facilities. The Villa Park Country Club is located north of the creek across from the end of Windes Drive. The club's facilities include stables, an arena, and a swimming pool. The location of these related features is shown on FIGURE 22.



COUNTY/ORANGE/VILLA PARK
RELATED FEATURES

All Legend Symbols as per
Figure 7, Phase II

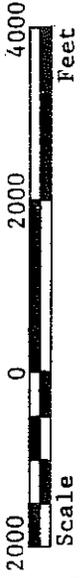


FIGURE 22

(2) Orange/Villa Park. The Cerro Villa Park site is located east of the City of Villa Park and north of Santiago Canyon Road. The property is a 27 acre landfill that is currently planned for limited improvement as a natural park. North of the Cerro Villa Park site is the planned Edison Wilderness Area, which will surround the planned Edison substation. Planned park use is currently limited to riding and hiking trails. The Lazy "B" Golf Course, and Tennis and Swim Club are south of Santiago Canyon Road and are linked to the creek area by bicycle trail SCO-677. The Santiago Tennis Club is adjacent to the south side of Santiago Canyon Road and west of SOR-695. An equestrian trail is planned as part of the flood control improvements along Handy Creek, which is a tributary of Santiago Creek. The trail will link SOR-604A to SCO-674. The Santiago Creek will be linked to the Santa Ana Canyon by a bicycle trail (SOR-716) and an equestrian trail (SCO-713). The location of these related features is shown on FIGURE 22.

D. Summary

1. General. Over five years have passed since the Santa Ana River/Santiago Creek Greenbelt Plan was adopted and published. Many of the proposals in that plan have become a reality in the form of existing projects and other forms of accomplishment, or, are included as part of this Implementation Plan. FIGURE 23 is a statistical summary of this Plan. It lists, for each of the four major segments of the greenbelt corridor, the total acreage within the corridor, the impact area, existing and planned parks, and open space; and, the existing and planned mileages for bicycle and equestrian trails, and their related landscaping projects. Costs are provided for acquisition and development of planned projects (not existing), and for the operation and maintenance of both existing and planned projects.

2. Greenbelt Corridor and Impact Area. There are 6,595 acres in the newly defined greenbelt corridor. If the County acquires the 1,600 acres south of the Santa Ana Canyon, for Coal Canyon Regional Park (CCO-430), the total would then be 8,195 acres, or 12.8 square miles of greenbelt. This total is very close to the 8,400 acres, or 13 square miles proposed in the original Greenbelt Plan. The 25,293 acres of impact area are intended to enhance the greenbelt corridor by serving as a transition area and an introduction to the fact that a greenbelt is being approached. Included in the impact area are natural areas which will provide a visually aesthetic backdrop.

3. Parks. Included in this 3,610 acres (672 existing and 2,938 planned) are regional and local parks, trail park and rides, and rest stops. When the County completes its planning for the Santiago Creek, another 536 acres may be added to bring the total to 4,146. The landscaped trail system, which will

eventually extend the entire length of the river in the County (27 miles) and the Lower Santiago Creek (10 miles), will actually be a linear park, and will add an approximate 250 additional acres, for a total of 4,396 acres of parks in the greenbelt corridor.

4. Open Space. This 942 acres (699 existing and 243 planned) includes golf courses and equestrian centers, plus agricultural areas that are in the flood plain.

5. Bicycle and Equestrian Trails. The Orange County portion of the "mountains to the sea" trail system is nearing completion, with over 54 miles of equestrian trails (33.9 existing and 20.5 planned) and over 60 miles of bicycle trails (27.8 existing and 32.4 planned), along the greenbelt corridor. The trail system is the heart of the corridor and is already enjoyed by several hundred thousands of citizens each year. The regional significance of the trail has been recognized by its designation as a "national recreation trail."

6. Trail Rest Stops. There are many rest stops along the trails and more are planned. Existing rest stops are listed with identification of the facilities available as follows: (B) bicyclists; (E) equestrian; and (BE) bicyclists and equestrians. Lebard Park (B), Centennial Park (B), Alona Park (B), Edna Park (BE), River Trails Stables (E), Rancho del Rio (E), Yorba Regional Park (BE), Featherly Regional Park (B), Coal Canyon Stables (E), Jack Fisher Park (B), Santiago Park (B), Hart Park (B), and Yorba Park (B).

7. Trail Park and Rides. These much needed facilities are planned for development at the Forrest Paull Park (off the west levee and south of Garden Grove Boulevard), and at El Parque del Rio (off the east levee and south of Lincoln Avenue).

8. Costs. The cost figures for acquisition, development, and operation and maintenance, reflect the most recent experience of the participating jurisdictions. Acquisition and development costs are provided only for planned projects, while, operation and maintenance costs are provided for both existing and planned projects. There are some projects for which costs have not yet been estimated; therefore, the total costs indicated in FIGURE 23 must be recognized as likely being somewhat less than what will be realized. This factor contributes to the need for periodic updating of the plan.

STATISTICAL SUMMARY

Segment	<u>GREENBELT CORRIDOR</u>		<u>IMPACT AREA</u>
	Acreage		Acreage
Lower River	2,839		2,008
Middle River	1,522		3,139
Santa Ana Canyon	1,158		17,536
Santiago Creek	1,076		2,610
TOTALS	6,595		25,293

Segment	<u>PARKS</u>		<u>COSTS</u>		Operation & Maintenance
	<u>ACREAGE</u>		Acquisition	Development	
	Existing	Planned			
Lower River	156	504	\$ 5,046,000	\$14,136,000	\$ 664,560
Middle River	30	528	650,000	3,726,000	334,897
Santa Ana Canyon	326	1,666	2,750,000	1,386,000	415,400
Santiago Creek	160	* 240	3,813,598	6,681,570	720,501
TOTALS	672	2,938	\$12,259,598	\$25,929,570	\$2,135,358

*Includes 83 acres "existing" and 168 acres "planned" of 787.4 total acres in Lower Santiago Creek Regional Park. The nature of use and related costs for the remaining 536.4 acres will be determined as part of the Specific Plan and Draft Environmental Impact Report being prepared by the County's Project Plans Branch for the Lower Santiago Creek.

Segment	<u>OPEN SPACE</u>		<u>COSTS</u>		Operation & Maintenance
	Existing	Planned	Acquisition	Development	
Lower River	244	189	\$ 3,745,200	\$ 702,800	\$ -
Middle River	9	16	-	-	-
Santa Ana Canyon	420	-	-	-	-
Santiago Creek	26	38	372,160	-	-
TOTALS	699	243	\$ 4,117,360	\$ 702,800	\$ -

Segment	<u>EQUESTRIAN TRAILS</u>		<u>COSTS</u>		Operation & Maintenance
	<u>MILEAGE</u>		Acquisition	Development	
	Existing	Planned			
Lower River	19.3	1.2	\$ -	\$ 6,000	\$ 2,050
Middle River	10.7	1.8	-	9,000	1,250
Santa Ana Canyon	2.0	5.0	-	25,000	700
Santiago Creek	1.9	12.5	105,273	37,955	1,442
TOTALS	33.9	20.5	\$ 105,273	\$ 77,955	\$ 5,442

BICYCLE TRAILS

Segment	<u>MILEAGE</u>		<u>COSTS</u>		
	Existing	Planned	Acquisition	Development	Operation & Maintenance
Lower River	11.3	8.2	-	\$ 481,700	\$ 5,860
Middle River	10.7	0.5	-	30,000	3,360
Santa Ana Canyon	2.5	7.3	42,000	238,900	2,934
Santiago Creek	3.3	16.4	426,352	511,970	5,415
TOTALS	27.8	32.4	468,352	\$1,262,570	\$ 17,569

LANDSCAPING

Lower River	-	11.7	-	\$ 633,115	\$ 113,724
Middle River	8.7	-	-	-	84,564
Santa Ana Canyon	-	-	-	-	-
Santiago Creek	-	-	-	-	-
TOTALS	8.7	11.7	-	\$ 633,115	\$ 198,288

V. Execution

A. General. This Plan is a coordinated composite of many local plans which have been developed by the participating jurisdictions for their respective areas of the greenbelt corridor. The successful execution of this Plan is dependent upon the same critical factors which contributed to its development, i. e., the centrally coordinated cooperative efforts of all concerned. The coordination should be provided by a separate agency, with membership consisting of representatives of the participating jurisdictions. The Greenbelt Commission, in its present or some other form of updated organizational structure, and appropriate responsibilities and functions, may well provide the required coordination. The functions to be performed should include but not necessarily be limited to: Reviewing and commenting on all proposed changes in land use that may influence the greenbelt corridor and its existing or planned facilities; maintaining guidelines which will assist decision making jurisdictions in ensuring that proposed developments within the greenbelt corridor, or the impact area, are compatible with the greenbelt concept; provide a forum for public input relative to the execution of the Implementation Plan; provide a source of current information on possible funding sources for greenbelt projects; encourage the development, operation and maintenance of appropriate greenbelt projects by private enterprise; provide coordination on multijurisdictional projects to avoid duplications or omissions; collect and publish information on current standards for the development, efficiency and safety of operation, and maintenance of greenbelt facilities; and periodically update the Implementation Plan to reflect the current status of existing facilities and planning for the greenbelt.

B. Review of Proposed Changes in Land Use. Prior to submission to the decision making body of the cognizant jurisdiction, applications or plans for changes in land use, or development of projects within the greenbelt corridor, or the impact area, will be sent to the Greenbelt Commission for review and comments relative to compatibility with the Implementation Plan. This procedure will apply to all applications and plans with the exception of the following:

1. Accessory structures including garages, carports, patios, swimming pools, and similar appurtenances.
2. Additions to existing structures, interior modifications, and/or alterations, providing they do not substantially increase the density or result in an adverse visual impact on the greenbelt corridor/impact area.
3. Minor lot line adjustments or side yard and setback variances, for residences, that will not result in an increase in the number of parcels and/or density.

4. Minor encroachment permits and exceptions (a change in regulation requirements to a degree less than that which necessitates a variance).

5. Business licenses, e. g., for sale of beer and wine, etc., in established commercial areas.

6. Minor temporary land uses having negligible and short lived influence on the environment, e. g., Christmas tree sale lots, firework stands, mobile home offices, etc.

7. Permits for demolition and removal of buildings and related structures, that will not result in the site constituting an adverse impact on the greenbelt corridor/impact area.

8. Variances or other land use actions regarding minimum standards for parking.

9. Emergency projects required to repair, maintain, restore, demolish or replace property or facilities that would otherwise constitute an immediate hazard to public safety.

C. Guidelines. The following guidelines are provided for use in ensuring that proposed changes in land use, or plans for project development, are compatible with the greenbelt concept. The guidelines may also be of use in the review of general plans, and the preparation or updating of local ordinances that will control the development, operation and maintenance of facilities within the greenbelt corridor or impact area.

1. Development Densities. On 3 January 1974, the Greenbelt Commission approved a recommendation regarding development densities adjacent to the greenbelt corridor. A copy of the guideline is provided in APPENDIX U.

2. Integrating Development With the Greenbelt Corridor. The Greenbelt Commission has recognized that existing zoning and desired use of land could lead to certain forms of development that may not be compatible with the greenbelt concept. Thus, the Greenbelt Commission prepared a guideline which proposes various means by which industrial, commercial, and residential development may be integrated with the greenbelt corridor, without a loss in land value, and return, and without sacrificing the essentials of the greenbelt concept. A copy of the guideline is provided in APPENDIX V.

3. Guideline for Signs. The "(SC)" Scenic Corridor Zone --Overlay, in APPENDIX M, contains regulations for signs which are considered appropriate for the greenbelt corridor and the impact area.

4. Guideline for the Establishment of Standards for Cleanliness and Appearance of Commercial Equestrian Stables

Located Within the Greenbelt Corridor. The guideline developed by the Greenbelt Commission for the stated purpose is provided in APPENDIX W. On 1 April 1976, the City of Huntington Beach published Ordinance No. 2039, entitled "Permanent Commercial Horse Facilities Standards." A copy of this ordinance is provided as ATTACHMENT "A" to APPENDIX W. On 12 October 1976, the Board of Supervisors received a report from a Board appointed Equine Task Force containing recommendations on County equine activities, including proposed equine standards for commercial stables. On 26 October 1976, the Board adopted the Task Force's recommendations for inclusion in a County ordinance. A copy of the Task Force's recommendations is provided in ATTACHMENT "B" to APPENDIX W. The content of APPENDIX W and its attachments constitute a comprehensive, up-to-date guideline for use in developing or updating standards for control of equine facilities in or near the greenbelt corridor.

5. Landscape Guide. On 28 February 1974, the Greenbelt Commission awarded a contract to the landscape architectural firm of EDAW, Inc., for preparation of a landscape guide to be used as a basic reference in the selection of trees, shrubs, and ground cover for planting along the greenbelt corridor. The landscape guide was published in October 1974, and the governing boards of the member jurisdictions adopted the guide as a basic reference in landscape planning, and have assisted in its distribution. The guide divides the greenbelt corridor into four zones, and based on the climate and soil characteristics therein, lists the trees, shrubs, and ground cover that are most likely to thrive within each zone. A copy of the landscape guide is contained in the pocket on the inside back cover of this Plan.

6. Criteria for Developments Within the Greenbelt Corridor and Impact Area. The "(SC)" Scenic Corridor Zone--Overlay, in APPENDIX M, is recommended for use as a criteria for development standards to ensure an orderly, and high quality of development in keeping with the natural amenities of the greenbelt corridor and impact area.

D. Public Meetings. The Greenbelt Commission should hold monthly or quarterly public meetings for the purpose of reviewing proposed changes in land use, and plans for development of projects and greenbelt facilities within the greenbelt corridor and impact area. Comments and recommendations should be solicited from the various Citizen Greenbelt Committees and other interested parties or agencies.

E. Standards for Development, Efficiency and Safety of Operation, and Maintenance of Greenbelt Facilities. The Greenbelt Commission has compiled a list of approved standards and criteria for bicycle and equestrian trails, and has prepared a proposed general criteria for the site selection, design, development, and operation and maintenance of trail rest stops. The Greenbelt Commission has also concerned itself with the maintenance and

patrolling of the trails system throughout the greenbelt corridor. In a letter dated 4 April 1974, to the Board of Supervisors, the Greenbelt Commission recommended the establishment and operation of a single agency managed trails system maintenance program, and the development of specifications for an expanding trails system maintenance contract. By Resolution No. 75-817, the Board authorized the expenditure of Harbors, Beaches, and Parks District funds for the operation and maintenance of the river trails system. APPENDIX X includes the standards and criteria for bicycle and equestrian trails, and trail rest stops. ATTACHMENT "A" to APPENDIX X is a copy of the Greenbelt Commission's letter of 4 April 1974.

F. Methods for Acquiring Use of Land for the Greenbelt. There are various methods available for acquiring the use of land for greenbelt purposes. These methods include acquisition in fee, acquisition in less than fee, incentive programs, and zoning and land use controls. A description of the various methods is provided in APPENDIX Y.

G. Source of Funding for Greenbelt Projects. The greenbelt corridor and its extensive existing and planned trail system is already recognized for its regional significance. Thus, it is expected that several projects may qualify for federal and state funding support, as well as local funds. A description of possible funding sources for various categories of greenbelt projects is provided in APPENDIX Z.

H. Corps of Engineer Flood Control Project. The Los Angeles District of the U.S. Corps of Engineers has completed a Review Report on the Santa Ana River Main Stem -- including Santiago Creek. The Corps \$741 million recommended project for improving flood control measures along the river and the creek will influence a number of existing and planned greenbelt projects. The project has been included in the Congressional Public Works Omnibus Bill, with \$700,000 specified for first phase funding. President Gerald Ford signed the bill in late October 1976. Following hearings by the Senate and House appropriation committees, in the spring or summer of next year, the \$700,000 may be made available on 1 October 1977. Effective execution of this Implementation Plan should include continued liaison with the Corps of Engineers. By a letter dated 6 November 1975, the Greenbelt Commission provided comments, and recommendations to the Corps of Engineers regarding the flood control project and its possible impact on the greenbelt corridor. A copy of the letter is included in pages 133 - 138 of APPENDIX 1 of the Corps review report.

I. Compliance With Environmental Impact Report Requirements. It is possible that many of the planned greenbelt projects will be categorically exempt from the environmental assessment process, or, will qualify for a negative declaration. Each project will have to be evaluated on an individual basis in relation to the requirements of the California Environmental Quality Act of 1970 -- as amended.

VI. APPENDIXES

AN AGREEMENT PROVIDING FOR THE ESTABLISHMENT OF
THE SANTA ANA RIVER AND
SANTIAGO CREEK GREENBELT COMMISSION

This is an agreement between the COUNTY OF ORANGE, the ORANGE COUNTY FLOOD CONTROL DISTRICT, the ORANGE COUNTY WATER DISTRICT, and those cities along the Santa Ana River and Santiago Creek which subscribe to it. The parties are all public agencies having some jurisdiction in the project area which shall be described generally as the Santa Ana River and Santiago Creek, and the land within one and one-half miles of the River and Creek on both sides, and the land from crest to crest in the Santa Ana Canyon. This Agreement is made pursuant to Title 1, Division 7, Chapter 5 of the Government Code of the State of California, which provides for joint powers agreements.

Section 1. Establishment of Commission

There is established THE SANTA ANA RIVER AND SANTIAGO CREEK GREENBELT COMMISSION, which is referred to as "Commission" in this Agreement. The Commission shall constitute a separate public agency pursuant to the provisions of Government Code Section 6507.

Section 2. Purpose

The purpose of this Agreement is to establish an agency which will coordinate the general plans and other land use policies and decisions of the contracting parties insofar as they pertain to the project area, with the ultimate objective of providing the optimum amount of open space for public uses.

Section 3. Common Powers to be Exercised

Common powers to be exercised pursuant to this Agreement are the powers of each party to plan for the appropriate use of land in the project area and to cooperate with the other parties to the Agreement. It is understood that the power of the Commission to plan for the appropriate use of land in the project area shall not limit the power of any member to zone and rezone property at variance with the recommendations of the Commission. The

Commission is designated pursuant to Government Code Section 6506 as the agent to exercise the common powers provided for in this Agreement and to administer and otherwise execute this Agreement.

Section 4. Specific Powers

The Commission shall have such powers as are necessary to carry out the above purpose, including, but not limited to, the power to make and enter into agreements; to incur debts and obligations; to employ necessary personnel, experts, and consultants; to appoint advisory committees; to lease and dispose of office space; to acquire and dispose of personal property; to accept gifts and loans of cash and personal property; and to apply for and accept grants for operating funds, studies and surveys.

Any decision or determination by the Commission shall be advisory, not mandatory, as to any member, except as otherwise provided in this Agreement.

Section 5. Manner of Exercising Powers

The powers of the Commission shall be subject to the restrictions upon the manner of exercising the powers of the County of Orange.

Section 6. Specific Functions

The specific functions of the Commission shall be to review and comment on proposed land use decisions of the members affecting the project area and to conduct studies and formulate plans for the use of the project area with the objective of providing the optimum amount of open space.

It is understood that the Commission will, to the maximum extent possible, utilize the services and facilities of members, including the advice of the legal counsel of the various members, in performing its functions. Except as provided in Section 20 of this Agreement relating to the supply of office space and equipment and Section 6505.5 of the Government Code relating to the services of the County Treasurer and Auditor-Controller, the cost of said services and facilities shall not be deducted from

the membership assessment levied on the members pursuant to Section 14 of this Agreement.

Section 7. Specific Obligations of Members

The Commission shall have access to proposed land use documents prior to approve/deny decisions by the members. All parties to this Agreement shall provide the requisite information in a timely manner.

Section 8. Membership

Membership in the Commission shall be voluntary and shall be limited to the County of Orange, the Orange County Flood Control District, the Orange County Water District, and any incorporated city within Orange County, any part of which falls within the project area. The eligible agencies signing this Agreement prior to or within two months of the effective date of this Agreement shall constitute the initial members of the Commission. Thereafter, any eligible agency desiring to gain membership in the Commission may do so by subscribing to this Agreement and satisfying any conditions or requirements for membership which may be imposed by the Commission.

Section 9. Governing Body

The governing body of the Commission shall consist of:

(1) Two members of the Orange County Board of Supervisors representing the County of Orange and the Orange County Flood Control District, both selected by the Orange County Board of Supervisors.

(2) One member of the Board of Directors of the Orange County Water District selected by said Board.

(3) One member of the city council from each member city selected by the respective city councils.

The Board of Supervisors, Board of Directors of the Orange County Water District, and respective city councils, shall appoint alternate members with the same qualifications who shall serve in the absence of regular members with full voting powers. Each member of the governing board shall serve at the pleasure of his appointing power.

Section 10. Quorum

A quorum of the governing body shall consist of a majority of its members. Action shall be taken by vote of a majority of a quorum; except, however, the Commission shall not enter into an agreement nor adopt or amend its Bylaws except at a meeting where two-thirds of all members of the governing body are present and then upon affirmative action of the majority of all members of the governing body.

Section 11. Bylaws

The Commission may adopt such Bylaws or procedures consistent with this Agreement as it may find appropriate to govern its functions.

Section 12. Funds and Property

The Treasurer of Orange County shall be the Treasurer of the Commission and the Auditor-Controller of Orange County shall be the Auditor of the Commission. All funds of the Commission shall be maintained in the County Treasury. The duties of the Treasurer and Auditor shall be as defined in Sections 6505 and 6505.5 of the Government Code of the State of California. The records of the Treasurer and Auditor shall be open at all times during normal business hours to the inspection of any authorized representative of any member.

Section 13. Fiscal Year

The Commission shall be operated on a fiscal year beginning on July 1 of each year and continuing through June 30 of the succeeding year.

Section 14. Budgets and Membership Assessments

Prior to May 1 of each year, the Commission shall adopt a budget for the following fiscal year. Contributions in the form of membership assessments shall be made by the members of the Commission for the purpose of defraying its costs of operation. Each member shall be advised of the amount of its assessment for any fiscal year by May 15 of the previous fiscal year. The assessment for each fiscal year shall be paid by each member on or before August 1 of such year.

Membership assessments shall be determined on the basis of number of acres in the project area. Acreage owned in fee by the Orange County Flood Control District and the Orange County Water District shall be attributed to said Districts and not to the County or the respective cities within which said acreage lies. Each member shall pay that portion of the operating budget which is determined by dividing the total number of acres the member has in the project by the total number of acres all of the members have in the project area.

In determining the initial budget, the following figures shall be used. Thereafter, the Commission may adjust the acreage totals as may be necessary.

<u>Jurisdiction</u>	<u>Number of Acres in Project Area</u>
Anaheim	8,444
Costa Mesa	4,125
Fountain Valley	3,202
Garden Grove	1,468
Huntington Beach	3,456
Newport Beach	393
Orange	10,446
Orange County	15,130
Orange County Flood Control District	1,357
Orange County Water District	929
Santa Ana	9,968
Villa Park	1,228
Yorba Linda	426
TOTAL	60,572

In the event any member withdraws from the Commission subsequent to the establishment of a budget for the following fiscal year, the Commission shall revise the budget as may be necessary by June 15. Membership assessments for the remaining members shall be increased only with the consent of the said members.

Section 15. Limits of Liability

The Commission's debts, liabilities, and obligations shall not constitute debts, liabilities, or obligations of any party to this Agreement.

Section 16. Withdrawal

Any member may withdraw from the Commission by filing a resolution of its governing body to that effect by May 1 of any year. Such withdrawal shall be effective at the commencement of the following fiscal year and the withdrawing member shall not be liable for the membership assessment levied for said following fiscal year.

Section 17. Termination

This Agreement may be terminated by resolutions of the governing boards of two-thirds of the members, including the County of Orange. Upon termination, all claims against the Commission shall be paid and the remaining assets, if any, distributed among the members and former members, if any, in proportion to the total contributions they have made to the Commission.

Section 18. Term

This Agreement shall continue in effect until terminated in the manner prescribed above.

Section 19. Effective Date

This Agreement shall become effective when signed by the County of Orange, the Orange County Flood Control District, and any number of entities eligible for membership having an aggregate of 30,000 acres in the project area, in accordance with the figures in Section 14 of this Agreement, and not including the acreage of the County and the Flood Control District.

Within thirty (30) days of such effective date, a meeting of the Commission shall be called by the County.

Section 20. Interim Administration

The County of Orange shall coordinate the formation of the Commission. The County shall provide a place for Commission meetings and, until the commencement of the first full fiscal year following the effective date of this Agreement, the County shall provide the Commission with office space and equipment. Thereafter, the cost of any office space and equipment to be provided may be deducted from the County's membership assessment

for the ensuing fiscal year.

In the event this Agreement becomes effective after April 1, 1973 and prior to February 1, 1974, the Commission may meet and adopt an interim budget for the period prior to July 1, 1974. The Commission may establish membership assessments for said period. Each member shall be advised of the amount of said assessment, and the same shall be paid within two months of the adoption of said interim budget. Failure to pay such an interim membership assessment by April 1, 1974 shall constitute withdrawal from the Commission.

Section 21. Multiple Copies

In lieu of circulating a single document among the entities eligible for membership in the Commission, this Agreement shall be prepared in multiple copies, each of which may be signed by the County of Orange and an entity eligible for membership. Signed Agreements shall be filed initially with the Clerk of the Orange County Board of Supervisors, who shall notify all entities eligible for membership of the effective date of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed
this Agreement.

Dated: _____, 197 . COUNTY OF ORANGE, a political
sub-division of the State of
California
ATTEST:
WILLIAM E. ST. JOHN
County Clerk and ex-officio Clerk
of the Board of Supervisors of
Orange County, California
By _____
Chairman of its Board of
Supervisors

By _____

DATED: _____, 197 . SUBSCRIBING MEMBER

ATTEST:

By _____
Clerk Title _____

I certify that the Santa Ana River/Santiago Creek
Greenbelt Commission on _____, did approve the
(Date)
request of the City of _____ for membership in
the Commission with the condition that the City pay an assessment
of \$ _____ for the year _____.

By _____
Chairman of the Greenbelt
Commission

Santa Ana River/Santiago Creek
GREENBELT COMMISSION

ORGANIZATIONAL STRUCTURE
and
Present and Past Members

The organizational structure of the Greenbelt Commission, includes the Commission, the Citizen Greenbelt Committees, and the Commission's staff. The members of the Commission are elected officials appointed to serve as commissioners from their respective jurisdictions, i. e., city councilmen/councilwomen, or members of the Board of Supervisors or Board of Directors. The alternates are also elected officials. The members of the Citizen Greenbelt Committees are appointed by the governing board of their respective jurisdictions. The Commission's staff serves under the direction of the Commission. Those members of the Commission or Citizen Greenbelt Committees who have served as chairman are indicated by an asterisk (*). The names of members are listed in alphabetical order.

GREENBELT COMMISSION:

<u>Jurisdiction</u>	<u>Commissioner</u>	<u>Alternate</u>
Anaheim	Dr. William I. Kott *R. Jerry Sneegas	Cal Pebley Don R. Roth
County of Orange, and Flood Control District	Ronald W. Caspers Ralph B. Clark Ralph A. Diedrich	
Huntington Beach	Norma B. Gibbs *Dr. Donald D. Shipley	Richard Siebert Henry Duke
Newport Beach	J. Peter Barrett	Donald A. McInnis
Orange	Fred L. Barrera Robert D. Hoyt James A. Jackman Joe Temple	
Orange County Water District	Preston K. Allen August F. Lenain	John Fonley

GREENBELT COMMISSION (cont.)

<u>Jurisdiction</u>	<u>Commissioner</u>	<u>Alternate</u>
Santa Ana	Jerry M. Patterson James E. Ward	Vernon S. Evans
Villa Park	Dorothy M. Potter Harold F. Tipton *James H. Wells	James P. Reichert
Yorba Linda	*Dale T. Chaput George Machado	Rudolph Castro Anton M. Groot Henry W. Wedaa

CITIZEN GREENBELT COMMITTEES:

Anaheim

*Donald J. Fears Dione Hesketh Madeline Krpan	Buzz Long Frank Reitzel Robert Rodenberger	Joe Wade John Willoughby
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County Unincorporated Areas

William Gregory Shirley Grindle	Paul Lima Charles Lopez	*Eugene St. Amand
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Huntington Beach

Fred Bolding Margaret Carlberg	Betty Kennedy Edward Kerins	Glen Kimmel *Fred Roth
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Newport Beach

(The City Planning Commission performed the functions of the Citizen Greenbelt Committee)

William Agee Paul L. Balalis George Cokas	William Frederickson *Jacqueline E. Heather Paul L. Hummel	Hall Seely
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Orange

Donald Baker Mary Jane Blomgrem Sandy Burnside	Daryl D. Hansen Tony Ozbolt *Jeri Reeder	*Judy Watson Pat Yeakley
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CITIZEN GREENBELT COMMITTEES (cont.)

Orange County Water District

(The functions of the committee were accomplished by the District's staff liaison with the local community)

Santa Ana

*Jean Ankrum
Hugh Dunn

Frances Latimore
Rene Romero

Andrew J. Unetic

Villa Park

Thomas Cleary
J. Ward Dawson

Sue Kaiser
Jack Neelon

*Carol Kawanami

Yorba Linda

Kenneth Bradley
*John Gamblin
Marge Holler

Richard Jolliff
John F. McGee
Donald S. Perley

Harold Shapiro
Beth Stevens
*Dr. Richard Tooley

GREENBELT COMMISSION'S STAFF:

Coordinator: E. John Berger (21Dec73 to present)
Charles R. Sackett (14Mar73 to 7Dec73)

Planner: Raymond L. Hetherington (21Jun74 to present)

Secretary: Jo Orth (16Aug76 to present)
Eileen M. Emo (19Nov73 to 30Aug76)

BYLAWS
GREENBELT COMMISSION

ARTICLE 1 - AUTHORITY

The authority for the activities of the Greenbelt Commission shall be the joint powers agreement, originally entered into by:

Anaheim
Huntington Beach
Orange
Orange County
Orange County Flood Control District
Orange County Water District
Santa Ana
Villa Park
Yorba Linda

ARTICLE 2 - ORGANIZATION

1. Greenbelt Commission

Commission members shall be appointed by their present jurisdictions in accordance with the joint powers agreement. As a body, the Commission shall have the following duties:

- 1.1 Appoint a Greenbelt Coordinator to serve at the pleasure of the Commission.
- 1.2 Approve an annual operating budget, and its allocation among the participating jurisdictions.
- 1.3 Exercise approval authority over all proposed expenditures not within the approved budget.
- 1.4 Exercise approval authority over all budgeted expenditures in excess of \$100.00.
- 1.5 Establish project priorities for the preparation of Greenbelt program plans.

- 1.6 Provide policy direction to the Greenbelt Coordinator.
- 1.7 Authorize special studies.
- (2) 1.8 Utilize the Santa Ana River/Santiago Creek Greenbelt Plan - as adopted by the Board of Supervisors on June 23, 1971, as a component of the Orange County Master Plan of Land Use, and on June 27, 1973, as a component of the Open Space Element of the Orange County General Plan - as the basic reference plan in developing, reviewing and coordinating the development of plans for the greenbelt corridor.

2. Chairman and Vice Chairman

The Chairman and Vice Chairman shall be elected by a majority vote of all Commission members. The Chairman and Vice Chairman shall be elected no later than the first meeting of a fiscal year. They shall hold office for that year or until resignation from the Commission.

2.1 Duties of Chairman

The Chairman shall be the presiding officer and shall preserve order and decorum at all meetings of the Commission. He shall be authorized to sign for the Commission on all matters delegated to him by the Commission.

2.2 Duties of the Vice Chairman

In the absence of the Chairman, the Vice Chairman shall assume the duties and powers of the Chairman.

2.3 Chairman Pro Tempore

In the absence of the Chairman and Vice Chairman at any meeting, a Chairman Pro Tempore may be selected by a majority vote of members present to assume the duties and powers of the Chairman.

3. Greenbelt Coordinator

The Greenbelt Coordinator or his representative shall prepare an agenda for each meeting and shall attend each meeting. He shall maintain record of proceedings. Meetings will be tape recorded. The tapes will be retained until approval of minutes at the subsequent meeting. The tapes then will be erased. The Greenbelt Coordinator shall perform the functions called out in the joint powers agreement, and as directed by the Commission.

The Greenbelt Coordinator shall also:

- 3.1 Hire and discharge all other Commission employees as may be necessary to effectively facilitate the business of the Commission, and in accordance with the approved budget.
- 3.2 Manage the affairs of the Commission in accordance with the directives of the Commission.
- 3.3 Call on staff members of participating jurisdictions for support in activities necessary to further the objectives of the Commission.
- 3.4 Submit a monthly report on Greenbelt activities to the Commission and other interested parties.
- 3.5 Submit a monthly report on budget performance to the Commission.
- 3.6 Represent the Commission in discussions with the technical agencies impacting the Greenbelt.
- 3.7 Provide recommendations to participating jurisdictions on actions in or affecting the Greenbelt corridor.

(2) 4. Citizen Greenbelt Committees

Each Commissioner representing a city member of the Commission, shall nominate a committee, of not less than five members, to their respective City Councils for appointment to the city's Citizen Greenbelt Committee. The functions and duties of the committees will be:

- 4.1 Coordinate and work with the planning staff of their respective city, the Citizen Greenbelt Committees of neighboring cities in the greenbelt corridor, the County of Orange and the Greenbelt Commission in the development of plans for the greenbelt corridor.
- 4.2 Provide input to the various planning staffs that will represent the desires of the citizens of their respective city regarding greenbelt facilities.
- 4.3 Provide information to the citizens of their respective city regarding the status of the planning and development of greenbelt facilities.
- 4.4 Utilize the administrative, clerical, and planning capabilities of the Greenbelt Commission staff, as feasible, in execution of their functions and duties.

ARTICLE 3 - MEETINGS

(1) 1. Regular

The regular meeting of the Commission shall be held on the first Thursday of each month at 7:30 p.m. Meetings will be held in the County Administration Building, 515 North Sycamore Street in Santa Ana.

2. Quorum and Majority

A majority of members of the Commission constitute a quorum for the transaction of business.

3. Voting

Each question before the Commission may be voted upon by a voice vote. A roll call vote shall be taken on any question upon demand by any member.

Questions before the Commission will be decided by a majority vote of those present, except that a majority vote of total Commission membership will be required for:

Approval of an annual budget.

Hiring or firing of the Greenbelt Coordinator.

4. Motions by Chairman

The Chairman may make or second any motions without stepping down from the chair.

- (1) Amended Greenbelt Commission meeting 3/7/74.
- (2) Amended Greenbelt Commission meeting 9/5/74.

GREENBELT CORRIDOR ACCOMPLISHMENTS

The following list is a summary of significant planning and actual development accomplishments which have occurred within the Santa Ana River/Santiago Creek Greenbelt Corridor. The majority of these accomplishments were the direct result, in whole or part, of actions by the Greenbelt Commission.

1. Total Project

a. Establishment of Santa Ana River/Santiago Creek Greenbelt Commission.

b. Designation of Citizen Greenbelt Committees within each member jurisdiction, and the extensive participation by these committees in the development of greenbelt corridor project plans.

c. Coordinated participation and joint efforts between the member and non-member jurisdictions within the corridor.

d. Development of the following guidelines for use within the corridor:

(1) Development densities.

(2) Signs.

(3) Standards for cleanliness and appearance of commercial equestrian stables.

(4) Integrating development with the greenbelt corridor.

(5) Landscaping.

e. Study of water needs for irrigation by the OCFCD.

f. Preparation of procedure and time schedule for development of Greenbelt Implementation Plan, and coordination of multijurisdictional effort towards its completion.

g. Izaak Walton League adoption of Greenbelt Corridor as a project area for provision of trees and plants, free-of-charge to the Greenbelt Program.

h. Review and comments on Corps of Engineers flood control and trails plan for river and creek.

i. Adopted and transmitted a resolution (No. 76-101) to the Boards of Supervisors of the Counties of Orange, Riverside and San Bernardino, recommending that the three counties enter into a joint powers agreement which will provide for the coordinated development of a master plan for the conservation of the natural resources and enhancement of the recreational potential of the Santa Ana River.

j. Reviewed and provided staff briefings and written comments and recommendations on over 200 proposed changes in land use throughout the Greenbelt Corridor, e. g., EIR's, use permits, variances, project plans, tentative tracts and general plan amendments.

k. Numerous color slide presentations to colleges/ universities, civic groups, service clubs, city councils, commissions and boards, and professional organizations.

1. Preparation and distribution of "Tour Guides for the Greenbelt Corridor."

2. Trails

a. Obtained \$50,000 federal grant for bicycle trail extension from Edinger to Katella Avenues.

b. Completion of approximately 20 miles of bicycle and equestrian trails from the Pacific Coast Highway to Imperial Highway.

c. Development of plans for bicycle and equestrian trails from Katella Avenue to Tustin Avenue.

d. Commencement of plan development and budgeting for trails from Imperial Highway to the county line.

e. Completion of CALTRANS bicycle trail from Gypsum Canyon Road to county line.

f. Development of a proposed Arterial Bikeway System trail along the Santiago Creek, and its approval by the cities of Orange and Villa Park.

g. County revenue sharing funds obtained for bicycle trails for all cities that submitted a plan and request.

3. Lower River.

a. Refinement of Greenbelt Corridor and designation of related impact area, and establishment of project lists and priorities.

- b. Coordination with State to construct bicycle bridge across river mouth south of Pacific Coast Highway.
- c. Construction of bicycle trail link from Lebard Park to river levee trail.
- d. Extensive planting of river levee banks with ice plants by volunteer Girl and Boy Scouts in 1973-74.
- e. Fairview Regional Park land acquired for \$3.65 million.
- f. Centennial Park site included in Master Plan of Regional Parks, and negotiations commenced between the City of Santa Ana and the Harbors, Beaches and Parks District (HB&PD) for determination of ownership, design, development, operations and maintenance.
- g. Site searches, with private investors, for location of privately operated equestrian centers.
- h. Site search for park and ride facility for use of equestrians with horse trailers.

4. Middle River

- a. Refinement of Greenbelt Corridor and designation of related impact area, and establishment of project list and priorities.
- b. Siting and construction of new river trail bicycle crossing between Edna and Alona Parks.
- c. Issuance of permit by Orange County Flood Control District (OCFCD) to City of Santa Ana for use of Edna property as a park, and completion of the park with excellent trail rest stop facilities in 1975.
- d. Decision by Board of Supervisors to use former OCFCD maintenance yard for greenbelt project; and approval of Greenbelt Commission's concept for use of the property as a trail park and ride facility.
- e. Obtained \$375,000 county revenue sharing funds for El Camino Real Park.
- f. Expansion of grass area in river bottom of River View Golf Course.
- g. Obtained \$300,000 grant received for rehabilitation of Burris Sand and Gravel Pit, and conversion of pit to water conservation/recreation facility.
- h. Proposal for and approval by City of Orange, Orange County Water District (OCWD), and Board of Supervisors, for development of El Parque del Rio site as a "park and ride" facility in support of the river trails system.

i. Joint powers agreement developed between OCWD, OCFCD, Orange County Harbors, Beaches and Parks District (HB&PD), Anaheim and Orange County for 5 Coves. Project approved and \$300,000 federal grant obtained. Design underway for development as water conservation/recreation facility.

j. Newkirk dump site recreation use study completed; planning for park site and possible exchange for City of Anaheim property in Santa Ana Canyon.

k. Obtained \$20,000 county revenue sharing funds for trail rest stop.

l. Siting and development of River Trail Stables with trail rest stop.

m. Expansion of Rancho del Rio Equestrian Center with trail rest stop.

n. Acquisition of CALTRANS property for development of Riverdale Rest Stop.

o. Design of plans for Warner Basin water conservation/recreational facility.

p. Establishment of Izaak Walton League nursery on OCWD property.

q. Imperial Woods Equestrian Center design completed and access study underway.

5. Santa Ana Canyon

a. Refinement of Greenbelt Corridor and designation of related impact area, and establishment of project lists and priorities.

b. Joint environmental cost/benefit study approved and funded by federal grant and cities of Anaheim, Orange, Yorba Linda and County of Orange. Study area includes Santa Ana Canyon and Santiago Creek. Land use decision model completed and evaluative application underway.

c. Yorba Regional Park lands acquired, design completed and Phase I construction completed.

d. Featherly Regional Park extension acquisition effort underway, including connection with Yorba Regional Park.

e. Plans completed and approved for private expansion of Coal Canyon Stables.

f. Feasibility study and preliminary appraisal authorized for acquisition of property for Coal Canyon Regional Park with eventual trail linkage to Cleveland National Forest.

6. Santiago Creek

a. Refinement of Greenbelt Corridor and designation of related impact area, and establishment of project lists and priorities.

b. Sand and Gravel Committee study completed for rehabilitation of inactive sand and gravel pits.

c. Establishment of Lower Santiago Creek Planning Task Force for flood control and greenbelt improvements.

d. Revenue sharing funds obtained for Hart Park Extension.

e. Obtained \$375,000 revenue sharing funds for application to acquisition of Rinker property, now acquired and designated "Wilderness Area."

f. Board of Supervisors approved acquisition of Blome property.

g. Board of Supervisors approved appraisal and acquisition of 68 additional acres for inclusion in Lower Santiago Creek Regional Park.

ZONING DESIGNATIONS

Anaheim

PR Public Recreation.
RSA-43,000 Residential, Agricultural.

City of Orange

R-0 Recreation - Open Space District.
S-G Sand - Gravel District.
R-1-7 Single Family Residential, 7,000 sq. ft.
minimum lot size District.
R-3-A Multiple Family Residential (Restricted)
District.
C-1 Local Business District.
R-1-6 Single Family Residential, 6,000 sq. ft.
minimum lot size District.
R-1-10 Single Family Residential, 10,000 sq. ft.
minimum lot size District.
R-1-40 Single Family Residential, 40,000 sq. ft.
minimum lot size District.

Costa Mesa

PDR-LD Planned Residential Development -
Low Density.
PDR-MD Planned Residential Development -
Medium Density.
I&R Institutional & Recreational.
MP Industrial Park District.

County of Orange

A1 General Agricultural District.
A1(SR) General Agricultural District
(Sign Restrictions).
A1(0) General Agricultural District
(Oil Production).
A1(FP-2) General Agricultural District (Floodplain).
C1 Local Business District.
M1 Light Industrial District.
R2 Group Dwellings District.
100-M1-20,000 Light Industrial District, 100 ft.
minimum required building site width,
20,000 sq. ft. minimum required building
site area.
R4 Suburban Residential District.
AR Agricultural Residential District.
SG Sand and Gravel Extraction District.

County of Orange (cont.)

100-E4(20,000)	Small Estates District, 100 ft. minimum required building site width, 20,000 sq. ft. minimum required for each dwelling unit.
E4(15,000)	Small Estates District, 15,000 sq. ft. minimum required for each dwelling unit.
E4-1	Small Estates District, 1 acre minimum required building site area.
100-C1-10,000	Local Business District, 100 ft. minimum required building site width, 10,000 sq. ft. minimum required building site area.
R2-(1500)	Group Dwellings District, 1500 sq. ft. minimum required for each dwelling unit.
100-M1-10,000	Light Industrial District, 100 ft. minimum required building site width, 10,000 sq. ft. minimum required building site area.

Huntington Beach

CF-R	Civic Facilities - Recreational.
CF-E	Civic Facilities - Educational Institution.
R5	Office - Professional.

Santa Ana

O	Open Space.
A1	General Agriculture.
C2	General Commercial
R2	Limited Multiple Family Residential.
C1	Community Commercial.
M1	Light Industrial.
R1	Single Family Residential.

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION		ZONING		OWNERSHIP/REMARKS
					AGREEMENT	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	
LNB-001	Vacant/Oil Production/Residential		Water-related recreation and conservation area.	Note (1)	-	Note (1)	Note (1)	Note (1)	Note (1)
(a)	"	"	Small craft harbor	"	-	"	"	"	"
(b)	"	"	Bicycle trail	"	-	"	"	"	"
(c)	"	"	"	"	-	"	"	"	"
(d)	"	"	Hiking trail	"	-	"	"	"	"
(e)	"	"	"	"	-	"	"	"	"
(f)	"	"	Equestrian trail	"	-	"	"	"	"
(g)	"	"	Neighborhood parks (3)	"	-	"	"	"	"
(h)	"	"	View parks (4)	"	-	"	"	"	"
(i)	"	"	Play lot	"	-	"	"	"	"
(j)	"	"	Scenic area	"	-	"	"	"	"
(k)	"	"	"	"	-	"	"	"	"
(l)	"	"	Landscaped entry	"	-	"	"	"	"
(m)	"	"	Private development	"	-	"	"	"	"
(n)	"	"	Rest stop	"	-	"	"	"	"
(o)	"	"	Coast Hwy. (PCH) reroute	"	-	"	"	"	"
LCO-001	Same as LNB-001		Same as LNB-001	Note (1)	Note (1)	Note (1)	Note (1)	Note (1)	Note (1)
LCM-001	Undeveloped		Water related recreation/conservation.	115-011-33	1.28	Costa Mesa	PDR-LD	Private	Private
				-40	11.91	"	"	"	"
				-41	23.10	"	"	"	"
				-360-32	4.49	"	PDR-RD	"	"
				-33	1.95	"	"	"	"
				-37	9.22	"	"	"	"
				-45	5.01	"	"	"	"
				-46	73.18	"	"	"	"
					130.14				

Project Total

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS
IDENTIFICATION
ZONING

USE

ASSESSOR PARCELS
OR OTHER

PROJECT NUMBER	CURRENT	PLANNED	DESCRIPTION	ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
LHB-002	Equestrian trail	Equestrian trail	River levee, west	-	County	Al(O);Al	County, PCH Bridge to Garfield Av.
LNB "	"	"	east	-	"	Al	County, PCH Bridge to 19th St. (extended)
LCM "	"	"	"	-	"	"	County, 19th St. (extended) to MacArthur Blvd.
LFV "	"	"	west	-	Santa Ana	Al;M1;Cl;R2	County, Garfield to Edinger Aves.
LSA "	"	"	"	-	County/Santa Ana	O	County, Edinger Av. to 17th St.
LHB-003	Bicycle trail	Bicycle trail	east	-	County/Santa Ana	Al/O	County, MacArthur Blvd. to 17th St.
LCM- "	"	"	River levee, west	-	County	Al(O);Al	County, PCH Bridge to Adams Av.
			east	-	County	Al	County, 19th St. (extended) to MacArthur Blvd.
LSA "	"	"	east	-	County/Santa Ana	Al;M1;Cl;	County, MacArthur Blvd. to 17th St.
LNB-004	Vacant	Neighborhood park	Note (2)	Note (2)	Note (2)	Note (2)	Note (2).
LHB-004	State Beach/Hwy. R/W	Huntington State Beach Development	114-150-50	7.45	Huntington Beach	CF-R	State.
			-62	25.00	"	"	"
			-64	84.69	"	"	"
			-160-60	17.09	"	"	"
	Project Total			134.23			
LCM-004	Undeveloped	Primary hwy. & bicycle lane	Westerly extension of 19th St.	-	Costa Mesa	PDR-MD	Private, Bicycle lane on planned 19th St. extension to LHB-003.
LNB-005	Vacant	Bicycle trail	Note (2)	Note (2)	Note (2)	Note (2)	Note (2)
LHB-005	Vacant	Santa Ana River mouth Open Space Development	114-160-61	22.21	Huntington Beach	R5	State, Located west of river & north of PCH.
			-63	16.03	"	"	Same as above.
			-68	10.41	"	"	Private, Location as above.
			-69	34.83	"	"	"
	Project Total			83.48			
LCM-005	Secondary Hwy. bicycle lane	Primary Hwy. & bicycle lane	Victoria St.	-	Costa Mesa	-	Costa Mesa, Linkage from Placentia Av. to river.

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	USE	IDENTIFICATION			ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ASSESSOR PARCELS OR OTHER DESCRIPTION	ASSESSOR PARCELS OR OTHER DESCRIPTION					
LHB-006	Trails	Trail landscaping		River levee, west	26.1	County	Al(0);Al	Al	Al(0);Al	County, PCH bridge to Adams Av. County, 19th St. (extended) to MacArthur Blvd.	
LCM- "	"	"		east	38.7	"	Al	Al	Al	County, MacArthur Blvd. to 17th St.	
LSA- "	"	"		"	40.5	County/Santa Ana	Al;M1;Cl; R-2/0	Al	Al;M1;Cl; R-2/0	County, MacArthur Blvd. to 17th St.	
LHB-007	Project Total				105.3						
	Bicycle trail	Bicycle trail		155-131-29	-	Huntington Beach	CF-R	CF-R	CF-R	Huntington Beach. Linkage from Lebard School & Park to LHB-003.	
				-151-1	-	"	"	"	"	Huntington Beach School Dist. (HBSD).	
				-201-2	-	"	"	"	"	Edison Co.	
				River levee	-	County	Al	Al	Al	County/Orange County Sanitation Dist. (OCSD).	
LCM-007	Park	Park		115-011-30	6.02	Costa Mesa	I&R	I&R	I&R	Costa Mesa, Vista Park.	
				-31	-	"	"	"	"	Same as above.	
	Project Total				6.31						
LHB-008	State beach	Pacific Coast Hwy. Bicycle trail		114-150-62	-	Huntington Beach	CF-R	CF-R	CF-R	State, Linkage from Brookhurst St. to Beach Blvd.	
LCM-008	Undeveloped	Regional Park		-160-64	-	"	"	"	"	Same as above.	
	"	"		420-011-6	253.15	Costa Mesa	I&R	I&R	I&R	Note (3). County (Fairview).	
	"	"		-7	-	"	"	"	"	"	
	"	"		-8	-	"	"	"	"	"	
	"	"		-11	-	"	"	"	"	"	
	"	"		-012-1	-	"	"	"	"	"	
	"	"		-2	-	"	"	"	"	"	
	"	"		-011-9	27.56	"	"	"	"	City of Costa Mesa.	
	"	"		-10	-	"	"	"	"	"	
	"	"		-012-3	-	"	"	"	"	"	
	Project Total				280.71						

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS	USE
LHB-009	River Channel	Bicycle & pedestrian river crossing at PCH. channel	PCH R/W/River	-	County	A1	County/CALTRANS.		
LCM-009	Golf course & State Hospital	Bicycle trail loop	Costa Mesa Golf & Country Club; Fairview Hospital	-	Costa Mesa	I&R	State. Trail loop from LCM-003 via golf course & hospital.		
LHB-010	Bicycle lanes/trails	Upgraded linkages to LHB-003	City streets/river levee	-	Huntington Beach	-	Huntington Beach/County/OCSD/Edison Co.		
LCM-010	Golf Course	Golf Course	139-111-1	1.29	Costa Mesa	I&R	Private. Mesa Verde Country Club & Golf Course.		
			-2	2.17	"	"	Same as above.		
			-3	3.47	"	"			
			-6	82.98	"	"			
			-8	6.37	"	"			
			-10	1.29	"	"			
			-11	.13	"	"			
			-12	4.97	"	"			
			-13	10.49	"	"			
			-26	25.68	"	"			
			-112-25	4.16	"	"			
		Project Total		143.00					
LHB-011	Bicycle lanes/trails	Trail signing	City streets	-	Huntington Beach	-	Huntington Beach. Signing along bicycle trails/lanes linking into LHB-003.		
LCM-011	Secondary Hwy.	Secondary Hwy. and bicycle lane	California St.	-	Costa Mesa	-	Costa Mesa. Linkage to LCM-003 from Gisler Av.		

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	IDENTIFICATION			ZONING	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION		
LHB-012	Park	Park	155-131-29 -145-1 -201-2	1.11 1.89 2.00 5.00	Huntington Beach " " " "	CF-R " " " "	Huntington Beach, Lebard Park. " " Edison Co.
Project Total							
LCM-012	Park	Park	139-571-03 -04 -05 -06 -07		Costa Mesa " " " " " " " "	I&R " " " " " " " "	Costa Mesa, Suburbia Park. Same as above. " " " "
Project Total							
LHB-013	School	School	155-151-1	10.12	Huntington Beach	CF-E	HBSD, Lebard School.
LCM-013	Secondary Hwy. and undeveloped	Secondary Hwy., bicycle lane & trail	South Coast Drive & adjacent to San Diego Freeway	-	Costa Mesa	MP	Costa Mesa/Private. Linkage to LCM-003 from Harbor Blvd.
LHB-014	School	School	155-043-1	13.66	Huntington Beach	CF-E	Fountain Valley School Dist. Arevalos School.
LSA-050	Street/RR R/W	Bicycle lane/trail	Street R/W/RR R/W	-	Santa Ana	-	Santa Ana/SPTC. Linkage to Santiago Creek via Golden Loop trail.
LFV-050	Bicycle lane	Bicycle lane	Street R/W	-	Fountain Valley	-	Fountain Valley. Linkage to LSA-003 from Mile Square Regional Park via Slater Av. and Euclid St.

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	USE		IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	ZONING
	CURRENT	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ASSESSOR PARCELS OR OTHER DESCRIPTION					
LSA-056	Athletic field/school	Regional Park	408-021-1	408-021-1	16.91	Santa Ana	0	Santa Ana Unified School District (SAUSD). (Centennial)	
	Undeveloped	"	-031-1	-031-1	9.11	"	"	Santa Ana.	
	Agricultural	"	-5	-5	21.65	"	"	United States of America.	
	Athletic field/school	"	-7	-7	3.84	"	"	SAUSD.	
	Undeveloped	"	-8	-8	56.11	"	"	Santa Ana.	
	Project Total				107.62				
ICO-059	Commercial/Vacant/Stables	Stadium	144-261-9	144-261-9		County	100-C1-10,000	Note (4). Private. Located west of river & north of Edinger.	
			-10	-10		"	"	Private. Located same as above.	
			-11	-11		"	"	County.	
			-15	-15		"	"	Private.	
			-17	-17		"	"	"	
			-23	-23		"	"	"	
			-24	-24		"	"	"	
			-25	-25		"	"	"	
			-26	-26		"	"	"	
			-27	-27		"	"	"	
			-28	-28		"	"	"	
			-29	-29		"	"	"	
	Project Total				17.0				

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	IDENTIFICATION			ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	ZONING
			ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION						
LSA-062	Residential (Mobile Homes)	Equestrian center	144-261-33	15.01	Santa Ana	A1	Note (4). Private. Located west of river & north of Edinger Av.				
LSA-065	Vacant	Equestrian center	144-261-18	7.59	Santa Ana	A1	Note (4). Private. Located west of river & south of McFadden Av.				
LSA-068	Drive-in Theatre	Polo field/all purpose area	144-261-3	13.11	Santa Ana	C2	Note (4). Private. Located west of river & south of McFadden Av.				
LSA-071	Drive-in Theatre	Polo field/all purpose area	144-261-3	9.49	Santa Ana	C2	Note (4). Private. Located west of LSA-068 & south of McFadden Av.				
LSA-074	Residential/Commercial	Equestrian center	144-271-1		Santa Ana	R2	Note (4). Private. Located west of river & south of 1st St.				
			-2		"	"	Same as above.				
			-3		"	"	"				
			-4		"	"	"				
			-5		"	"	"				
			-7		"	"	"				
			-8		"	"	"				
			-9		"	"	"				
			-10		"	"	"				
			-11		"	"	"				
			-12		"	"	"				
			-13		"	"	"				
			-15		"	"	"				
			-16		"	"	"				
			-17		"	"	"				
			-18		"	"	"				
			-19		"	"	"				

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	ZONING
			ASSESSOR PARCELS OR OTHER DESCRIPTION	101-260-39					
LSA-083	Residential/ Industrial/stables	Equestrian center	101-260-39			Santa Ana	R2	Note (4). Private. Located west of river & north of 1st St.	
			-55			"	C2, R2	Same as above.	
			-56			"	"	"	"
			-69			"	"	"	
LSA-086	Project Total Park	Park	101-210-47		17.06	Santa Ana	0	Santa Ana, Harper Park. Located west of river north of 5th St.	
			-48			"	"	Same as above.	
			-49			"	"	Garden Grove. Location same as above.	
			-50			"	"	Santa Ana.	
			-51			"	"	Garden Grove.	
					8.62				
LSA-089	Project Total Street	Bicycle lane	Street R/W		-	Santa Ana	-	Santa Ana, Linkage to LSA-003 from Euclid & Reitt Sts, via 5th St.	
			101-260-65		-	Santa Ana	0	SAUSD. Bicycle linkage from Spurgeon Intermediate School to LSA-003.	
LSA-095	Project Total Golf Course	Golf Course	101-270-23		0.4	Santa Ana	0	Garden Grove. Willowick Municipal Golf Course. Located west of river at 5th St.	
			-27		3.71	"	"	Same as above.	
			-28		95.41	"	"	"	"
			-210-25		0.2	"	C2	"	
			-58		0.6	"	"	"	
			-59		0.56	"	"	"	
					100.88				

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	USE	IDENTIFICATION			ZONING	DESIGNATION	OWNERSHIP/REMARKS
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION			
LSA-098	Vacant	Park		101-502-25		Santa Ana	R2	Note (4). Private. Located east of river & north of the Pacific Electric R/W.	
				-26		"	"	Same as above.	
				-28		"	"	"	
				-29		"	"	"	
				-30		"	"	"	
				-32		"	CM	"	
				-33		"	R2	"	
				-35		"	"	"	
				-36		"	"	"	
					29.77				
LSA-101	Vacant	Park		101-282-42	2.40	Santa Ana	R2	Note (4). Private. Located east of river and west of Fairview St.	
LSA-104	Street	Bicycle lane		Street R/W	-	Santa Ana	-	Santa Ana. Bicycle linkage to LSA-003 from 5th St. via Fairview St.	
LSA-107	Vacant	Stables		101-290-71	11.20	Santa Ana	R1	Note (4). Private. Located west of river & south of 17th St.	
					.53	"	"	Same as above.	
					11.73				
	Project Total								

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	ZONING
			PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION					
LSA-110	Commercial/vacant		Accessory commercial uses	101-360-2		Santa Ana	C2	Note (4). Private. Located west of river & south of 17th St. Same as above.	
				-4		"	"	"	
				-8		"	"	"	
				-9		"	"	"	
				-10		"	"	"	
				-23		"	"	"	
				-28		"	"	"	
				-31		"	"	"	
				-35		"	"	"	
				-44		"	"	"	
				-45		"	"	"	
				-46		"	"	"	
				-47		"	"	"	
				-48		"	"	"	
				-49		"	"	"	
				-50		"	"	"	
				-52		"	"	"	
				-53		"	"	"	
				-54		"	"	"	
				-55		"	"	"	
				-56		"	"	"	
Project Total					6.22				
LSA-113	Commercial/vacant		Park	101-29-79		Santa Ana	C1	Note (4). Private. Located east of river & south of 17th St. Same as above.	
				-81		"	"	"	

LOWER RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	IDENTIFICATION				OWNERSHIP/REMARKS
			PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	
LSA-113	Commercial/vacant	Park	101-29-82	Santa Ana	C1	Note (4). Private. Located east of river & south of 17th St.	
			-83	"	"	Same as above.	
						3.11	
						Project Total	

Note (1): Project area includes several hundred acres within dual jurisdiction of City of Newport Beach and County of Orange. Individual projects identified as (a) - (o), their respective assessor parcels/acreages, jurisdiction/designations, and ownerships, will be determined in detail upon completion of specific plan for area. Assessor parcels and ownerships for entire project area are provided in APPENDIX G.

Note (2): Projects LNB-004 and 005 are a neighborhood park, and a related bicycle trail which links the park to the river. The assessor parcels/acreages, jurisdiction/designations, and ownership information, for the overall areas of the two projects are provided in APPENDIX G.

Note (3): Acreage as per Real Property Inventory (1Jan76), General Services Agency, County of Orange. All county parcels total 253.15 acres, while all Costa Mesa parcels total 27.56 acres.

Note (4): This project description extracted from City of Santa Ana Greenbelt Plan as presented to the Greenbelt Commission on 3Apr75. Assessor parcel numbers and acreages updated to reflect current records.

SUPPLEMENTARY INFORMATION FOR NEWPORT BEACH PROJECTS

Project Number	Current Use	Planned Use	Acreage	Assessor Parcels	Jurisdiction	Zoning		Ownership
						Designation	Designation	
LNB-001 and LCO-001	Vacant/Oil Production/Residences	Water Related Recreation and Conservation Area including a Small Craft Harbor		45-035-03 -04 -05 -06	Newport Beach or County	Subject to a Specific Area Plan	State of California, Dept. of Public Works	
"	"	"		45-037-01	"	"	City of Newport Beach	
"	"	"		45-041-02	"	"	Turbow, M.D., 1502 E. Florence Ave., L.A.	
"	"	"		45-042-02	"	"	Hansford, Robert, 21091 Inferno Ln. II.B.	
"	"	"		-04	"	"	Jensen, Frank, 6908 W. Coast Hwy., N.B.	
"	"	"		-05	"	"	Jensen, Frank, 7006 W. Oceanfront, N.B.	
"	"	"		-06	"	"	Signal Properties, Inc., 17890 Skypark, Irvine	
"	"	"		45-055-27	"	"	Signal Oil & Gas Co. 17890 Skypark, Irvine	
"	"	"		114-170-09	"	"	City of Newport Beach	
"	"	"		-10	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-31	"	"	Costa Mesa School Dist., P.O. Box 517, C.M.	
"	"	"		-32	"	"	Beeco Ltd., P.O. Box 1028, N.B.	
"	"	"		-39	"	"	Costa Mesa School Dist., P.O. Box 517, C.M.	
"	"	"		-48	"	"	Beeco Ltd., P.O. Box 1028, N.B.	
"	"	"		-49	"	"	Costa Mesa School Dist., P.O. Box 517, C.M.	
"	"	"		-50	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-53	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-55	"	"	Costa Mesa School Dist., P.O. Box 517, C.M.	
"	"	"		-56	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-57	"	"	Costa Mesa School Dist., P.O. Box 517, C.M.	
"	"	"		-58	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-60	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-43	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-24	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-33	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-34	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-35	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	
"	"	"		-45	"	"	Beeco, Ltd. P.O. Box 1028, N.B.	

SUPPLEMENTARY INFORMATION FOR NEWFORT BEACH PROJECTS

Project Number	Current Use	Planned Use	Acreage	Assessor Parcels	Jurisdiction	Zoning		Ownership
						Designation	Designation	
LNB-001 and LCO-001	Vacant/Oil Production/Residences	Water Related Recreation and Conservation area including a small craft harbor	"	114-200-02 -03 -11	Newport Beach or County	Subject to Spec. Area Plan	Beeco, Ltd., P.O. Box 1028, N.B. County of Orange County of Orange Beeco, Ltd., P.O. Box 1028, N.B.	
"	"	"	"	114-210-05 -06 -07 -08	"	"	"	
"	"	"	"	114-661-01 -02 -03 -04 -05 -06 -07 -08 -09 -10	"	"	Signal Properties, 1 Canal Cir., N.B. Signal Properties, 2 Canal Cir., N.B. Signal Properties, 3 Canal Cir., N.B. Signal Properties, 336 Colton St., N.B. Signal Properties, 5 Canal Cir., N.B. Signal Properties, 6 Canal Cir., N.B. Signal Properties, 7 Canal Cir., N.B. Signal Properties, 17890 Sky Park Cr. Irv.	
LNB-004 and LNB-005	Vacant	Neighborhood Park	+11 Acrs. Approx.	45-024-01 -02 -03 -04 -05 -06 -07 -08 -12 -13	Newport Beach	Park Site	Milton Slade, 1522 S. Eastern, Commerce Abu-Haydar, Laure, 1005 Herring, West Covina Boydston, Annette, 114 Via Palermo, N.B. Lancia, Benny, 1608 S. Atlantic, Alhambra Spreen, Gregory, 7106 W. Oceanfront, N.B. Reif, Melvin, 1334 Casiano Rd., L.A. Kimbrough, Laverne, 501 S. Rossmore, L.A. Dempsey, Mildred, 7100 W. Oceanfront, N.B. McRoberts, Jack, 107 Highland, N.B. Henningsgard, Betty, 7101 Seashore, N.B. State of California, Dept. of Public Works	
"	"	"	"	45-035-01 -02 -03 -04 -05 -06 -07 -08 -09 -10	"	"	"	

SUPPLEMENTARY INFORMATION FOR NEWPORT BEACH PROJECTS

Project Number	Use		Planned	Acreage	Assessor Parcels	Zoning		Ownership
	Current					Jurisdiction	Designation	
LNB-004	Vacant		Neighborhood Park	111 Acs. Approx.	45-035-11	Newport Beach	Park Site	State of California, Dept. of Public Works
and LNB-005	"	"	"	"	-12	"	"	"
"	"	"	"	"	-13	"	"	"
"	"	"	"	"	-14	"	"	"
"	"	"	"	"	-15	"	"	"
"	"	"	"	"	45-036-01	"	"	"
"	"	"	"	"	-02	"	"	"
"	"	"	"	"	-03	"	"	"
"	"	"	"	"	-04	"	"	"
"	"	"	"	"	-05	"	"	"
"	"	"	"	"	45-095-01	"	"	"
"	"	"	"	"	-02	"	"	"
"	"	"	"	"	-03	"	"	"
"	"	"	"	"	-04	"	"	"
"	"	"	"	"	-05	"	"	"
"	"	"	"	"	-06	"	"	"
"	"	"	"	"	-07	"	"	"
"	"	"	"	"	-08	"	"	"
"	"	"	"	"	-09	"	"	"
"	"	"	"	"	-10	"	"	"
"	"	"	"	"	-11	"	"	"
"	"	"	"	"	-12	"	"	"
"	"	"	"	"	-13	"	"	"
"	"	"	"	"	-14	"	"	"
"	"	"	"	"	-15	"	"	"
"	"	"	"	"	-16	"	"	"
"	"	"	"	"	-17	"	"	"
"	"	"	"	"	-18	"	"	"
"	"	"	"	"	-19	"	"	"
"	"	"	"	"	-20	"	"	"
"	"	"	"	"	-21	"	"	"
"	"	"	"	"	45-105-01	"	"	"
"	"	"	"	"	-02	"	"	"
"	"	"	"	"	-03	"	"	"
"	"	"	"	"	-04	"	"	"
"	"	"	"	"	-05	"	"	"
"	"	"	"	"	-06	"	"	"

SUPPLEMENTARY INFORMATION FOR NEWPORT BEACH PROJECTS

Project Number	Use		Planned	Acreage	Assessor Parcels	Zoning		Ownership
	Current	Planned				Jurisdiction	Designation	
LNB-004 and LNB-005	Vacant	Neighborhood Park	± 11 Acrs. Approx.	45-105-07	Newport Beach	Park Site	State of California, Dept. of Public Works	
"	"	"	"	-08	"	"	"	
"	"	"	"	-09	"	"	"	
"	"	"	"	-10	"	"	"	
"	"	"	"	-11	"	"	"	
"	"	"	"	-12	"	"	"	
"	"	"	"	-13	"	"	"	
"	"	"	"	-14	"	"	"	
"	"	"	"	-15	"	"	"	
"	"	"	"	-16	"	"	"	
"	"	"	"	-17	"	"	"	
"	"	"	"	-18	"	"	"	
"	"	"	"	-19	"	"	"	
"	"	"	"	-20	"	"	"	
"	"	"	"	-21	"	"	"	
"	"	"	"	45-121-02	"	"	"	
"	"	"	"	-03	"	"	"	

ENGINEERING AND ECONOMIC FEASIBILITY STUDY

CONSTRUCTION COSTS

GENERAL

The cost of constructing the basic features of this marina will be about the same for whoever builds it. There will be differences in the methods and cost of financing, however, depending on who develops the various components. One of the items included in the scope of this study was a determination of the relative feasibility of various combinations of public and private ownership alternatives. Each of these alternatives carries a different price tag and cost allocation. Also, as berthing basins are deleted from public ownership, Federal participation decreases. Thus, in order to develop cost estimates for the various schemes of public versus private ownerships, these schemes must first be defined and then analyzed as to how each scheme will affect Federal participation. Because part of the financing will probably be through a State loan, certain basic requirements for State participation must be met as well as those of the Federal Government.

SPONSORSHIP SCHEMES

The physical layout plan for the marina is shown on Plate 2. Its capacity is 3009 recreational boats, including berths for 150 boats around the water perimeter of Newport Shores to be built by others. In order to analyze the fiscal aspects of building and operating the marina, construction costs are considered for sponsorship schemes in which responsibilities for construction and operation are geographically divided as follows:

1. The entire marina to be owned by the Harbor District.
2. Basins A, B and C to be owned by the Harbor District. Basin D to be in private ownership but to provide at least 260 berths and operate within the marina framework.
3. Basins A and B to be owned by the Harbor District. Basins C and D to be in private ownership but to provide at least 1120 berths and to operate within the marina framework.

4. Basins A and B to be owned by the Harbor District, but the Basin C and D areas to be completely deleted from the project.

It should be noted that under Schemes 2, 3 and 4 the Harbor District will not be responsible for bridging Victoria Street and that under Scheme 3 and 4, the Harbor District will not be responsible for bridging 19th Street.

Each of the above schemes would meet the criteria for Federal and State participation by providing for public ownership of all waterways in the publicly owned basins, including (1) berthing areas, (2) a harbor master area with a public landing, (3) public ownership and construction of all bulkheads, (4) public ownership of a strip 20 feet wide surrounding the entire wetted perimeter.

For each of the four schemes, two alternatives for land management of the perimeter lands of the publicly owned basins are considered. Public participation is maximized under sub-scheme "a" by acquiring all of the perimeter lands and turning them over to the Harbor District for leasing out to private enterprise, as is being done at Dana Point Harbor. Public participation is minimized under sub-scheme "b" by acquiring only the lands of the publicly owned basins that are to be converted to water area plus the 20 foot marginal working strip, the slip-related parking lots and the harbormaster's office site. The remaining lands within the project boundary would be left in private ownership to be developed and managed by their owners for the various marina-related uses of the overall development plan. Obviously, these lands would have to be filled with materials excavated from the water areas before they could be used for such purposes, and thereafter their worth would be increased several fold. The public sponsors should be compensated for bringing about this increase thru some form of agreement with the land owners at time of acquisition. To simplify this accounting problem for the purposes of this study, the cost of land acquisition under the sub-scheme "b" alternatives is merely reduced by the estimated cost to the public sponsor of excavating and placing on the privately held adjacent lands the amount of fill material required to bring these lands up to project grade.

CORPS OF ENGINEERS PARTICIPATION

It has been a long standing Federal policy to participate in the development of public harbors or marinas. This program is the responsibility of the U.S. Army Corps of Engineers. At the direction of Congress they undertake a thorough study of the project and make their recommendation through the Secretary of the Army to Congress. If the project is approved by Congress, detailed engineering studies are made and when the local sponsor's funds are ready, Congress can appropriate necessary construction funds. In order to qualify for these Federal funds, a number of conditions must be met by the local public agencies:

1. The harbor must be administered by a public agency.
2. A public landing must be available to all on equal terms.
3. All harbor facilities, public or private, must be available to all on equal terms.

Moreover, an economic analysis that will be made by the Corps must show a favorable ratio of general public benefits to Federal costs. The Federal share, by Congressional policy, is 50 percent of the construction costs of the general navigation features, the remainder to be provided by local interests, in this case, the Harbor District. For this marina, these features are the entrance jetties, the navigation lights, the revetted slopes around the curve of the inner part of the entrance channel, and dredging of the entrance channel and the main channel through the four basins. The analysis of benefits is basically a determination of the depreciated value of the recreational-boat fleet (this being considered a measure of the benefits of the fleet to its owners), the sport-fishing benefits, and the reduction of damage to boats of all classes because of the shelter provided by the harbor. These benefits are compared to the costs of constructing and maintaining the general navigation features and acquiring the lands to be occupied by these general navigation features.

The Corps of Engineers will make their own economic analysis according to their established guidelines. However, in order to determine the feasibility of obtaining Corps of Engineer

participation and funding, the following analysis was made, based on the Corps guidelines:

- (1) Total Public Harbor, 4 basins and 3000 boats

Annual Costs

1st Cost-Construction	\$7,400,000
Cost of land acquisition	<u>1,725,000</u>
TOTAL	\$9,125,000

Annual Cost (50 year life)	
Land and Construction*	\$ 650,000
Maintenance	<u>120,000</u>
TOTAL	\$ 770,000

Annual Benefits

Depreciated value of boats	\$28,000,000
Average annual benefit	2,000,000

Benefit-Cost ratio 2.6

- (2) Basins A, B and C Public with 2740 boats

Annual Costs

1st Cost-Construction	\$6,920,000
Cost of land	<u>1,590,000</u>
TOTAL	\$8,510,000

Annual Costs (50 year life)	
Land and Construction*	\$ 610,000
Maintenance	<u>100,000</u>
TOTAL	\$ 710,000

Annual Benefits

Depreciated value of boats	\$25,000,000
Average Annual Benefit	1,812,000

Benefit-Cost ratio 2.6

(3) Basins A and B Public with 1874 boats

Annual Costs

1st Cost-Construction	\$ 6,520,000
Cost of land	1,390,000
TOTAL	\$ 7,910,000

Annual Cost (50 year life)	
Land and Construction*	\$ 560,000
Maintenance	90,000
TOTAL	\$ 650,000

Annual Benefits

Depreciated value of boats	\$17,000,000
Average Annual benefit	1,122,000

Benefit-Cost ratio 1.7

*Amortization of first costs in 50 years at 6-7/8 percent compound interest.

The above analysis shows that so long as at least Basins A and B are operated by the Harbor District, participation by the Corps of Engineers with a Federal expenditure of over \$3,000,000 can be justified.

PROJECT FIRST COST

The following is a breakdown of first costs of the marina, including highway bridges, assuming Corps requirements will be met:

TABLE 2

Cost of Construction
(In millions of dollars)

ITEM	Public or		
	Federal	Public	Private
<u>ENTRANCE CHANNEL</u>			
Jetties and Wave Absorber*	1.250	1.250	-
Dredging Entrance Channel*	0.715	0.715	-
Navigation Aid Foundations*	0.045	0.045	-
Land Valuation	-	3.000	-
Pacific Coast Highway Bridge	-	-	-
Sub Total	2.010	5.010	-

ITEM	Federal	Public	Public or Private
BASIN A			
Dredging Main Channel*	0.425	0.425	-
Bulkheading Main Channel	-	0.060	-
Dredging and Bulkheading Boat Basins	-	1.300	-
Interior Roads	-	0.075	-
Harbor Master & Admin. Fac.	-	0.600	-
Land Valuation-Public	-	1.710	-
Land Valuation-Pub/Priv.**	-	-	3.050
Sub Total	0.425	4.590	3.050
BASIN A-B			
Pacific Coast Highway Bridge		2.900	
BASIN B			
Dredging Main Channel*	0.625	0.625	-
Bulkheading Main Channel	-	0.395	-
Dredging & Bulkheading Boat Basins	-	3.230	-
Interior Roads	-	0.400	-
Support Land Utilities	-	1.460	-
Land Valuation Public	-	1.030	-
Land Valuation Pub/Priv.**	-	-	0.690
Sub Total	0.625	7.140	0.690
BASINS B-C			
19th St. Bridge	-	3.000	-
BASIN C			
Dredging Main Channel*	0.400	0.400	-
Bulkheading Main Channel	-	0.410	-
Dredging & Bulkheading Boat Basins	-	1.600	-
Interior Roads	-	0.175	-
Support Land Utilities	-	0.930	-
Land Valuation Public	-	1.010	-
Land Valuation Pub/Priv.**	-	-	0.750
Sub Total	0.400	4.525	0.750
BASINS C-D			
Victoria Street Bridge	-	0.700	-

ITEM	Federal	Public	Public or Private
BASIN D			
Dredging Main Channel*	0.240	0.240	-
Bulkheading Main Channel	-	0.525	-
Dredging & Bulkheading Boat Basin	-	0.580	-
Interior Roads	-	0.075	-
Support Land Utilities	-	0.550	-
Control Structure for Banning-Greenville Channel	-	0.400	-
Land Valuation Public	-	0.410	-
Land Valuation Pub/Priv.**	-	-	0.320
Sub Total	0.240	2.780	0.320
TOTAL	3.700	30.645	4.810
TOTAL (Public & Private)			35.455
TOTAL (Federal, Public, Private)			39.155

*To be constructed by the Corps of Engineers

**Public for sponsorship sub-scheme "a", private for sponsorship sub-scheme "b".

The breakdown of costs to participating interests for each of the sponsorship schemes is shown in the following Table:

TABLE 3

Cost Breakdown by Sponsorship Schemes
(in millions of dollars)

Sponsorship Scheme	Harbor		
	Fed.	Dist.	Private
1. All water areas public			
a. With lands public	3.7	35.4	-
b. With lands private	3.2	29.1	6.3
2. Basins A, B, C, Public			
a. With lands public	3.5	31.5	4.1
b. With lands private	3.1	25.8	10.2
3. Basins A, B, Public			
a. With lands public	3.1	23.4	12.6
b. With lands private	2.9	19.1	17.1

POTENTIAL REVENUES

GENERAL

The income produced by the overall project will come from three principal sources: slip rentals in the water area, taxes levied against the berthed craft and leases of land parcels for various uses. Slip rentals and numbers of boats to be taxed under each sponsorship scheme will not vary appreciably with any reasonable modification of the water-area configuration in future planning, as the ratio of berthing area to fairway and channel area must remain approximately the same for navigational reasons. Income from the land area, on the other hand, may vary considerably according to the purposes for which it is used and with intensity of use. Use-intensity is closely related to the number of people (below congestion limits) that are attracted to the area either as permanent residents or as participants in marina activities who come from outside the project boundaries.

The current trend in Orange County is toward curtailment of the number of residents in any given area by imposing various types of governmental controls. These controls take the form of zoning restrictions, building-height restrictions, restrictions on the allowable number of residential units per acre, review-board control over new development, etc. An example of high-intensity use is Marina del Rey, in Los Angeles County, where high-rise buildings are permitted and where facilities that attract thousands of visitors are encouraged. An example of low-intensity use is Huntington Harbour, where minimum lot-size restriction as well as low-density zoning regulations are imposed.

INCOME FROM SLIPS

Slip rental rates are estimated at \$2.50 and \$2.25 per foot of length per month for slips over and under 36 feet respectively, based on current rates in nearby marinas. An average occupancy rate of 95% is assumed, making the annual income per foot of slip \$28.50 and \$25.65 respectively. It is also assumed that the berthing areas together with their designated parking areas are to be leased to private enterprise for slip-construction and operation, as is now being done at

Dana Point Harbor, and that the annual income to the Harbor District will be 20% of the slip rentals. The income to the Harbor District by basins and by sponsorship schemes is shown in the following table:

TABLE 4

Annual Slip Income

BASIN A

Berthing area	460,000 sq. ft.	
Gross income:	117 slips x 50 ft. @ 28.50:	\$167,000
	164 slips x 35 ft. @ 25.65:	\$147,000
		<u>\$314,000</u>
Harbor District lease income, 20%		\$ 62,800

BASIN B

Berthing area	1,760,000 sq. ft.	
Gross income:	1452 slips x 35 ft. @ \$25.65:	\$1,304,000
Harbor District lease income, 20%		\$ 260,800

BASIN C

Berthing area	862,000 sq. ft.	
Gross income:	866 slips x 30 ft. @ 25.65:	\$666,000
Harbor District lease income, 20%		\$133,200

BASIN D

Berthing area	244,000 sq. ft.	
Gross income:	260 slips x 30 ft. @ 25.65:	\$200,000
Harbor District lease income, 20%		\$ 40,000

Sponsorship Scheme 1: public ownership all Basins	\$496,800
Sponsorship Scheme 2: public ownership Basins A,B,C	456,800
Sponsorship Schemes 3 & 4: public ownership Basins A,B	323,600

BOAT TAX REVENUE

The taxes derived from privately owned lands, improvements built on these lands, furnishings in these improvements and most other private properties belonging to the tenants are normally used to provide community services for residents of those lands. Because such taxes are all presumably returned to the taxpayers in the form of police and fire protection, schools, roads, sanitation, etc., they cannot be considered as project revenues. Additional taxes derived from berthed boats, on the other hand, are generated only as a result of more berthing area being provided, and those additional boats do not increase the demand for normal community services. Only those services provided by the harbor management are increased, and this increase is reflected in the harbor operations costs which are taken into account in the economic analysis. For this reason boat taxes are considered to be direct revenues resulting from harbor construction, regardless of their ultimate disposition.

Orange County levies taxes on the boats in its harbors on the basis of their assessed value, i.e., one-fourth of their actual depreciated value. The estimated harbor boat tax revenue is therefore considered to be one fourth of the depreciated appraised value of the boats used in the benefit/cost analysis for Corps of Engineers participation. Assuming a 95 percent occupancy factor, the berthed boats would then have an assessed value of \$9,590,000. The 1973 tax rate for the Newport Harbor area is \$9.18* per \$100 of assessed valuation, and at this rate the boat tax revenue produced by the project under Schemes 1, 2 and 3 would be approximately \$880,000 annually. Under Scheme 4 it would be approximately \$570,000 annually.

INCOME FROM LAND AREAS

All land areas within the project boundary not occupied by roads, slip-parking lots, the harbormaster's office and the green strip along the Santa Ana River are considered leasable. The principal purposes for which the leased land will be used are condominium-type housing developments, motels and hotels, restaurants and various commercial and recreational activities. As previously stated, the primary requisite for a successful leasing program of this nature is a fairly large number of permanent residents who will make use

*Orange County Tax Assessor's Office, Marine Division

of the facilities provided other than the living units themselves. For this reason, a fairly generous allocation of condominium sites was provided for feasibility-testing purposes. It was assumed that about 2,500 units would be built on these sites, which averages about 6 units per acre for the 420 acre site. In addition, sites were provided for about 1,000 hotel and motel units. It was felt that the resulting marina population would assure the success of the restaurants, and the commercial and recreational activities to be provided.

In April, 1967, Victor Gruen and Associates made a re-study of Marina del Rey which provided data on revenues being obtained by the harbor administration from lease of marina lands for various purposes. That was prior to the construction of any high-rise buildings when the level of development approximated that desired for West Newport Marina. The results of that study have been upgraded to present price levels to give the following table of land lease revenues that is considered applicable to the project area.

TABLE 5

Annual Revenues Obtainable for Marina Lands

<u>Parcel Use</u>	<u>Income per Square Foot</u>
Restaurants	\$ 0.90
Motels & Hotels	0.60
Various Sales & Recreation	0.35
Condominiums, General	0.20
Condominiums, Bluff Area	0.40*

*Derived for this report by considering the larger number of units per acre possible and better vistas of the east-boundary condominiums.

An analysis of available lease parcels indicates that a satisfactory use-plan maximizing revenue potentials without violating County height and unit-density criteria can be developed. First, a group of view condominiums would be sited along the east boundary rising to about the level of the adjacent mesa lands. These structures should command premium lease returns, provided their view of the harbor is not obscured by development to the west. Next, a few channel-view restaurant sites would be reserved along the water front, as they will probably

produce the highest revenue per square-foot. Then enough good hotel and motel sites will be reserved to satisfy the anticipated transient needs. They must be near or have easy access to main travel routes crossing the marina. In general, the remaining parcels along the waterfront will be offered mainly for two or three story condominiums, and those not along the water but generally contiguous to main roads will be offered as sites for various commercial and recreational uses.

The revenue rates from Table 5 were applied to the areas of the various parcels in one typical development scheme for the site which adhered generally to the principles previously described. The estimated income is shown in the following Table:

TABLE 6

Annual Income from Lease of Land

	<u>Acres</u>	<u>Income</u>
Basin A		
Launching Ramp	3	\$ 18,000
Residential	12	190,000
Commercial	8	164,000
	<u>23</u>	<u>\$ 372,000</u>
Basin B		
Residential	28	510,000
Commercial	24	463,000
Recreational	8	120,000
	<u>60</u>	<u>\$1,093,000</u>
Basin C		
Residential	20	284,000
Commercial	10	252,000
Recreational	5	76,000
	<u>35</u>	<u>\$ 612,000</u>
Basin D		
Residential	14	360,000
Commercial	5	80,000
Recreational	3	46,000
	<u>22</u>	<u>\$ 486,000</u>

A summary of annual income to the Harbor District from all sources for each of the sponsorship schemes is presented in the following table:

TABLE 7

Annual Harbor District Income From All Sources

(In Thousands of Dollars)

<u>Sponsorship Scheme</u>	<u>Slips Rentals</u>	<u>Boat Taxes</u>	<u>Land Leases</u>	<u>Total</u>
1. All water areas public				
a. With lands public	496.8	880	2,560	3,936.8
b. With lands private	496.8	880	-	1,376.8
2. Basins A, E, C Public				
a. With lands public	456.8	880	2,074	3,410.8
b. With lands private	456.8	880	-	1,336.8
3. Basins A, B Public				
a. With lands public	323.6	880	1,462	2,665.6
b. With lands private	323.6	880	-	1,203.6
4. Basins A, B Public and no Marina in Basins C,D				
a. With lands public	323.6	570	1,462	2,355.6
b. With lands private	323.6	570	-	893.6

ECONOMIC ANALYSIS

FUNDING SCHEDULE

One of the controlling factors in the economic analysis of the proposed marina project is the required scheduling of funds that must be provided by the Harbor District for each of the sponsorship schemes considered. Deferred expenditures may be reduced to present worth for comparison with project revenues, which must also be reduced to present worth for valid analysis. It is assumed that all lands would have to be acquired prior to start of construction. The construction features to be accomplished by the Corps of Engineers will probably be completed over a two or three year period, with matching funds for at least half of the total being required prior to project implementation. All bridge construction should be accomplished as early in the program as possible so that work on piers and abutments will not interfere with basin development. The lead time required for fabrication of steel superstructure components will necessitate early funding also, so that most of the funds for bridge construction will be needed very early in the development program. Roads and utilities cannot be installed until the land areas of the project plan are filled and consolidated. Much of the excavation for production of fill material, on the other hand, must await completion of perimeter walls to retain the fill, and construction of these walls is one of the costliest features of the project.

In general, it appears that over half of the required public funds must be available prior to commencement of work and that most of the remainder will be needed about a year later. Although the construction period may cover about four years, it is assumed for the purposes of this study that all public funds must be available at the start of the project. Some savings may result from deferred funding of portions of the program, but until a firm plan is agreed upon, it is considered unsafe to rely on this possibility.

REVENUE SCHEDULE

For the purposes of this report, it is assumed that the leasing of berthing areas for slip construction will begin at the end of the first three years of construction (as some overlap of construction and slip-leasing is permissible) and that the slips will be rented and occupied in uniformly increasing numbers to full capacity over the succeeding four years. In order to simplify the calculations, no revenues are considered receivable during the first two years of this period and the full-capacity revenues from slip rentals and boat taxes (reduced to 95 percent occupancy) are considered to be receivable from the beginning of the third year (five years after project implementation) to the end of the assumed project life 45 years later.

Under sub-scheme "a" of the project-sponsorship alternatives, revenues from land-area leases will also help to support the project. These revenues are also assumed to become receivable in full amount beginning the fifth year after project implementation.

ANNUAL COSTS

The annual revenues will be partially offset by the annual costs of administering, patrolling and maintaining the harbor. These annual costs are estimated at \$300,000 for sponsorship scheme 1, \$280,000 for sponsorship scheme 2, and \$250,000 for sponsorship schemes 3 and 4. Unlike the revenues however, they will begin at the beginning of the slip-leasing period and continue throughout the life of the project.

REVENUE-COST RATIO

One measure of the economic feasibility of a project is a comparison of the sum of all of its revenues with all of its costs reduced to annual amounts averaged over the life of the project. If the ratio exceeds one to one, the project is considered to be economically justified. In order to reduce costs and revenues to a common basis, a project life must be established, which for this project is assumed at 50 years as required for analysis of Corps of Engineers projects.

The estimated first costs to the Harbor District are shown in Table 2, and for this comparison, it is assumed that they will be met with borrowed capital.

For each sponsorship scheme it is assumed that a State loan of \$10,000,000 can be obtained, repayable over a 30-year period at 4.5 percent compound interest in 30 uniform annual installments. The remainder of the first cost is assumed to be met with institutional loans that will be repayable over a 50 year period at 8.0 percent compound interest in 50 uniform annual installments. The debt-servicing costs would therefore be the 30 year capital recovery factor (.06139) applied to the first \$10,000,000 of cost, plus the 50 year, 8% capital recovery factor (.08174) applied to the remainder of the cost. To the debt-servicing costs must be added the annual costs of maintaining the harbor. Because they do not start for three years after the project implementation date, however, these costs should be reduced by the ratio of the 50 year to the 47 year sinking fund ($.00174/.00220 = .790$).

At the end of the project life, the public land areas, water areas, and improvements will have a salvage value for which credit may be taken in the cost accounting. Inasmuch as the land and water areas do not deteriorate with age and most of the improvements, such as bulkhead walls, roads and utility systems, suffer only minor deterioration if continuously maintained, the salvage value of the public portions of the harbor is considered to be 80 percent of the initial Harbor District cost for each of the sponsorship schemes evaluated. In taking an annual credit for this salvage value, it may be assumed that the prospective salvager establishes a sinking fund to the District's credit on the project implementation date into which he pays a uniform annual amount, which at 8 percent compound interest will reach the estimated harbor purchase price 50 years hence. This amount is 80 percent of the 50 year sinking fund factor ($.00174 \times .80$) multiplied by the Harbor District's first cost as shown in Table 2. The District's annual costs may then be reduced by this annuity.

The harbor revenues are those shown in Table 7, but because they do not start for five years after the project implementation date, they must be reduced by the ratio of the 45 year to the 50 year compound amount factor at 8 percent interest ($386.505/573.770 = .672$). These revenues and the comparable annual costs for each of the sponsorship schemes, with resultant revenue-cost ratios, are shown in the following table.

TABLE 8

Economic Analysis of 50-Year Project
(annual values in thousands of dollars)

Sponsorship Scheme	Revenues	Costs				Rev./Cost Ratio	
		Debt Servicing	Operations & Maintenance	Salvage Credit	Total	First 30 Years	Last 20 Years
1.							
All water public							
a. Land public	2646	2690	237	-48	2879	.92	1.17
b. Land private	925	2175	237	-41	2371	.39	.53
2.							
Basins A,B,C pub.							
a. Land public	2292	2371	221	-44	2548	.90	1.18
b. Land private	898	1905	221	-36	2090	.43	.61
3.							
Basins A,B pub.							
a. Land public	1791	1709	198	-31	1873	.96	1.42
b. Land private	809	1358	198	-27	1529	.53	.88
4.							
Basins A,B pub. & no boats in Basins C,D							
a. Land public	1583	1709	198	-31	1873	.85	1.25
b. Land private	600	1358	198	-27	1529	.39	.66

From this analysis it is apparent that the scheme "b" alternatives all lack justification by a fairly wide margin. Under the scheme "a" alternatives, however, the large revenues from land leases considerably exceed the increases in costs resulting from the additional raw-land acquisition, and for the first 30 years they are marginally sub-feasible. After the State loan has been retired, however, all of the scheme "a" alternatives show good feasibility for the last 20 years. The method of analysis used in Table 8 is quite sensitive

to interest rates. For example, if the interest rate on the loan obtained from the private sector is reduced from 8 to 7 percent, the revenue-cost ratio will increase about 15 percent, making all of the scheme "a" projects economically feasible for the entire project life. Thus, if prevailing interest rates were to improve in the future, or if the State would increase its share of the funding at its lower interest rate, the economics of the project would be measurably enhanced.

It must be realized that the estimates of costs and revenues on which this analysis is based are of a very preliminary nature. While an effort was made to use conservative figures, these estimates must be refined by more detailed planning of project components and by market studies of prospective revenues before they can be accepted as authoritative. Nevertheless, the strong indications of project feasibility demonstrated by this analysis and consideration of the many benefits that would result from the project warrant continuance of efforts to achieve project implementation.

SOURCE OF FUNDS

Implementation of the project must be geared to the Corps of Engineer's time schedule. The earliest definite assurance that a Federal project will be implemented will be the allocation by Congress of funds with which to start the Corps' General Design Memoranda. If an effort is made in 1974 to secure such a project for the marina site and this effort is maintained over the next few years, experience with other projects has shown that about 7 years will be consumed in reaching this GDM-funding milestone. At that time, the Corps will begin the detailed planning of those components of the project which it will construct. About three more years will then be consumed in the design effort and preparation of contract plans and specifications before actual construction can begin.

In the case of Dana Point Harbor, this three year period was used to accumulate funds thru the District's taxing powers, and it is assumed that this action will be repeated. The assessed tax base of Orange County is now about \$4 billion, and the Harbors, Beaches and Parks District's share of the

annual tax levy is now \$0.22 on hundred dollars assessed value. The District is now using most of its tax funds to raise the status of its County Parks program to desired standards. This goal should be reached within a few years, and assuming that continuance of the same tax rate can be justified, some of the funds can then be diverted to other uses. For the purposes of this report it is assumed that the Corps' GDM will be funded in 1981 and that \$0.05 of the tax levy can be diverted to accumulate project funds. This would amount to \$2,000,000 per year or \$6,000,000 by 1984, the assumed year of project implementation.

Another source of funding is the small-craft-harbors loan program of the State Department of Navigation and Ocean Development. It is assumed that a \$10,000,000 State loan can be obtained in 1984 at the present annual interest rate of 4.5 percent. This will probably be a 30 year loan with a 5 year moratorium on commencement of repayment of principal.

The remaining funding requirement would then have to be met with Harbor Revenue Bonds, which will be assumed to draw 8 percent interest with any maturity period desired up to 50 years.

DEBT SERVICING

It is assumed that retirement of the District's debts assumed in the financing of the project would be accomplished generally by continuation of the \$0.05 per hundred tax levy allocation for the first five years after project implementation and thereafter with harbor revenues augmented as necessary by taxation. A suggested debt-servicing program for each of the sponsorship alternatives considered in this report is outlined in the following table.

TABLE 9

Suggested Debt-Servicing Programs

(all figures except tax rates in millions of dollars)

Scheme 1a. All water areas pub. with perim. lands pub.
 Funds Required: 35.4-6=29.4: State 10.0, Rev. Bonds 19.4

Years	1984-87	1987-89	1989-2014	2014-34
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	1.59	1.59	1.59	1.59
Harbor Opr. & Maint.	-	0.30	0.30	0.30
Total	2.04	2.34	2.56	1.89
<u>Met By</u>				
Harbor Income (Gross)	-	-	3.94	3.94
Taxes	2.04	2.34	-	-
Tax Rate*	\$0.0510	\$0.0585	-	-
Harbor Income (Net)	-	-	1.38	2.05

Scheme 1b. All water areas pub. with perim. lands pri.
 Funds Required: 29.1-6=23.1: State 10.0, Rev. Bonds 13.1

Years	1984-87	1987-89	1989-2014	2014-34
<u>Demands</u>				
State	0.45	0.45	0.67	-
Revenue Bonds	1.07	1.07	1.07	1.07
Harbor Opr. & Maint.	-	0.28	0.28	0.28
Total	1.52	1.80	2.02	1.35
<u>Met By</u>				
Harbor Income (Gross)	-	-	1.38	1.38
Taxes	1.52	1.80	.64	-
Tax Rate*	\$0.0380	\$0.0450	\$0.016	-
Harbor Income (Net)	-	-	-	\$0.03

*Per \$100 of assessed value assuming tax base of
 \$4 billion

Table J Continued

Scheme 2a. Basins A,B,C public with perim. lands public
 Funds Required: 31.5-6=25.5: State 10, Rev. Bonds 15.5

Years	1984-87	1987-89	1989-2014	2014-34
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	1.27	1.27	1.27	1.27
Harbor Maint. & Opr.	-	0.28	0.28	0.28
Total	1.72	2.00	2.22	1.55
<u>Met By</u>				
Harbor Income (Gross)	-	-	3.41	3.41
Taxes	1.72	2.00	-	-
Tax Rate*	\$0.0430	\$0.0500	-	-
Harbor Income (Net)	-	-	1.19	1.86

Scheme 2b. Basins A,B,C public with perim. lands private
 Funds Required: 25.8-6=19.8: State 10, Rev. Bonds 9.8

Years	1984-87	1987-89	1989-2014	2014-34
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	0.80	0.80	0.80	0.80
Harbor Opr. & Maint.	-	0.28	0.28	0.28
Total	1.25	1.53	1.75	1.08
<u>Met By</u>				
Harbor Income (Gross)	-	-	1.34	1.34
Taxes	1.25	1.53	0.41	-
Tax Rate*	\$0.0312	\$0.0382	\$0.0103	-
Harbor Income (Net)	-	-	-	0.26

*Per \$100 of assessed value assuming tax base
 of \$4 billion

Table 9 Continued

Scheme 3a. Basins A,B pub. with perim. lands public
 Funds Required: 23.4-6=17.4: State 10, Rev. Bonds 7.4

<u>Years</u>	<u>1984-87</u>	<u>1987-89</u>	<u>1989-2014</u>	<u>2014-34</u>
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	0.60	0.60	0.60	0.60
Harbor Opr. & Maint.	-	0.25	0.25	0.25
<u>Total</u>	<u>1.05</u>	<u>1.25</u>	<u>1.52</u>	<u>0.85</u>
<u>Met By</u>				
Harbor Income (Gross)	-	-	2.67	2.67
Taxes	1.05	1.25	-	-
<u>Tax Rate*</u>	<u>\$0.0262</u>	<u>\$0.0312</u>	<u>-</u>	<u>-</u>
Harbor Income (Net)	-	-	1.15	1.82

Scheme 3b. Basins A,B pub. with perim. lands private
 Funds Required: 10.1-6=13.1: State 10, Rev. Bonds 3.1

<u>Years</u>	<u>1984-87</u>	<u>1987-89</u>	<u>1989-2014</u>	<u>2014-34</u>
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	0.25	0.25	0.25	0.25
Harbor Opr. & Maint.	-	0.25	0.25	0.25
<u>Total</u>	<u>0.70</u>	<u>0.95</u>	<u>1.17</u>	<u>0.50</u>
<u>Met By</u>				
Harbor Income (Gross)	-	-	1.20	1.20
Taxes	0.70	0.95	-	-
<u>Tax Rate*</u>	<u>\$0.0175</u>	<u>\$0.0238</u>	<u>-</u>	<u>-</u>
Harbor Income (Net)	-	-	0.03	0.70

*Per \$100 of assessed value assuming tax base of
 \$4 billion

Table 9 Continued

Scheme 4a. Basins A,B pub. with perim. lands public
and no marina in Basins C,D
Funds Required: 23.4-6=17.4: State 10, Rev. Bonds 7.4

Years	1984-87	1989-89	1989-2014	2014-34
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	0.60	0.60	0.60	0.60
Harbor Opr. & Maint.	-	0.25	0.25	0.25
Total	1.05	1.25	1.52	0.85
<u>Met By</u>				
Harbor Income (Gross)	-	-	2.36	2.36
Taxes	1.05	1.25	-	-
Tax Rate*	\$0.0262	\$0.0312	-	-
Harbor Income (Net)	-	-	0.84	1.51

Scheme 4b. Basins A,B pub. with perim. lands private
and no marina in Basins C,D
Funds Required: 19.1-6=13.1: State 10, Rev. Bonds 3.1

Years	1984-87	1987-89	1989-2014	2014-34
<u>Demands</u>				
State Loan	0.45	0.45	0.67	-
Revenue Bonds	0.25	0.25	0.25	0.25
Harbor Opr. & Maint.	-	0.25	0.25	0.25
Total	0.70	0.95	1.17	0.50
<u>Met By</u>				
Harbor Income (Gross)	-	-	0.89	0.89
Taxes	0.70	0.95	0.28	-
Tax Rate*	\$0.0175	\$0.0238	\$0.0070	-
Harbor Income (Net)	-	-	-	0.39

*Per \$100 of assessed value assuming tax base of
\$4 billion

INDIRECT BENEFITS

In addition to the direct-revenue benefits used for financial justification of the project, several indirect benefits will result. The tax base of the area will be increased not only by virtue of the taxable developments within the project boundary but also because of new developments in presently depressed areas outside the project boundary that will be upgraded by the presence of the marina.

The increase in population of the affected area will create a demand for new jobs and additional commercial services, which should result in still more taxable development in the form of small marine-related industries, shopping centers, household repair and servicing facilities, etc., which in turn cause a disproportionately small increase in the need for community-support services.

In general, the upgrading of the area will have many indirect and intangible benefits, which, though difficult to evaluate, have a real worth which should be considered in justification of the project.

RECREATION AND OPEN SPACE ELEMENT

SECTION 12 - IMPLEMENTATION

The proposals contained herein will cost money. A basic premise of this Recreation and Open Space Element is that open spaces serve a public need, provide public services, and are a necessary part of a high-quality living environment; and that, therefore, the expenditure of public funds for preservation and improvement of open space is warranted. While it is anticipated that acquisition of land for all of the park and trail proposals in the undeveloped areas will be implemented through dedication of land by the developer, many of the open space proposals will require public purchase of the land or of an easement. The City of Newport Beach has adopted an Open Space Zoning District; however, privately-owned land can only be zoned as open space with the agreement of the property owner.

It is obvious that public purchase of land for open space in an area with the high land values of Newport Beach is going to be an expensive proposition. It is anticipated that land values are going to continue to increase. Therefore, the City should acquire these lands as soon as possible and will consider the best possible use of existing City owned lands.

There are many possible means of raising the revenues necessary for public purchase and improvement of open space lands, including building exise tax, municipal bond issures, special assessment districts, and grants from State and Federal agencies.

Where the open space areas have regional significance, the City will request the participation of the County, State, or Federal Government.

Grants from Federal and State Agencies

The City of Newport Beach will apply to the State and Federal governments for funds to assist in acquisition and development of some of its park and open-space land. The most common grant source is the Land and Water Conservation Fund; however, there are some other open-space grants from the Federal government that are available. In addition to these far-reaching grants, the City will also apply to the County for matching funds in the development of a portion of the bicycle trails system that coincides with the County Master Plan. In addition to Federal and County grants, the City is also eligible to receive monies through the Federal revenue-sharing program, both from the Federal level and the County level. Wherever applicable, the City will take advantage of these revenue-sharing funds.

State Park Bond Issue of 1974

Additional funds could conceivably be available to the City of Newport Beach if the State Park Bond Issue of 1974 is approved by the voters in June. This is a \$250,000,000 bond issue with \$90,000,000 being distributed to cities and counties. Based on the projected population in 1980, Newport Beach's share would be about \$206,000. This money would be used for both acquisition and development of park sites.

Excise Tax Fund

A major portion of funds that will be utilized to implement park development in the City of Newport Beach will come from the Building Excise Tax Fund. This is a fund that imposes a 15 cents per square foot development tax on all residential, commercial, and industrial developments within the City and is used exclusively for the development of fire stations, libraries and parks. Since its inception in 1964, this Fund has accumulated \$1,900,000 of which \$1,500,000 has been expended. Thirty-five percent of that amount has gone into park development. These funds have been expended in accordance with City Council Policy I-4 which is a cost-sharing policy on undeveloped land. Council Policy I-4 identifies the responsibilities of the City and private land owners when land developments are proposed, relating to the acquisition and development of local parks, view parks, bicycle trails, and other open-space elements.

Upper Bay

It is anticipated that the privately-owned lands designated as open space within and adjacent to the Upper Bay will be acquired by the State or Federal government as a wildlife preserve. If the State or Federal government does not acquire all of the Upper Bay area indicated as open space on the Open Space Plan, the City will explore other possibilities for acquisition.

Revenue Projections

Figure 5 projects the various potential revenue sources by year until 1990 - 1991.

Priorities for City Open Space Acquisition and Improvements

Figure 6 indicates the open space areas and facilities for which it is anticipated that City expenditures will be required, listed in three priority groupings. These priority groupings are based on three major factors:

- 1) The need to reduce activity park deficiencies in certain sections of the City;
- 2) The ecological significance of the areas;
and
- 3) The probability that the opportunity for preservation of open space will be lost in the near future.

Also included, are suggested time phases for acquisition and improvement, recognizing the fact that not all of these proposals can be accomplished at once. However, if the opportunity arises to acquire any of these areas sooner than indicated, this should be done. The proposed means of acquisition, estimated costs, and funding sources are also indicated on the chart. (All cost estimates are based on constant dollars; inflation is not taken into account. Although inflation will increase actual costs, it will also increase revenues such that the net effect on relative costs should be negligible.)

The costs of those projects earmarked for local bond issue funding (and State Bond Issue of 1974 funding if passed) add up to a total of \$3,136,000. If it becomes possible to lease the State-owned property at low cost, the local bond issue would not be necessary.

Projects Proposed to Be Funded by Other Levels of Government

Following is a list of open space projects which are beyond the responsibility and scope of local funding, and for which the City will seek County, State, and/or Federal funding:

1. Upper Newport Bay flora and fauna reserve and associated equestrian and hiking trails.
2. Santa Ana River Greenbelt and associated equestrian and hiking trails.
3. Land for public parking lots on State property on Coast Highway.
4. Additional public restrooms for beaches.
5. Regional park north of Upper Bay.

FIGURE 5 REVENUE SOURCES FOR PARK ACQUISITION AND DEVELOPMENT

Year	50% of Building Exc	Fed. Rev. Sharing	County Rev. Sharing	State Bond of 1974	Local Bond Issue	General Fund	County Bike Trails Fund	Gas Tax Bikeway Fund	Special Fund
974-75	\$ 310,000		\$ 100,000		\$3,636,000	\$ 10,000	\$ 25,000	\$ 50,000	
975-76	345,000		200,000	\$206,000		10,000	25,000	50,000	
976-77	345,000	\$250,000				10,000	25,000	50,000	
977-78	325,000	250,000				10,000	25,000	50,000	\$400,000
978-79	310,000					10,000	25,000	50,000	
979-80	290,000					10,000	25,000	50,000	
980-81	275,000					10,000	15,000	30,000	
981-82	255,000					10,000			
982-83	240,000					10,000			
983-84	220,000					10,000			
984-85	200,000					10,000			
985-86	190,000					10,000			

REVENUE SOURCES FOR PARK ACQUISITION AND DEVELOPMENT

Year	50% of Building Exc	Fed. Rev. Sharing	County Rev. Sharing	State Bond of 1974	Local Bond Issue	General Fund	County Bike Trails Fund	Gas Tax Bikeway Fund	Special Fund
86-87	\$ 170,000					\$ 10,000			
87-88	155,000					10,000			
88-89	135,000					10,000			
89-90	120,000					10,000			
90-91	100,000					10,000			
Sub Totals	\$3,985,000	\$500,000	\$ 300,000	\$206,000	\$3,136,000	\$170,000	\$165,000	\$330,000	\$400,000

TOTAL-----\$9,692,000

FIGURE 6 - PRIORITY LISTING OF OPEN SPACE PROJECTS

Priority and Phase	Proposed Facility	Proposed Means of Acquisition	Estimated Acquisition Cost & Means of Funding	Estimated Improvement Cost & Means of Funding
1st Priority by Fiscal Year 1976	West Newport Park (State Right of Way)	Purchase in fee or lease	\$1,740,000 - City Bond	\$250,000 - Building Excise Tax
	North Corona del Mar Park	Purchase or lease the State property	\$370,000 - City Bond	\$350,000 - Building Excise Tax
	Semeniuk Slough	Purchase prv. property	\$500,000 - Building Excise Tax	\$150,000 - Building Excise Tax
	Balboa Island Park	Litigation	Fee	\$75,000 - State Park bond
	San Joaquin Hills Park	City-owned	-	\$110,000 - Building Excise Tax
	Cliff Drive Park	City-owned	-	\$55,000 - State Park Bond
	Corona Highlands Tot Lot	Purchase - fee	\$50,000 - State Park Bond	\$5,000 - Building Excise Tax
	Spyglass Hills Park	Dedication	-	\$150,000 - Building Excise Tax
	Harbor View Nature Park	Dedication	-	\$30,000 - Building Excise Tax
	Bikeway System Backbone	Current R/W	-	\$200,000 - Gas Tax \$100,000 - County

FIGURE 6 , CONT.

Priority and Phase	Proposed Facility	Proposed Means of Acquisition	Estimated Acquisition Cost & Means of Funding	Estimated Improvement Cost & Means of Funding
1st Priority by Fiscal Year 1975 (Cont.)	Inspiration Point	Purchase Fee	\$100,000 - Building Excise Tax \$100,000 - County Revenue Share	-
	Kings Road View Lots	Purchase in fee from State or lease	\$69,000 - City Bond	\$20,000 - Building Excise Tax
	32nd & Balboa Blvd. Park	Purchase in fee	\$300,000 - Federal Revenue Share	\$100,000 - Building Excise Tax
2nd Priority by Fiscal Year 1980	Balboa Island Play Lot	Purchase in fee	\$200,000 - Federal Revenue Share	\$50,000 - Building Excise Tax
	Bayside Drive Park	City-owned	-	\$50,000 - Building Excise Tax \$26,000 - State Park Bond
	Tustin at University Park	Purchase in fee	\$500,000 - Building Excise Tax	\$400,000 - Building Excise Tax
	Spyglass Hills Nature Park	Dedication	-	\$75,000 - Building Excise Tax
	Marinapark	City-owned	-	\$400,000 - Special Fund
	Cliff Drive Park	Two lots City-owned Acquire church from State in fee or lease	\$220,000 - City Bond \$200,000 - County Revenue	\$130,000 - Building Excise Tax for two lots "B"-9

FIGURE 6, CONT.

Priority and Phase	Proposed Facility	Proposed Means of Acquisition	Estimated Acquisition Cost & Means of Funding	Estimated Improvement Cost & Means of Funding
2nd Priority by Fiscal Year 1980	State-owned property east of superior	Purchase in fee or lease from State	\$800,000 - City Bond	\$240,000 - Building Excise Tax
	Bikeway System Secondary	Existing R/W and Dedication	-	\$130,000 - Gas Tax \$65,000 - County
3rd Priority by Fiscal Year 1990	(3) Banning Property Parks	Dedication	-	\$360,000 - Building Excise Tax
	Banning View Park	Dedication	-	\$100,000 - Building Excise Tax

FIGURE 7 - TALLY OF OPEN SPACE PROJECT COSTS BY FUNDING SOURCE

Priority	Building Excise Tax	Fed Rev Sharing	County Rev Shar	State Bond	City Bond	County Bikeways	Gas Tax Bikeways	Special Fund
1st By 1976	\$ 110,000		\$ 100,000	\$ 75,000	\$1,746,000	\$ 100,000	\$ 200,000	
	5,000			55,000	370,000			
	150,000			50,000				
	30,000							
	250,000							
	150,000							
	100,000							
	350,000							
	20,000							
	500,000							
	\$1,665,000		\$ 100,000	\$ 180,000	\$2,116,000	\$ 100,000	\$ 200,000	
2nd By 1980	\$ 100,000	\$ 300,000	\$ 200,000	\$ 26,000	\$ 220,000	\$ 65,000	\$ 130,000	\$ 400,000
	50,000	200,000			800,000			
	500,000							
	400,000							
	130,000							
	50,000							
	240,000							
	75,000							
	\$1,545,000	\$ 500,000	\$ 200,000	\$ 26,000	\$1,020,000	\$ 65,000	\$ 130,000	\$ 400,000
3rd By 1990	\$ 360,000							
	100,000							
	\$ 460,000							
Sub Totals	\$3,670,000	\$ 500,000	\$ 300,000	\$ 206,000	\$3,136,000	\$ 165,000	\$ 350,000	\$ 400,000

TOTAL -----\$8,707,000

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
LNB-001	Water-related recreation & conservation area.	Newport Beach	-	-	-	-	-	Note (1).
(a)	Small craft harbor	"	-	-	-	-	-	Note (2).
(b)	Bicycle trail, bluff area	"	Note (3)	Newport Beach	-	Newport Beach	-	Note (3).
(c)	Bicycle trail, east levee	"	"	"	-	"	-	"
(d)	Hiking trail, bluff area	"	"	"	-	"	-	"
(e)	Hiking trail, east levee	"	"	"	-	"	-	"
(f)	Equestrian trail, east levee	"	"	"	-	"	-	"
(g)	Neighborhood parks	"	"	"	-	"	-	Three separate parks.
(h)	View parks	"	"	"	-	"	-	Four separate parks.
(i)	Play lot	"	"	"	-	"	-	"
(j)	Scenic area, bluff	"	"	"	-	"	-	"
(k)	Scenic area, east levee	"	"	"	-	"	-	"
(l)	Landscaped entry	"	"	"	-	"	-	"
(m)	Private development	"	Note (2)	"	-	"	-	"
(n)	Trails end rest stop	"	Note (3)	"	-	"	-	"
(o)	Coast Highway, re-route	-	-	-	-	-	-	Notes (1), (2) and (3).
LCO-001	Same as LNB-001	-	-	-	-	-	-	Note (1).
LCM-001	Water-related recreation-conservation	-	-	-	-	-	-	Note (4).
LHB-002	Equestrian trail	Completed	County	Completed	County	Completed	\$ 380	Note (5). West levee; PCH Bridge to Garfield Av. for 3.8 mi.
LNB "	"	"	"	"	"	"	\$ 80	East levee; PCH Bridge to 19th St. (extended) for 0.8 mi.

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
LCM-002	Equestrian trail	County	Completed	County	Completed	County	\$ 430	East levee; 19th St. (extended) to MacArthur Blvd. for 4.3 mi.
LFV "	"	"	"	"	"	"	340	West levee; Garfield to Edinger Aves. for 3.4 mi.
LSA "	"	"	"	"	"	"	250	West levee; Edinger Av. to 17th St. for 2.5 mi.
"	"	"	"	"	"	"	450	East levee; MacArthur Blvd. to 17th St. for 4.5 mi.
	Project Total						\$ 1,930	Distance = 19.3 mi.
LHB-003	Bicycle trail	County	Completed	County	Completed	"	\$ 870	Note (6). West levee; PCH Bridge to Adams Av. for 2.9 mi.
LCM "	"	"	"	"	\$ 61,200	"	612	East levee; 19th St. (extended) to Adams Av. for 2.04 mi.
"	"	"	"	"	Completed	"	690	East levee; Adams Av. to MacArthur Blvd. for 2.3 mi.
LSA "	"	"	"	"	"	"	1,350	East levee; MacArthur Blvd. to 17th St. for 4.5 mi.
	Project Total				\$ 61,200		\$ 3,522	Distance = 11.74 mi.
LNB-004	Neighborhood park	Newport Beach	Leased	Newport Beach	\$281,000	Newport Beach	\$14,000	East of river & south of Pacific Coast Hwy. (PCH). West Newport Park.
LRB-004	Huntington State Beach Development	State	-	State	-	State	-	Expansion & redevelopment of existing state beach.
LCM-004	Primary highway & bicycle lane	Costa Mesa	-	Costa Mesa	\$3,700,000	Costa Mesa	\$ 265	Development cost includes both acquisition & development of 19th St. extension, but excludes cost of bridge. O & M costs for bicycle lane only. Linkage to LHB-003 from Placentia Av.
LNB-005	Bicycle trail	Newport Beach	-	Newport Beach	-	Newport Beach	-	Linkage to LHB-003 from LNB-004.

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
LHB-005	Santa Ana River mouth Open Space Development	State	\$2,000,000	State	-	State	-	West of river & north of PCH. Included within acquisition list as approved by Calif. Coastal Zone Commission (CCZC).
LCM-005	Primary highway & bicycle lane	Costa Mesa	-	Costa Mesa	\$ 702,000	Costa Mesa	\$ 550	Acquisition & development costs for Victoria St. between river & Canyon Dr. & bicycle lane thereon to Placentia Av. Bridge widening costs not included. O & M costs for bicycle lane only.
LHB-006	Trail landscaping	County	Completed	County	\$ 161,112	County	\$ 28,188	Note (7). PCH to Adams Av. for 2.9 mi.
LCM "	"	"	"	"	111,112	"	19,440	19th St. (extended) to Adams Av. for 2.0 mi.
LSA "	"	"	"	"	127,779	"	22,356	Adams Av. to MacArthur Blvd. for 2.3 mi.
" "	"	"	"	"	111,112	"	19,440	MacArthur Blvd. to Edinger Av. for 2.0 mi.
" "	"	"	"	"	122,000	"	24,300	Note (4). Edinger Av. to 17th St. for 2.5 mi.
	Project Total		-		\$ 633,115		\$113,724	Distance = 11.7 mi.
LHB-007	Bicycle trail	Huntington Beach/County/Orange County Sanitation Dist. (OCSD)/Edison Co.	Completed	Huntington Beach/County	Completed	Huntington Beach/County	\$ 90	Linkage from Lebard School & Park to LHB-003 for 0.3 mi.
LCM-007	Park	Costa Mesa	Completed	Costa Mesa	Completed	Costa Mesa	\$ 26,460	Vista Park. Linkage to LHB-003 from park via LCM-005.
LHB-008	PCH bicycle trail	State	Completed	County/Huntington Beach/State	\$ 65,000	State	\$ 510	PCH from Brookhurst St. to Beach Blvd. for 1.7 mi.
LCM-008	Regional Park	County/Costa Mesa	Completed	County/Costa Mesa	\$5,339,000	County/Costa Mesa	\$421,500	Note (9). Fairview Regional Park, County's 253 ± acres being acquired by 20 annual payments of \$290,157 ea. Total area 281 acres; quasi wilderness.
LHB-009	Bicycle & Pedestrian crossing at PCH	County/CALTRANS	Completed	County CALTRANS	\$ 100,000	County	-	Bridge crossing rivermouth south of PCH for 0.1 mi. ABS 17c.
	Project Total				\$ 250,000			

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual) COST	
LCM-009	Bicycle trail loop	State	Completed	Costa Mesa	\$92,400	Costa Mesa	\$ 925	Trail loop from LCM-003 around Costa Mesa Golf & Country Club & Fairview Hospital, with linkage to Fairview Regional Park. Golf course land leased by City from State. Development cost provided by Huntington Beach.
LHB-010	Upgraded bicycle trail linkages to LHB-003	Huntington Beach/County/ Sanitation Dist./ Edison Co.	Completed	Huntington Beach	\$ 400	Huntington Beach/ County	-	
LCM-010	Golf Course	Private	Completed	Private	Completed	Private	-	Mesa Verde Country Club & Golf Course.
LHB-011	Trail signing	Huntington Beach	Completed	Huntington Beach	\$ 270	Huntington Beach	-	Signing along bicycle trails/lanes linking into LHB-003.
LCM-011	Bicycle lane	Costa Mesa	Completed	Costa Mesa	\$ 1,400	Costa Mesa	\$ 200	Bicycle lane along California St. from Gisler Av. to Suburbia Park (LCM-012), and LCM-003.
LHB-012	Park	Huntington Beach	Completed	Huntington Beach	Completed	Huntington Beach	\$ 7,800	Lebard Park. Linked to LHB-003 via LHB-007.
LCM-012	Park	Costa Mesa	Completed	Costa Mesa	Completed	Costa Mesa	\$ 8,400	Suburbia Park. Linked to LCM-003 via LCM-011.
LHB-013	School	Huntington Beach School Dist. (HBSD)	Completed	HBSD	Completed	HBSD	-	Lebard Park. Linked to LHB-003 via LHR-007.
LCM-013	Bicycle lane Bicycle trail	Costa Mesa	Completed	Costa Mesa	\$ 1,500	Costa Mesa	\$ 200	Bicycle lane will located on South Coast Dr., Hyland Av. & Sunflower Av. Bicycle trail will be located adjacent to and north of San Diego Fwy., linking to LCM-003.
LHB-014	Project total School	Fountain Valley School Dist. (FVSD)	Completed	FVSD	\$11,700	FVSD	\$ 300	Arealos School. West of river, north of Adams Av.
LSA-050	Bicycle lane/trail	Santa Ana	-	Santa Ana	-	Santa Ana	-	Golden loop bicycle trail/lane linking LSA-003 to SSA-605 bicycle trail for 8.3 mi.
LFV-050	Bicycle lane	Fountain Valley	Completed	Fountain Valley	Completed	Fountain Valley	\$ 313	Linkage from LSA-003 to Mile Square Regional Park via Slater Av. and Euclid St. for 1.25 mi.

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
LFV-052	Equestrian trail	County/ Fountain Valley	Completed	Fountain Valley	\$ 6,000	Fountain Valley	\$ 120	Linkage from LFV-002 to Mile Square Regional Park for 1.2 mi.
LCO-053	Camping area	Santa Ana/ Fountain Valley	\$2,870,000	Santa Ana	\$3,587,500	Private	-	Note (10). Located west of river & south of Edinger Av.
LSA-056	Regional Park	Santa Ana/Santa Ana Unified School Dist.	See remarks	County/Santa Ana	\$2,259,600	Santa Ana	\$161,400	Note (9). Centennial Regional Park, City of Santa Ana & SAUSD own 85.9 acres. City is acquiring 21.7 acre FCC site from USA. Total of 107.6 acres; active park.
LCO-059	Stadium	Santa Ana	\$ 804,800	Private	-	Santa Ana	-	Note (10). Located west of river & north of Edinger Av.
LSA-062	Equestrian center	Private	-	Private	-	Private	-	Note (10). Located west of river & north of Edinger Av.
LSA-065	Equestrian center	Private	-	Private	-	Private	-	Note (10). Located west of river & south of McFadden Av.
LSA-068	Polo field all purpose area	Santa Ana	\$ 550,000	Santa Ana	\$ 410,000	Santa Ana/ Private	-	Note (10). Located west of river & south of McFadden Av.
LSA-071	Polo field all purpose area	Santa Ana	\$ 390,400	Santa Ana	\$ 292,800	Private	-	Note (10). Located west of LSA-068 & south of McFadden Av.
LSA-074	Equestrian center	Private	-	Private	-	Private	-	Note (10). Located west of river & south of 1st St.
LSA-077	Park & recreation	Santa Ana	\$ 526,800	Santa Ana	\$ 658,500	Santa Ana	-	Note (10). Located east of river & south of 1st St.
LSA-080	Park & recreation	Santa Ana	\$ 433,200	Santa Ana	\$ 541,500	Santa Ana	-	Note (10). Located east of river & north of 1st St.
LSA-083	Equestrian center	Private	-	Private	-	Private	-	Note (10). Located west of river & north of 1st St.
LSA-086	Park	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	\$ 25,000	Harper Park. Located west of river & north of 5th St.
LSA-089	Bicycle lane	Santa Ana	Completed	Santa Ana	-	Santa Ana	-	Linkage from Euclid & Raitt Sts. to LSA-003 via 5th St.

LOWER RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
LSA-092	Bicycle linkage	SAUSD	Completed	SAUSD	Completed	SAUSD	-	Linkage to LSA-003 from Spurgeon Intermediate School.
LSA-095	Golf course	Garden Grove	Completed	Garden Grove	Completed	Private	-	Willowick Municipal Golf Course.
LSA-098	Park	Santa Ana	\$1,000,000	Santa Ana	\$1,200,000	Santa Ana	-	Note (10). Located east of river & north of the Pacific Electric R/W.
LSA-101	Park	Santa Ana	\$ 91,000	Santa Ana	\$ 114,000	Santa Ana	-	Note (10). Located east of river & west of Fairview St.
LSA-104	Bicycle lane	Santa Ana	Completed	Santa Ana	-	Santa Ana	-	Linkage from 5th St. to LSA-003 via Fairview St.
LSA-107	Stables	Private	-	Private	-	Private	-	Note (10). Located west of river & south of 17th St.
LSA-110	Accessory commercial uses	Santa Ana	\$ 250,000	Private	-	Private	-	Note (10). Located west of river & south of 17th St.
LSA-113	Park	Santa Ana	\$ 125,000	Santa Ana	\$ 155,000	Santa Ana	-	Note (10). Located east of river & south of 17th St.

Note (1): Project area includes several hundred acres within dual jurisdiction of City of Newport Beach and County of Orange. Individual projects identified as (a)-(o), and responsibilities for acquisition, development, operation/maintenance, and their respective costs, will be determined in detail upon completion of a specific plan for the entire project area.

Note (2): A copy of an "Engineering and Economic Feasibility Study" for LNB-001(a) is provided in Attachment "A" of APPENDIX G.

Note (3): See Attachment "B" of APPENDIX G, Section 12-Implementation, "Recreation and Open Space Element" - Newport Beach General Plan.

Note (4): This project will consist of essentially the same and/or similar facilities and features as LNB and LCO-001. Development of specific plans for the river mouth will be a coordinated, multi-jurisdictional effort to ensure maximum beneficial uses of area for all concerned.

Note (5): Cost estimates based on 10 ft. average equestrian trail width; development = offroad: \$5,000/mi., and onroad: \$200/mi.; operation/maintenance = \$100/mi./yr.

LOWER RIVER SEGMENT

Note (6): Cost estimates based on 8 ft. average bicycle trail width; development: onroad (lane) = \$1,800/mi. and offroad (trail) = \$30,000/mi.; operation/maintenance: onroad = \$250/mi./yr. and offroad = \$300/mi./yr.

Note (7): Development cost based on Part "B" of the Santa Ana River Environmental Plan (SAREP) @ \$55,556/mi. Landscaped areas along levees estimated to be 9 acres/mi. O & M landscaping costs = \$1,080/acre/yr.

Note (8): Development cost based on Part "A" SAREP @ \$48,800/mi.

Note (9): Development costs for active park = \$21,000/acre, and for quasi-wilderness = \$19,000/acre. O & M costs = \$1,500/acre/yr.

Note (10): Project costs extracted from City of Santa Ana Greenbelt Plan as presented to the Greenbelt Commission on 3Apr75.

LOWER RIVER SEGMENT

PLANNED PROJECT PRIORITIES

<u>Jurisdiction</u>	<u>Project Number</u>	<u>Description</u>	<u>Priority</u>
<u>County of Orange</u>	LCM-008	Fairview Regional Park	Group One
	LSA-056	Centennial Regional Park	Group One
	LCO-001	Talbert Regional Park	Group Two
<p>Note: Above priority groups established in County Master Plan of Regional Parks, Amendment No. 3. LSA-056 added to Group One by Board Resolution No. 73-1384.</p>			
<u>Huntington Beach</u>	LHB-008	PCH Bicycle Trail	1
	LHB-010	Upgraded Bicycle Trails	2
	LHB-011	Signing Bicycle Trails	3
	LHB-006	River Trail Landscaping	4
<p>Note: Remaining Huntington Beach projects were not assigned priorities.</p>			
<u>Newport Beach</u>	LNB-001	Water-Related Recreation/ Conservation Area	1
	LNB-004	West Newport Park	1
	LNB-005	Bicycle Trail	1
<u>Costa Mesa</u>	LCM-008	Fairview Regional Park	1
	LCM-003	Bicycle Trail	2
	LCM-009	Bicycle Trail Loop	3
	LCM-011	Bicycle Lane	4
	LCM-006	River Trail Landscaping	5
	LCM-013	Bicycle Lane/Trail	6
	LCM-005	Bicycle Lane	7
	LCM-004	Bicycle Lane	8
<u>Fountain Valley</u>	LFV-052	Equestrian Trail	-
<u>Santa Ana</u>	LSA-056	Centennial Regional Park	1
	LSA-107	Stables	2
	LCO-059	Stadium	3
	LSA-065	Equestrian Center	4
	LSA-071	Polo Field	5
	LCO-053	Camping Area	6
	LSA-083	Equestrian Center	7
	LSA-110	Accessory Commercial Uses	8
	LSA-068	Polo Field	9
	LSA-113	Park	10
	LSA-104	Park	11
	LSA-101	Park	12

<u>Jurisdiction</u>	<u>Project Number</u>	<u>Description</u>	<u>Priority</u>
<u>Santa Ana</u> (continued)	LSA-080	Park & Recreation	13
	LSA-077	Park & Recreation	14
	LSA-074	Equestrian Center	15
	LSA-062	Equestrian Center	16

Note: Remaining projects in Lower River segment of City of Santa Ana Greenbelt Plan were not assigned priorities.

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	IDENTIFICATION	
								USE	ZONING
MSA-202	Equestrian trail	Equestrian trail	River levee, west	-	Santa Ana	0	County, 17th St. to G.G. Blvd.		
MOR "	"	"	"	-	City of Orange/County	R-0/R4	County, G.G. Blvd. to Orangewood Av.		
MAN "	"	"	"	-	Anaheim/County	PR/100-M1-20,000;R4	County, Orangewood to Katella Aves.		
MOR "	"	"	east	-	City of Orange/County	R-0/A1	County/OCWD, Katella Av. to AT&SF R.R.		
MAN "	"	"	south	-	Anaheim	RSA-43,000	OCWD/County, AT&SF R.R. to Imperial Hwy.		
MSA-203	Bicycle trail	Bicycle trail	River levee, west	-	Santa Ana	0	County, 17th St. to G.G. Blvd.		
MOR "	"	"	"	-	City of Orange/County	R-0/R4	County, G.G. Blvd. to Orangewood Av.		
MAN "	"	"	"	-	Anaheim/County	PR/100-M1-20,000;R4	County, Orangewood to Katella Aves.		
MOR "	"	"	east	-	City of Orange/County	R-0/A1	County/OCWD, Katella Av. to AT&SF R.R.		
MAN "	"	"	south	-	Anaheim	RSA-43,000	OCWD/County, AT&SF R.R. to Imperial Hwy.		
MSA-206	Trail landscaping	Trail landscaping	River levee, west	7.2	Santa Ana	0	County, Edna to Forrest Paul Parks.		
MOR "	"	"	"	7.2	City of Orange/County	R-0/R4	County, Chapman to Orangewood Aves.		
MAN "	"	"	"	1.8	Anaheim	PR	County, Orangewood Av. to Orange Fwy.		
MOR "	"	"	east	32.4	City of Orange/County	R-0/A1	County/OCWD, Katella Av. to AT&SF R.R.		
MAN "	"	"	south	29.7	Anaheim	RSA-43,000	OCWD/County, AT&SF R.R. to Imperial Hwy.		
Project Total				78.3					

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	IDENTIFICATION		ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER DESCRIPTION	ASSESSOR PARCELS OR OTHER DESCRIPTION					
MAN-207	Vacant	Recreation	232-011-30	Anaheim	16.16	Anaheim	PR	Anaheim. Located west of river and south of Orangewood Av.	
MAN-208	River levee	Rest stop	River levee, west	County	-	County	R4	County. Orangewood rest stop. Located west of river and south of Orangewood Av.	
	Vacant	"	232-011-13	Anaheim	0.77	Anaheim	PR	Anaheim. Location & use same as above.	
	"	"	-19	"	3.12	"	"	"	
	Project total				3.89				
MAN-209	Equestrian center	Equestrian center	83-220-64	County	4.04	County	AI	Private. Rancho Del Rio. Located west of river south of Ball Rd. Includes rest stop.	
	Project total		-70	"	5.40	"	"	Same as above.	
	Street/bridge	Bicycle lane xing	Street R/W	City of Orange/County	9.44	City of Orange/County	-	Ball Rd./ Taft Av.	
MCW-215	Water conservation basin	Water conservation basin/park	253-341-1	County	-	County	AI	OCWD. Old Santa Ana Regional Park - South.	
			-2	"		"	"	Private.	
			-3	"		"	"	"	
			-4	"		"	"	"	
			-5	"		"	"	OCWD.	
			-6	"		"	"	Private.	
			451-1	"		"	"	County.	
			-2	"		"	"	OCWD.	
			-3	"		"	"	"	
			-4	"		"	"	"	

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED DESCRIPTION	IDENTIFICATION			ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER DESCRIPTION	ZONING	County				
MCW-215	Water conservation basin	Water conservation basin/park	253-451-5		County	AI	Private.		
			84-010-6		"	"	OCWD.		
			-7		"	"	"		
			-15		"	"	"		
	Project total		190.0						
MAN-218	Street	Bicycle lane	Street R/W		Anaheim/County	-	Anaheim/county. Lincoln Av.		
MAN-221	Water conservation basin	Water conservation basin/park	268-081-2		Anaheim	RSA-43,000	OCWD. Old Santa Ana Regional Park - North.		
			-3		"	"	Same as above.		
			-4		"	"	"		
			-5		"	"	"		
	Project total		65.0						
MAN-224	Flood control channel	Equestrian trail	Flood control channel		County/Anaheim	-	County. Carbon Creek Diversion Channel for 1.8 mi.		
MAN-227	Street/bridge	Bicycle lane xing	Street R/W		City of Orange/County	-	County/City of Orange. Glassell St./Kraemer Blvd.		
MAN-230	Vacant	Recreation	360-071-14		Anaheim	RSA-43,000	County. Newkirk Dump Site.		
			-18		"	"	"		
	Project total		20.53						

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	ASSESSOR PARCELS OR OTHER		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
			IDENTIFICATION	ZONING				
MAN-233	Sand mining/water conservation basin	Water conservation basin/park	346-111-1	Anaheim	RSA-43,000	OCWD. Warner Basin.		
			121-1	"	"	"		
			-2	"	"	"		
			-3	"	"	"		
			131-2	"	"	"		
			132-3	"	"	"		
			-4	"	"	"		
			-5	"	"	"		
			-6	"	"	"		
			-7	"	"	"		
			-8	"	"	"		
			-9	"	"	"		
			141-14	"	"	"		
			-16	"	"	"		
			-17	"	"	"		

Project Total

109.00

MAN-236	Vacant	Rest stop	360-184-1	Anaheim	RSA-43,000	County. Riverdale rest stop.
			Street R/W	"	-	Anaheim. Access to Riverdale rest stop
	Project Total				3.00	

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	IDENTIFICATION	
								USE	ZONING
MAN-239	Vacant	Park	359-011-52 -70 -71	5.22 0.10 3.99	Anaheim " "	RSA-43,000 " "	Anaheim, Riverdale Park. " "		
	Project total			9.31					
MAN-242	Street R/W/bridge	Bicycle lane xing	Street R/W	-	Anaheim	-	Anaheim, Lakeview Av.		
MAN-245	Vacant	Equestrian center	85-020-54	10.5	County	AI	OCWD, Imperial Woods Equestrian Center.		
MAN-248	Street R/W, river channel	Bicycle/equestrian xing	Street R/W/river channel	-	Anaheim	RSA-43,000	OCWD/County, Trail linkage from south to north levee in the Imperial Hwy. area.		
MSA-251	Vacant	Park	101-111-1	8.53	Santa Ana	R1; CI	Note (1). Private, Edna Park expansion, Located west of river & north of 17th St.		
MSA-254	Vacant	Park	101-691-14	5.97	Santa Ana	R1	Note (1). Private, Edna Park expansion, Located west of river & north of 17th St.		
MSA-257	Park	Park	1-011-16	2.5	Santa Ana	0	County, Edna Park, Located west of river & north of 17th St.		
MSA-260	Vacant	Park and ride	101-055-26	3.36	Santa Ana	0	Note (2). County, Former OCFCD maintenance yard, Forrest Pauli Park, Located west of river & south of G.G. Blvd.		
MOR-308	Street R/W	Bicycle trail	Street R/W	-	County	-	County, Orangewood Av. trail link to El Camino Real Park.		
MOR-309	Equestrian center	Equestrian center	84-010-18	1.0	City of Orange	R-0	OCWD, River Trails Stables, Located east of river south of Lincoln Av. Rest stop.		
	Project total			6.5	"	"	"		
				7.5					

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION		ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS				
				84-010-4	County									
MCO-315	Vacant	Park and ride	84-010-4	-14		3.22	"		MI	SAVI. Old Santa Ana Regional Park (El Parque del Rio). OCWD.				
				Project total										
				S&G Mining/ vacant	Water conservation basin/park	360-011-2	3		10.71	County		SG	Private. Old Santa Ana Regional Park. (Noble Pit). Same as above.	
							5		6.42	"	"	"	"	
							6		8.88	"	"	"	"	"
							031-1		2.98	"	"	"	"	"
							2		9.48	"	"	"	"	"
							3		5.17	"	"	"	"	"
							6		5.13	"	"	"	"	"
							11		8.85	"	"	"	"	"
							15		4.97	"	"	"	"	"
							21		3.46	"	"	"	"	"
							22		24.60	"	"	"	"	"
							052-2		0.03	"	"	"	"	"
221-1		1.53	"				"	"	"	"				
2		4.34	"	"	"	"	"							
Project total		0.08			96.63									
MSA-318	Industrial	Park and recreation facility	001-011-13	21		1.07	Santa Ana	RI	Note (1). Private. Located east of river north of 17th St. Same as above.					
				23		5.96	"	"	"					
				Project total		2.16								
Project total					9.19									

MIDDLE RIVER SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	IDENTIFICATION		ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER DESCRIPTION	PLANNED					
MSA-321	Park	Park	001-011-8		27.20	Santa Ana	0	Santa Ana. Alona Park, Located east of river & south of Santiago Creek. Same as above.	
	Project total		-9		<u>0.10</u>	"	"		
					<u>27.30</u>				
MSA-324	River levees/park	Bicycle trail	001-011-8		-	Santa Ana	0	Santa Ana. Bicycle trail linkage from MSA-003 to Alona Park.	
			-25		-	"	"		
MSA-327	Golf course	Golf course	001-011-6		2.58	Santa Ana	0	County. River View Golf Course.	
			-7		<u>13.90</u>	"	"		
			-10		6.08	"	"	Santa Ana.	
			-16		31.63	"	"	County.	
			-20		14.94	"	"	"	
			-25		3.85	"	"	Santa Ana.	
			002-231-4		1.10	City of Orange	R-0	County.	
			-24		2.14	"	"	"	
			-25		5.30	"	"	"	
			261-24		3.99	"	"	"	
			-25		5.77	"	"	"	
			-26		0.50	"	"	"	
			-27		<u>2.05</u>	"	"	"	
	Project total				<u>93.83</u>				

Note (1): This project description extracted from City of Santa Ana Greenbelt Plan as presented to the Greenbelt Commission on 3Apr75. Assessor parcel numbers and acreages updated to reflect current records.

(2): Acreage as per Real Property Inventory (1Jan76), General Services Agency, County of Orange.

MIDDLE RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
MSA-202	Equestrian trail	County	Completed	County	Completed	County	\$ 130	Note (1). West levee; 17th St. to Garden Blvd. for 1.3 mi.
MOR "	"	"	"	"	"	"	180	West levee; Garden Grove Blvd. to Orangewood Av. for 1.8 mi.
MAN "	"	"	"	"	"	"	70	West levee; Orangewood to Katella Aves. for 0.7 mi.
MOR "	"	County/OCWD	"	County/OCWD	"	"	360	East levee; Katella Av. to AT&SF R.R. for 3.6 mi.
MAN "	"	"	"	"	"	"	330	South levee; AT&SF R.R. to Imperial Hwy. for 3.3 mi.
	Project Total		-		-		\$ 1,070	Distance = 10.7 mi.
MSA-203	Bicycle trail	County	Completed	County	Completed	County	\$ 390	Note (2). West levee; 17th St. to Garden Grove Blvd. for 1.3 mi.
MOR "	"	"	"	"	"	"	540	West levee; Garden Grove to Orangewood Av. for 1.8 mi.
MAN "	"	"	"	"	"	"	210	West levee; Orangewood to Katella Aves. for 0.7 mi.
MOR "	"	County/OCWD	"	County/OCWD	"	"	1,080	East levee; Katella Av. to AT&SF R.R. for 3.6 mi.
MAN "	"	"	"	"	"	"	990	South levee; AT&SF R.R. to Imperial Hwy. for 3.3 mi.
	Project Total		-		-		\$ 3,210	Distance = 10.7 mi.
MSA-206	Trail landscaping	County	Completed	County	Completed	County	\$ 7,776	Note (3). West levee from Edna Park to south end of Forrest Paul Park for 0.8 mi.
MOR "	"	"	"	"	"	"	7,776	West levee from Chapman to Orangewood Aves. for 0.8 mi.

MIDDLE RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		COST	DEVELOPMENT		COST	OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	County		JURISDICTION	County		JURISDICTION	(Annual)	
MAN-206	Trail landscaping	County	Completed	County	Completed	County	\$ 1,944	County	West levee from Orangewood Av. to Orange Fwy. for 0.2 mi.	
MOR "	"	County/OCWD	"	County/OCWD	"	"	34,992	"	East levee from Katella Av. to AT&SF R.R. for 3.6 mi.	
MAN "	"	"	"	"	"	"	32,076	"	South levee from AT&SF R.R. to Imperial Hwy. for 3.3 mi.	
	Project Total						\$ 84,564		Distance = 8.7 mi.	
MAN-207	Recreation	Anaheim	Completed	Anaheim	"	Anaheim	-	Anaheim	Located west of river & south of Orangewood Av.	
MAN-208	Rest stop	County/Anaheim	Completed	County	\$ 60,000	Anaheim	\$ 10,425	Anaheim	Note (4). Orangewood rest stop. Located west of river & south of Orangewood Av.	
MAN-209	Equestrian center	Private	Completed	Private	-	Private	-	Private	Rancho del Rio. Located west of river & south of Ball Rd.	
MAN-212	Bicycle lane xing.	County/City of Orange	Completed	County	-	County	-	County	Linkage to MOR-203 via Taft Av./Ball Rd.	
MCW-215	Water conservation basin/park	OCWD	Completed	OCWD	\$ 1,558,000	OCWD	\$ 285,000	OCWD	Note (5). Old Santa Ana Regional Park - South. Located west of river & north of Ball Rd.	
MAN-218	Bicycle lane	County/Anaheim	Completed	Anaheim	-	Anaheim	-	Anaheim	Linkage to MOR-203 via Lincoln Av.	
MAN-221	Water conservation basin/park	OCWD	Completed	OCWD/County/Anaheim	Note (5)	OCWD	-	OCWD	Old Santa Ana Regional Park - North. Located west of river & north of Lincoln Av.	
MAN-224	Equestrian trail	County	Completed	County	\$ 9,000	County	\$ 180	County	Note (6). Linkage to Miller Retarding Basin & Anaheim Lake via Carbon Creek Channel.	
MAN-227	Bicycle lane xing.	City of Orange/County	Completed	Anaheim	-	Anaheim	-	Anaheim	Linkage to MOR-203 via Glassell St./Kraemer Blvd.	
MAN-230	Recreation	Anaheim	-	Anaheim	-	Anaheim	-	Anaheim	Development plans to be determined.	
MAN-233	Water conservation basin/park	OCWD	Completed	OCWD	-	OCWD	-	OCWD	Warner Basin. Located north of river & east of Tustin Av.	
MAN-236	Rest stop	County	Completed	County	\$ 115,000	Anaheim	\$ 8,040	Anaheim	Note (4). Riverdale Rest Stop. Located south of river & east of Riverside Fwy.	

MIDDLE RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
MAN-239	Park	Anaheim	Completed	Anaheim	-	Anaheim	-	Development plans to be determined.
MAN-242	Bicycle lane xing.	Anaheim	Completed	Anaheim	-	Anaheim	-	Linkage to MAN-203 via Lakeview Av.
MAN-245	Equestrian center	OCWD	Completed	Private	-	Private	-	Imperial Woods Equestrian Center. Located south of river & west of Imperial Hwy.
MAN-248	Bicycle/equestrian xing.	County/OCWD	Completed	County	-	County	-	Trail crossing from south to north levee in the Imperial Hwy. area
MSA-251	Park	Santa Ana	\$ 147,000	Santa Ana	\$ 598,584	Santa Ana	-	Note (7). Edna Park expansion. Located west of river & north of 17th St.
MSA-254	Park	Santa Ana	\$ 103,000	Santa Ana	\$ 419,416	Santa Ana	-	Note (7). Edna Park expansion. Located west of river & north of 17th St.
MSA-257	Park	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	\$ 3,337	Note (7). Edna Park. Located west of river & north of 17th St.
MSA-260	Park and ride	County	Completed	County	\$ 175,000	County	\$ 9,000	Note (8). Forrest Pauli Park. Located west of river & south of Garden Grove Blvd.
MOR-308	Bicycle trail	County	Completed	County	\$ 30,000	County	\$ 150	Note (4). Trail link from west levee to El Camino Real Park for 0.5 mi.
MOR-309	Equestrian center	OCWD	Completed	Private	Completed	Private	-	River Trails Stables. Located east of river south of Lincoln Av. Land leased from OCWD.
MCM-312	Park and ride	OCWD	-	OCWD/County	-	County	-	Old Santa Ana Regional Park (El Parque del Rio). Land acquisition by exchange between OCWD & SAVI. South of Lincoln Av. and off east levee.
MCO-315	Water conservation basin/park	OCWD/County	-	OCWD/County	-	OCWD/County	-	Old Santa Ana Regional Park (Noble Pit). North of Lincoln Av. and off east levee.
MSA-318	Park & recreation facility	Santa Ana	\$ 400,000	Santa Ana	\$ 800,000	Santa Ana	-	Note (7). Located east of river & north of 17th St.
MSA-321	Park	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	\$ 29,095	Note (7). Alona Park. Located east of river & south of Santiago Creek.
MSA-324	Bicycle trail	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	-	Linkage from MSA-203 to Alona Park.

MIDDLE RIVER SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
MSA-327	Golf course	County/Santa Ana	Completed	Private	Completed	Private	-	River View Golf Course. Located in river channel between Alona Park & Garden Grove Fwy.

Note (1): Equestrian trail operation/maintenance (O&M) = \$100/mi./yr.

Note (2): Bicycle trail O&M costs = offroad (trail): \$300/mi./yr.; onroad (lane) = \$250/mi./yr.

Note (3): Landscaping O&M costs (irrigation, plant replacement, vandalism, etc.) based on an average area of 9 acres/mi. and \$1,080/acre/yr.

Note (4): Development costs based on Part "A" or "B" of the Orange County Santa Ana River Environmental Plan of 17Dec74, and O&M costs of \$2,680/acre/yr., based on Orange County "Study of Proposed Santa Ana River Trail Facilities at Garden Grove Boulevard," dated 22Sep75.

Note (5): Development cost based on OCWD "Evaluation of Burris Sand Pit for Water Conservation" of Dec74. Total development cost includes MCM-215 and MAN-221, and is conditional upon receipt of federal grant. O&M - \$1,500/acre/year (quasi-wilderness).

Note (6): Equestrian trail (offroad): development = \$5,000/mi., O&M = \$100/mi/yr.

Note (7): Project acquisition/development costs extracted from City of Santa Ana Greenbelt Plan, as presented to the Greenbelt Commission on 3Apr75. O&M costs received from city staff.

Note (8): Project costs based on Orange County "Study of Proposed Santa Ana River Trail Facilities at Garden Grove Boulevard," dated 22Sep75.

MIDDLE RIVER SEGMENT
 PLANNED PROJECT PRIORITIES

Jurisdiction	Project Number	Description	Priority
<u>County of Orange</u>	MCW-215	Old Santa Ana Park - South	Group One
	MAN-221	Old Santa Ana Park - North	Group One
	MCW-312	El Parque del Rio	Group One
	MCO-315	Old Santa Ana Park (Noble Pit)	Group One
	MAN-224	Equestrian Trail to Miller Basin	Group Two
	MAN-233	Warner Basin Park	Group Two

Note: Above priority groups established in County Master Plan of Regional Parks. Project identification determined by name and/or location.

<u>OCWD</u>	MCW-215	Old Santa Ana Park - South	1
	MAN-221	Old Santa Ana Park - North	1
	MCW-312	El Parque del Rio	1
	MCO-315	Old Santa Ana Park (Noble Pit)	1
	MAN-224	Equestrian Trail to Miller Basin	1
	MAN-233	Warner Basin Park	1
	MAN-245	Imperial Woods Equestrian Center	1

<u>Anaheim</u>	MAN-236	Riverdale Rest Stop	1
	MCW-215	Old Santa Ana Park - South	2
	MAN-221	Old Santa Ana Park - North	3
	MAN-239	Riverdale Park	4
	MAN-230	Recreation (Newkirk)	5
	MAN-248	Bicycle Equestrian Trail Crossing at Imperial Highway	6
	MAN-212	Bicycle Lane Crossing at Ball Road/Taft Avenue	7
	MAN-218	Bicycle Lane, Lincoln Avenue	7
	MAN-227	Bicycle Lane Crossing at Glassell Street	8
	MAN-224	Equestrian Trail along Carbon Creek Channel to Miller Basin	9
	MAN-242	Bicycle Lane Crossing, Lakeview Avenue	10
	MAN-233	Warner Basin Park	11
	MAN-245	Imperial Woods Equestrian Center	12
MAN-208	Orangewood Rest Stop	13	

<u>Orange</u>	MOR-308	Bicycle Trail to El Camino Real Park	1
	MCW-312	El Parque del Rio	2
	MCO-315	Old Santa Ana Park (Noble Pit)	3

Note: Above priorities developed by the Citizen Greenbelt Committees of the City of Orange and the County Unincorporated Area.

<u>Jurisdiction</u>	Project Number	Description	Priority
<u>Santa Ana</u>	MSA-260	Forrest Paull Park	1
	MSA-254	Edna Park Expansion	2
	MSA-251	Edna Park Expansion	3
	MSA-318	Park & Recreation Facility	4

"(SC)" SCENIC CORRIDOR ZONE--OVERLAY

.040 Well Servicing. No well servicing shall be performed except between the hours of seven a.m. and seven p.m. except in case of emergency, if at the time of well servicing or maintenance any of the conditions described in Section 18.83.061.040 exist.

.050 Oil Removal. Oil produced at the drill site shall be removed therefrom by an underground pipeline or pipelines. Such pipeline or pipelines shall be constructed within one hundred eighty days after the date the first well in the drill site is completed.

.060 Equipment Storage. There shall be no storage of material, machinery or vehicle which is not for immediate use or servicing of an installation on the drill site.

.070 Site and Installation Maintenance. The drill site and all permanent installations shall be maintained in a neat, clean and orderly condition, and all surfaces of permanent installations within the drill site shall be painted and maintained in a neat and orderly manner.

.080 Height of Installation. Except as otherwise herein specifically permitted, no permanent installations at the drill site shall be or project more than eight feet above the surface of the surrounding ground.

.090 Signs. No sign which is visible from outside of the drill site shall be caused, permitted or allowed to be or remain any place on the drill site except:

.091 Such signs as are required by law;

.092 Warning signs;

.093 No trespassing signs.

.100 Gas Burning. Natural gas shall not be vented to the atmosphere nor burned by open flare.

.110 Landscaping Requirements. Shrubs shall be planted and maintained along the exterior of the fence or wall enclosing the drill site. This requirement shall not be constructed to limit or prohibit additional site beautification by landscaping or other planting. (Ord. 2197 § 1 (part); October 19, 1965.)

18.83.070 BASIC SAFETY REGULATIONS.

In addition to the provisions contained herein, the drilling for and production of oil shall be subject to the regulations of Chapter 17.12 of the Anaheim Municipal Code. (Ord. 2197 § 1 (part); October 19, 1965.)

Chapter 18.84

"(SC)" SCENIC CORRIDOR
ZONE--OVERLAY

Sections:

- 18.84.010 Description and purpose.
- 18.84.020 Permitted uses and structures--General.
- 18.84.030 Site development standards General.
- 18.84.040 Development in single-family residential and agricultural (SC) zones.
- 18.84.050 Development in multiple-family residential (SC) zones.
- 18.84.060 Development in commercial (SC) zones.
- 18.84.070 Development in industrial (SC) zones.

18.84.010 DESCRIPTION AND PURPOSE.

The Scenic Corridor Overlay (SC) Zone is intended to provide for and promote orderly growth in certain areas of the City designated as being of distinctive, scenic importance, while implementing local governmental agency actions for the protection, preservation and enhancement of the unique and natural scenic assets of these areas as a valuable resource to the community. (Ord. 3397 § 2 (part); February 11, 1975.)

18.84.015 DELINEATION OF (SC) ZONE BOUNDARIES.

Areas of the City designated as being within the Scenic Corridor Overlay (SC) Zone, and reasons for said designation are as specified herein:

.010 Santa Ana Canyon (SC) Zone; shall be defined as that area lying easterly of the intersection of the Newport and Riverside Freeways, westerly of the Orange County line, southerly of the Atchison, Topeka and Santa Fe Railroad right-of-way, and northerly of the present or any future south city limits of the City of Anaheim.

This area has been so designated as an area of distinctive natural and rural beauty characterized and exemplified by the interrelationship between such primary natural features as the rolling terrain, winding river, Eucalyptus tree windbreaks and the profusion of

natural vegetation. (Ord. 3397 § 2 (part); February 11, 1975.)

18.84.020 PERMITTED USES AND STRUCTURES—GENERAL.

The (SC) Zone is established to be combined with other zones within the Scenic Corridor (e.g., RS-7200(SC), RM-2400(SC), CL(SC), ML(SC), etc.).

The regulations which apply to property in any zone with which the (SC) Zone is combined shall remain the same, except as to the matters specified in this chapter. This chapter shall apply in lieu of or in addition to and shall supersede the corresponding regulations of such zone with which the (SC) Zone is combined. (Ord. 2929 § 1 (part); June 1, 1971.)

18.84.030 SITE DEVELOPMENT STANDARDS—GENERAL.

The Scenic Corridor site development standards are intended to provide for the continued orderly development of the City's scenic areas by encouraging a high quality of development in keeping with the natural amenities of these areas and preserving their unique scenic resources as an asset to the community. The site development standards prescribed hereinafter for the underlying zones within said Corridor are established to insure harmony with adjacent uses of land and to retain the scenic characteristics of these areas.

18.84.036 OUTDOOR ADVERTISING—GENERAL.

Billboards, as defined in this title, are prohibited on any parcel located within the (SC) Zone, otherwise the sign regulations for the underlying zone in which such land is located, as provided in Chapter 18.05 “Outdoor Advertising,” shall apply for any such zone combined with the (SC) Zone, except for commercial zones as otherwise provided herein. (Ord. 3397 § 2 (part); February 11, 1975.)

18.84.038 TREE PRESERVATION.

Preservation of significant stands and single specified trees in the Scenic Corridor is intended to preserve the natural beauty of the Santa Ana Canyon environment, increase the visual identity and quality of the area, and protect the remaining natural amenities from premature removal or destruction.

.010 Definitions. In the context of this ordinance, the following words shall have the meaning respectively ascribed to them:

“Specimen Tree” is hereby defined as Eucalyptus varieties (Eucalyptus), Quercus varieties (Oak), Schinus varieties (Pepper), or Platanus varieties (Sycamore) tree with a trunk measuring eight (8) inches or greater in diameter, measured at a point four (4) feet above ground level, which has been found by the City of Anaheim to be of high value because of its type and/or historic association.

“Stand” is hereby defined as five (5) or more Specimen Trees located on any parcel of land.

.020 Scope. It shall be unlawful to cut down, destroy, or remove any Stand of Eucalyptus Specimen Trees or any single Oak, Pepper, or Sycamore Specimen Tree growing within the boundaries of the Scenic Corridor Zone, unless prior approval has been granted by the Development Services Department.

.021 Criteria for Approval. In determining whether or not to grant approval for removal or destruction of a Stand of Eucalyptus Specimen Trees or any single Oak, Pepper, or Sycamore Specimen Tree, the decision shall be based on both of the following:

.0211 The replacement of the Stand of Specimen Trees or single Specimen Tree with trees from the following specified list:

Botanical Name	Common Name	Square Footage of Coverage in Ten (10) Years
Aibizia Julibrissin	Silk Tree	500
Alnus Rhombifolia	White Alder	300
Arbutus Menziesii	Madrone	500
Brachychiton Aerifolium	Flame Tree	300
Certatonia Siltqua	Carob Tree	300
Cercis Occidentalis	Western Redbud	175
Cherisia Speciosa	Floss Silk Tree	175
Cinnamomum Camphora	Camphor Tree	175
Cupania Anacardioides	Carrot Wood	300
Erythrina Caffea	Kaffirboon Coral	500
Eucalyptus Species	Gum Tree	75
Ficus Species	Fig Tree	300
Gleditsia Triacanthos	Honey Locust	500
Jacaranda Acutifolia	Jacaranda	700
Kolreuteria Formosana	Chinese Flame Tree	500
Liquidambar Formosana	Chinese Sweet Gum	300
Pinus Canariensis	Canary Island Pine	175
Pinus Coulteri	Coulter Pine	300
Pinus Holepensis	Aleppo Pine	700
Pinus Padiata	Monterey Pine	500
Platanus Racemosa	California Sycamore	700
Pterocarya Stenoptera	Chinese Wingnut	700
Pinus Kawakani	Evergreen Pear	500
Quercus Agrifolia	California Live Oak	300

Botanical Name	Common Name	Square Footage of Coverage in Ten (10) Years
Salix Babylonica	Weeping Willow	500
Schinus Molle	California Pepper	500
Tipuana Tipu	Tipu Tree	500
Ulmus Parvifolia Sempervirens	Chinese Elm	500
(Walnut) Juglans Californica	S. Ca. Black Walnut	500

.0212 Establishment of good cause for removal or destruction of the Stand of Specimen Trees or single Specimen Tree, based on one or more of the following criteria:

.02121 Diseased trees whose condition is a source of present danger to healthy trees in the immediate vicinity, providing a certificate attesting such fact has been filed with the City of Anaheim by a licensed tree surgeon authorized to do business within the City.

.02122 Trees whose general health and condition are a source of present danger of falling in respect to existing or proposed structures, and interference with utility service.

.02123 Trees so weakened by age, disease, storm, fire, excavation, removal of adjacent trees, or any injury so as to cause imminent danger to persons or property.

.030 Appeal.

Any decision made regarding approval for removal or destruction of any Stand of Specimen Trees may be appealed by the property owner or affected resident or property owner in the City of Anaheim to the City Council. (Ord. 3412 § 1; April 8, 1975; Ord. 3423 § 2; May 13, 1975.)

18.84.040 DEVELOPMENT IN SINGLE-FAMILY RESIDENTIAL AND AGRICULTURAL (SC) ZONES.

18.84.041 PERMITTED BUILDINGS AND USES.

Those uses which are automatically or conditionally permitted in the specific zones shall be permitted automatically or conditionally except the following uses shall be excluded:

- .010 Hotels, motels and motor inns;
- .020 Billboards;
- .030 Drive-in, walk-up or semienclosed restaurants;
- .040 Open-air theaters;
- .050 Borrow pits;

- .060 Concrete batching or mixing of Portland or asphaltic concrete;
- .070 Dumps (sanitary landfill);
- .080 Excavation, processing, storage, wholesaling and distribution of sand, gravel and other nonfuel minerals.
- .090 Refuse, disposal or transfer;
- .100 Animal hospitals and kennels;
- .110 Sewage treatment plants;
- .120 Automobile or truck sales agency (new or used);
- .130 Car washes;
- .140 Amusement parks;
- .150 Circuses, carnivals, rodeos, or fairgrounds;
- .160 Racetracks;
- .170 Pawnshops;
- .180 Planned unit shopping centers;
- .190 Transportation terminals;
- .200 Explosives storage.

18.84.042 SITE DEVELOPMENT STANDARDS.

Notwithstanding the site development standards of the residential or agricultural zone in which located, the following additional standards shall apply:

.010 Building and Structural Height Limitations:

.011 The maximum overall height of any building or mobilehome shall be twenty-five feet measured from the highest portion of structure to the highest finished grade level at the foundation.

.012 Roof-mounted equipment including exterior-mounted and ground-mounted radio and television antennas shall not be permitted. (Ord. 2929 § 1 (part); June 1, 1971.)

18.84.050 DEVELOPMENT IN MULTIPLE-FAMILY RESIDENTIAL (SC) ZONES.

18.84.051 PERMITTED BUILDINGS AND USES.

Those uses which are automatically or conditionally permitted in the specific zones shall be permitted automatically or conditionally except the following uses shall be excluded:

- .010 Hotels, motels and motor inns.
- 18.84.052 SITE DEVELOPMENT STANDARDS.**
Notwithstanding the site

development standards of the multiple-family residential zone in which located, the following additional standards shall apply:

.010 **Minimum Site Area:** All sites shall be of sufficient size and width to accommodate the anticipated number of dwelling units and parking spaces, open areas, and other structures and uses for which

provisions are made in these zones. Further, the minimum project area shall be five acres and such five acre projects may develop as condominium projects or as multiple-family subdivisions.

.020 **Building Location:** On all lots adjacent to freeways, expressways, arterial highways and railroad rights-of-way, buildings and mobilehome coaches shall be located no closer than fifty feet to the right-of-way line.

.030 **Parking Area Landscaping:**

.031 The required fifty feet shall be used for recreation and open space or may be used for open parking and vehicular accessways; provided that a minimum ten foot wide screen planting (may include trees or shrubs, etc., a minimum forty-two inch high decorative masonry wall, a forty-two inch high earthen berm, or any combination of these) shall be maintained adjacent to the right-of-way line.

.032 All open parking areas and their adjacent vehicular accessways shall be landscaped. Landscaping shall include at least one tree per three thousand square feet of open parking area and vehicular accessway evenly distributed throughout the open parking areas. (Ord. 2929 § 1 (part); June 1, 1971.)

18.84.060 DEVELOPMENT IN COMMERCIAL (SC) ZONES.

18.84.061 PERMITTED BUILDINGS AND USES.

Those uses which are automatically or conditionally permitted in the specific zones shall be permitted automatically or conditionally except the following uses shall be excluded:

.010 Office or commercial use of a residential structure;

.020 Automobile, truck or mobilehome sales lots (new or used);

.030 Billboards except temporary tract signs as provided in Section 18.05.072;

.040 Service stations except where integrated with a shopping center.

18.84.062 SITE DEVELOPMENT STANDARDS.

Notwithstanding the site development standards of the commercial zone in which located, the following additional standards shall apply:

.010 **Yards and Setbacks:**

.011 Adjacent to freeways,

expressways or scenic highways all buildings shall maintain a landscaped setback area having a minimum depth of one hundred feet.

.012 Adjacent to major, primary, secondary, hillside primary or hillside secondary highways, all buildings shall maintain a landscaped setback area having a minimum depth of fifty feet.

.013 Adjacent to collector and local streets, all buildings shall maintain a landscaped setback area having a minimum depth of twenty feet.

.014 **Improvement of Required Setbacks:** The required landscaped setbacks listed above shall be either fully landscaped or may be used as part of an automobile parking area; provided that a minimum twenty foot wide screen planting area shall be maintained adjacent to any right-of-way line. Where the developer provides a three foot high landscaped berm adjacent to the right-of-way line the planting and landscaping may be reduced to fourteen feet.

.0141 Where the rear of a commercial building abuts upon a local street where two-thirds of property in the block on the opposite side of the street is zoned for residential use, a six foot high masonry wall shall be provided to the rear of said screen planting area for the full width of the subject property.

.0142 Where an interior site boundary line abuts a residential zone a minimum ten foot screen landscaped setback shall be provided adjacent to the property line.

.020 **Landscaping:** In addition to the required setback and slope landscaping, all parking areas and vehicular accessways shall be landscaped. Landscaping shall include at least one tree per three thousand square feet of parking area and/or vehicular accessway evenly distributed throughout the parking area. There shall be an average of forty-eight square feet of planter area provided per tree. Said planter areas shall have a minimum dimension of six feet.

.030 Building and Structural Height Limitations:

.031 The maximum building height shall be thirty-five feet above the average finished grade levels of the building site on which it is located measured at the exterior building walls.

.032 Roof-mounted equipment including exterior-mounted and ground-mounted radio and television antennas

shall not be permitted.

.040 Outdoor Advertising. All signs in any commercial zone combined with the (SC) Zone shall be in compliance with the sign provisions for the CL-HS (Commercial, Limited Hillside Zone) as specified in Section 18.05.091 (Outdoor Advertising - CL-HS Zone). (Ord. 2929 § 1 (part); June 1, 1971; Ord. 3397 § 2 (part); February 11, 1975.)

18.84.070 DEVELOPMENT IN INDUSTRIAL (SC) ZONES.

18.84.071 PERMITTED BUILDINGS AND USES.

Those uses which are automatically or conditionally permitted in the specific zones shall be permitted automatically or conditionally except the following uses shall be excluded:

- .010 Building material storage yard;
- .020 Contractor storage yard;
- .030 Draying, freighting or trucking yard or terminal;
- .040 Large equipment storage or rental;
- .050 Rags, paper, metals or junk storage or sales;
- .060 Rock, sand or gravel, wholesale storage or distribution;
- .070 Auto or truck storage (new or used);
- .080 Mobilehome parks or travel trailer parks;
- .090 Billboards;
- .100 Amusement parks;
- .110 Circuses, carnivals or rodeos;
- .120 Drive-in, walk-up or semienclosed restaurants;
- .130 Borrow pits;
- .140 Concrete batching or mixing of Portland or asphaltic concrete;
- .150 Dumps;
- .160 Open-air theaters;
- .170 All outdoor aspects of permitted uses unless screened from the freeway or scenic highway by the use of wall, landscaping or both. (Ord. 2929 § 1 (part); June 1, 1971.)

Chapter 18.85

"PC" PLANNED COMMUNITY ZONE

Sections:

- 18.85.010 Description and purpose.
- 18.85.020 Permitted uses and structures.
- 18.85.030 Minimum site area.
- 18.85.040 Initiation of Planned Community Zoning and the General Plan of Development.
- 18.85.050 General Plan of Development—Adoption.
- 18.85.060 Final specific plans—Requirements.
- 18.85.070 Reclassification from PC Zoning.
- 18.85.100 Dedication and improvements.

18.85.010 DESCRIPTION AND PURPOSE.

The purpose of Planned Community Zoning is to encourage, preserve and improve the health, safety and general welfare of the people residing within the community by encouraging the use of contemporary land planning principles. The provisions of this zone are intended to allow diversification of uses, relationships and heights of buildings and open spaces in planned building groups while insuring compliance with the spirit, intent and other provisions of the zoning ordinance. (Ord. 2931 § 1 (part); May 27, 1971.)

18.85.020 PERMITTED USES AND STRUCTURES.

The provisions of this zone are intended to allow diversification of uses, relationships and heights of buildings and open spaces in planned building groups while insuring compliance with the spirit, intent and other provisions of the zoning ordinance.

.010 Planned Residential Housing Developments which comply with the land use and zoning proposals and population densities set forth on the General Plan may be approved by conditional use permit.

.020 Where other types of development can not be adequately provided for under the zoning plan or element, due to terrain, size and shape of the property, etc., the City would have the option of approving a variance.

SANTA ANA CANYON SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	DESCRIPTION	ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS	IDENTIFICATION	
								ASSESSOR PARCELS OR OTHER	ZONING
CAN-402	Equestrian trail	Equestrian trail	River levee, north	-	Anaheim	-	Note (1). County, Imperial Hwy. to Shorb Wells (MWD outlet). Anaheim, Shorb Wells. County/Anaheim/Private. Shorb Wells to county line.		
"	"	"	351-042-14	-	County	Al			
CCO	Agriculture/undeveloped	"	Various	-	"	Various			
CAN-403	River levee	Bicycle trail	River levee	-	County/Anaheim	-	Note (2). County, Imperial Hwy. to Weir Canyon Rd. ABS 6B. Metropolitan Water District (MWD). Anaheim.		
CCO-403A	Bicycle lane	Bicycle lane	351-042-1 -14	-	County	Al (FP-2)			
CCO-403	Agriculture/undeveloped/ Fwy. R/W.	Bicycle trail	850-060-38 Hwy. R/W	-	"	"	Santa Ana Valley Irrigation Co. (SAVI). County, Quintana Dr. to Gypsum Canyon Rd. along S.A. Canyon Rd. Private/State/County. Weir Canyon Rd. to Gypsum Canyon Rd.		
"	Bicycle trail	"	Various	-	County	Various			
CAN-407	Undeveloped/street/canal & R.R. R/W.	Bicycle trail	Fwy. R/W Street, canal & R.R. R/W.	-	Anaheim/Yorba Linda/County	-	State, Gypsum Canyon Rd. to county line. Anaheim/Yorba Linda/County, ABS 2B linking Yorba Linda to Yorba Regional Park.		
CAN-409	Regional Park	Regional Park	349-081-50 -52	-	Anaheim	RSA-43,000	Note (3). County, Yorba Regional Park.		
	Project Total		351-011-59 -042-05 -25 -26	166.13	"	"	"		
CAN-412	Trail easement	Trail easement	351-042-14	-	County	Al (SR) (FP-2)	Anaheim, Shorb Wells link between Yorba & Featherly Parks.		

SANTA ANA CANYON SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED DESCRIPTION	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER	ZONING				
CCO-415	Agriculture/undeveloped	Flood Plain, Open Space	85-060-3	County	30.80	County	AI (FP-2)	SAVI.
			-4		4.78	"	"	"
			-29		6.02	"	"	"
			-31		2.35	"	"	"
			-37		1.20	"	"	"
			-38		66.75	"	"	"
			-41		155.92	"	"	"
	Project Total				267.82			
CCO-418	River channel/undeveloped	Equestrian trail	River channel	County	-	County	AI (FP-2)	County/OCWD. Trail river xing @ Weir Canyon.
CCO-421	Regional Park	Regional Park	85-060-38 85-070-26	County	225.79	County	AI (SR) (FP-2)	SAVI. Note (4). County, Featherly Regional Park.
CCO-424	Stables	Stables	353-042-02 -052-02 353-063-14 -20	County	2.98	County	AI (SR) (FP-2)	Private. Coal Canyon Stables.
	Project Total				28.80 31.78			
CCO-427	Golf Course	Golf Course	85-070-40 -44 353-063-5 -6 -11 -12	County	3.42	County	AI (SR) (FP-2)	Private. Green River Golf Course.
	Project Total				0.10(est) 101.87 1.05 13.12 0.40(est) 119.96			

SANTA ANA SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	IDENTIFICATION			ZONING	OWNERSHIP/REMARKS
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION		
CCO-430	Undeveloped		Park/Wilderness area.	85-070-10	640.00	County	AI(SR)	Private. Coal Canyon Regional Park.
				-11	448.12	"	AI	"
				-12	320.00	"	"	"
				-48	191.87	"	AI(SR)	"
			Project Total		1599.99			

- Note (1): Portions of equestrian trail established and in use; however, engineering study underway to determine final trail system route from Imperial Hwy. to county line.
- Note (2): Route of bicycle trail from Imperial Hwy. to Gypsum Canyon Rd. under engineering study.
- Note (3): Acreage as per Real Property Inventory (1Jan76), General Services Agency, County of Orange. All County parcels total 166.13 acres.
- Note (4): Acreage as per Real Property Inventory (1Jan76), General Services Agency, County of Orange. Approximately 70 acres of County land, used for Riverside Freeway, will be traded by the State for 168 acres of private land, and will provide a connection between Yorba and Featherly Regional Parks. All parcels total 225.79 acres.

SANTA ANA CANYON SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
CAN-402	Equestrian trail	County	Completed	County	Completed	County	\$ 200	Note (1). North levee; Imperial Hwy to Shorb Wells (MWD outlet) for 2.0 mi.
CCO- "	"	"	-	"	\$ 25,000	"	500	Shorb Wells to county line; route not yet determined, for approx. 5.0 mi.
	Project Total				\$ 25,000		700	Distance = 7.0 mi.
CAN-403	Bicycle trail	County	\$ 22,000	County	\$ 88,000	County	\$ 675	Note (2). Imperial Hwy. to Weir Canyon Rd. for 2.25 mi. ABS 6B.
CCO-403A	Bicycle lane	"	Completed	"	Completed	"	825	Quintana Dr. to Gypsum Canyon Rd. along S.A. Canyon Rd. for 3.3 mi.
CCO-403	Bicycle trail	"	-	"	60,000	"	600	Weir Canyon Rd. to Gypsum Canyon Rd. for 2.0 mi. ABS 6C.
"	"	State	Completed	State	Completed	State	750	Gypsum Canyon Rd. to county line for 2.5 mi.; Fwy. R/W.
	Project Total		\$ 22,000		\$ 148,000		2,850	Distance = 6.75 mi.
CAN-407	Bicycle trail	County	\$ 20,000	County	\$ 90,900	County	\$ 909	ABS 2B trail linking Yorba Linda to Yorba Regional Park for 3.03 mi.
CAN-409	Regional Park (Phase I)	County	Completed	County	\$ 2,179,257	County	\$ 150,000	Yorba Regional Park.
	(Phase II)	"	"	"	1,386,000	"	99,000	Under construction = 100 acres.
	Project Total		-		\$ 3,565,257		\$ 249,000	Planned = 66 acres @ \$21,000/acre.
CAN-412	Trail easement	County	-	County	-	County	-	Shorb Wells easement for CCO-402 and 403 trails.
CCO-415	Flood plain, open space.	Private	-	-	-	Private	-	Santa Ana Valley Irrigation Co. (SAVI) property.
CCO-418	Equestrian trail xing	County	-	County	-	County	-	Trail river xing @ Weir Canyon.
CCO-421	Regional Park (Existing) (Expansion)	County	Completed	County	Completed	County	\$ 166,400	Featherly Regional Park. Total usable park area = 156± acres (52 wilderness, 104 active park)
		State	-	"	-	"	-	Note (3). State acquiring 168± acres to replace 70 acres of county land used for RIV. Fwy. Land will provide connection between Yorba & Featherly Regional Parks.

SANTA ANA CANYON SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual) COST	
CCO-424	Stables	Private	-	Private	-	Private	-	Coal Canyon Stables. Rest stop. 32 acres.
CCO-427	Golf Course	Private	-	Private	-	Private	-	Green River Golf Course.
CCO-430	Park/Wilderness area	County	\$2,750,000	County	-	County	-	Coal Canyon Regional Park. Will link S.A. Canyon to Cleveland National Forest.

Note (1): Portions of equestrian trail established and in use; however, engineering study underway to determine final trail system route from Imperial Hwy. to county line. Cost estimates based on 10 ft. average equestrian trail width; acquisition cost = 6 x A.V. or \$25,000/acre; development = offroad: \$5,000/mi., and onroad: \$200/mi.; operation/maintenance = \$100/mi./yr.

Note (2): Portions of bicycle trail established and in use; however, engineering study underway to determine final trail system route from Imperial Hwy. to Gypsum Canyon Rd. Acquisition and development costs for Imperial Hwy. to Weir Canyon Rd. as per ABS plan, or, based on an average bicycle trail width of 8 ft. onroad (lane) and 10 ft. offroad (trail); acquisition cost is 6 x A.V. or estimated \$25,000/acre; development: onroad = \$1,800/mi. and offroad = \$30,000/mi.; operation/maintenance: onroad = \$250/mi./yr. and offroad = \$300/mi./yr.

Note (3): Operation and maintenance costs for parks based on \$1,500/acre/yr. for active parks and \$200/acre/yr. for wilderness areas.

SANTA ANA CANYON SEGMENT
 PLANNED PROJECT PRIORITIES

Jurisdiction	Project Number	Description	Priority
<u>Anaheim</u>	CCO-418	Equestrian Trail Crossing	1
	CAN-403	Bicycle Trail	2
	CCO-403	Bicycle Trail	3
	CCO-402	Equestrian Trail	4
	CCO-430	Coal Canyon Regional Park	5
	CAN-407	Bicycle Trail Crossing	6

The above priorities were developed by the Citizen Greenbelt Committees of the Cities of Anaheim, Yorba Linda, and the County's Unincorporated Areas.

l. Fences and walls, maximum height:

1. Within intersection areas—Same as section 7-9-137.4(b) and (c).
2. Along the boundary of the cluster development—Seven and one-half (7½) feet except within intersection areas.

m. Off-street parking:

1. At least two (2) usable automobile parking spaces, in a garage or carport, each not less than ten (10) feet by twenty (20) feet, shall be provided and maintained within the building site for each dwelling unit.
2. At least one off-street automobile parking space for each two (2) dwelling units shall be provided for visitors and guests. Such parking space shall be convenient and accessible for visitors and guests and shall not be within the minimum travel way of any street or driveway as approved on the tentative tract map.

(g) *Multiple-family residential development.* For the purpose of complying with the requirements of this section "multiple-family residential development" includes all residential developments wherein some or all of the lots contain more than one dwelling unit in accordance with the applicable zoning regulations.

Multiple-family residences that are developed in accordance with final subdivisions approved pursuant to the provisions of paragraph (c)(1) of this section shall comply with the building line requirements for the R2 District as designated by section 7-9-127.1, building line designation, of this code unless otherwise specified by the recorded PC development plan. Notwithstanding the provisions of any adopted PC development plan or text, condominium projects and community apartment projects are permitted subject to a use permit, as provided in section 7-9-150.

(h) The preceding regulations in paragraphs (f) and (g) shall be subject to the following exceptions:

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(1) Where there is a difference in elevation of three (3) feet or more between adjacent building pads on lots having a common side property line, R1 side yard regulations shall apply to that common side yard only.

(2) Where an area is subject to the PD "Planned Development" District regulations, the yards specified in the approved conditional permit shall apply.

(3) Where otherwise provided in sections 7-9-123 and 7-9-124, the regulations of said sections shall apply.

(i) *Building site area required.* Except as provided in sections 7-9-123 and 7-9-124, the minimum building site area for each use conducted on any property shall be as specified on the recorded development plan. (Code 1961, § 78.0219.1; Ord. No. 2757, § 1, 5-8-74; Ord. No. 2809, § 1, 2-5-75)

Sec. 7-9-104. SG "Sand and Gravel Extraction" District regulations.*

All references to this section shall include sections 7-9-104.1 through 7-9-104.19. The phrase "mining operations" when used in this section shall mean mining, quarrying and the commercial extraction of rock, sand, gravel, earth, clay and similar materials. "Director" means the Director of the Orange County Environmental Management Agency. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.1. Purpose and intent.

Rock, sand, gravel, earth, clay and similar materials are valuable natural resources whose recovery in a responsible manner is encouraged. These regulations are intended to provide for mining, quarrying, and the commercial extraction and processing of these materials in a manner which is both environmentally sensitive and compatible with existing and future land uses. These regulations are also intended to implement the Surface Mining and Reclamation

*Editor's note—Section 1 of Ord. No. 2893, adopted Feb. 25, 1976, repealed former §§ 7-9-104—7-9-104.9, relative to SG "Sand and Gravel Extraction" District regulations, and derived from Ord. No. 2656, § 3, enacted Feb. 23, 1973. Section 2 of said Ord. No. 2893 amended the Code by adding §§ 7-9-104—7-9-119, relative to the same subject matter, as herein set out.

Act of 1975. These regulations, together with the "Sand, Gravel and Mineral Extraction Code of the County of Orange" (Division 10) are intended to insure that sites are mined in a safe and reasonable manner with progressive reclamation to a natural appearing or otherwise usable condition compatible with adjacent areas. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.2. SG site permits.

Except as provided in sections 7-9-104.13 and 7-9-104.14, every site zoned SG "Sand and Gravel Extraction" shall have a single comprehensive SG site permit which shall delineate all of the uses permitted on that particular site. An SG site permit shall consist of the plan of operations, the drainage and erosion control plan, the vehicular access plan, and the reclamation plan required by section 7-9-104.7 as said plans are approved by the Planning Commission or the Board of Supervisors, and any additional conditions required by the Planning Commission or the Board of Supervisors approving said plans. Except as provided in sections 7-9-104.13 and 7-9-104.14, no uses shall be permitted in the SG "Sand and Gravel Extraction" District unless authorized by an SG site permit. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.3. Uses permitted subject to an SG site permit.

The following uses may be permitted in the SG "Sand and Gravel Extraction" District with an SG site permit:

- (a) Mining, quarrying, and the commercial extraction of rock, sand, gravel, earth, clay and similar materials. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.4. Additional uses permitted subject to an SG site permit.

The following additional uses may be permitted in the SG "Sand and Gravel Extraction" District with an SG site permit:

- (a) Storage, stockpiling, distribution and sale of rock, sand, gravel, earth, clay and similar materials.
- (b) The installation and operation of plants or apparatus for rock crushing or cement treatment of base materials, and appurtenant screening, blending, washing, loading and conveyor facilities.

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- (c) Concrete batching plants and mixing plants for either portland cement or asphaltic concrete.
- (d) The manufacture of concrete and clay products and prestressed structural units in conjunction and concurrent with excavation on the site.
- (e) Sanitary landfilling, including inert materials disposal sites.
- (f) Shops, garages and warehouses for the repair, maintenance and storage of equipment and supplies necessary for the conduct of the uses permitted.
- (g) Offices for the conduct of the uses permitted.
- (h) Not more than two (2) single-family dwelling units for employees engaged in guarding or carrying on the uses permitted.
- (i) Public and private parks and recreation areas and appurtenant buildings and improvements when they are compatible with all other authorized uses on the site and the reclamation of the site.
- (j) Agricultural and other types of open space uses.
- (k) Any other uses necessary or incidental to mining operations on the site. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.5. Compliance with other laws.

Any uses permitted in the SG "Sand and Gravel Extraction" District shall comply with all other applicable laws and ordinances and, specifically, with "The Sand, Gravel and Mineral Extraction Code of the County of Orange" (Division 10) insofar as said code is applicable to the uses permitted. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.6. Guidelines and standards for SG site permits and mining operations.

- (a) The following are guidelines to be followed in preparing and reviewing the documents required by section 7-9-104.7:

The Planning Commission may approve applications for SG site permits which do not adhere to the guidelines in this subsection

where, in the judgment of the Planning Commission, these guidelines are not appropriate. Persons wishing to deviate from any of the standards suggested in the guidelines in this subsection shall submit written justification to the Planning Commission.

- (1) *Dust control:* Roads, driveways and parking areas on the site should be maintained so as to control dust. Means may include oiling or hard-surfacing such areas or a watering program.
- (2) *Setbacks:* Structures and extraction operations should be set back an appropriate distance from property lines and in no event less than the distances shown on the "Building Lines Chart" contained in section 7-9-127.1. The appropriate distance will depend upon topographical features, safety considerations, environmental considerations, existing adjacent uses, and probable future adjacent uses.
- (3) *Days and hours of operation:* These should be specified in the SG site permit and may vary depending upon the scope, nature and location of the operation. Primary factors to consider in establishing the days and hours of operation for a given site are adjacent uses, noise and traffic.
- (4) *Off-street parking:* Off-street parking should be provided on the site for all equipment and for all cars of employees.
- (5) *Screening:* Extracting and processing operations should be screened in such a manner that they are not readily visible from any public street. Planting may be used as a screen in accordance with a landscaping plan. Screening should be set back at least twenty (20) feet from any intersection of driveways, streets or sidewalks.
- (6) *Fencing:* Fencing should be provided and maintained as necessary for safety around all extraction operations. Such fencing should be a minimum of six (6) feet in height with the bottom not more than four (4) inches above the ground. Any gates should be locked when not in regular use.
- (7) *Drainage:* Surface drainage should be controlled in a manner meeting the approval of the Director of the Environmental Management Agency to prevent silt or loose material from filling any existing drainage course or encroaching upon adjoining property and improvements. All provisions to control natural watercourses should be designed to prevent overflow or diversion of water away from the natural point of discharge and such provisions should be subject to the review and approval of the Orange County Flood Control District.
- (8) *Removal of buildings and equipment:* Buildings and equipment used in mining operations should be removed within six (6) months of the termination of mining operations on the site.
- (9) *Reclamation schedule:* Reclamation of each area should commence as soon as excavation operations have been completed within the area, and continue in a diligent manner prior to or concurrently with the extension of excavation operations to a new area.
- (10) *Grading:* Slopes and overburden stockpiles should be graded and smoothed so as to control erosion and prevent the creation of potentially dangerous areas. The property should be so graded that stagnant water will not be permitted to collect.
- (11) *Soils:* Measures should be taken to consider the quality of soils which will be required to sustain plant life pursuant to any landscaping plan.
- (12) *Timing:* The sequence and approximate time frames within which the areas shown are proposed to be excavated and otherwise used should be illustrated in increments of from twelve (12) to thirty-six (36) months.
 - (b) Section 7-9-145 relating to off-street parking shall not apply to land in the SG "Sand and Gravel Extraction" District.
 - (c) In no event shall excavation in any pit-type of mining operation be permitted in ex-

cess of one hundred fifty (150) feet in depth as measured from existing grade. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.7. SG site permit applications.

(a) Applications for SG site permits shall include:

- (1) A draft environmental impact report where it has been determined in accordance with County procedures that such a report is required. Where such a report has been prepared, the measures proposed therein for the mitigation of possible adverse environmental effects of the proposed operation shall be incorporated into the various plans required by this section to the extent feasible.
- (2) A report of a comprehensive soils engineering and engineering geologic investigation prepared by a registered civil engineer and a certified engineering geologist, relative to the setbacks, slopes and excavations proposed.
- (3) A plan of operations which shall include a recent aerial photograph of the site and a map or maps and appurtenant notes which illustrate the following:
 - a. Property lines and lease lines, including a legal description of the site.
 - b. The existing topography of the site and land within five hundred (500) feet of the site and any structures, water-courses, levees, drainage facilities, utility easements and facilities, roads and driveways existing within said areas.
 - c. The location and condition of any abandoned pits and previously mined areas on the site.
 - d. The area or areas to be excavated and typical cross sections of slopes to be formed or modified.
 - e. The depth of all proposed excavations.
 - f. The sequence and approximate time frames within which the areas shown are proposed to be excavated and otherwise used.
 - g. The location of all proposed structures, including processing plants and appurtenant equipment and fences. Where such facilities are proposed to be relocated over the course of the life of the use permit, their various proposed locations shall be shown.
 - h. Existing vegetation.
 - i. Landscaping, if any, proposed to be planted in addition to that indicated on the reclamation plan.
 - j. Details of areas for the storage of overburden and waste material and any proposed berms.
 - k. Proposed points of ingress and egress, haul roads, driveways and parking areas on the site.
- (4) A drainage and erosion control plan approved by the Director. This plan shall include a map or maps and appurtenant notes which illustrate the following:
 - a. The location and approximate depth of proposed settling basins, desilting ponds, recycling ponds and other bodies of water. Where such facilities are proposed to be relocated over the course of the life of the use permit, their various proposed locations shall be shown.
 - b. The existing groundwater level and annual fluctuation of all areas to be excavated.
 - c. Methods to be taken for the disposition of drainage and for the control of erosion, erosion cutback and sedimentation.
 - d. If applicable, provisions to be taken for the conservation and protection of groundwater. Approvals obtained or required from the appropriate Regional Water Quality Control Board shall be indicated.
- (5) A vehicular access plan describing, in addition to the points of ingress and egress to the site, the streets and highways to be used by vehicles going to and coming from the site, and the type and size and quantity of vehicles anticipated. This plan shall be designed in a manner so as to minimize additional vehicular traffic over local residential streets, and this plan shall be approved by the Director.

(6) A reclamation plan consisting of a map or maps and appurtenant notes which fully illustrate and set forth how and when each portion of the site will be restored to a natural appearing or otherwise usable condition. The plan shall include all of the information required by Section 2772 of the California Public Resources Code. In addition, the plan shall include a landscaping plan prepared by a licensed landscape architect or a person who is otherwise qualified. (Where the landscaping plan is not prepared by a licensed landscape architect, the qualifications of the person preparing the plan shall be stated.) The landscaping plan shall take into account the nature of the soil on the site.

(b) Unless otherwise approved by the Director, any maps submitted pursuant to this section shall be drawn to a scale of one (1) inch equals one hundred (100) feet and contours shall illustrate five-foot intervals.

(c) The level of detail of the plans and reports required by this section may vary according to the scope of the mining operation involved and the nature of the site. These plans and reports may be combined with the approval of the Director. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.8. Standards for approval of SG site permit applications.

(a) SG site permit applications and applications for amendments to SG site permits may be approved when the Planning Commission or the Board of Supervisors finds:

- (1) That the plans and reports submitted adequately describe the proposed operation;
- (2) That the plans and reports submitted incorporate adequate measures to mitigate the probable significant adverse environmental effects of the proposed operation;
- (3) That the plans and reports submitted incorporate adequate measures to restore the site in a diligent manner to a natural appearing or otherwise usable condition compatible with adjacent areas;
- (4) That the uses proposed are compatible with the objectives, policies and general land uses and programs specified in the Orange County General Plan; and

(5) That the uses proposed are not likely to cause serious public health or safety problems.

(b) Reclamation plans and amendments to reclamation plans may be approved when the Planning Commission or the Board of Supervisors finds:

- (1) That the plan as proposed or amended is sufficiently detailed;
- (2) That the plan as proposed or amended incorporates adequate measures to restore the site (excluding abandoned pits and previously mined areas) in a diligent manner to a natural appearing or otherwise usable condition compatible with adjacent areas.

(c) Where the Planning Commission or the Board of Supervisors disapproves an application for an SG site permit or a reclamation plan, that body shall specify in writing the basis for its disapproval. In addition, the Planning Commission or the Board of Supervisors may set forth such facts as it deems appropriate in making such findings. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.9. Reclamation of mined areas required.

(a) Where an SG site permit has been issued or a reclamation plan has been approved, persons owning the land which is the subject of the SG site permit or reclamation plan shall undertake or cause to be undertaken, in a timely manner, the reclamation of any area used for mining operations in accordance with said SG site permit or reclamation plan.

(b) The failure to undertake or cause to be undertaken reclamation work required by subsection (a) in a timely manner shall be, and the same is hereby declared to be, unlawful and a public nuisance endangering the health, safety, and general welfare of the public and a detriment to the surrounding community. There shall be a hearing held by the Board of Supervisors on due notice to the owner and operator to determine the fact of noncompliance with subsection (a) and the extent of the public nuisance.

(c) In addition to any other remedy provided by law for the abatement, removal and

enjoinment of such public nuisance, the Board of Supervisors, after notice and hearing as per subsection (b), may cause the necessary remedial and reclamation work to be done, and the cost thereof shall be assessed against the owners of the property. The notice shall be in writing and mailed to all persons whose names appear on the latest equalized assessment roll as owners of the real property at the addresses shown on said assessment roll, or as otherwise known by the Board of Supervisors to be the owners or operators of the property involved. The Director shall also cause at least one (1) copy of such notice to be posted in a conspicuous place on the premises. No assessment shall be held invalid for failure to post or to mail or correctly address any notice if this section has been substantially complied with.

(d) The Board of Supervisors shall at the hearing make findings which specify the unlawful condition and the corrective work required to be done, and if said corrective work is not commenced thirty (30) days after receipt of such order and diligently prosecuted to completion, the County of Orange may cause such work to be done, in which case, the cost and expense of such work, including the incidental expenses incurred by the County, will be assessed against the owners of the property and become a lien upon such property.

(e) If upon the expiration of the thirty-day period provided for in this section the work has not been done or commenced, and is not being prosecuted with diligence, the County shall proceed to do such work or cause such work to be done. Upon completion of such work, the Director shall file a written report with the Board of Supervisors setting forth the fact that the work has been completed and the cost to be assessed. The Board of Supervisors shall thereupon fix a time and place for hearing protests against the assessment of the cost of such work. The Clerk of the Board of Supervisors, directed by the Board, shall thereafter give notice in writing to the owners and operators of the property of the hour and place that the Board will pass upon said report and will hear protests against said assessments. Such notice shall also set forth the amount of the proposed assessment. Upon the date and hour set for the hearing of protests, the Board shall hear and consider the report from the

Director and all protests, if there be any, and then proceed to confirm, modify or reject the assessments.

(f) A list of assessments as finally confirmed by the Board shall be sent to the Tax Collector for collection. If any assessment is not paid within ten (10) days after its confirmation by the Board, the Clerk of the Board of Supervisors shall cause to be filed in the office of the County Recorder of the County of Orange a notice of lien.

(g) From and after the date of the recordation of such notice of lien, the amount of the unpaid assessment shall be a lien on the property against which the assessment is made, and such assessment shall bear interest at the rate of six (6) per cent per annum until paid in full. Such lien shall continue until the amount of the assessment and all interest thereon shall have been paid. The lien shall be subordinate to tax liens and all fixed special assessment liens previously imposed upon the same property, but shall have priority over all contractual liens which may thereafter be created against the property. From and after the date of recordation of such notice of lien, all persons shall be deemed to have notice of the content thereof. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.10. Security for reclamation.

(a) Where it is determined by the Director that mining operations in the SG "Sand and Gravel Extraction" District are within three (3) years of termination, an extraction permit shall not be issued for that site pursuant to the "Sand, Gravel and Mineral Extraction Code of the County of Orange" (Division 10) until the owner or operator furnishes the County of Orange with security in an amount determined by the Director to be sufficient for the reclamation of the site in accordance with the SG site permit or reclamation plan for that site.

(b) Any security given pursuant to this section shall be approved by the County Counsel and shall be in one of the following forms:

- (1) A bond or bonds by one or more duly authorized corporate sureties.
- (2) Cash or a passbook or certificate of deposit in a local financial institution payable to the County of Orange.

- (3) A letter of credit from a financial institution payable to the County of Orange upon demand when accompanied by a letter from the Director stating that the principal has not complied with the rehabilitation requirements of the SG site permit or reclamation plan. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.11. Owner-initiated zone changes.

Any request for a change of zone to the SG "Sand and Gravel Extraction" District shall be accompanied by an application for an SG site permit. The Planning Commission shall hear and consider the zone change request and the application for an SG site permit simultaneously. The zone change shall not be recommended for adoption unless an SG site permit is approved. Any such SG site permit shall be conditioned upon the zone change becoming effective. In such case, the SG site permit application shall also be considered by the Board of Supervisors and if approved shall not become final until the ordinance applying the SG "Sand and Gravel Extraction" District regulations is effective. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.12. Sites zoned "SG" between March 30, 1973 and January 1, 1976.

As to any site placed in the SG "Sand and Gravel Extraction" District between March 30, 1973 and January 1, 1976, the legal description of the property, the general plan of operation, the ultimate use proposal, and the Rehabilitation Plan and any amendments thereto in effect on January 1, 1976 and the standards formerly set forth in section 7-9-351.8 of the Codified Ordinances of the County of Orange shall constitute an SG site permit for purposes of these regulations. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.13. County-initiated zone changes.

(a) This section pertains to those mining operations existing in the unincorporated portion of Orange County on January 1, 1976 outside the SG "Sand and Gravel Extraction" District. The County may place such sites in the SG "Sand and Gravel Extraction" District. Thereafter, the owner of any such site may apply for an SG site permit at any time. Until Planning Supp. No. 3

an SG site permit is approved for any such site, the uses thereon shall be regulated as nonconforming uses are generally. Any such uses may not be expanded, discontinued for a period in excess of one (1) year, or altered in any significant way without an SG site permit unless such expansion, discontinuation, or alteration is permitted by applicable prior entitlements to use. Alternations which are solely the result of implementing a reclamation plan as required by this section shall not require an SG site permit.

(b) Notwithstanding section 7-9-151, within one hundred twenty (120) days of the effective date of the ordinance placing any site described in subsection (a) in the SG "Sand and Gravel Extraction" District, the owner or operator thereof shall file a reclamation plan for the site with the Director. A reclamation plan for purposes of this section shall be as defined in section 7-9-104.7(a)(6). Any such reclamation plan shall be heard and considered as provided in sections 7-9-104.19 and 7-9-104.8.

(c) Reclamation plans submitted pursuant to this section need not apply to areas within the site which were mined prior to January 1, 1976 if such areas will not be used for any future extraction operations. The scope of any such exempt previously mined areas shall be determined on a case-by-case basis, taking into account the relationship of the area claimed to be previously mined to current and proposed future mining operations.

(d) It shall be unlawful to conduct extraction operations on any site described in subsection (a) after one hundred twenty (120) days from the effective date of the ordinance placing the site in the SG "Sand and Gravel Extraction" District without a reclamation plan on file with the Director.

(e) It shall be unlawful to conduct extraction operations on any site described in subsection (a) after a reclamation plan for the site has been disapproved, until a subsequent reclamation plan for the site is approved.

(f) After a reclamation plan for any site described in subsection (a) has been approved, it shall be unlawful to conduct mining operations which do not conform with said plan, and it shall be unlawful for the owner of the site and the person who secured the approval of

the reclamation plan, if other than the owner, to fail to implement said plan. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.14. Sites zoned "SG" prior to March 30, 1973.

(a) This section pertains to those sites zoned SG "Sand and Gravel Extraction" prior to March 30, 1973. The owner of any such site may apply for an SG site permit at any time. Until an SG site permit is approved for any such site, the uses thereon shall be regulated in accordance with prior entitlements to use and the standards previously contained in these regulations. Any such uses may not be expanded, discontinued for a period in excess of one (1) year, or altered in any significant way without an SG site permit unless such expansion, discontinuation, or alteration is permitted by applicable prior entitlements to use. Alterations which are solely the result of implementing a reclamation plan as required by this section shall not require an SG site permit.

(b) Notwithstanding section 7-9-151, the owner or operator of any site described in subsection (a) shall file a reclamation plan for the site with the Director not later than October 1, 1976. A reclamation plan for purposes of this section shall be as defined in section 7-9-104.7-(a)(6). Any such reclamation plan shall be heard and considered as provided in sections 7-9-104.19 and 7-9-104.8.

(c) Reclamation plans submitted pursuant to this section need not apply to areas within the site which were mined prior to January 1, 1976 if such areas will not be used for any future extraction operations. The scope of any such exempt previously mined areas shall be determined on a case-by-case basis, taking into account the relationship of the area claimed to be previously mined to current and proposed future mining operations.

(d) It shall be unlawful to conduct extraction operations on any site described in subsection (a) after October 1, 1976 without a reclamation plan on file with the Director.

(e) It shall be unlawful to conduct extraction operations on any site described in subsection (a) after a reclamation plan for the site has been disapproved, until a subsequent reclamation plan for the site is approved.
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(f) After a reclamation plan for any site described in subsection (a) has been approved, it shall be unlawful to conduct mining operations which do not conform with said plan, and it shall be unlawful for the owner of the site and the person who secured the approval of the reclamation plan, if other than the owner, to fail to implement said plan. (Ord. No. 2893, § 1, 2-25-76)

Sec. 7-9-104.15. Amendments to SG site permits.

Upon application of the permittee, SG site permits and reclamation plans may be amended any number of times. Applications for amendments to SG site permits and reclamation plans shall be in a format acceptable to the Director and shall include information appropriate to the scope of the amendment requested. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.16. Interim administrative SG site permit amendments.

(a) Upon application of the permittee, where changed circumstances necessitate a change in any SG site permit issued pursuant to section 7-9-104.9, the Director may approve operations which deviate from an approved SG site permit for a period of up to one hundred twenty (120) days, provided the Director determines that the public health, safety and welfare are not endangered by such interim operations. Within said 120-day period the owner or operator of the site in question shall apply for an amendment to the SG site permit pursuant to section 7-9-104.15. Interim administrative SG site permit amendments may not be extended beyond the initial 120-day period.

(b) Whenever the Director grants an interim administrative SG site permit amendment pursuant to this section, he shall notify the Planning Commission within seven (7) days of the action taken and of the reasons for such action. A copy of the Director's report shall be given to the permittee. The Planning Commission may revoke or modify any interim administrative SG site permit amendment, provided that the permittee shall be given at least five (5) days' notice of the Commission's consideration of the matter and an opportunity to address the Commission prior to any such action. The Planning Commission need not

schedule a consideration of the matter if the Commission does not wish to overrule or modify the action of the Director. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.17. Suspension or revocation of SG site permits.

In addition to any other means of enforcing these regulations, the Board of Supervisors may suspend or revoke an SG site permit or any other entitlement to conduct mining operations granted pursuant to the Orange County Zoning Code when the Board determines, in accordance with this section, that a permittee is violating material terms of an SG site permit or that a reclamation plan is not being implemented.

Prior to any such suspension or revocation, the Director shall specify the nature of the violation or the failure to implement a reclamation plan in writing and demand at least twice over a period of not less than thirty (30) days that the permittee correct the violation or failure. When adequate steps have not been taken to insure the immediate correction of the violation or failure to the satisfaction of the Director, the Director shall request the Board of Supervisors to set a hearing to consider whether the SG site permit or other entitlement to mining operations should be suspended or revoked. The owner and operator of the site in question shall be given at least fifteen (15) days' notice of any such hearing.

Whenever the Board of Supervisors suspends or revokes an SG site permit or other entitlement to conduct mining operations pursuant to this section, it shall do so by resolution, which resolution shall set forth the facts upon which the Board bases its action.

A resolution of suspension shall also set forth any conditions which must be met to reinstate the SG site permit or other entitlement to conduct mining operations. Prior to the reinstatement of any suspended SG site permit or other entitlement to conduct mining operations, the permittee shall submit a compliance plan to the Planning Commission for approval. The Director may approve mining operations and other uses in accordance with an approved compliance plan. Upon certification by the Director that a permittee has corrected all

violations and satisfied any conditions of reinstatement in accordance with an approved compliance plan, the Planning Commission shall reinstate a suspended SG site permit or other entitlement to conduct mining operations. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.18. Fees.

Fees for filing applications and plans pursuant to these regulations shall be established by resolution of the Board of Supervisors. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-104.19. Procedures.

(a) Applications for SG site permits and reclamation plans shall be filed with the Director and heard and considered by the Planning Commission. Any such application or plan shall be in a format acceptable to the Director, and any such application or plan shall not be accepted for filing unless, in the judgment of the Director, it is reasonably complete.

(b) Except where an application is submitted in connection with an owner-initiated zone change pursuant to section 7-9-104.11, there shall be a public hearing on each application for an SG site permit and each reclamation plan filed within one hundred twenty (120) days of filing, provided that the applicant or person submitting the plan may request, and the Director may grant, extensions of this period. Notice of such public hearings shall be given in the manner set forth in section 7-9-150 pertaining to use permits.

(c) Public hearings on SG site permit applications and reclamation plans may be continued. The Planning Commission may approve, conditionally approve, or disapprove applications for SG site permits and reclamation plans.

(d) Except where an application is submitted in connection with an owner-initiated zone change pursuant to section 7-9-104.11, any such action of the Planning Commission is final, in the absence of an appeal, after fourteen (14) days. Any such action may be appealed to the Board of Supervisors within that fourteen-day period by any person, whereupon the Board of Supervisors shall conduct a public hearing to consider the matter within forty-five (45) days of the date the appeal is filed. Such appeal shall be filed with the Director. Notice of the

Board of Supervisors' public hearing shall be mailed by the Clerk of the Board of Supervisors to the applicant or person submitting a reclamation plan, to the person who filed the appeal (if other than the applicant or person submitting a reclamation plan), and to all persons owning property within three hundred (300) feet of the exterior boundaries of the site.

(e) These procedures apply to applications for amendments to SG site permits and reclamation plans, except that such applications shall be heard within fifty (50) days of filing unless the applicant requests, and the Director grants, an extension of this period. (Ord. No. 2893, § 2, 2-25-76)

Sec. 7-9-105. RM-M "Resource Management—Minerals" District regulations.

All references to this section shall include sections 7-9-105.1 through 7-9-105.7. (Ord. No. 2915, § 1, 5-26-76)

Sec. 7-9-105.1. Purpose and intent.

The RM-M District, a combining district, is established to provide a method for identifying and classifying potential future mineral extraction sites, areas containing mineral deposits which require further evaluation, and designated areas of statewide and regional significance within the meaning of the Surface Mining and Land Reclamation Act of 1975. It is intended that the requirements of this district will protect economically significant deposits of rock, sand, gravel, earth, clay or other minerals from encroachment by incompatible uses and will provide adequate notice to interested persons that the materials may possibly be extracted from the site in the future.

This district is intended to be an interim district to be applied only until a determination is made as to whether the property should be rezoned to a district permitting mineral extraction.

It is further intended that the district should include sufficient area around the future extraction site to provide an adequate buffer between extraction operations and adjacent uses. (Ord. No. 2915, § 1, 5-26-76)

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Sec. 7-9-105.2. Application.

In any district where the district symbol is followed by, as a part of such symbol, parenthetically enclosed letters "RM-M", thus (RM-M), the additional requirements, limitations and standards of this district shall apply. The district symbol shall constitute the "base district" and the (RM-M) suffix shall constitute the "combining" district. In the event of conflicting provisions of such a combined district, the requirements of the (RM-M) district shall take precedence over the requirements of the base district.

A petition to apply the RM-M District may be initiated by the property owner or by the Board of Supervisors or the Planning Commission in compliance with the provisions of section 7-9-105.6 (Requirements for filing) and with standard zone change procedures. The district may be applied to designated areas of statewide and regional significance in conformance with the General Plan, and to additional areas found to be potentially valuable future mineral extraction areas. (Ord. No. 2915, § 1, 5-26-76)

Sec. 7-9-105.3. Uses permitted.

The following uses shall be permitted subject to the approval of a use permit by the Planning Commission as provided by section 7-9-150.

Any use permitted by the "base district" regulations except those uses specifically prohibited by section 7-9-105.4. (Ord. No. 2915, § 1, 5-26-76)

Sec. 7-9-105.4. Uses prohibited.

All uses not specifically permitted by a use permit approved in compliance with provisions of this district. (Ord. No. 2915, § 1, 5-26-76)

Sec. 7-9-105.5. Site development standards.

The establishment, operation and maintenance of the uses permitted by this district shall be in compliance with the following standards:

- (a) Minimum building site area: Ten (10) acres.
- (b) Minimum building site width: No minimum.

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	IDENTIFICATION		ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
			ASSESSOR PARCELS OR OTHER DESCRIPTION	ASSESSOR PARCELS OR OTHER DESCRIPTION					
SCO-604	Various	Equestrian trail	Various	Santa Ana/County & City of Orange	-	Various	Various	Note (1). Various. Santa Ana River to Villa Park Dam via creek channel.	
SOR-604A	Street R.W.	Equestrian trail	City street	City of Orange	-	-	-	Note (2). City of Orange. East from Loma St. to southern boundary of AP-370-011-4.	
"	Vacant	"	370-011-4	"	-	S-G	S-G	Private. East along southern boundary easement to AP 370-011-7.	
"	"	"	-6	"	-	"	"	Private. Northeast along easement to AP 370-011-19.	
"	"	"	-19	"	-	"	"	Private. East along dedicated trail on southern boundary to AP 85-541-5.	
SCO "	"	"	85-541-5	County	-	AR	AR	Private. East as above to AP 93-280-16 in creek.	
SOR "	Creek channel	"	93-280-16	City of Orange	-	S-G	S-G	Private. Northeast in creek channel to AP 93-280-2.	
SCO "	"	"	-2	County	-	Al	Al	Private. East in creek channel to AP 93-250-36.	
SOR "	"	"	-250-36	City of Orange	-	R-1-10	R-1-10	County. South in creek channel to AP 93-250-37.	
SOR "	"	"	-37	"	-	"	"	County. Trail project 604A terminates in wilderness area (former Rinker property, SOR-704).	
SCO-605	Various	Bicycle trail	Various	Santa Ana, County & City of Orange	-	Various	Various	Note (1). Various Santa Ana River to Villa Park Dam. ABS 7A through 7D.	
SOR-605A	River channel & golf course	Bicycle trail	1-011-5	City of Orange	-	R-0	R-0	Note (3). County. Trail xing from west to east river levee @ G.C. Blvd. bridge. Same as above.	
"	"	"	-6	"	-	"	"	Same as above.	
SSA "	Street R/W.	Bicycle lane	City street	Santa Ana	-	-	-	Santa Ana. Striped & signed trail along Memory Lane from east river levee to Southern Pacific Transportation Co. (S.P.T.C.) R/W.	

SANTIAGO CREEK SEGMENT
SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
				USE	ZONING				
SSA-605A	R.R. R/W	Bicycle trail	R.R. R/W	-	Santa Ana	-	S.P.T.C. R.R. R/W to creek.		
"	Creek channel	"	2-180-23	-	"	0	Santa Ana. Along creek channel from R.R. R/W to Main St.		
"	Creek channel/Park	"	3-020-02	-	"	"	Santa Ana. (Santiago Park), Main St. to Valencia Av.		
"	"	"	-03	-	"	"	Same as above!		
"	"	"	41-211-10	-	"	"	Santa Ana. (Santiago Park), Valencia Av. to Parker St.		
"	"	"	-220-33	-	"	"	Santa Ana. (Santiago Park), Parker St. to Glassell St.		
"	"	"	-34	.11	"	"	A.T.&S.F. Route same as above.		
"	"	"	-68	.14	"	"	"		
"	"	"	-64	-	"	"	"		
SOR	Creek channel/Fwy. R/W.	"	-63	.19	City of Orange	R-0	Santa Ana.		
"	Creek channel/Park	"	390-111-5	-	"	"	State.		
"	"	"	-021-1	-	"	"	City of Orange (Hart Park), Glassell St. to Cambridge St.		
SOR-605A	Bicycle lane	Bicycle lane	City street	-	City of Orange	"	Same as above.		
"	"	"	"	-	"	"	City of Orange. Striped and signed trail south on Cambridge St. to G.G. Fwy. R/W.		
"	Fwy. R/W	Bicycle trail	Fwy. R/W	-	"	"	State. Along G.G. Fwy. R/W from Cambridge to Tustin Sts.		
"	Street R/W	Bicycle lane	City street	-	"	"	City of Orange. North along Tustin St. from G.G. Fwy. R/W to creek.		
"	Creek channel	Bicycle trail	390-321-1	-	"	R-1-7	County. East along creek from Tustin St. to S.P.R.R. R/W.		
"	"	"	-151-20	.21	"	R-1-7	Private. Route same as above.		

SANTIAGO CREEK SEGMENT

SUMMARY OF 'EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
SOR-605A	Creek channel		Bicycle trail	390-141-15	-	City of Orange	R-3-A		County, East along creek from Tustin St. to S.P.R.R. R/W.
"	"		"	392-071-2	.14	"	R-1-7		Private, Route same as above.
"	"		"	-1	-	"	R-1-7		City of Orange.
"	"		"	-061-2	-	"	R-1-7		City of Orange.
"	"		"	93-010-52	-	"	C-1		County.
"	"		"	-54	.12	"	C-1		Private.
"	"		"	-47	-	"	C-1		City of Orange.
"	"		"	-53	.14	"	C-1		State.
"	"		"	-36	.21	"	R-0		Private.
"	"		"	40-271-24	-	"	R-1-7		County.
"	"		"	-230-10	.14	"	R-1-7		S.P.T.C.
"	"		"	-8	.17	"	R-1-6		Private.
"	"		"	93-030-1	.39	"	S-G		S.P.T.C.
"	R.R. R/W		"	R.R. R/W	-	"	-		S.P.T.C. North along R.R. R/W from creek to Collins Av.
SOR-605A	Street R/W		Bicycle lane	City street	-	"	-		City of Orange, East on Collins to Prospect Av.
SCO	Road R/W		Bicycle trail	County road	-	County	-		County, South on Prospect Av. to Bond Av.
SOR	Street R/W		"	City street	-	City of Orange	-		City of Orange, East on Bond to Hewes Av.
"	"		"	"	-	"	-		City of Orange, North on Hewes Av. to Santiago Canyon Rd.
"	Bicycle lane		"	"	-	"	-		City of Orange, East on Santiago Canyon Rd. to Loma St.
"	Street R/W		"	"	-	"	-		City of Orange, North on Loma to south boundary of AP 370-011-4.
"	Vacant		Bicycle trail	370-011-4	-	"	S-G		Private, East along southern boundary easement to AP 370-011-6.

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
SOR-605A	Vacant		Bicycle trail	370-011-6	-	City of Orange	S-C		Private. Northeast along easement to AP 370-011-19.
"	"		"	-19	-	"	"		Private. East along dedicated trail on southern boundary to AP 85-541-5.
SCO	"		"	85-541-5	-	County	AR		Private. East as above to AP 930-280-16 in creek.
SOR	"	Creek channel	"	93-280-16	-	City of Orange	S-G		Private. Northeast in creek channel to AP 93-280-2.
SCO	"	"	"	-2	-	County	AI		Private. East in creek channel to AP 93-250-36.
SOR-605A	Creek channel		"	93-250-36	-	City of Orange	R-1-10		County. Southeasterly in creek channel to AP 93-250-37.
"	"		"	-37	-	"	"		County. Trail project 605A terminates in wilderness area (former Rinker property).
SSA-608	Reservoir		Rest stop	1-121-43	3.45	Santa Ana	0		Santa Ana. Bristol Reservoir.
SSA-611	Park		Park	2-020-34	3.92	Santa Ana	0		Santa Ana. Jack Fisher Park.
SSA-614	Commercial/Residential		Rest stop (park & concession stand)	2-201-4		Santa Ana	C2		Note (4). Private. North of creek, east & west of Main St.
				-5		"	"		Same as above.
				-6		"	"		"
				-7		"	"		"
				-9		"	"		"
				-11		"	"		"
				3-011-1		"	RI		"
				-2		"	"		"
				-3		"	"		"
				-4		"	"		"
				-5		"	"		"

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION	ZONING	DESIGNATION	OWNERSHIP/REMARKS
SSA-614	Commercial/Residential		Rest stop (park & concession stand)	3-011-6		Santa Ana	RI	RI	Note (4). Private. North of creek, east & west of Main St. Same as above.
				-7		"	"	"	"
				-8		"	"	"	"
				-9		"	"	"	"
				-10		"	"	"	"
				-11		"	"	"	"
				-12		"	C2	C2	"
				-13		"	"	"	"
				-14		"	"	"	"
				-012-2		"	RI	RI	"
				-4		"	"	"	"
				-5		"	"	"	"
				-6		"	"	C2	"
				-7		"	"	"	"
				-9		"	"	RI	"
				-10		"	"	"	"
				-11		"	"	"	"
				-15		"	"	"	"
				-16		"	"	"	"
				-17		"	"	"	"
				-18		"	"	"	"
				-20		"	"	C2	"
				-21		"	"	"	"
				-013-1		"	RI	RI	"
				-2		"	"	"	"
				-8		"	"	RI-C2	"

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION			ZONING	DESIGNATION	OWNERSHIP/REMARKS
					ACREAGE	JURISDICTION	ACREAGE			
SSA-614	Commercial/Residential		Rest Stop (Park & concession stand)	3-013-11	Santa Ana	C2		Note (4). Private. North of creek, east & west of Main St.		
				-12	"	"		Same as above.		
				-13	"	"		"		
				-15	"	"		"		
Project Total					18.26					
SSA-617	Commercial		Park	2-180-17	Santa Ana	C2		Note (4). Private. South of creek, west of Main St.		
				-18	"	"		Same as above.		
				-23	"	"		Santa Ana. Location same as above.		
				-29	"	"		Private.		
				-33	"	"		"		
				-34	"	"		"		
Project Total					7.90					
SSA-620	Park/Day camp		Park/Day camp	3-020-2	Santa Ana	0		Santa Ana. Santiago Park and Day Camp.		
				-3	"	"		Same as above.		
				41-212-10	"	"		"		
				-11	"	"		"		
				-220-31	"	"		"		
Project Total					6.98					
SSA-622	Street R/W, R.R. R/W		Bicycle lane/trail	City street, R.R. R/W.	Santa Ana	-		Santa Ana/SPTC. Trail linkage to SSA-605 via Lincoln Av.		

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
				ZONING	DESIGNATION				
SCO-650	Vacant/S&G mining	Trail Park & Ride	93-051-05	11.32	City of Orange	S-G			Private. Project site on both sides of creek in southwest corner of Lower Santiago Creek Regional Park.
			-030-16	9.95	County	SG (FP-2)			Private.
			-01	14.75	"	"			SPTC.
			40-240-16	7.62	"	"			Private.
			-453-61	0.80	"	R4			"
			-28	0.20	"	"			SAVI.
				<u>44.64</u>					
SCO-653	Agriculture	Park	92-350-23	.40	County	100-E-4 (20,000)			Private. Project site in Lower Santiago Creek Regional Park, south of creek and bounded by Hewes and Bond Aves. and Santiago Blvd.
			-29	4.29	"	100-E-4 (20,000)			Private.
			-31	.04	"	"			"
			-360-73	25.73	"	"			"
			93-081-04	.40	"	E-4 (15,000)			"
			-05	2.31	"	"			"
			-06	2.50	"	"			"
			-07	9.18	"	"			"
			-22	2.24	"	"			"
			-25	10.27	"	100-E-4 (20,000)			"
			-27	4.56	"	"			"
			-28	<u>6.27</u>	"	"			"
				<u>68.19</u>					
	Project Total								

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	IDENTIFICATION			ZONING	OWNERSHIP/REMARKS
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION		
SOR-656	Vacant		Equestrian trail	Various	-	City of Orange/County	-	City of Orange/Private. Linkage to SCO-604 from Crawford Canyon Rd.
SVP-659	Equestrian trail		Equestrian trail	County rd./City st.	-	County/Villa Park	-	County/Villa Park. Linkage to SCO-604 from Villa Park.
SVP-662	Street R/W, Bicycle lane		Bicycle lane	County rd./City st.	-	County/Villa Park	-	County/Villa Park. Linkage to SOR-605 from Villa Park.
SCO-665	Vacant		Trail Park & Ride (Vista)	92-360-70	6.82	County	AI	Private. Project site on southern edge of Lower Santiago Creek Regional Park at Santiago Canyon Rd. & Blvd.
SOR-668	Refuse Disposal Station #22		Trail Park & Ride (Campground)	370-041-10	0.30	City of Orange	S-G	County. Project site on north and south sides of creek & east of Loma St.
				-11	6.57	"	"	County.
				-14	9.10	"	"	"
				-011-8	12.76	"	"	Private.
				-17	3.85	"	"	"
				-18	15.61	"	"	"
			Project Total		48.19			
SOR-671	Street R/W, Bicycle lane		Bicycle lane	City street	-	City of Orange	-	City of Orange. Linkage from SOR-605 to SCO-677 via Santiago Canyon Rd.
SCO-674	Street R/W, Equestrian trail		Equestrian trail	County road	-	County	-	County. Linkage to Irvine Park via Orange Park Acres Blvd. and Chapman Av.
SCO-677	Bicycle lane		Bicycle lane	County road	-	County	-	County. Linkage to Irvine Park via Orange Park Acres Blvd. and Chapman Av.
SOR-680	Street R/W, vacant		Equestrian trail	City street	-	City of Orange	-	City of Orange. Linkage to Villa Park trails, Anaheim Hills trails & Edison Wilderness Park.
				85-541-1	-	City of Orange	-	County. Route same as above.
				-5	-	County	-	Private. Route same as above.

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ZONING				
SOR-683	Street R/W		Equestrian trail	City street	-	City of Orange	-	City of Orange. Linkage to SOR-680.	
SOR-686	Vacant		Equestrian trail	93-280-11	-	City of Orange	R-1-10	Orange Unified School District (OUSD). Linkage from SCO-604 to Handy Creek.	
SOR-692	Vacant/residential		Equestrian trail	93-280-11	-	City of Orange	R-1-10	OUSD. Linkage from SOR-686 to SOR-604 via listed parcels.	
				370-062-5		"	"	Private. Route same as above.	
				-4		"	"	"	
				-3		"	"	"	
				-2		"	"	"	
				-1		"	"	"	
				-073-3		"	"	"	
				-2		"	"	"	
				-1		"	"	"	
				-072-5		"	"	"	
				-4		"	"	"	
				-3		"	"	"	
				-2		"	"	"	
				-1		"	"	"	
				93-270-42		"	"	"	
				-25		"	"	"	
				-250-45		"	"	"	
				-44		"	"	"	
				-24		"	"	"	
SOR-695	Vacant		Park and Ride	93-280-11	28.36	City of Orange	R-1-10	County. South of creek & west of Windes Dr.	
SOR-698	Street R/W		Bicycle lane	City st./County rd.	-	City of Orange/County		OUSD. Linkage from SOR-671 to SOR-605 via Windes Dr.	

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT USE	PLANNED USE	ASSESSOR PARCELS OR OTHER DESCRIPTION	IDENTIFICATION		ACREAGE	JURISDICTION	DESIGNATION	OWNERSHIP/REMARKS
				ZONING					
SCO-701	Residence/agriculture	Nature preserve	93-270-2			.70	County	E4-1	County, South side of creek, east of Windes Dr. (formerly Blome property). Same as above.
			-12			.20	County	"	"
			-17			.80	"	"	"
			-32			.25	"	"	"
			-43			5.52	City of Orange	R-1-40	"
			93-270-44			17.97	"	"	"
			-45			.31	County	E4-1	"
			-46			8.31	"	"	"
						<u>34.06</u>			
	Project Total								
SOR-704	Agriculture	Wilderness area	93-250-38			48.88	City of Orange	R-1-10	Note (5). County, North of creek extending easterly towards base of Villa Park Dam. Same as above.
			-39				City of Orange	R-1-10	"
			-40				"	"	"
			-41				"	"	"
			-42				"	"	"
			-43				"	"	"
			93-250-39				City of Orange	R-1-10	County, Trail loop around SOR-704. Same as above.
			-40				"	"	"
			-38				"	"	"
			-36				"	R-1-40	"
			-4			.32	"	"	Private, Route as above.
			-19				"	"	County.
			-26				"	"	"
			-24				"	"	"
SCO-707	Vacant	Equestrian trail							

SANTIAGO CREEK SEGMENT

SUMMARY OF EXISTING/PLANNED PROJECTS' CURRENT STATUS

PROJECT NUMBER	CURRENT	USE	PLANNED	IDENTIFICATION			OWNERSHIP/REMARKS	
				ASSESSOR PARCELS OR OTHER DESCRIPTION	ACREAGE	JURISDICTION		DESIGNATION
SCO-710	Flood control basin		Equestrian trail	Various	-	County	-	County. Trail linkage between Lower Santiago Creek & Irvine Regional Parks.
SCO-713	Vacant		Equestrian trail	93-250-39	-	City of Orange	R-1-10	County. Linkage from SOR-604 to Anaheim Hills trails.
SOR-716	Street R/W, vacant		Bicycle lane	Various	-	"	"	County. Route as above.
				85-551-9	-	County	Al	"
				105-010-42	-	"	"	"
				Various	-	City of Orange/Anaheim	Various	City of Orange/Private/Anaheim. Linkage from SOR-605 to CCO-403A via Loma St. & Imperial Hwy.

- Note (1): Trail route is dependent upon determination of ultimate flood control channel configuration, which is currently under study by County EMA Project Plans Division.
- Note (2): This is proposed equestrian trail (Loma St. to Villa Park Dam) for interim period pending eventual completion of County's flood control project in creek.
- Note (3): This is proposed Arterial Bikeway System (ABS) trail for interim period pending eventual completion of County's flood control project in creek and the trail currently described as ABS Project 7A through 7D.
- Note (4): This project description extracted from City of Santa Ana Greenbelt Plan as presented to the Greenbelt Commission on 3Apr75. Assessor parcel numbers and acreages updated to reflect current records.
- Note (5): Acreage as per Real Property Inventory (1Jan76), General Services Agency, County of Orange. Does not include 12.923 acres acquired by OCFCD in flood plain. All County parcels total 48.88 acres.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
SCO-604	Equestrian trail	County	Note (1)	County	Note (1)	City of Orange	Note (1)	Note (1). Santa Ana River to Villa Park Dam via creek channel.
SOR-604A	Equestrian trail	City of Orange	Completed	City of Orange	-	City of Orange	-	Note (2). Point of beginning, east from Loma St. to southern boundary of AP 370-11-4. Zero distance.
"	"	"	-	City of Orange	\$ 365	"	\$ 7	Easement along southern boundary of AP370-11-4 to AP 370-11-6 for 0.073 mi.
"	"	"	-	"	\$ 700	"	\$ 14	Easement along northwest boundary of AP 370-11-6 to AP 370-11-19 for 0.14 mi.
"	"	"	-	Private	-	"	\$ 27	Easterly along dedicated trail on southern boundary to AP 85-541-5 for 0.27 mi.
SCO "	"	"	-	"	-	"	\$ 58	Easterly as above to AP 93-280-16 in creek for 0.58 mi.
SOR "	"	County	\$ 497	County	\$1,350	County	\$ 27	Northeast in creek channel to AP 93-280-2 for 0.27 mi.
SCO "	"	"	\$ 850	"	\$ 140	"	\$ 3	Easterly in creek channel to AP 93-250-36 for 0.028 mi.
SOR "	"	"	Completed	"	\$1,700	"	\$ 34	Southeasterly in creek channel to AP 93-250-37 for 0.34 mi.
"	"	"	"	"	\$1,600	"	\$ 32	Trail project 604A extends 0.32 mi. to east end of SOR 704 and terminates.
Project Total			\$1,347		\$5,855		\$ 202	Distance = 2.02 miles.
SCO-605	Bicycle trail	County	Note (1)	County	Note (1)	Note (1)	Note (1)	Note (1). Santa Ana River to Villa Park Dam via creek channel. ABS 7A through 7D.
SOR-605A	Bicycle trail	County	Completed	County	\$3,000	County	\$ 30	Note (3). Trail King from west to east river levee at C.G. Blvd. bridge for 0.1 mi.
SSA "	Bicycle lane	Santa Ana	"	"	\$1,620	Santa Ana	\$ 225	Striped and signed trail along Memory Lane from east river levee to Southern Pacific Transportation Co. (S.P.T.C.) R/W for 0.9 mi.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
SSA-605A	Bicycle trail	County	\$ 3,500	County	\$ 3,000	Santa Ana	\$ 30	S.P.T.C. R.R. R/W to creek for 0.1 mi.
"	"	Santa Ana	Completed	"	\$ 4,500	"	\$ 45	Along creek channel from R.R. R/W to Main St. for 0.15 mi.
"	"	"	"	"	\$ 9,000	"	\$ 90	Main St. (Santiago Park) to Valencia Av. for 0.3 mi.
"	"	"	"	"	\$ 4,500	"	\$ 45	Valencia Av. (Santiago Park) to Parker St. for 0.15 mi.
SOR	"	County	\$16,755	"	\$13,500	"	\$ 135	Parker St. (Santiago Park) to Glassell St. for 0.45 mi.
"	"	City of Orange	Completed	"	\$ 8,904	City of Orange	\$ 154	Glassell St. (Hart Park) to Cambridge St. for 0.56 mi.
"	Bicycle lane	"	"	City of Orange	Completed	"	\$ 33	South along existing striped & signed trail on Cambridge St. to G.G. Fwy. R/W for 0.13 mi.
"	Bicycle trail	County	\$23,250	County	\$19,620	"	\$ 150	East along G.G. Fwy. R/W from Cambridge to Tustin Sts. for 0.5 mi. (Development @ 0.5x\$30,000 = \$15,000 + landscaping @ .35/SFx5' width = \$1,75 linear ft.x5,280 = 9,240x.05 = \$4,620 + \$15,000 = \$19,620.
"	Bicycle lane	City of Orange	Completed	"	\$ 234	"	\$ 33	North along Tustin St. from G.G. Fwy. R/W to creek for 0.13 mi.
"	Bicycle trail	County	\$44,597	"	\$38,100	"	\$ 381	East along creek from Tustin St. to S.P.R.R. R/W for 1.27 mi.
"	"	"	\$38,903	"	\$41,775	"	\$ 150	Note (4). North along R.R. R/W from creek to Collins Av. for .5 mi.
"	Bicycle lane	City of Orange	Completed	"	\$ 756	"	\$ 105	East on Collins Av. to Prospect Av. for 0.42 mi.
SCO	"	County	"	"	\$ 612	County	\$ 85	South on Prospect to Bond Aves. for 0.34 mi.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS, ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
SOR-605A	Bicycle lane	City of Orange	Completed	County	\$ 954	City of Orange	\$ 133	East on Bond to Hewes Av. for 0.53 mi.
" "	"	"	"	"	\$ 1,224	"	\$ 170	North on Hewes Av. to Santiago Canyon Rd. for 0.68 mi.
" "	"	"	"	City of Orange	Completed	"	\$ 98	East on Santiago Canyon Rd. to Loma St. for 0.39 mi.
" "	"	"	"	County	\$ 576	"	\$ 80	North on Loma to south boundary of AP 370-011-4 for 0.32 mi.
" "	Bicycle trail	"	-	"	\$ 2,595	"	\$ 22	East along southern boundary easement of AP 370-011-4 to AP 370-011-6 for 0.073 mi. (Development = .073 x \$30,000 = \$2,190 + landscaping @ .35 SF x 3' width = \$1,05/linear ft. x 5,280 = \$5,544/mi. x .073 = \$405+\$2,190 = \$2,595).
" "	"	"	-	"	\$ 3,000	"	\$ 30	Northeasterly along east boundary of AP 370-011-6 to AP 370-011-19 for 0.1 mi.
" "	"	"	-	Private	-	"	\$ 81	Easterly along dedicated trail along southern boundary of AP 370-011-19 to AP 85-541-5 for 0.27 mi.
SCO "	"	"	-	"	-	"	\$ 174	Easterly along dedicated trail along southern boundary of AP 85-541-5 to AP 93-280-16 in creek for 0.58 mi.
SOR "	"	County	\$ 497	County	\$ 8,100	County	\$ 81	Northeast in creek channel to AP 93-280-2 for 0.27 mi.
SCO "	"	"	850	"	\$ 840	"	\$ 8	Easterly in creek channel to AP 93-250-36 for 0.028 mi.
SOR "	"	"	Completed	"	\$ 10,200	"	\$ 102	Southeasterly in creek channel to AP 93-250-37 for 0.34 mi.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
SOR-605A	Bicycle trail	County	Completed	County	\$ 9,600	County	\$ 96	Trail project 605A terminates at eastern boundary of SOR-704 (Wilderness Area) after distance of 0.32 mi.
	Project Total		\$ 128,352		\$ 186,210		\$ 2,766	Distance = 9.9 miles.
SSA-608	Rest stop	Santa Ana	Completed	Santa Ana	-	Santa Ana	-	Bristol Reservoir rest stop.
SSA-611	Park	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	\$ 12,946	Jack Fisher Park.
SSA-614	Rest stop/Park & Concession Stand	Santa Ana	\$ 730,000	Santa Ana	\$ 973,000	Private	-	Note (5). North of creek, east and west of Main St.
SSA-617	Park	Santa Ana	\$ 316,000	Santa Ana	\$ 395,000	Santa Ana	-	Note (5). South of creek, west of Main St.
SSA-620	Park/Day Camp	Santa Ana	Completed	Santa Ana	Completed	Santa Ana	\$ 85,300	Santiago Park (\$75,554) and Day Camp (\$9,746).
SSA-622	Bicycle lane/trail	Santa Ana	-	Santa Ana	-	Santa Ana	-	Trail linkage to SSA-605 via Lincoln Av.
SOR-623	Park	City of Orange	Completed	City of Orange	Completed	City of Orange	\$156,256	Note (6). Hart Park.
SOR-626	Park	City of Orange	Completed	City of Orange	\$ 300,000	City of Orange	\$ 45,000	Note (7). Hart Park expansion.
SOR-629	Recreation Center	Private	Completed	Private	-	Private	-	South of creek & east of Hart Park.
SOR-632	Bicycle lane	City of Orange	Completed	City of Orange	Completed	City of Orange	-	Linkage to SOR-605 via Cambridge St.
SOR-635	Golf course	Private	Completed	Private	Completed	Private	-	Santiago Golf Course.
SOR-638	Park	City of Orange	Completed	City of Orange	Completed	City of Orange	\$ 32,896	Note (6). Yorba Park.
SOR-641	Open space	City of Orange	\$ 372,160	City of Orange	-	City of Orange	-	Note (6). North and south of creek & northeast of Yorba Park.
SCO-644	Equestrian trail	County	\$ 62,246	County/Villa Park	\$ 6,500	County/Villa Park	\$ 130	Note(4). Santiago Creek to Villa Park via RR R/W for 1.3 mi.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
SCO-647	Bicycle trail	County	\$ 298,000	County	\$ 320,000	County/City of Orange	\$ 1,149	ABS 8A, Santiago Creek to Newport Av. for 3.83 mi.
SCO-650	Trail Park & Ride	County	\$ 970,998	County	\$ 937,440	County	\$ 66,960	Note (8). Located in southwestern portion of Lower Santiago Creek Regional Park; north and south of creek, & east & west of SCO-644 & 647 Trails. Acquisition cost of \$9,750 for AP 93-030-1 in SOR 605 deducted. Total area = 44.64 acres, active park.
SCO-653	Park	County	\$1,565,600	County	\$1,276,000	County	\$102,000	Note (9). Located on flat terrain in Lower Santiago Creek Regional Park, south of creek & bounded by Hewes & Bond Aves. & Santiago Blvd. Total area = 68 acres, with 30 acres developed as active park and 38 acres as quasi-wilderness.
SOR-656	Equestrian trail	City of Orange/County	\$ 30,250	City of Orange/County	\$ 5,000	City of Orange/County	\$ 100	Linkage to SCO-604 from Crawford Canyon Rd. for 1.0 mi.
SVP-659	Equestrian trail	County/Villa Park	Completed	County/Villa Park	Completed	County/Villa Park	\$ 60	Linkage to SCO-604 from Villa Park for 0.6 mi.
SVP-662	Bicycle lane	County/Villa Park	Completed	County/Villa Park	\$ 1,080	County/Villa Park	\$ 150	Linkage to SOR-605 from Villa Park for 0.6 mi.
SCO-665	Trail Park & Ride (Vista)	County	\$ 132,000	County	\$ 115,940	County	\$ 10,230	Note (8). Located on flat terrain in Lower Santiago Creek Regional Park, south of creek, north of Santiago Canyon Rd. & west of Santiago Canyon Blvd. Provides vista point. Total area = 6.82 acres, quasi-wilderness.
SOR-668	Trail Park & Ride (Campground)	County	\$ 99,000	County	\$ 819,230	County	\$ 72,285	Note (8). Located in Lower Santiago Creek Regional Park, north & south of creek & east of Loma St. Total area = 48 acres of which County owns 16. Acquisition cost for remaining 32 private acres. Quasi-wilderness.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	COST (Annual)	
SOR-671	Bicycle lane	City of Orange	Completed	County	\$ 3,600	City of Orange	\$ 500	Linkage from SOR-605 to SCO-677 via Santiago Canyon Rd. for 2.0 mi.
SCO-674	Equestrian trail	City of Orange/ County	Completed	County	\$ 7,500	County	\$ 280	Linkage to Irvine Park via Orange Park Acres Blvd. and Chapman Av. for 2.8 mi. (1.3 mi. completed).
SCO-677	Bicycle lane	City of Orange/ County	Completed	County	Completed	County	\$ 700	Linkage to Irvine Park via Orange Park Acres Blvd. and Chapman Av. for 2.8 mi.
SOR-680	Equestrian trail	Private/ City of Orange	Completed	City of Orange/ Private	-	City of Orange	-	Linkage to Villa Park trails, Anaheim Hills trails and Edison Wilderness Park. Total distance not yet determined.
SOR-683	Equestrian trail	City of Orange	Completed	Private	-	City of Orange	\$ 50	Linkage between east and west portions of SOR-680 for 0.5 mi.
SOR-686	Equestrian trail	Orange Unified School Dist. (OUSD)	Completed	City of Orange	\$ 1,500	City of Orange	\$ 30	Linkage from SCO-604 to Handy Creek trail for 0.3 mi.
SOR-692	Equestrian trail	OUSD/ City of Orange	\$ 9,750	City of Orange	\$ 4,500	City of Orange	\$ 90	Linkage from SOR-686 to SOR-604 for 0.9 mi.
SOR-695	Park and Ride	OUSD	Completed	City of Orange	\$1,378,920	City of Orange	\$86,352	Note (6). South of creek & west of Windes Dr.
SOR-698	Bicycle lane	City of Orange/ County	Completed	City of Orange/ County	\$ 1,080	City of Orange/ County	\$ 150	Linkage from SOR-671 to SOR-605 via Windes Dr. for 0.6 mi.
SCO-701	Nature Preserve	County	Completed	County	\$ 95,000	County	\$40,500	Note (10). Located in Lower Santiago Creek Regional Park, south of creek & east of Windes Dr. Total area = 34.06 acres. Major portion substantially developed by original owner; 27 acres to be maintained. Quasi-wilderness.
SOR-704	Wilderness Area	County	Completed	County	\$ 391,040	County	\$ 9,776	Located in Lower Santiago Creek Regional Park, north of creek & SCO-701; extending easterly towards base of Villa Park Dam. Designated as wilderness area by County on 6Apr76. Total area = 49 acres.

SANTIAGO CREEK SEGMENT

SUMMARY OF PROJECTS' ACQUISITION, DEVELOPMENT AND OPERATION RESPONSIBILITY

PROJECT NUMBER	PLANNED USE	ACQUISITION		DEVELOPMENT		OPERATION/MAINTENANCE COST		REMARKS
		JURISDICTION	COST	JURISDICTION	COST	JURISDICTION	(Annual)	
SCO-707	Equestrian trail	County	\$ 1,680	County	\$ 6,000	County	\$ 120	Trail loop around SOR-704 for 1.2 mi.
SCO-710	Equestrian trail	County	Completed	County	\$ 1,100	County	\$ 380	Note (1). Trail linkage between Lower Santiago Creek & Irvine Regional Parks for 3.8 mi.
SCO-713	Equestrian trail	County	-	County	-	County	-	Linkage from SOR-604 to Anaheim Hills trails. Precise route/distance not yet determined.
SOR-716	Bicycle trail	City of Orange/County/Anaheim	-	City of Orange/County/Anaheim	-	City of Orange/County/Anaheim	-	Linkage from SOR-605 to CO-403A via Loma St. and Imperial Highway.

Note (1): Trail route and responsibility for acquisition, development, operation and maintenance, and related costs, dependent upon determination of ultimate flood control channel configuration, which is currently under study by County Project Plans Division/EMA.

Note (2): Cost estimates based on 10 ft. average equestrian trail width; acquisition cost = 6 x A.V. or \$25,000/acre; development = offroad: \$5,000/mile, and onroad: \$200/mile; operation/maintenance = \$100/mile/year.

Note (3): This is proposed Arterial Bikeway System (ABS) trail for interim period pending eventual completion of County's flood control project in creek and the trail currently described as ABS Project 7A through 7D. Cost estimates are based on an average trail width of 8 ft. onroad (bicycle lane), and 10 ft. offroad (bicycle trail); acquisition cost is 6 x A.V. or estimated \$25,000/acre; development: onroad * \$1,800/mile and offroad = \$30,000/mile; operation/maintenance: onroad = \$250/mile/year and offroad = \$300/mile/year.

SANTIAGO CREEK SEGMENT

- Note (4): Acquisition costs for bicycle and equestrian trails, and development costs for bicycle trail based on ABS 8A. Development costs for equestrian trail = \$5,000/mile; operation/maintenance costs for bicycle trail offroad = \$300/mile/year, and for equestrian trail offroad = \$100/mile/year.
- Note (5): Project costs extracted from City of Santa Ana Greenbelt Plan as presented to the Greenbelt Commission on 3Apr75.
- Note (6): Project costs extracted from City of Orange Master Plan of Parks dated March 1975.
- Note (7): Project costs per City of Orange staff status report on Greenbelt Implementation Plan presented to the Orange City Council on 18May76.
- Note (8): Acquisition costs = 6 x A.V. or \$25,000/acre; development: active park = \$19,000/acre, quasi-wilderness = \$17,000/acre, wilderness = \$8,000/acre; operation/maintenance: active and quasi-wilderness = \$1,500/acre, wilderness = \$200/acre.
- Note (9): Acquisition cost based on appraisal by Real Property Services, County GSA. Development for active park portion of project estimated at \$21,000/acre.
- Note (10): Development cost as per Harbors, Beaches and Parks Commission meeting on 25Feb76, agenda item #5.
- Note (11): Development cost as per EMA letter of 21Jul76 to Board of Supervisors.

SANTIAGO CREEK SEGMENT
PLANNED PROJECT PRIORITIES

Jurisdiction	Project Number	Description	Priority
<u>County of Orange</u>	Several	Lower Santiago Creek Regional Park	Group One
	SCO-605	Bicycle Trail ABS-7A	1976-77
	SCO-647	Bicycle Trail ABS-8A	1976-77
	SCO-605	Bicycle Trail ABS-7B	1977-78
	SCO-605	Bicycle Trail ABS-7C	1977-78
	SCO-605	Bicycle Trail ABS-7D	ASAP

Note: Above priority groups established in County's Master Plan of Regional Parks, Amendment No. 3, and bicycle trail project dates in County's Arterial Bikeway System Program published 3 June 1975.

<u>Santa Ana</u>	SSA-614	Rest Stop (Park & Concession Stand)	1
	SSA-617	Park	2
<u>Orange/ Villa Park</u>	SCO-653	Park (68 acre)	1
	SCO-701	Nature Preserve	2
	SOR, SCO-604A	Equestrian Trail	3
	SOR-680	Equestrian Trail	3
	SOR-683	Equestrian Trail	3
	SOR-686	Equestrian Trail	3
	SOR-692	Equestrian Trail	3
	SCO-707	Equestrian Trail	3
	SCO-710	Equestrian Trail	3
	SOR, SCO-605A	Bicycle Trail/Lane	4
	SVP-662	Bicycle Lane	4
	SOR-626	Hart Park Expansion	5
	SCO-713	Equestrian Trail	5
	SOR-695	Trail Park and Ride	6
	SOR-698	Bicycle Lane	6
	SOR-704	Wilderness Area	7
	SCO-644	Equestrian Trail	8
	SCO-647	Bicycle Trail	8
	SCO-604	Equestrian Trail (Garden Grove Freeway to Southern Pacific Railroad)	9
	SOR-656	Equestrian Trail	10
	SCO-674	Equestrian Trail	11
	SOR-671	Bicycle Lane	12
	SCO-604	Equestrian Trail (Southern Pacific Railroad to Loma Street)	13

Jurisdiction	Project Number	Description	Priority
<u>Orange/ Villa Park (continued)</u>	SCO-650	Trail Park and Ride	14
	SCO-665	Trail Park and Ride	14
	SOR-668	Trail Park and Ride	14
	SOR-716	Bicycle Lane	15
	SOR-641	Open Space	16

GUIDELINE FOR DEVELOPMENT DENSITIES

The Greenbelt Commission has been chartered to optimize open space potential of the land within the Santa Ana River/Santiago Creek Corridor. The Greenbelt project has as its objective provision of an area of contrast and visual relief from urban development; a contrast which daily becomes more necessary as our cities and County move from a rural and suburban atmosphere to an increasingly urban life style.

There is considerable development pressure in many portions of the Greenbelt, even though much of the adjacent land currently is in low density or undeveloped status. In these areas lie the best opportunities to set policies that will enhance the objectives and goals exemplified by the Greenbelt Commission.

Higher population densities contribute substantially to air, noise and water quality problems. They also can detract aesthetically from a Greenbelt area. Runoff water from the higher density areas increases the need for more channelization and flood control structures in watercourses, thereby eliminating the relatively scarce, natural riparian areas in the County. Density increases also require an attendant increase in the numbers and widths of roads and bridges.

The Greenbelt Commission respectfully requests that each city having Greenbelt land within its jurisdiction carefully review its land use policies with respect to areas adjacent to or forming a backdrop for the Greenbelt and consider maintaining such land in as low a development density as possible. In addition to protecting an open space investment for future generations, such planning provides a wider choice of life style within each community and the opportunity for wide recognition as part of an outstanding example of coordinated inter-jurisdictional open space planning.

GUIDELINE FOR
INTEGRATING DEVELOPMENT WITH THE GREENBELT CORRIDOR

The Santa Ana River/Santiago Creek Greenbelt Plan in its section on General Policies and Design Guidelines states:

"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."

Zoning presently exists within the Greenbelt Corridor which would allow many land-uses which might, if not properly integrated into the Corridor system, have an adverse impact upon the Greenbelt environment. The existence of property zoned for industrial, commercial or multi-family residential uses in areas immediately adjacent to the River and Creek trails need not be considered a threat to the Greenbelt environment, nor should the existence of the Greenbelt constitute a threat to the right of a property owner to profit by developing his property. Careful site planning and landscaping can enhance a project's value, both to the property owner and to the Greenbelt Corridor.

There are vacant parcels of land available which could be creatively developed into an infinite variety of commercial recreational uses.

At the outset of what is purported to be a continuing shortage of gasoline for non-essential travel, there is an indication that Orange County residents will be seeking recreation opportunities close to home, thereby opening an entirely new market for commercial recreation projects. By integrating commercial recreation facilities into the Greenbelt Corridor, such facilities become accessible through a variety of transportation modes, which would tend to increase the usage of the Greenbelt trails system, perhaps with a concurrent decrease in private automobile usage.

Recreational facilities could be located immediately adjacent to the River and Creek trails or at some distance, but tied into the trails system by linkages. One of the keys to encouraging trail access and usage is by the provision of bike racks and horse tie rails at convenient locations.

INDUSTRIAL USES:

The Greenbelt Corridor can be compatible with many types of industry, provided the particular project does not cause uncontrollable noise, air, water or visual pollution. Every effort should be made to retain green areas adjacent to the River and

Creek. Landscape screening should be provided at a height and density sufficient to screen unsightly operations or storage areas from public view.

Industries locating in or near the Greenbelt may avail themselves of the advantages offered by the alternative transportation mode provided by the bicycle trails. By integrating the Greenbelt trail system with their private circulation system, and by providing strategically placed bike racks, the industry may encourage the use of fewer automobiles by their employees, and may encourage the public to learn more about their product or method of operation.

An industry's greenspace may become a trail mini-rest stop, thereby providing an excellent public relations opportunity. A small information kiosk could be located in the greenspace, and in some kinds of industry, tours of the facility could be offered. Public reception rooms, executive offices and employee lounge areas may be oriented to benefit from the views of the Creek or River and contiguous greenspace.

COMMERCIAL USES:

Some of the most unsightly areas in Southern California are in strip commercial developments. Conversely, some of the most outstanding examples of site planning can be found in commercial centers in Orange County.

Greenbelts and commercial developments should be eminently compatible, since each, by its nature, encourages pedestrian traffic. Trail users enjoy the accessibility of restaurants, phone booths, restrooms and other conveniences offered by shopping centers.

Site development should include provisions for low-profile signing, with a minimum of sign visibility from trails. Walkways and bike trails should integrate easily with Greenbelt trail systems to encourage mingling of trail users and shoppers, without diverting Greenbelt trails into the shopping centers. Bike racks, shaded horse tie-rails and small orientation signs could be strategically placed for the convenience of bikers, hikers and equestrians. Business catering to the particular needs and interests of Greenbelt trail users could be located at one end of a shopping center, adjacent to the trail access. Special interest or theme shopping centers, such as farmers' markets or craftsmen's centers would be especially desirable in or near the Corridor.

RESIDENTIAL AREAS:

In areas zoned for residential use, within or adjacent to Greenbelt Corridors, a policy of permitting the lowest possible density of development should prevail.

In the more urbanized parts of the County, higher density residential zoning has been granted in or near the Greenbelt, so development standards should be instituted which will enable the projects to blend easily into the existing environment.

Major concerns under consideration from the viewpoint of residential developers include ensuring both the visual privacy and protection from trespass. Multiple dwelling units and cluster-type developments should be buffered from surrounding land uses by landscaped strips, berms, and attractive fencing materials. The landscaped strips may be integrated into the trail system, providing an alternative mode of transportation for residents and minimizing the visual impact of urbanization upon the Greenbelt.

Developers should endeavor to pull back from the trail systems and stay out of the floodplains wherever possible. In some parts of Orange County, entire cities are located within the Santa Ana River floodplain, but in many places, the floodplain zone is reasonably narrow so development within it in those areas can feasibly be avoided.

While mitigating measures can escalate development costs, they can measurably enhance property values. The Greenbelt trail system is a valuable amenity which, when linked by linear park systems to residential developments, can become an additional selling point for a prospective buyer or renter.

Lower density development creates less impact upon the ability of the environment to absorb the demands of urbanization than does high density development. However, generally speaking, lower density development means less land held in common or public ownership, so provision should be made for easements to allow interior circulations and linkages throughout the tract to separate horse and bicycle trails from automobile traffic.

Easements become increasingly important when an area is being developed into half-acre or larger lots, since large-lot neighborhoods tend to be horse-oriented, providing urgent need for linkage capabilities between local and regional trail systems.

A list of suggested recreational activities and projects is attached. Not all of the suggested projects would be compatible with the trail system if located in close proximity to the River or Creek, but, in properly buffered settings, even a use as noisy as a speedway could be considered as part of the overall trail system if it were tied in through a bike trail linkage.

Many of the suggested uses could be provided by private investment; others are, by nature, traditionally provided by public agencies. Some facilities could be provided by a combination of public and private investment through lease-back or concession agreements.

SUGGESTED RECREATIONAL ACTIVITIES AND PROJECTS WITHIN THE GREENBELT CORRIDOR

PARKS - Private or Public providing the following activities:

1. Archery
2. Baseball diamonds
3. Batting practice cages
4. Bicycle rentals
5. Botanical gardens
6. Campgrounds
7. Dog training areas (hunting and obedience)
8. Fishing ponds
9. Football field
10. Garden plots (rentals of space and tools)
11. Golf courses
12. Hang glider area (steep hillsides required)
13. Horse shoes
14. Hunting preserve
15. Lawn bowling
16. Model airplane and/or boat facilities
17. Mountaineering school (in rugged terrain--old sandpits?)
18. Paddle tennis courts
19. Picnic areas
20. Rest stops
21. Shooting range - target, skeet, trap
22. Shuffleboard courts
23. Ski hills (artificial snow)
24. Sliding hills (various natural and artificial surfaces)
25. Stables
26. Swimming and wading pools
27. Tennis courts
28. Tot lots (creative and traditional play equipment)
29. Trampolines
30. Water sports lagoons

NATURAL PRESERVES:

1. Aviaries
2. Bird sanctuaries
3. Ecologic preserves
4. Fish hatcheries
5. Marine preserves
6. Nature centers
7. Rock hound sites (mineralogists, geologists, paleontologists)

MAJOR PUBLIC ATTRACTIONS:

1. Arenas (indoor or outdoor)
2. Auditoriums
3. Band shells
4. Bowling alleys
5. Convention centers - Retreats
6. Country clubs
7. Dude ranches
8. Equestrian centers
9. Fairgrounds
10. Hansom cab rides through parks and trail system
11. Marinas
12. Motorcycle/recreational vehicle park
13. Restaurants
14. Skating rinks - roller (indoor or outdoor) or ice
15. Speedways
16. Stadiums
17. Theaters - open space or air
18. Theme amusement attractions (Knotts Berry Farm type)

EDUCATIONAL FACILITIES:

1. Aquariums
2. Craft centers (instructional and/or craft sales booths)
3. Exhibit centers at public facilities such as:
 - a. Water factory tour
 - b. MWD water quality education center
 - c. Sewage disposal plant tour
 - d. Factory information centers and tours

4. Historical monuments
5. Junior college or college campus
6. Library
7. Museum
8. Observatory
9. Planetarium
10. Schools - public, private, technical, etc.
11. School nature centers (experimental and orientational)
12. Youth centers:
 - a. Campgrounds
 - b. Day camps
 - c. Four-H/Future Farmers agricultural centers
 - d. Scout houses

GUIDELINES FOR THE ESTABLISHMENT OF STANDARDS FOR
CLEANLINESS AND APPEARANCE OF COMMERCIAL EQUESTRIAN STABLES
LOCATED WITHIN THE GREENBELT CORRIDOR

1.0 Intent and Purpose

It is the intent of these guidelines to provide standards for the maintenance of equestrian stables which will contribute to the health, well-being and safety of the community and encourage the establishment of a restful, rustic environment within the Greenbelt. Stables within the Greenbelt will be subject to inspection by an agency or agencies designated by the jurisdiction in which the stable is located, which may use the following guidelines:

2.0 Specific Development Standards

2.1 The maximum number of equines maintained in any one acre of land is not to exceed 25.

2.2 Each equine shall be provided with a minimum of 120 square feet of shelter.

2.3 Corral floors shall be graded to slope away from the center of the corral.

2.4 Each corral shall be provided with a combination manger and feeder and a permanently installed water system with automatic drinking controls. The watering cup or drinking device shall at all times be in a shaded area.

2.5 A back-siphoning device shall be installed to protect the public water supply. An approved pressure vacuum breaker is recommended on the water line serving the corrals. The vacuum breaker should be at least 12 inches above the highest point of water usage or an approved double-check valve may be acceptable.

2.6 The valves in all troughs, bowls, cups and other water sources shall be maintained properly to prevent leakage.

2.7 Automatic valves, or sanitary drains, if water flow is continuous, are necessary for large troughs or cups.

2.8 Paddocks and corrals should be properly graded and maintained to suit the master drainage plan so that rain water and/or trough overflow do not form ponds.

2.9 A minimum of one wash rack shall be provided, and shall have a permanent watering system, a concrete slab floor and be connected to an approved sewerage system.

2.10 Perimeter trees and shrubs are required for screening and dust control purposes.

GUIDELINES FOR THE ESTABLISHMENT OF STANDARDS FOR
CLEANLINESS AND APPEARANCE OF COMMERCIAL EQUESTRIAN STABLES
LOCATED WITHIN THE GREENBELT CORRIDOR

2.11 Stallions shall be maintained in a safe manner in order to provide protection for other animals and people.

2.12 Public toilets for each sex shall be provided.

3.1 Standards for Cleanliness

3.1 Manure removal: All stalls shall be cleaned a minimum of five times per week, with daily cleaning preferred.

3.2 Temporary placement of manure shall not exceed 48 hours, in an all concrete, 3-walled open storage bin, with removal to on or off-ranch use or approved method of destruction on a suitable schedule. Sizing of storage bins depend upon projected daily volume of wastes.

3.3 Feed mangers or boxes shall not be placed near water sources, since, damp, spilled feed attracts flies and encourages breeding of same.

3.4 All dry grains shall be stored in rodent-proof metal containers and hay shall be stored in a covered structure on a cement slab or on a raised wooden platform that maintains a minimum clearance of 18 inches above the ground.

3.5 Proper weed control shall be maintained on the entire premises.

3.6 Continuous dust control shall be maintained on the entire premises, through light watering of arenas and exercise pens.

3.7 Trash containers shall be conveniently located near an all-weather access road.

4.0 Appearance Standards

The intent of the Greenbelt Corridor Concept is to provide a relaxed, rustic environment within an increasingly urbanizing area. The following guidelines reflect that policy and are suggested as objectives.

4.1 Architectural Standards

4.1.a. All buildings and corrals will be maintained in safe, sanitary condition and in a good state of repair.

4.1.b. Architectural treatment and color schemes of exterior portions of all structures should be compatible with the rustic atmosphere of the Greenbelt trails.

PERMANENT COMMERCIAL HORSE FACILITIES STANDARDS
(2039-3/76)

S. 9380 PURPOSE. The purpose of this article is to establish standards for the keeping of horses in a permanent manner which will not endanger the health, welfare, and safety of the community and which will assure that horses are kept in a clean and sanitary condition and not subject to cruelty or abuse. Further, it is the intention of this article to assure that good stable management is a continuing practice.

S. 9381 USES PERMITTED. Horse facilities of a permanent nature are permitted by the Planning Commission in the ROS or on publicly-owned property subject to approval of a conditional use permit. Horse related facilities may include such uses as: commercial horse stables, rental stables, riding academies, etc.

Horse shows and rodeos may be permitted when approved as part of a special event permit by the Board of Zoning Adjustments.

S. 9382 DEVELOPMENT STANDARDS. MINIMUM BUILDING SITE. Permanent commercial horse facilities shall have a minimum building site of five (5) acres.

S. 9382.1 DEVELOPMENT STANDARDS. MINIMUM RIDING AREA. There shall be provided minimum riding areas based on one of the following alternatives:

- (a) One (1) acre of riding area for every fifteen (15) horses; or
- (b) A minimum of five thousand (5000) square feet of fenced riding arena area for every fifteen (15) horses up to one hundred (100). For those facilities providing for a density to exceed one hundred (100) horses, the minimum riding area shall include at least two (2) separate arenas.
- (c) Any combination of Sections 9382.1(a) and 9282.1(b) may be utilized to satisfy the minimum riding area requirements.

S. 9382.2 DEVELOPMENT STANDARDS. MINIMUM FRONTAGE. Where a horse stable abuts a public street or highway the minimum frontage shall be not less than one hundred (100) feet.

S. 9382.3 DEVELOPMENT STANDARDS. MAXIMUM BUILDING HEIGHT. The maximum building height shall be thirty-five (35) feet.

S. 9382.4 DEVELOPMENT STANDARDS. LANDSCAPING AND IRRIGATION. All required landscaping and permanent irrigation systems shall be subject to approval by the Department of Building and Community Development. Mandatory landscaped areas shall include:

- (a) A ten (10) foot planter along the front and exterior side property lines.
- (b) A ten (10) foot planter with perimeter trees and shrubs shall be provided along the side and rear property lines.

S. 9382.5 DEVELOPMENT STANDARDS. FENCING REQUIREMENTS. The entire site, other than riding areas, shall be fenced with a type of fencing designed to confine horses within the site in order to protect the mandatory landscaped areas from horse or pedestrian damage.

S. 9382.6 DEVELOPMENT STANDARDS. PARKING. The minimum development standards for all vehicle parking shall conform to Article 979.

S. 9382.7 DEVELOPMENT STANDARDS. YARD REQUIREMENTS. All structures including but not limited to stalls, corrals, barns, and maintenance enclosures except fences for pastures, grazing areas, riding arenas and watchman's quarters, shall maintain a minimum distance of three hundred (300) feet from any property that is zoned and master planned for residential use.

S. 9382.8 DEVELOPMENT STANDARDS. YARD SETBACK REQUIREMENTS. The following general yard setback requirements shall apply:

- (a) FRONT AND EXTERIOR SIDE YARD: The front and exterior side yard setback shall be a minimum of fifty (50) feet.
- (b) INTERIOR SIDE AND REAR: The interior side and rear yard setback shall be a minimum of twenty-five (25) feet.

S. 9382.9 DEVELOPMENT STANDARDS. CORRAL, RACKS AND STALLS. All corrals, racks and stalls shall be of consistent design and materials and shall be of noncombustible construction provided that the Fire Chief may modify these requirements where practical difficulties exist as long as the alternatives comply with the intent of the code.

S. 9383 HORSE CORRAL. Corrals designed for one horse shall meet the following requirements:

- (a) The minimum size corral shall be 288 square feet with a minimum dimension of twelve (12) feet and shall have a minimum five (5) foot high fence.
- (b) Each corral shall be provided with a permanently installed water system with automatic drinking controls.
- (c) A minimum of ninety-six (96) square feet of shelter covering with a minimum dimension of eight (8) feet shall be provided. Shelters shall be sloped away from corral centers, or rain gutters which lead to the outside of the corrals shall be installed.
- (d) Corral floors shall be graded to prevent ponding within the confines of the corral.

Corrals may be designed for more than one horse provided that the dimensions and other requirements set out in this section shall be increased to accommodate the number of horses to be confined in such corrals at any one time.

S. 9383.1 BOX STALL. Box stalls are optional and may be provided in lieu of horse corrals. Box stalls shall be a minimum size of 144 square feet and shall maintain a minimum dimension of twelve (12) feet.

S. 9383.2 WASH RACK. There shall be one (1) wash rack provided for every thirty-five (35) horses but in no case shall there be less than one (1) wash rack. Each wash rack shall meet the following requirements:

- (a) The minimum size wash rack area shall be six (6) feet wide and eight (8) feet long.
- (b) Each wash rack shall be provided with a permanent watering system.
- (c) Each wash rack shall be constructed with a concrete slab flooring.

- (d) Each wash rack shall be connected to an approved sewage facility and shall be provided with a back siphon device on the water source.
- (e) Wash racks may be designed for more than one horse provided that the dimensions and other requirements set out in this section shall be increased to accommodate the number of horses to be washed at any one time.

S. 9384 GENERAL OPERATING REQUIREMENTS. The following requirements shall govern the operation of permanent commercial horse facilities:

- (a) The land surface of horse enclosures shall be graded above the surrounding land surface. A grading plan shall be submitted as a part of the conditional use permit.
- (b) Exercise rings shall maintain a minimum dimension of thirty (30) feet.
- (c) Arenas shall maintain a minimum of ten thousand (10,000) square feet with a minimum dimension of eighty (80) feet.
- (d) The maximum number of horses shall be twenty-five (25) horses per acre.
- (e) Storage and tack areas shall be provided and designated on the plot plan.
- (f) Trash solid waste disposal areas, and dumpsters shall be designated and conveniently located with an all-weather road access provided.
- (g) Continuous dust control of the entire premises shall be maintained and be subject to the regulations contained in Chapter 8.24 of the Huntington Beach Municipal Code. A method of water sprinkling for arenas and exercise pens shall be provided and shall be indicated on the site plan.
- (h) A permanent single family residential unit shall be provided on the site and shall be subject to approval by the Planning Commission as a part of the conditional use permit. A watchman shall be on duty twenty-four (24) hours a day.
- (i) A back-siphoning device shall be installed to protect the public water supply. An approved pressure vacuum breaker is recommended on the water line serving the corrals. The vacuum breaker shall be at least twelve (12) inches above the highest point of water usage or an approved double-check valve may be acceptable.
- (j) Security lighting shall be provided and all utilities shall be installed underground.
- (k) A log containing the name of every horse, its location in the facility, the owner's name and address, and the names and addresses of persons to be notified in case of emergency shall be kept in the watchman's quarters and readily available when needed.
- (l) All fire protection appliances, appurtenances, emergency access, and any other applicable requirements, pursuant to Chapter 17.56 of the Huntington Beach Municipal Code, shall meet the standard plans and specifications on file in the Fire Department.

S. 9385 FLY AND INSECT CONTROL. Fly and insect control shall be subject to all city and county regulations.

- (a) Method of disposal of stable wastes shall be indicated as a part of the conditional use permit and shall be subject to approval by the Planning Commission.
- (b) Feed mangers or boxes shall not be placed near water sources.

S. 9385.1 RODENT CONTROL. All dry grains shall be stored in rodent-proof metal containers, and hay storage shall be covered. Bulk or commercial amounts of grain or hay shall be located no closer than fifty (50) feet to any enclosure or building where horses are quartered.

S. 9387 WATER MANAGEMENT. For effective control of fly-production sources, the following shall be provided:

- (a) A nonleak valve for all troughs, bowls, cups, and other water sources.
- (b) Automatic valves or sanitary drains, if water flow is continuous, shall be provided for large troughs or cups.
- (c) In paddock and corrals, the developer shall properly grade the earth surface to suit the master drainage plan so that rain water trough overflow does not form ponds.

S. 9388 DUST CONTROL. Continuous dust control of the entire premises shall be maintained and subject to the regulations contained in Chapter 8.24 of the Huntington Beach Municipal Code.

S. 9389 STABLE MANAGEMENT. The management of commercial horse stables shall meet the requirements of the responsible county agency.

S. 9389.1 ENFORCEMENT. The responsible county agency, as designated in Chapters 8.12 and 8.24 of the Huntington Beach Municipal Code, and Article 902 of the Huntington Beach Ordinance Code, is hereby vested with the duty and authority to inspect regularly all commercial horse stables within the city. Report and recommendation by such agency shall be forwarded to the Director of Building and Community Development.

PROPOSED FOR ADOPTION

By

BOARD RESOLUTION

EQUINE STANDARDS FOR COMMERCIAL STABLES

The intent of this proposed Resolution is to establish standards for the keeping of equines in a manner which will not endanger the health, peace, or safety of the community and which will assure that equines are kept in a clean and sanitary environment and are not subjected to suffering, cruelty, or abuse.

It is further the intention of the County to provide for routine inspections of commercial stables to assure that the regulations set forth by this article are being vigorously maintained.

Section 1.00 Definitions. The definitions contained in Article 1 of Division 1, of Title 4, and article 1 of Division 1, of Title 5, of the Codified Ordinance shall apply to this Resolution unless it is apparent from the context hereof that some other meaning is intended. In addition, the following definitions shall apply:

Section 1.01 Licensee. The legal owner or person in actual control of any activity involving animals.

Section 1.02 Owner. Actual owner of animal, legal ownership is established by a person being registered as the owner on a license or other legal document.

Section 1.03 Primary enclosures. Means any structure used to immediately restrict an animal or animals to a limited amount of space.

Section 2.00 Administration.

Section 2.01 Type and number of animals. Applicant, when applying for a license, shall furnish the Director with a list of the type(s) of animals proposed to be kept or used for any purpose, together with the estimated maximum number thereof. The Director shall establish the kind and maximum number of animals authorized to be maintained on the premises.

Section 2.02 Regulations to be issued. A copy of these regulations shall be issued to each applicant for a license; the applicant shall acknowledge receipt of such standards and shall agree to comply with same by signing a form provided for the purpose by the Director. Such form shall be filed with the application for license.

Section 2.03 Zoning. The applicant shall demonstrate that the proposed use of the property complies with the zoning regulations of Orange County.

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Section 2.04 Fee. A nonrefundable application fee of \$25.00 shall be charged for processing an application for any commercial stable license. The application fee shall be credited to the license fee if the license is issued.

Section 2.05 Changes to be reported. Licensee shall report in writing any changes in address, ownership, or management to the Director at least fifteen (15) days prior to such change. (Zoning applies to the property and licensing applies to the licensee or applicant, regardless of the ownership of the property.)

Section 2.06 Records to be kept. Licensee shall maintain a register of the names and addresses of persons from whom animals have been received from and to whom animals have been rented or leased. This information shall be available to the Director upon demand.

Section 2.07. License to be displayed. Each licensee shall display the license issued by the Director in the office, reception room, or other area accessible for inspection.

Section 2.08. License expiration. Each license shall automatically terminate on the expiration date shown thereon unless, on or before such date, application for renewal has been submitted and approved as herein provided.

Section 2.09 Inspections. All licensees, upon being granted any animal facility license, do thereby consent and agree to the entry upon the premises described in the license or application by the Director or his authorized deputy for the purpose of conducting such inspections as he may deem required.

Section 3.00 Equine facility operating standards.

Section 3.01 Construction and maintenance. Housing facilities for commercial stables must be constructed, equipped, and maintained so as to continuously provide a healthful and sanitary environment, as approved by the Director, for the animals kept or to be kept therein.

Section 3.02 Manure management. Licensee shall initiate and maintain a program of proper manure management. Licensee shall provide for the daily collection of manure from in and around corrals and access areas. Manure shall be stored in covered containers. Containers utilized for manure storage shall be cleaned and emptied as required. However, in no case shall manure be permitted to remain in any container for a period exceeding seven (7) days.

NOTE: Thin layer spreading of manure on corrals and riding arenas shall be subject to the approval of the Director.

Section 3.03 Premises to be kept clean and sanitary. Licensee shall remove extraneous debris and rubbish from facility grounds; trash solid waste disposal areas, and dumpsters are to be designated and conveniently located with an all-weather road access provided.

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Section 3.04 Food and storage. Licensee shall be responsible for the daily care and maintenance of all equines maintained exclusively on the premises for which a license or permit has been issued, including but not limited to the adequate supply of food and water. All dry grains and pellets shall be stored in rodent-proof containers. Hay shall be stored on a raised platform that maintains a minimum six (6) inch clearance above the surrounding area. Hay shall be kept covered as to protect it from the elements.

Section 3.05 Dust control. A program of continuous dust control of the entire premises shall be provided. A method for light watering of arenas, and exercise areas shall be maintained. In lieu of watering, chemical control of dust may be permitted.

Section 3.06 Vector control. There must be adequate and effective means of control of insects and rodents and such control must be vigorously maintained at all times.

Section 3.07 Combustible materials. Combustible materials and or solutions shall be maintained a minimum of twenty-five (25) feet from all primary enclosures.

Section 3.08 No smoking areas. A minimum of two (2) "No Smoking" signs shall be posted on the facility grounds prohibiting smoking in the following areas:

- a. Within all stalls.
- b. Within 10 feet of manure or trash dumpsters.
- c. Within 25 feet of hay or tack areas.

Section 3.09 Weed control. Weeds shall be removed from in and around corrals and access areas.

Section 4.00 Equine facility construction standards.

Section 4.01 Construction and maintenance. Housing facilities for commercial stables must be constructed and maintained so as to continuously provide a healthful and sanitary environment as approved by the Director for the animals to be kept or to be kept therein.

Section 4.02 Equine corrals shall conform to the following minimum standards: There shall be one corral provided for each equine, except that a mare and foal may be corralled and maintained together for a period not to exceed twelve (12) months.

Section 4.03. Corral area. The corral shall have a minimum area of two hundred and sixteen (216) square feet with a minimum dimension of twelve (12) feet, and shall have a fence with a minimum height of five (5) feet. Each corral shall be provided with a feeder and a permanently installed water system with automatic drinking controls.

In lieu of the automatic water system described above, water containers with a minimum capacity of twenty (20) gallons may be utilized. Water containers shall be cleaned as often as required. A clean fresh supply of water shall be available to the animals at all times.

NOTE: Containers are to be completely emptied, cleaned, and refilled on a weekly basis during the summer months of June through September.

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Section 4.04 Shelter. Each corral shall be provided with a minimum of ninety-six (96) square feet of shelter, with a minimum dimension of eight (8) feet. Shelters shall be sloped away from corral centers, or rain gutters which lead to the outside of the corral shall be installed. Corrals and related facilities shall be kept in good repair in order to protect the animals from injury and to facilitate the prescribed animal husbandry practices set forth. Corral surfaces shall be graded and sloped to allow for proper drainage.

Section 4.05 Box stalls. Box stalls are optional and may be provided in lieu of equine corrals. Box stalls shall have a minimum area of one hundred and forty (140) square feet, with a minimum dimension of ten (10) feet. Bedding material such as shavings, sand, sawdust, etc. should be changed as regularly as necessary to facilitate the prescribed animal husbandry practices set forth.

Section 4.06 Pastures and paddock areas. In lieu of providing equines with a limited amount of space as outlined in the preceding subsections dealing with equine corrals and box stalls, equines may, with the approval of the Director, be boarded in pasture or paddock areas. If one or both of these alternative methods is provided, it shall be fenced in compliance with both State and County codes pertaining to livestock fencing. Feed bins and water troughs shall be provided. Natural shelter, such as coniferous evergreens, may be considered adequate shelter for the purpose of this section.

Section 5.00 Humane treatment of animals.

Section 5.01 Good Citizenship. Licensee shall allow no animal to constitute or cause a hazard, or to be a menace to the health, safety, or peace of the community. Licensee shall keep all animals in such manner as may be prescribed to protect the animals from the public and the public from the animals.

Section 5.02 Cruelty. The licensee shall take every reasonable precaution to insure that animals are not teased, abused, mistreated, annoyed, tormented, or in any manner made to suffer by any person or means.

Section 5.03 Escaped animals. Licensee shall make every reasonable effort to recapture every animal that escapes. Escapes of animals wherein the recapture of the animal cannot be immediately accomplished shall be reported to the Director.

Section 5.04 Owner notification. Licensee shall immediately notify the owner of any animal boarded or held on consignment should the animal refuse to eat or drink beyond a twelve hour period, is injured, becomes sick, or dies.

STANDARDS AND CRITERIA FOR BICYCLE TRAILS

The following is a summary of the STANDARDS and CRITERIA for bicycle trails as published in 1972 in "A Feasibility Study of a Countywide Bicycle System in Orange County." (Note: The concepts presented are considered as potentials and it is recognized that more detailed and specific standards are necessary and will be developed as additional experience permits).

Grade: A grade of 6 percent is considered the maximum for bicycle facilities, with level spots for rest areas provided at the top of any grade. In addition to these areas, level areas along the route are suggested if long grades of 4 to 6 percent are unavoidable.

Length: The average cyclist can sustain speeds of approximately 10 miles per hour, varying with the type of bicycle being used. A short path, 2 to 5 miles in length can, therefore, be traversed in less than 30 minutes. Interest in short routes will generally decrease after the second or third use. Longer paths utilizing diverse riding conditions and providing a variety of panoramas are very desirable, since they will generally have more repeated use. Both long and short trails should be included in any system to provide the greatest variation of situations possible.

Traffic Direction: Facilities should accommodate two-way bicycle traffic wherever it can be safely separated from vehicular traffic. According to the Vehicle Code, bicycles must travel in the same direction as vehicular traffic within the roadway. Use of two-way facilities would be more economical than two one-way facilities since both to and from traffic could be provided by the same facility allowing bicyclists to return to their point of origin from a location on the route, rather than having to complete a "loop" circuit.

Width: The optimum widths for both trails and ways are eight feet for two-way traffic and four feet for one-way traffic. Larger than optimum widths may be utilized to provide passing zones or rest areas or may be implemented in areas where heavy uses are anticipated. The fact that paths which are eight or more feet wide will accommodate maintenance vehicles should be considered prior to facility construction.

Surfaces: The surface should be constructed to comfortably support the weight of the cyclist and any vehicles (maintenance) which will be using the trail or way.

Safety: Safety is of the utmost importance in considering bicycle facilities. Although bicycle trails are preferable to bicycle ways (since they would be safer than a mix of bicycles with vehicular traffic), an entire system in Orange County cannot be all trails, and safety factors pertaining to roadways must be of primary concern. Traffic separation is the principle factor to be considered in roadway safety. Noted below are some safety concepts suggested for various street types. The extent to which these concepts are applied is dependent upon the volumes and speeds of vehicular traffic and bicycle traffic.

1. Residential Streets

Speeds and volumes on residential streets are normally not high enough to require traffic separation. Signing of the route should be sufficient to

designate the street as an established bicycle route thereby informing motorists that bicycles will be using the same facility. It is assumed that motorists will then extend the proper courtesy and use good driving habits to insure the safety of both themselves and the bicyclists.

2. Arterial Highways

Commuter or feeder streets and arterial highways will require separation between vehicular and bicycle traffic in addition to route signing. The bicycle facility should be located well outside the traveled way and where possible it should be incorporated in the parkway behind the curb line.

On the basis of accident experience, the Road Department has emphasized that bicycles and motor vehicles should not be mixed and that use of painted lines and signs do not provide adequate or positive protection for bicyclists against drunken drivers, out-of-town drivers who are not familiar with bicycle signing, inattentive drivers, and careless speeders.

Further, while automobiles on arterial highways travel at speeds of 35 to 55 mph, most bicyclists travel at not more than 10 mph. With this speed differential, there is a strong chance of serious, if not fatal, injury to the bicyclist who accidentally swerves into the traffic (most common among children or teenagers through poor judgment or horseplay). For this reason, the Road Department recommends that, on arterial highways, bicycles be separated as far as possible from motor vehicle traffic. This may mean paving the entire eight foot parkway to provide both a four foot sidewalk and a four foot bicycle trail. In some cases this would eliminate landscaping in the parkway and would not be aesthetically desirable. However, aesthetics have to be weighed against the safety of children and adult bicyclists. Where possible, the solution is to provide more right-of-way so that landscaping can also be provided.

3. Trails

Safety aspects regarding trails are few, and not primarily related to the facility but rather to its uses and users. Once established, the trails must remain solely for bicycles (pedestrian uses may be included), with minibikes, motorcycles, etc., which would create extremely unsafe conditions, completely excluded. Also, equestrian uses should not be permitted within 20 feet of the bicycle facility since compatibility between horses and bicycles is questionable.

4. Bicycle Safety Education

Safety is a major factor not only in consideration of the facilities themselves, but also of the users of the system. Knowledge of bicycle regulations by the general public appears to be very minimal although safety education for school children is a significant element of both school curricula and police department activities. Education, however, is dependent upon local agencies and has not as yet been a coordinated operation. With the establishment of a countywide system, education of both safety and bicycle regulations will be necessary on a much greater scale than that which presently exists. Education of adults as well as children must be accomplished to insure safe and proper use of the system. A concentrated effort throughout the County, combining the resources of local agencies, schools, civic organizations and the communications media should be developed.

Accessibility: One of the key factors in establishment of any recreation system is its availability to the population. In determination of any proposed bicycle route the accessibility to it must be considered and should be established so that optimum participation by the residents is provided. The nature of bicycle trails and ways are such that accessibility should not be a significant problem if existing or proposed recreation facilities and roadways are utilized as focal points in the system.

Linkage: Although bicycle routes will provide recreation potential in themselves, use of the routes as linkages between different recreation areas, neighboring communities, significant points of interest, or between communities and recreation areas should be considered. Analysis of proposed routes from this perspective would allow multiple use of the route serving transportation as well as recreation purposes.

Trail Attraction: Trail attraction will have perhaps more effect upon repeated use of the proposed route than any other single factor. It encompasses many of the criteria previously presented and is in general a statement regarding the physical characteristics of the trail itself. Included in this criterion is consideration of the comfort, rideability, safety and uniqueness of the trail or path. Surface smoothness (material) and general condition (absence of potholes, cracks in the surface, etc.) are the primary aspects of comfort. Rideability covers topography (grades), ease in handling (width) and layout (bends, turning radii). Safety includes intersection systems, traffic separation, and condition of riding corridors (zone in which bicyclist operates). Variation in grade and surface structure and layout, including weaves and bends, separation of two-way traffic by natural means (trees, rocks, etc.), breaks in path or trail continuity, etc., are elements to be considered under uniqueness.

Aesthetics: Perhaps the most difficult and by far the most subjective criterion is that of the aesthetic value of a route. It differs from trail attraction in that aesthetics relate to the area within which the route is placed, and should be of primary importance when priorities of bicycle ways and trails are established.

Because aesthetic values vary with each individual, a particular checklist cannot be presented. In general, however, trails and ways should be established in areas where visual amenities and scenic vistas predominate providing a pleasing and satisfying environment. Although wooded regions, lazy country roads and beaches are generally thought of as amenity areas, urban regions encompassing unique forms of architecture, or cultural and historical significance should also be considered from the aesthetic viewpoint.

The last few criteria noted above are most applicable to recreation oriented routes. However, where possible and practical these criteria should be considered when evaluating routes emphasizing transportation, so as to enhance the quality of the bicycle trail or way. Similar emphasis is now being placed on the planning and development of scenic highways, where analysis of the adjacent environment and visual amenities as well as safety, convenience, cost and direct route determination are included.

STANDARDS FOR EQUESTRIAN TRAILS

The following is a summary of standards for the development of equestrian trails, as provided in the Orange County 1974 publication "Trails for the Orange Park Acres, Cowan Heights, El Modena Area."

Trail Easement Widths: A 10-ft. graded trail in a 15-ft.-wide easement shall be the standard width. In cases of steep transverse side slopes, wider easements may be required. The 10-ft. graded width should accommodate vehicles used for emergency and maintenance purposes.

Trail Construction:

1. Trails not adjacent to public streets:

a. Clearance. The trail shall be free from overhead obstructions from ground level to a height of 10 ft.

b. Grade. The trail need not be graded level in the direction of the trail. A rolling and wandering path is generally preferable to a straight and level condition. While rolling terrain is desirable, trail grade of over 20% is not acceptable except in extreme cases. Grades of 15% shall be limited to 500 ft. in any one reach. The maximum grade allowed for distances greater than 500 ft. shall be 10%.

c. Cross slope. The trail shall be constructed to provide good drainage. A cross slope shall be maintained, not to exceed 1 inch in 18 inches. Berms and ditches shall be utilized to prevent washouts of fills and cuts.

d. Slope cuts. Cut slopes shall not be steeper than 2:1.

e. Fill cuts. Fill slopes shall be at least 2:1.

f. Fencing. In proposed tract developments, fencing shall be installed of a type proposed by the developer subject to approval of the planning commission.

g. Surfacing. In general, in undeveloped areas native soil shall be acceptable. Trails within proposed tract developments will require surface treatment such as decomposed granite, eucalyptus and/or bean pod mulch to minimize dust.

2. Trails adjacent to public streets:

a. Trails adjacent to public roadway shall be constructed in accordance with plans and specifications approved by the Road Commissioner of the County of Orange and meeting the standards of this section as closely as practicable.

b. Additional rights-of-way (15 ft. minimum) will be required from developers or County, as applicable, for trail purposes on arterial highways.

c. On arterial highways not presently constructed to ultimate standards, a graded 15-ft. shoulder adjacent to the roadway is recommended on an interim basis.

d. On local streets and fully improved arterial highways, it is recommended that the parking lane be signed and striped for an equestrian trail, with parking prohibited.

3. Signs: The proposed local riding and hiking trail system shall include the following types of signs:

a. Trail Signs shall display the symbol of a horse. The metal sign shall be fastened with brackets to a metal post set in concrete. Metal posts are recommended because much of the trail area is subject to fire hazard. Recommended spacing 1,000-ft. intervals along the trail.

b. Trail Entrance Signs shall be posted at trail entrances, probably at street crossings. These signs shall consist of redwood posts set in concrete with lettering burned on redwood boards. All signs shall state "Riding/Hiking Trail." One post could support several signs where multiple crossings occur.

c. Crossing Signs warning motorists of crossings, probably set 300 ft. before the crossing, shall be posted. The signs shall follow the International Code by showing a horseman on a horse with the words "Equestrian Crossing" below, and they shall otherwise conform to the Uniform Traffic Manual. The signs shall be installed by the Road Department.

d. Prohibition of Motor Vehicle Signs shall be installed at trail entrances.

e. Cost. Signs shall be purchased by the County and furnished to the developer for installation.

GENERAL CRITERIA FOR TRAIL REST STOPS

The Santa Ana River/Santiago Creek Greenbelt Plan calls for the creation of a trail/open space/recreation system along the 37 miles of the River and Creek. The trail system will require a series of rest stops spaced at approximate points along the River and Creek.

As a minimum, each rest stop should provide water for trail users, trash containers, restroom facilities, bicycle racks, and shaded rest areas. For equestrian use, hitching posts and a means for providing water for horses should be included. Other facilities such as parking areas for trail access, and picnic areas with benches and tables, may be provided where funds are available and/or wherever feasible.

In determining the need and location of trail rest stops, various factors have to be considered. An area of major concern is cost of establishing a rest stop, and every effort should be made to select sites where the lowest possible costs may be realized. These cost factors include: site acquisition, design of the facility, development or construction, and operation and maintenance.

1. Site acquisition. Costs for site acquisition may be eliminated by using existing or planned facilities, which are adjacent to or in close proximity, to the Santa Ana River/Santiago Creek trail system. Where rest stops are needed, and park sites are not available, sites on publicly owned land should be incorporated into a plan.

2. Design. Rest stops should be of a design that blends in with the existing environment and yet is low in cost. Design plans originated or contributed to by

volunteer action should be encouraged. Designing of rest stops should also allow facilities to be easily viewed by adjacent roads or streets which are patrolled. This will decrease the possibility of vandalism.

3. Development. The use of existing parks will not require additional development costs except possibly for trail linkages. Planned parks will not require any additional funds above those projected for the facility development. Any rest stops that require new construction should incorporate building materials that blend with a natural environment, have a low maintenance cost and are less susceptible to vandalism.

4. Operation and maintenance. Restroom facilities located in planned or existing parks will have the lowest operation and maintenance costs due to the availability of committed maintenance personnel. A rest stop that is independent of a park would constitute a higher maintenance cost than a rest stop located in a park facility. Also, rest stops that are located outside parks could have a higher rate of vandalism, due to less patrolling and fewer people to witness any vandalism.

In the development of a Commission policy establishing criteria for rest stops, every effort should be made to select sites within planned or existing park facilities, or if this is not feasible, on publicly owned land. In the trail system, rest stop facilities should be established at intervals of approximately 5 miles.

GREENBELT COMMISSION
625 North Ross Street, Suite B129
Santa Ana, California 92701

4 April 1974

The Honorable Board of Supervisors
County Administration Building
515 North Sycamore Street
Santa Ana, California 92701

Subject: Maintenance and patrolling of the trails system
throughout the Santa Ana River and Santiago Creek
Greenbelt Corridor.

Synopsis: Maintaining and patrolling the trails system throughout
the Santa Ana River and Santiago Creek Greenbelt Corri-
dor, may well be accomplished with greater efficiency
and lower costs under a single agency management pro-
gram than by several separate jurisdictions.

Gentlemen:

Within the Santa Ana River and Santiago Creek Greenbelt Plan, which
was adopted by your Board on 23 June 1971, as a component of the
Orange County Master Plan of Land Use, it is emphasized that bicy-
cle, equestrian and walking trails along the river and creek are
the backbone of the entire greenway and recreation system. When
current plans become a reality, the trails system will extend the
length of the river, from its mouth to the County line, and along
the creek from its confluence with the river on up to the Villa
Park Dam.

The principals involved in the planning and construction of the
trails include the Orange County Flood Control District (OCFCD),
Harbors, Beaches and Parks District (HB&PD), and the Orange County
Water District (OCWD). To date, bicycle and equestrian trails have
been completed from the rivermouth to Katella Avenue, under the
direction of the OCFCD. The OCFCD and OCWD are jointly planning
the construction of river trail segments from Tustin Avenue to
Imperial Highway and Katella Avenue to Tustin Avenue, with esti-
mated completion dates being the summer of 1974 and spring of
1975, respectively. The remaining portion of the river trails sys-
tem, i.e., from Imperial Highway to the County line, is being planned
by HB&PD. Detailed planning and construction of the trails along
the Santiago Creek will be another multi-jurisdictional effort.
Time schedules have not yet been determined for the latter two por-
tions of the trails system.

When completed, the trails system will be an extraordinary and
unique recreational facility, as well as a means of access to

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Other facilities located within or linked to the 36 miles of greenbelt corridor. The extent, however, to which this system will be used, and enjoyed, will be directly related to how well it is maintained. It was toward this end that the Greenbelt Commission directed its staff to inquire into the actual and planned maintenance of the trails system.

On 21 March 1974, the Greenbelt Coordinator met with representatives of the OCFCD, HB&PD, OCWD, County Planning Department, County Road Department and the cities of Orange and Santa Ana. The purpose of the meeting was to discuss the size of the present and planned trails system, current maintenance problems and procedures, and the relative merits of a single agency versus a multi-jurisdictional maintenance program. A summary of the experience gained to date and problems to be considered in a maintenance program is as follows:

- a. Bicycle trails must be swept as often as necessary to keep clear of loose sand and dirt.
- b. Dust control must be maintained, especially in areas where equestrian trails are on high ground (levees) overlooking private homes and swimming pools.
- c. Equestrian trails require blading to maintain proper grading and leveling of irregular surfaces.
- d. Trail sign maintenance includes repairs as well as replacement of damaged or missing signs.
- e. Graffiti on signs or other surfaces along the trails must be removed or obscured.
- f. Fencing and barricades must be maintained by repairs or replacement.
- g. Landscape maintenance requirements include replacement of bushes which have been run over or pulled out, and trimming of bushes and low tree limbs to maintain a safe clearance for riders.
- h. Trail striping must be maintained.
- i. The grading of shoulders of trails and access links must be maintained.
- j. Trail maintenance must be subordinate in priority to operational requirements, e.g., personnel, equipment and time on site needed for maintenance of a flood control facility would ordinarily receive priority scheduling over trail maintenance.

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- k. Patrolling of the trail system is required to ensure proper use. Unauthorized vehicles must be denied access, bicycles and equestrians limited to their respective trails, and general protection of the public and facilities must be provided.
- l. Equipment must be provided, and maintained, that is suitable for trail maintenance. Improper equipment, e.g., a sweeper too large for a bicycle trail, can damage the trail edges and accelerate wear and the need for repairs.
- m. Personnel must be trained in trail maintenance and now often perform such functions as additional duties or as extra-help.
- n. Trails which are established by a painted line on a paved road system can be maintained by a jurisdiction's normal road maintenance department or contractor.
- o. Certain areas may require a higher or more costly level of maintenance than others, thus the cost of maintenance for like-size areas may vary.

It was generally agreed that an off-road trails system, which passes through several jurisdictions, could be maintained more efficiently by a single agency than by the individual efforts of the several jurisdictions. A single agency program would enhance the likelihood of a consistently higher level of maintenance, throughout the trails system, with an overall reduction of cost.

A single agency program could be established by participating jurisdictions entering into a joint powers agreement. The agreement would provide for the preparation of specifications describing the type, quality and extent of work to be performed; the awarding of a contract for accomplishment of work; the designation of a County department or district to manage the contract, and the funding method - which would most likely be on a pro rata basis. The agreement could provide for expansion of the area covered and work to be done, and for the admission of new participants. This latter provision may be especially advantageous in view of the Master Plan of County-wide Bikeways, which plans for over 500 miles of bike trails in unincorporated areas. Various cities may also desire to join in the program as they develop bike trails but do not have the in-house maintenance capability.

The need for a well managed, high quality, and timely-responsive maintenance program may be supported by the likelihood of successful law suits filed by citizens who sustain personal injuries from accidents attributable to improper maintenance of the trails system. The

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Contract could include a provision for the contractor to carry liability insurance for accidents caused by improper maintenance.

Responsibility for managing the maintenance program could well be assigned to a County organization such as the currently considered "Environmental Management Agency (EMA)." The time required, however, for the establishment and operational effectiveness of the EMA, or some other yet to be established agency, may not be compatible with the need for a well managed and effective trails maintenance program.

It is the opinion of the Greenbelt Commission that responsibility for managing a trails maintenance program should be assigned at the earliest to an existing County department or district. The program could then expand and develop along with the expansion and development of the trails system. Then, when an EMA, or equivalent organization is established, the program could be reassigned to or absorbed by that agency.

RECOMMENDATIONS:

1. Authorize the County Counsel to prepare an agreement between the County, the OCFCD, HB&PD, OCWD, and any other jurisdictions that may desire to participate, for the establishment and operation of a single agency managed trails system maintenance program.
2. Assign responsibility to the County district or department with the most relevant experience, to develop the specifications for an expanding trails system maintenance contract.
3. Designate a specific County district or department to budget for and manage the trails system maintenance program in FY 1974-75.

Respectfully submitted,



DONALD D. SHIPLEY
Chairman, Greenbelt Commission

DDS:EJB:ee

METHODS FOR ACQUIRING USE OF LAND FOR THE GREENBELT

There are several methods for acquiring land, or its use, for greenbelt purposes. One method is the acquisition of the full title of the land, which allows for the most complete control of its use, however, the cost is often prohibitive. The right of use of land, with some likely limitations, may be obtained at less cost. A description of the variations of these methods is as follows:

1. Acquisition in Fee. This method involves the purchase of the full title of the land, and allows control over its present and future development or nondevelopment. In addition to outright purchase, acquisition may be accomplished by:

a. Purchase Through Eminent Domain. This provides a means whereby the land may be purchased for public use and benefit, provided the owner receives reasonable compensation. This condemnation procedure has been used for acquisition of park lands, and pending legislation may allow its use for open space.

b. Purchase - Saleback. The land is purchased and then resold with certain covenants or restricted rights. This allows the protection of the land from undesirable uses, and facilitates its development and maintenance for desirable uses, such as: golf courses, riding stables, agriculture, etc.

c. Purchase - Leaseback. After purchase the land is then leased to a private individual or organization to develop, operate and maintain for various greenbelt oriented recreational uses. Taxes may or may not be a responsibility of the long-term lessee, based on the possessory interest.

d. Lease - Leaseback. After land is purchased the jurisdiction leases it to private enterprise for development of a greenbelt oriented recreational facility, which is then leased back to the jurisdiction for operation.

e. Installment or Negotiated Purchase. The land and certain rights to its use are acquired in segments at its current value without the need for a one-time expenditure equal to the total value.

f. Life Estate. This purchase with the return of life interest allows the seller to retain and use the property during his lifetime. This type of acquisition allows ownership and control of the property until a future date when funds may be more available for greenbelt development.

g. Land Exchange. This method does not require funding, however, there may be difficulty in finding properties of like value for the exchange.

h. Purchase of Surplus State or Federal Land. When surplus government land is purchased by a local public agency for parks or recreation, a discount of 50 percent of the market value is often allowed.

i. Tax Foreclosure. Land acquired as a result of tax delinquency may be used for greenbelt purposes.

j. Dedication Requirements. Jurisdictions may require developers to dedicate land for park (greenbelt) uses as a condition of approval for development of a new tract.

k. Gifts. Individuals may give or sell land at reduced or nominal costs to jurisdictions. The public receives the land for park purposes at little or no cost and the donor receives a tax benefit.

1. Land Trusts or Stewardships. Non-profit organizations, like the Nature Conservancy, maintain revolving funds for this purpose.

2. Acquisition in Less Than Fee. Rather than purchase the entire fee simple interest in a parcel of land, the jurisdiction may acquire a single or any combination of rights. These may include:

a. Development Rights. This allows retention of an area in an undeveloped or non-urban use such as agriculture or watershed. A jurisdiction may acquire the development rights from the owner so that the owner is limited to non-development uses and is taxed accordingly.

b. Easements. An easement represents an interest in land of another person that entitles the owner of such interest to a limited use or enjoyment of the land. Such easements may be secured by outright purchase, installment purchase, gifts, or as a condition of approval for development. The land will generally continue to be maintained by the owner and remain on the tax rolls, but will receive property tax consideration in relation to the effect of the easement on the market value of the land. Types of easements include: trails, conservation, recreation, wildlife preserve, and access.

c. Leases. A jurisdiction may lease land with recreational or open space value. Options may be obtained for future purchase as part of the lease, with interim operation of recreational facilities.

d. Combined Uses Among Public Agencies. Permission is granted by license from various utility companies for open space uses on utility rights-of-way and/or properties. Other sources of open space lands for joint public use are school districts, county road departments and flood control districts.

3. Incentive Programs. These methods allow a local jurisdiction to control land use without acquiring title to any of the rights of the land.

a. California Land Conservation Act (Williamson). This act provides a property tax benefit for agricultural lands where the owner agrees to keep the land in agricultural use for a contracted period of time. The act is also usable for recreation, open space, scenic corridors, wildlife habitats, and wetlands.

b. Density Benefits for Open Space. Increase in density may be granted in trade for the extension of various open space lands to areas otherwise suited for development.

4. Zoning and Land Use Controls. Subdivision and zoning ordinances, enacted and administered by a jurisdiction, can assist in establishing and preserving land for open space and greenbelt purposes without a requirement for public ownership.

SOURCES OF FUNDING FOR GREENBELT PROJECTS

1. FEDERAL

a. Land and Water Conservation Fund. This fund is administered by the Bureau of Outdoor Recreation under the Department of the Interior. It is the primary source of funds available to state and local governments for the acquisition of outdoor recreation areas, and the development of recreational facilities, with an emphasis on water-oriented projects. Bicycle trails deemed to be of regional significance and/or serving recreational facilities are eligible for funding. Projects are funded at 50 percent of total cost with a local match required. Applications for funds are to be submitted by 1 September of each year to the State Department of Parks and Recreation.

b. Code 710 Recreational Program. This program was established by the U.S. Army Corps of Engineers for development of recreational facilities on existing Corps projects. Projects, including bicycle trails, are eligible for 50% funding matched by 50% local funding. The Los Angeles District Office of the Corps of Engineers can provide current information on the status of funds available.

2. STATE

a. SB 36 - Nonmotorized Facilities Program, Street and Highways Code, Section 157.4. This section requires that a minimum of \$360,000 annually be appropriated from State Highway Funds for development of nonmotorized facilities that: (1) provide continuity for existing bicycle routes severed by highway construction, or (2) are parallel to state highways and provide additional safety or capacity for the state highway facility. Administered by the California Department of Transportation (CALTRANS).

b. SB 36 - Bicycle Lane Account. This provides funding of \$360,000 per year for development of local bicycle lane projects. Funding is allocated on a 90% State, 10% local matching basis. The account is administered by CALTRANS.

c. SB 283. This bill provides a total of \$4,940,000 of State highway funds for improvements to the Pacific Coast Bicentennial Bike Route, and development by CALTRANS of a commuter bicycle trail system. This fund is administered by CALTRANS and is available from FY 1976-77 through 1978-79.

d. SB 821. This program authorizes 2% of each county's Local Transportation Fund, derived from the sales tax on gasoline, for the exclusive use of bicycle and pedestrian improvement projects which serve a transportation purpose. It is administered by the Southern California Association of Governments (SCAG).

e. SB 420. This bill authorizes the State Department of Parks and Recreation to provide a series of hostel facilities in state parks and to develop a system of recreational trails to and from these facilities. Within this bill, recreational trails are defined as pathways constructed so as to provide "safe and convenient means for persons, including bicyclists, hikers, and horsemen to travel to and between State park system units other than by motor vehicle." The bill was passed in 1974, and a total of \$2,150,000 was made available for its execution.

f. The 1974 Recreation Bond Act. The act provides \$90,000,000 for acquisition and development of recreational land and facilities. The total is divided between state and local jurisdictions with \$45,000,000 going to each. Of the state's share, \$1,500,000 will be provided for motorized off-road vehicles, and \$3,500,000 is for the development of recreational trails for users of non-motorized modes of travel including bicyclists, equestrians and pedestrians. Allocation of the local portion of the fund is on a population basis.

g. SB 1321. State, Urban, and Coastal Park Bond Act of 1976. This act provides for a bond issue of \$280,000,000 to be used to meet the recreational requirements of the people of the State of California by acquiring, developing, and restoring real property for state and local park, beach, recreational, and historical resources preservation purposes.

3. LOCAL

a. Highway Users Tax Fund. These funds are allocated to cities and counties for roadway expenditures by the state from the 7 cent per gallon tax on the sale of gasoline. Section 951 of the Streets and Highways Code specifies that these funds may be used on bikeways in the unincorporated area for development within the road right-of-way.

b. Dana Point Tideland Fund. This fund is derived from concessionaire and other such revenue from the operation of Dana Point Harbor. The fund may be used for the development of recreational facilities, including parks and trails.

c. Revenue Sharing Funds. The State and Local Fiscal Assistance Act of 1972 provides for the allocation of funds from the federal government to local government jurisdictions. The Board of Supervisors by Resolution No. 73-272, and Minute Order of 17 December 1974, approved the use of these funds for bikeway development.

d. Harbors, Beaches and Parks District Funds (HB&PD). This fund is derived from an ad valorem tax on real and personal property, and may be used for projects that have a recreational value which attracts use by county residents from communities beyond the immediate locale of the project.

e. Santa Ana River Environmental Enhancement Fund. This fund was established by an agreement between the Orange County Water District (OCWD) and the Orange County Flood Control District (OCFCD). The fund is financed by revenue derived from the sale of sand sediment from the river between Katella Avenue and Imperial Highway. Expenditures from the fund may be used for trail development in that reach of the river.

f. In Lieu Park Fee. This fee is provided by land developers in lieu of dedicated acreage required by the Local Park Code. It is used to provide for the acquisition and development of local parks to serve the future owners or residents from which the fees were derived.

g. Service Area. This is a taxing jurisdiction of the county which encompasses a defined area of unincorporated territory, and typically provides for local park acquisition, development and maintenance; road related landscape maintenance and summer recreational programs.

h. County and City General Funds. These funds may be used for greenbelt projects in accordance with the discretion of the governing body of the jurisdiction concerned.

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