

City of Reedley



Kings River Corridor Specific Plan

January, 1991

KINGS RIVER CORRIDOR
SPECIFIC PLAN

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Prepared for:

CITY OF REEDLEY

Prepared by:

KNOPF ENGINEERING

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TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 INTRODUCTION	1-1
1.1 Planning Area	1-1
1.2 Environmental Setting	1-1
1.3 Background	1-2
1.4 Purpose	1-3
1.5 Consistency with General Plan	1-3
1.6 Relationship to Other Regulations	1-3
1.7 Authority	1-4
1.8 California Environmental Quality Act Compliance	1-5
1.9 Public Participation	1-5
1.10 Plan Organization	1-6
2.0 GOALS AND POLICIES	2-1
2.1 Citizen Participation	2-1
2.2 Land Use	2-1
2.3 Circulation	2-6
2.4 Recreation, Open Space & Area	2-8
2.5 Public Infrastructure, Facilities and Services	2-10
2.6 Aesthetics	2-11
2.7 Safety and Management	2-11
2.8 Financing	2-12
3.0 SPECIFIC PLAN COMPONENTS	3-1
3.1 Land Use	3-1
3.2 Circulation	3-5
3.3 Recreation, Open Space & Public Access	3-8
3.4 Public Infrastructure, Facilities & Services	3-11
4.0 DESIGN GUIDELINES & LAND USE REGULATIONS	4-1
4.1 Single Family Residential	4-1
4.2 Multi-Family Residential	4-4
4.3 Commercial	4-5
4.4 Circulation System	4-5

TABLE OF CONTENTS (con't)

<u>SECTION</u>		<u>PAGE</u>
5.0	IMPLEMENTATION	5-1
5.1	Adoption Procedures	5-1
5.2	Financing	5-2
5.3	Phasing	5-6

APPENDICES

- A) Kings River Corridor Specific Plan Community Survey Results
 - B) Undesirable Non-Native Plant Species
 - C) Open Space Reforestation Plan
 - D) Kingswood Parkway Median Landscaping
 - E) Plan Implementation Fiscal Analysis
-

LIST OF FIGURES

<u>NUMBER</u>	<u>TITLE</u>	<u>FOLLOWS PAGE</u>
1	Regional Location Map	1-1
2	Planning Area Map	1-1
3	Planning Area Subareas	3-1
4	Land Use/Circulation Plan - Subarea No. 1	3-2
5	Land Use/Circulation Plan - Subarea No. 2	3-2
6	Land Use/Circulation Plan - Subarea No. 3	3-2
7	Subarea No. 2 Property Boundaries	3-5
8	Concept Plan of Smith Ferry Park Expansion	3-10
9	Concept Plan of Expanded Cricket Hollow Park	3-10
10	Concept Plan of Expanded Reedley Beach Park	3-10
11	Proposed & Existing Sewer System	3-11
12	Proposed & Existing Water System	3-11
13	Proposed & Existing Storm Drain System	3-11
14	Cul-de-sac Lot Layout	4-2
15	Major Street - Four Lane Divided Cross Section (Typical)	4-6
16	Nature Trail/Bike Path System Cross Section (Typical)	4-6

1.0 INTRODUCTION

The Kings River has long been regarded as Reedley's most important natural resource. To protect this valuable resource, the City of Reedley has prepared a planning document that focuses on the Kings River area. This document, entitled the Kings River Corridor Specific Plan, (hereinafter referred to as the "Specific Plan") provides guidance for the use, management and protection of the river environment.

An environmental impact report (EIR) has been prepared for this Specific Plan. This document details the potential environmental impacts of implementing the Specific Plan and offers measures and plan alternatives that can mitigate these impacts.

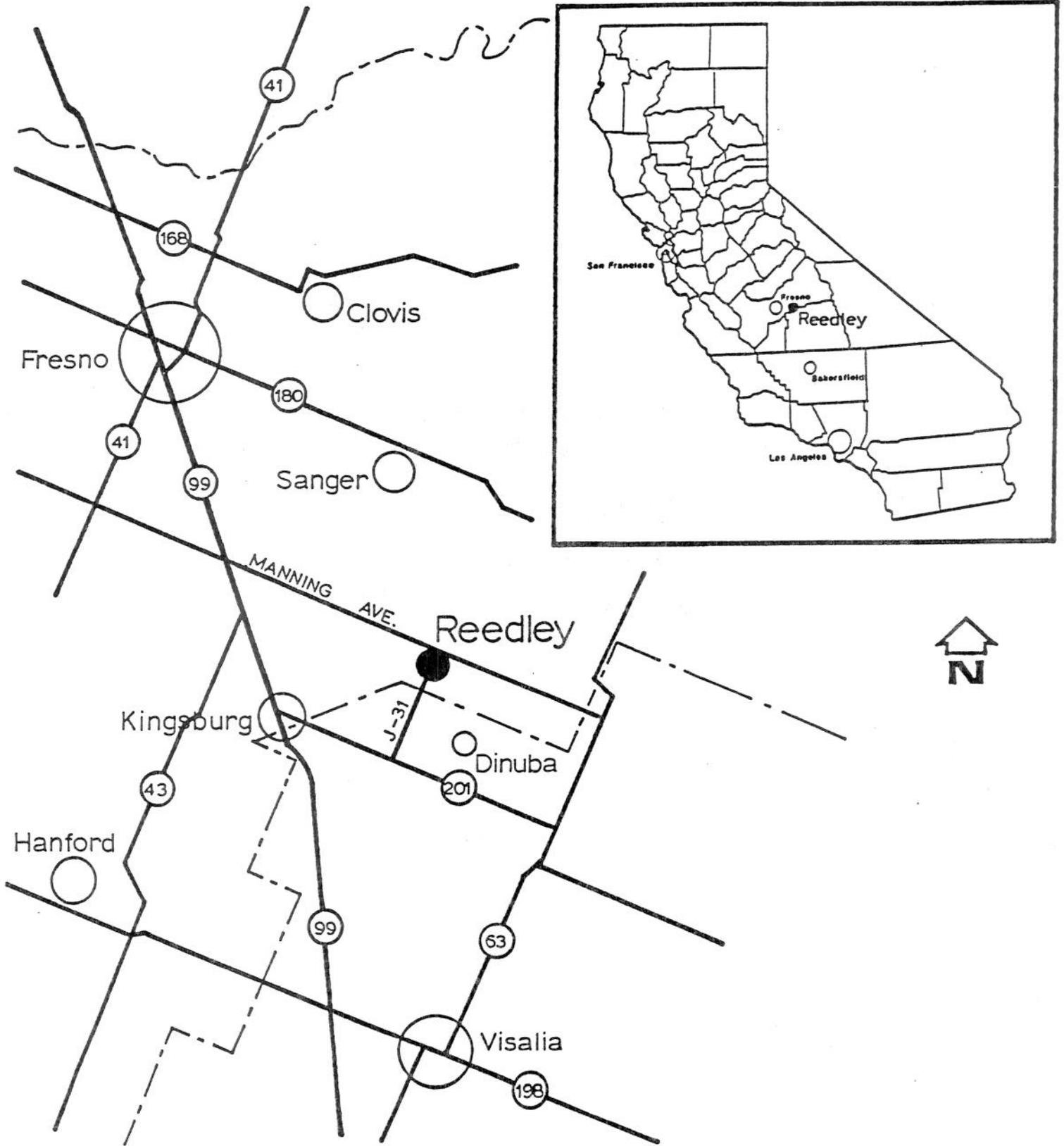
1.1 PLANNING AREA

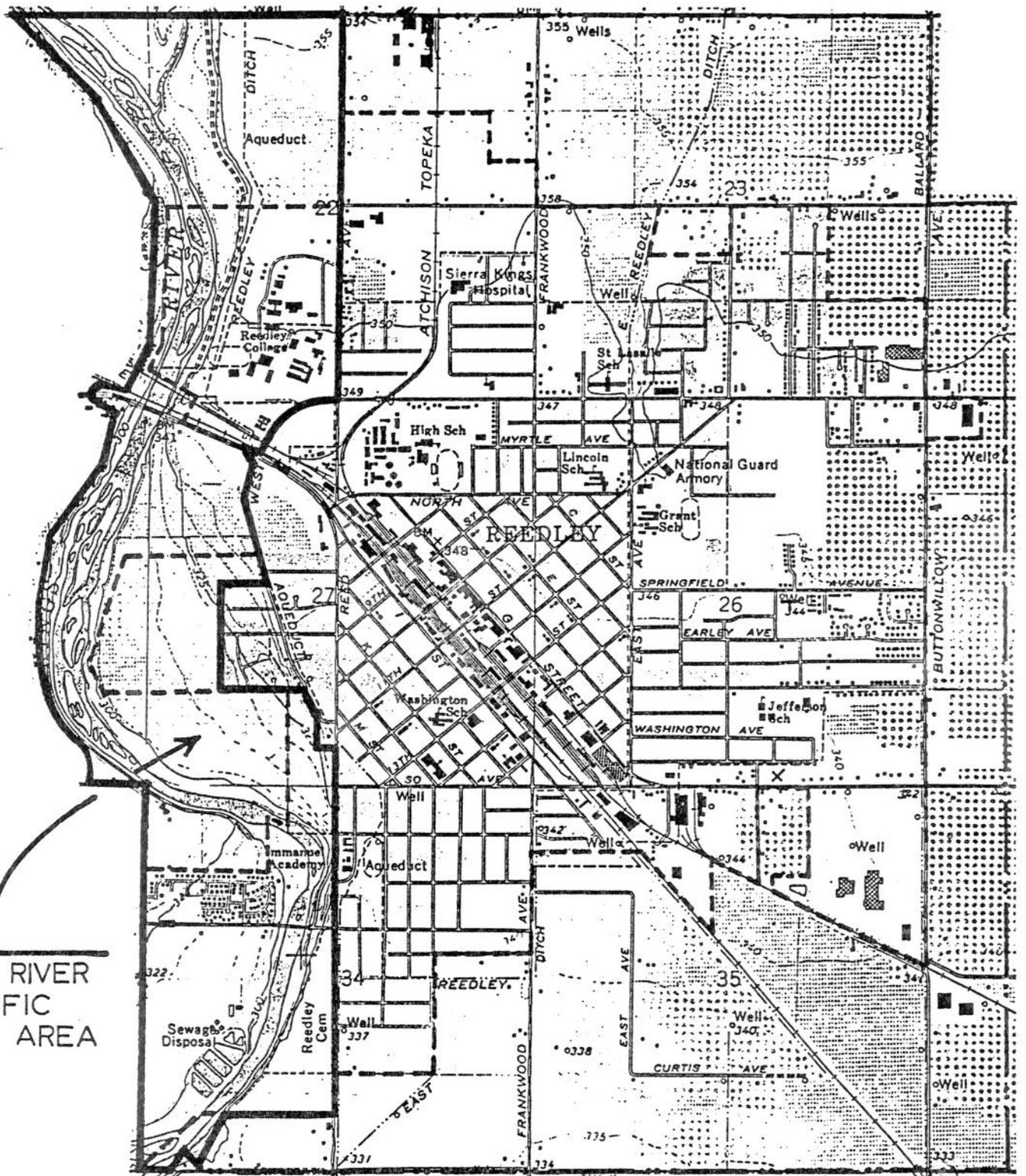
The Kings River Corridor (hereinafter referred to as the "Planning Area") encompasses a total of 958 acres of land along the Kings River in southern Fresno County (see Figure 1: Regional Location). The Planning Area includes lands which are in the County of Fresno and the City of Reedley. It is located east of Kings River Drive, west of Reed Avenue, south of South Avenue and north of Floral Avenue (see Figure 2: Planning Area).

1.2 ENVIRONMENTAL SETTING

The Kings River has its headwaters on the western slope of the Sierra Nevada range, from where it flows to the Pine Flat Reservoir. The reservoir, completed in 1954, was constructed with a capacity of 1,000,000 acre-feet for the purposes of flood control and water conservation. Twenty-five miles downstream of the reservoir, the river passes along the west side of Reedley as it flows to the Valley floor. Flows in the river at Reedley consist of releases from Pine Flat Dam and tributary inflow, less downstream diversions for irrigation. The highest flows typically occur during the summer irrigation season, while the lowest flows occur during the late fall when the river bottom area can be virtually dry.

The Kings River provides about 235 acres of riparian habitat within the Planning Area. This habitat, generally 600 to 700 feet wide, supports a diverse population of wildlife that includes ducks, hawks and beavers; and an established forest of cottonwood, sycamore, and Valley oak trees, and a dense understory of native riparian vegetation. There are several sites of "significant natural habitat" in the riparian area that are relatively undisturbed by human activities. Examples of these sites include the islands in the river channel and the steep bluffs that flank portions of the channel.





KINGS RIVER
SPECIFIC
PLAN AREA

- KINGS RIVER SPECIFIC PLAN BOUNDARY
- - - - - REEDLEY CITY LIMITS
- SPHERE OF INFLUENCE



Lands in the Planning Area are owned by numerous public agencies, including the State Lands Commission which claims ownership of the river bottom land; quasi-public districts, such as the State Center Community College District; and private interests. The privately held lands are currently used primarily for agriculture, while publicly owned lands are used for the Kings River Community College Campus, the City sewage treatment plant, and the Reedley Cemetery. Very little of the planning area has existing residential uses. Refer to the Kings River Specific Plan EIR for a more comprehensive discussion of the Planning Area's environmental setting.

1.3 BACKGROUND

Riparian habitat, which once existed in broad belts along the rivers of California, has been virtually eliminated by agricultural and urban activities. However, attempts are now being made to reverse this trend by protecting, and in some cases, enlarging and enhancing these beautiful natural resources.

A number of cities that are fortunate enough to be located on or near a river or creek, have recently endeavored to protect their riparian environment, while providing unique recreational opportunities to the community, by establishing parks, trail systems, and nature preserves along these water courses. It has also been recognized that, as a secondary benefit, these efforts to protect and enhance a waterway can help stimulate the economy of a community. Notable examples of communities in the State that have developed successful preservation-oriented river plans include Sacramento, San Luis Obispo and Chico.

The City of Reedley's sphere of influence includes about 235 acres of riparian area along the Kings River that serves as a natural habitat for wildlife and provides a wide range of recreational opportunities to the community. This riparian area is receiving an increasing level of attention from the community because lands adjacent to it, particularly along the east side of Kings River between the Manning and Olson Avenue bridges, are beginning a transition from agriculture to residential and commercial land uses. The community is also concerned about the degradation of the riparian environment from the use of off-road vehicles, littering, trespassing, excessive noise and other nuisance activities in the river area that are currently difficult to manage.

In response to recent development pressures along the river; complaints about trespassing, littering and noise; increasing community concerns over the degradation of the riparian area; and uncontrolled access to the river; the Reedley City Council, in accordance with State Government Code, Section 65858, adopted interim zoning that placed a moratorium on development within the Planning Area. This moratorium, which expired in October, 1988, allowed the City of Reedley time to prepare the original version of this Specific Plan.

As a result of subsequent meetings between the City staff and the owners of property in the Planning Area, the original Specific Plan has been revised. Land in the Planning Area was not developed during the Specific Plan revision process.

1.4 PURPOSE

The City of Reedley has prepared the Kings River Corridor Specific Plan in the interest of preserving and enhancing the unique riparian environment that presently exists along the Kings River. With this document, the City has created an opportunity for itself to protect and manage the extensive wildlife, plant, recreational and scenic resources that exist in the riparian area for the enjoyment of its current citizens as well as future generations.

The Specific Plan provides a detailed "blueprint" of how the river environment will be protected, where recreational facilities and access to the river will be provided, and how residential and commercial land will be developed. For example, the Reedley General Plan designates certain lands along the Kings River as open space. The Specific Plan will furnish additional guidance on the planning of that open space.

1.5 CONSISTENCY WITH THE GENERAL PLAN

According to State Government Code, Section 65454, specific plans must be consistent with a city's general plan. To insure compliance with the consistency requirement, the Kings River Corridor Specific Plan is directed by Reedley's General Plan. The Specific Plan also reflects community attitudes, the City's fiscal policy and State and Federal regulations.

The relationship between the Specific Plan and Reedley's General Plan is important. The General Plan is considered to be the "constitution" in terms of guiding the physical development of Reedley. The Specific Plan is a tool by which the General Plan is implemented, much like zoning or subdivision ordinances.

1.6 RELATIONSHIP TO OTHER REGULATIONS

The Specific Plan will provide most of the information necessary to determine which policies, regulations and standards govern development and land management within the Planning Area. Details not covered by the Specific Plan, such as parking requirements and sign regulations, are addressed by existing City ordinances.

State and federal regulations that pertain to the Planning Area, such as designated floodplains, public access requirements, or the Endangered Species Act, are preeminent

over local ordinances. Many of the relevant State and federal regulations have been acknowledged or further supported by policies and development standards in the Specific Plan.

Public access to the river is an important aspect of the Specific Plan that is regulated by State law. The Subdivision Map Act declares that a local agency shall not approve a tentative or final subdivision map for property fronting on a public waterway which does not provide reasonable public access to the river or stream (Government Code Section 66478.4). The Map Act also states that dedication of a public easement along a river bank is required with the subdivision of property fronting a river, with the width of the easement determined by the local agency (Government Code Section 66478.5). The Map Act does indicate that the local agency shall not deny the subdivision of property on a river solely because public access to the river is not provided if the agency finds that access is available within a reasonable distance (Government Code Section 66478.8).

Recent pertinent litigation includes the case of Kern River Public Access Committee v. City of Bakersfield (1985), in which the Appellate Court held that the owners of a subdivision along a river are required to not only provide reasonable access to the riverbanks, but they must also allocate a piece of private land for public use. The Court ruled against an access plan accepted by the City for an eight lot subdivision on the Kern River because it only provided access to an easement along the land side of the riverbank.

Agencies that have jurisdiction over activities in the river area include, but are not limited to, the State Lands Commission, the State Board of Reclamation and the State Department of Fish and Game. The State Lands Commission claims ownership of all land in the river bottom below the mean low water line as it last naturally existed, and a public trust easement between the high and low water lines on each side of the river. According to the State Lands Commission, upland land owners can utilize lands between the low and high water lines in any manner that is consistent with public trust needs.

The State Board of Reclamation has delineated a 100-year floodway along the Kings River. In the Planning Area, this floodway is typically contained within the outer banks of the river. Improvements and other encroachments in the floodway, which can potentially increase the elevation of flood waters, can not be constructed without a permit from this Board.

1.7 AUTHORITY

State Government Code, Section 65450, provides the Reedley City Council with the authority to prepare a specific plan. As with the general plan, the Planning Commission

and City Council are required to hold public hearings on the specific plan prior to adoption.

Planning permits, subdivision maps and parcel maps submitted for properties within the Planning Area must be consistent with Reedley's General Plan and Kings River Corridor Specific Plan.

1.8 COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT

The City of Reedley has prepared a draft environmental impact report (DEIR) on the Kings River Corridor Specific Plan. The DEIR is an informational document intended to provide decision-makers, the general public and responsible public agencies, with the environmental consequences of implementing the Specific Plan. The DEIR also provides a series of mitigation measures and alternatives to the proposed project which, if adopted, could reduce the impact of the project on the environment.

The Kings River Corridor Specific Plan EIR will be a "Program EIR" as provided for in Section 15168 of the California Environmental Quality Act (CEQA). Future projects proposed for the Planning Area will be subject to environmental review by the City of Reedley to determine consistency with the Specific Plan. Projects which are consistent with the Specific Plan will require no further environmental documentation. Projects which are deemed inconsistent with the Specific Plan will require further environmental review, such as an expanded initial study, mitigated negative declaration, or environmental impact report.

1.9 PUBLIC PARTICIPATION

Preparation of the Kings River Corridor Specific Plan has been guided by information provided by local, State and federal agencies; local private organizations; and opinions and attitudes expressed through a community survey and public workshops.

The most detailed public input was generated by the Kings River Corridor Specific Plan Survey that was conducted in April of 1988. The City distributed approximately 5800 questionnaires to the community asking for their opinions, ideas and recommendations regarding the planning of the Kings River Corridor. Approximately 500 questionnaires were completed and returned to the City. Information from the questionnaires was tabulated and presented at a public workshop where the public was asked to respond to the results and provide additional input. The results of the survey are presented in Appendix A.

A second public workshop was held on July 28, 1988 after the final draft of the Specific Plan was prepared. Various aspects of the Plan were modified or refined

following this meeting. Public input was also subsequently received during hearings held before the City Planning Commission and Parks & Recreation Commission in September, 1988. The Reedley City Council held a public hearing on the Specific Plan in October, 1988. After receiving public testimony, the City Council directed the staff to amend the Specific Plan. These recommended amendments were significant enough to warrant revising the Specific Plan and the associated EIR.

Additional public hearings on the revised documents were conducted by the Reedley Planning Commission and City Council. On January 8, 1991, the City Council adopted the Specific Plan and EIR.

1.10 PLAN ORGANIZATION

The Kings River Corridor Specific Plan serves as the "blueprint" for the future management of lands in the Planning Area. It provides a framework within which individual development projects and public improvements must be consistent in order to accomplish the community's goals for the Planning Area.

The major elements of this Specific Plan are as follows:

- 1) **Environmental Setting:** Describes the existing land uses, circulation plan, biotic and cultural resources, public services and other environmental features in the Planning Area that can potentially be affected by the implementation of the Specific Plan. The description of the environmental setting is contained in the Specific Plan Environmental Impact Report. Pertinent information from this section of the EIR is summarized in the discussion of the Specific Plan Components. (See Section 3.0).
- 2) **Goals and Policies:** Transforms the community's values and priorities into goals and policies for the Planning Area. These goals and policies also serve as the implementing tool for the Reedley General Plan.
- 3) **Plan Components:** Describes the individual components which together form the framework of the Specific Plan. The components are identified below.
 - A) **Land Use:** Identifies the location, intensity and type of land uses.
 - B) **Circulation:** Provides the alignment of major streets, pedestrian paths, and bikepaths. Provides design cross-sections for each circulation feature.

- C) **Public Services:** Describes the sewer, water, storm drainage, solid waste, fire, and police service requirements for the Planning Area.
- D) **Recreation and Open Space:** Identifies open space and recreational features, including parks, trails and natural habitat areas.
- 4) **Design Guidelines and Land Use Regulations:** Provides design details for streetscape improvements, including entryways, fences and walls, signage, and landscaping. They also establish development standards for zone categories within the Planning Area.
- 5) **Implementation and Financing:** Establishes implementation strategies for the Specific Plan, including adoption procedures, financing and phasing.
- 6) **Environmental Impact Report:** This document discusses the environmental impacts associated with the implementation of the Specific Plan. It also discusses mitigation measures and alternatives which, if implemented, could reduce or eliminate these impacts.

2.0 GOALS AND POLICIES

This section describes the goals and policies that direct planning in the Kings River Corridor. The goals will define the community's broad vision for the Planning Area. The policies, which are more specific than goals, serve to focus on the implementation of each goal. The goals and policies of this Plan are to be further implemented by development standards, regulations, management approaches and land use/circulation designations.

State planning law requires that specific plans must be consistent with a community's general plan. Therefore, the goals and policies of the specific plan must be consistent with the goals and policies of the general plan, and, in fact, serve to augment the general plan's goals and policies.

The goals and policies of this Specific Plan are based on the Reedley General Plan, public attitudes and existing environmental conditions described in the specific plan environmental impact report. Each goal will have one or more policies that further focus on the issue reflected in the goal.

2.1 CITIZEN PARTICIPATION

Goal 1

Provide the opportunity for Reedley citizens to participate in the planning, design, construction and financing of public improvements along the Kings River.

Policies

- 1.1 The Reedley City Council should encourage the formation of a non-profit private organization, such as the San Joaquin River Committee, to provide input and guidance on issues and public improvements that pertain to the Kings River Corridor.

2.2 LAND USE

Urban Growth Management

Goal 1

Establish a land use pattern for the Kings River Corridor that reflects the values, interests and priorities of the citizens of Reedley.

Policies

- 1.1 To insure and facilitate the orderly and well-designed development of land in the Planning Area, and the protection and management of the unique natural resources along the river, Reedley shall encourage land owners in the unincorporated portions of the Planning Area to annex to the City.

Goal 2

Encourage growth in those portions of the Planning Area designated for development prior to urbanizing other fringe areas around Reedley that are presently not designated for development under the existing General Plan.

Policies

- 2.1 To promote the efficient development of portions of the Planning Area east of the river, the "reserve" status on the "medium density residential" designation shall be removed.

Goal 3

Provide for a smooth transition from agriculture to urban uses in the Planning Area.

Policies

- 3.1 To the greatest extent possible, conflicts between existing agricultural uses and properties that are being developed for residential, commercial or public uses shall be minimized through project phasing, orientation and other means which may be available.

Residential

Goal 1

Residential development shall be designed to avoid potential conflicts with the proposed use of adjacent properties or streets.

Policies

- 1.1 Single family residential lots fronting onto collector or arterial streets shall have circular driveways to reduce the need for cars to back onto the street and to provide off-street parking.
- 1.2 Multi-family residential uses shall be located on collector streets, or adjacent to commercial or office uses.

- 1.3 Design and review of multi-family projects shall include consideration of building masses, building height, preservation of views and vistas, and privacy to adjoining single family areas.

Goal 2

Common improvements within residential developments shall be designed to promote a consistent and visually pleasing appearance.

Policies

- 2.1 All new residential development shall install landscaping, walls and fences, pavement, signs, lighting, and other types of street furniture consistent with the Kings River Corridor Specific Plan development standards (see Section 4.0).

Goal 3

Residential development shall be maintained and managed in a manner which promotes a neat, consistent and visually pleasing appearance.

Policies

- 3.1 Each new residential subdivision, multi-family project, mobile home park, and planned unit development shall form a landscaping and lighting maintenance district for the maintenance of "common space" areas within each development, including landscaped areas within the dedicated street right-of-way.

Goal 4

Residential development shall not adversely impact the Kings River riparian habitat or conflict with open space and recreational uses along the Kings River.

Policies

- 4.1 An open space buffer of approximately 200 feet shall be maintained between residential development on the west side of Kingswood Parkway and the river.
- 4.2 Development of the land between Kingswood Parkway and the Kings River shall consist of "low density" residential lots fronting onto the interior segment of the Parkway, commercial uses along Manning Avenue, and a transitional "medium density" residential uses between the "low density" lots and the commercial uses.

Goal 5

Conflicts between residential development and existing agricultural uses or environmental features, including views, native vegetation, and wildlife habitat shall be minimized or avoided, if possible, through project phasing, orientation and other means which may be available.

Policies

- 5.1 To the greatest extent possible, new residential development should be designed so that existing views of the Kings River environment are not significantly obstructed.

Goal 6

Affordable housing shall be encouraged within the Planning Area in accordance with the Housing Element of the Reedley General Plan.

Policies

- 6.1 Up to three-family units may be allowed (with a conditional use permit) in "medium density" residential areas as a transition between commercial uses and "low density" residential areas

Commercial

Goal 1

Promote commercial development that is well designed, economically viable, well maintained, provides for the commercial and shopping needs of the neighborhood and community, and presents minimal impacts to circulation systems and adjacent land uses.

Policies

- 1.1 All new commercial development should install landscaping, walls and fences, pavement, signs, lighting, and other types of street furniture consistent with existing City of Reedley codes and the Kings River Corridor Specific Plan development standards.
- 1.2 Commercial development along Manning Avenue and Upper Bridge Avenue shall be designed to standards higher than other commercial districts in the community because this area is a major "entryway" into Reedley.
- 1.3 Encourage highway-oriented commercial uses, including hotels, inns, and restaurants.

- 1.4 Facilitate the establishment of a hotel-restaurant complex on the knoll located south of the Manning Avenue Bridge on the east side of the Kings River.

Agriculture

Goal 1

Protect the viability of agricultural production within the Planning Area until such time as the property develops to an urban use.

Policies

- 1.1 Property owners who wish to continue farming within the Planning Area shall not be responsible for participating in the cost of public improvements until such time as they wish to develop their property.
- 1.2 Existing agricultural uses within the Planning Area may remain as long as the landowners wish to keep their land in production.
- 1.3 Property owners that are developing land for residential or commercial uses adjacent to lands in agriculture shall provide fences, walls, or buffer areas, where possible, in order to discourage trespassing and vandalism on the agricultural lands.

Goal 2

Protect agriculture on the west side of the Kings River from urban encroachment and incompatible activities.

Policies

- 2.1 Minimize conflicts between agricultural uses and developing properties through project phasing, orientation, and other means which may be available.
- 2.2 The City of Reedley should work with the County of Fresno to ensure that existing agricultural lands are preserved in unincorporated areas on the west side of the Kings River.

Public and Institutional Uses

Goal 1

Protect development near the waste water treatment plant from nuisances associated with the operation of the plant.

Policies

- 1.1 Development near the treatment plant should incorporate design measures that mitigate potential noise, odor, and visual impacts associated with the operation of the plant. The following measures should be considered: walls, building setbacks, and landscaped screening.

Goal 2

Protect the Reedley Cemetery from incompatible land uses and activities.

Policies

- 2.1 The City of Reedley and the Cemetery District should explore the possibility of providing limited access along the east side of the river which is consistent and sensitive to the special needs of the cemetery.

Goal 3

Protect and enhance the riparian habitat adjacent to the Cemetery.

Policies

- 3.1 Encourage the Cemetery District to curtail their current practice of dumping soil and trash along the riverbank. The District should also be encouraged to cleanup existing unsightly dump sites.

Goal 4

Provide for public and institutional uses within the Planning Area, including churches, parks, and fire stations.

2.3 CIRCULATION

Goal 1

Develop a circulation system for the Planning Area which is safe, convenient, and aesthetic; protects neighborhoods; effectively provides extension of and connections to existing street and road systems; and relieves traffic congestion on streets adjacent to the Planning Area.

Policies

- 1.1 Provide circular driveways on residential lots that front onto Kingswood Parkway.

- 1.2 Utilize local street systems to reinforce neighborhood identity and direct local traffic to collectors or arterials.
- 1.3 Discourage through traffic on local streets.
- 1.4 The design of Kingswood Parkway, a designated collector street, shall incorporate the following features:
 - o Curvilinear alignment which coincides with the existing westside sewer line to the greatest extent possible,
 - o Two lanes with parking and bike lanes on both sides in the residential area, and four lanes with no parking or bike lanes in the commercial area,
 - o Ten-foot landscaped median between Reed Avenue and Manning Avenue,
 - o 84-foot right-of-way, 64-foot curb-to-curb width,
 - o Accommodate public transit facilities,
 - o A view of the river environment,
 - o Four-foot wide sidewalks on both sides of the street, and a 16-foot wide landscaped parkway along lots that have a rear or side yard orientation to the Parkway in residential areas, and ten-foot wide sidewalks with tree planters adjacent to commercial properties,
 - o City standard cross-section.
- 1.5 Install signals at the intersections of Kingswood Parkway and Reed Avenue, and Kingswood Parkway and Manning Avenue as the Parkway is developed.
- 1.6 Provide adequate access to high intensity land uses, including commercial facilities, parks, and multi-family residential developments.
- 1.7 Commercial uses fronting onto Manning and Upper Bridge Avenues should provide right-hand turn pockets with 35 foot wide driveways. Left-hand turns shall not be allowed due to the existing unbroken median. Driveways from different parcels shall be consolidated wherever possible.
- 1.8 To minimize adverse impacts on adjacent land uses and streets, adequate parking shall be provided for persons using open space, recreational, commercial and educational facilities in the Planning Area.

Goal 2

Public transportation shall be facilitated within the Planning Area.

Policies

The City should provide for future bus stops along Kingswood Parkway.

2.4 RECREATION, OPEN SPACE AND ACCESSGoal 1

Protect and enhance existing native habitat, wildlife resources, and other aspects of the Kings River environment.

Policies

- 1.1 Landowners that develop property fronting on the Kings River shall dedicate lands along the river to the City for public open space and recreational uses.
- 1.2 Enhance native vegetation in the Kings River riparian area as follows:
 - o Using approved methods, young undesirable non-native plant species should be selectively removed from the native riparian habitat along the Kings River. See Appendix B for a list of the undesirable non-native plant species.
 - o Using proven methods, dominant native riparian plant species should be propagated locally and planted in the place of eradicated non-native plants.
- 1.3 Reforest designated "open space" lands (between the Kings River and Kingswood Parkway) as an oak savannah which requires limited initial maintenance. A reforestation plan is presented in Appendix C.
- 1.4 Protect identified areas of "significant natural habitat" by limiting access to these areas.
- 1.5 The use of motorized vehicles shall be prohibited on lands designated as "open space" within the Planning Area, including the riparian area.
- 1.6 Power boats shall continue to observe the existing maximum speed limit of 5 MPH north of the Olsen Avenue Bridge in accordance with existing policy and practice.

- 1.7 Jet skis should not be allowed to operate north of the Olson Avenue Bridge.

Goal 2

Provide adequate open space, access and recreational opportunities along the Kings River for the enjoyment of the public.

Policies

- 2.1 Plan as a long-term project, the establishment of a bike path that parallels the planned nature trail along the river. This future bike path shall reflect the following design features:
- o offers interesting, educational and panoramic views;
 - o does not adversely impact native habitat, wildlife and adjoining residential areas;
 - o is easily maintained and policed;
 - o connects to existing or proposed City and county systems and logical destination areas, and;
 - o is safe to users.
- 2.2 Promote a wide variety of compatible river-oriented recreational activities on the Kings River, including floating, swimming, walking, biking, fishing and nature appreciation.
- 2.3 Expand and enhance the parking, circulation, and day use facilities at Cricket Hollow Park.
- 2.4 The police practice firing range located adjacent to Cricket Hollow Park should be moved in the future to a site where fewer noise related conflicts will arise and to allow for expansion of the Cricket Hollow recreation facility on City owned property.
- 2.5 Expand the recreational opportunities at Reedley Beach by providing additional parking, and improving the existing trail system to the northern sandy beach area.
- 2.6 Expand Smith Ferry Park, in accordance with existing policy to provide for more public parking and improved open space along the Kings River. The Smith Ferry expansion shall be located near the Dinuba Avenue-Kingswood Parkway intersection.
-

Goal 3

Promote public awareness and appreciation of the Kings River environment by providing educational facilities along the river.

Policies

- 3.1 Establish an interpretive trail system using the dirt trails that exist north of Manning Avenue adjacent to the Kings River Community College.
- 3.2 Develop a nature interpretive center on the Community College Campus.

Goal 4

Provide controlled and managed public access to the Kings River in accordance with State law.

Policies

- 4.1 Establish a primary nature trail, constructed with decomposed granite, at the edge of the riparian area along the east side of the Kings River between the Manning Avenue and Olsen Avenue bridges to provide the public with the opportunity to access the river area. This trail shall connect with the interpretative trail system that is planned north of Manning Avenue.
- 4.2 The primary trail shall provide access to existing dirt trails that meander through the riparian area.
- 4.3 Establish an access trail between Kingswood Parkway and the nature trail along the existing City utility easement on the Eymann Avenue alignment.
- 4.4 Establish pedestrian access easements between Kingswood Parkway and interior local streets.
- 4.5 The City of Reedley shall investigate the feasibility of obtaining an easement for the trail across properties that are not expected to be developed in the near term so that the entire length of the trail can be completed within a reasonable period of time.

2.5 PUBLIC INFRASTRUCTURE, FACILITIES AND SERVICES

Goal 1

Provide for a safe and properly functioning Planning Area.

Policies

- 1.1 Require that land developers construct all street, sewer, water and storm drainage improvement at the time of development.

Goal 2

Provide for a Planning Area which is effectively served by police, fire and solid waste collection services.

Policies

- 2.1 To discourage vandalism, trespassing, and damage to the riparian habitat, the decomposed granite trail along the river shall provide access for patrol and emergency vehicles.
- 2.2 Maintain visibility of the river area from the Parkway to reduce potential for unlawful activities along the river.

2.6 AESTHETICS

Goal 1

Provide opportunities to visually appreciate the scenic resources in the Planning Area.

Policies

- 1.1 Establish scenic vistas at appropriate sites along the Kings River.

2.7 SAFETY AND MANAGEMENT

Goal 1

Protect human life, property, and improvements from flooding.

Policies

- 1.1 Comply with federal, State and local regulations in the floodplain of the Kings River.

Goal 2

Increase recreational safety on the Kings River.

Policies

- 2.1 Investigate the feasibility of jointly developing and implementing a Kings River safety program with the County of Fresno.

Goal 3

Control, to the greatest extent possible, vandalism, trespassing, littering, gunfire, excessive noise, dust and other nuisance activities along the Kings River.

Policies

- 3.1 Prohibit the use of off-road vehicles and firearms in and along the Kings River.
- 3.2 Prohibit access onto private properties from adjoining public properties.
- 3.3 Establish designated areas for campfires.
- 3.4 Establish a trash/debris removal program with City personnel or private organizations.

2.8 FINANCINGGoal 1

Develop a comprehensive strategy for the financing, construction and maintenance of public improvements within the Planning Area.

Policies

- 1.1 Adopt a parks and recreation ordinance, per the Quimby Act, which provides for fees and/or the dedication of land for the purpose of establishing park and recreational facilities.
- 1.2 Evaluate the formation of a redevelopment district in Reedley which would include portions of the Planning Area. This district could generate funds (tax increment monies) which could be used to finance various public and private improvements within portions of the Planning Area.
- 1.3 Require developers of property on the west side of Kingswood Parkway to dedicate a reasonable portion of lands which are designated as "open space" to the City of Reedley.

- 1.4 Utilize State Park bond funds to purchase designated "open space" lands that are not acquired through dedication, and/or develop open space/recreational facilities along the Kings River.
- 1.5 Consider establishing boat launch fees at Cricket Hollow and user fees at Reedley Beach Park as a future means to pay for the cost of improving and maintaining these facilities.
- 1.6 Establish a city-wide recreation assessment district which would generate funds which could only be used to maintain the parks and open space along the Kings River.

Goal 2

Develop a comprehensive strategy for the financing, construction and maintenance of private improvements within the Planning Area.

Policies

- 2.1 Require residential subdivisions to form landscaping maintenance districts for the maintenance of private common space landscaping and street landscaping within the public right-of-way.
- 2.2 Seek private donations from individuals, businesses and corporations in the community for special one time acquisition of lands or improvements including trail construction, play equipment, interpretive display signs, statues, or specific building improvements.
- 2.3 Facilitate the construction of a nature interpretive center and trail system adjacent to lands owned by the Kings River Community College. The interpretive facility should, to the greatest extent possible, be constructed cooperatively by the City, the college, service clubs and other interested groups and individuals.
- 2.4 Utilize local volunteer labor to maintain the interpretive nature trail.
- 2.5 Recover the cost of preparing the Kings River Corridor Specific Plan by placing a fee on building permits within the Planning Area.
- 2.6 Designate a specific City staff position or department with the responsibility of identifying and vigorously pursuing grants, loans, and other available funding sources as a means of financing land acquisitions and improvements in the Planning Area.

3.0 SPECIFIC PLAN COMPONENTS

The Kings River Corridor Specific Plan contains four components: Land Use; Circulation; Recreation, Open Space and Public Access; and Public Infrastructure Facilities and Services. The following discussion of each component includes a description of the existing conditions and a recommended action plan. The action plans are guided by Specific Plan goals and policies presented in Section 2.0, input received during public workshops, and attitudes expressed through the Specific Plan community survey.

3.1 LAND USE

Existing Conditions

The Kings River Corridor Planning Area covers about 958 acres of land along the Kings River on the west side of Reedley. For discussion purposes, the Planning Area has been divided into three subareas, with each subarea having different existing land uses, land ownership patterns, and land development potential (see Figure 3: Planning Area Subareas).

Subarea 1

Subarea 1 encompasses 423 acres of land along the Kings River, north of the A.T. & S.F. railroad. It is dominated by the river and the 259-acre Kings River Community College campus and farm. Kings River College, with a total enrollment of nearly 4000 students, is the primary land use in the subarea. Access to the subarea is provided by Manning Avenue on the south and Reed Avenue on the east. Surrounding land uses include urban development to the south and east, agriculture to the north and west.

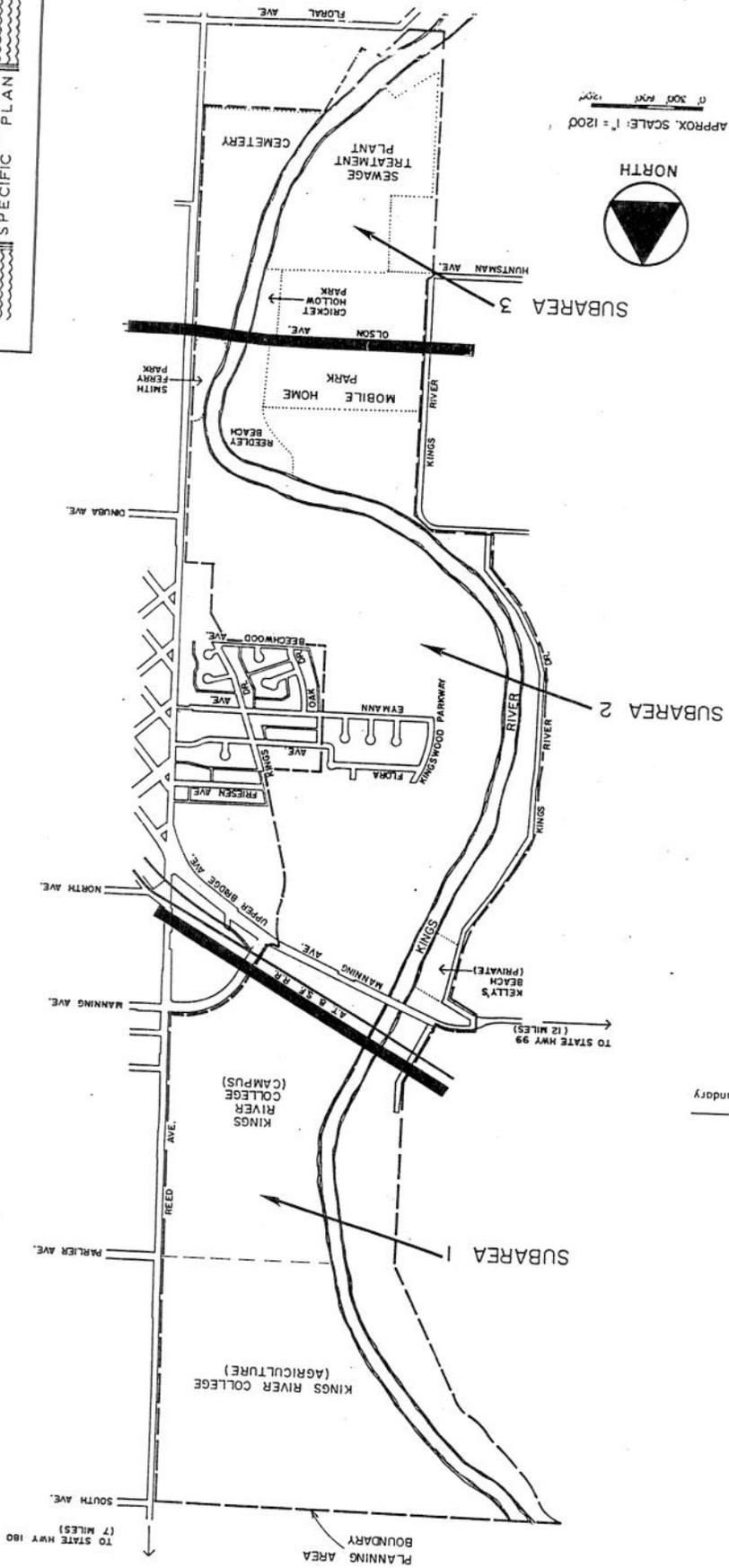
Subarea 2

Subarea 2 lying primarily on the east side of the Kings River, occupies 375 acres in the central portion of the Planning Area. This Subarea, bounded on the north by the A.T. & S.F. Railroad and Olson Avenue on the south, has the greatest potential of the three subareas for residential, commercial and open space development. It includes existing agricultural lands on the east side of the river that have "medium density residential", "service commercial" and "open space" land use designations under the current Reedley General Plan. A portion of the "medium density residential" area is in "reserve" status. On the west side of the river, a number of home sites exist between Kings River Drive and the river.

This subarea, with about 110 acres currently designated for "medium density residential" development, has recently been experiencing a transition from agriculture to residential land uses. Undeveloped residential land, which totals about 92 acres, could support

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KINGS RIVER
SPECIFIC PLAN



PLANNING AREA
SUBAREAS
FIGURE NO. 3

approximately 368 housing units based on existing zoning ordinances. Available sewer, water and storm drainage capacity exists (or will be provided under current utility master plans) within the subarea to serve these residential units and other designated land uses.

The Reedley General Plan designates approximately 89 acres of the existing agricultural land along the east side of the river as "open space". The open space area, generally 600 to 750 feet wide, is located between the river and a proposed collector street (see Section 3.2).

A six acre site along the south side of Manning Avenue is currently designated as "service commercial" by the Reedley General Plan. Because of the excellent accessibility from Manning, Upper Bridge and Reed Avenues, and because of its close proximity to the existing downtown business district, this area is considered an excellent site for commercial development that would cater to the traveling public.

Subarea 2 provides the greatest opportunity for public enjoyment of the scenic, open space, and recreational features of the Kings River. It contains two city parks, Smith Ferry and Reedley Beach; and a private park, Kelly's Beach. This reach of the river is actively used by swimmers, floaters and picnickers.

Subarea 3

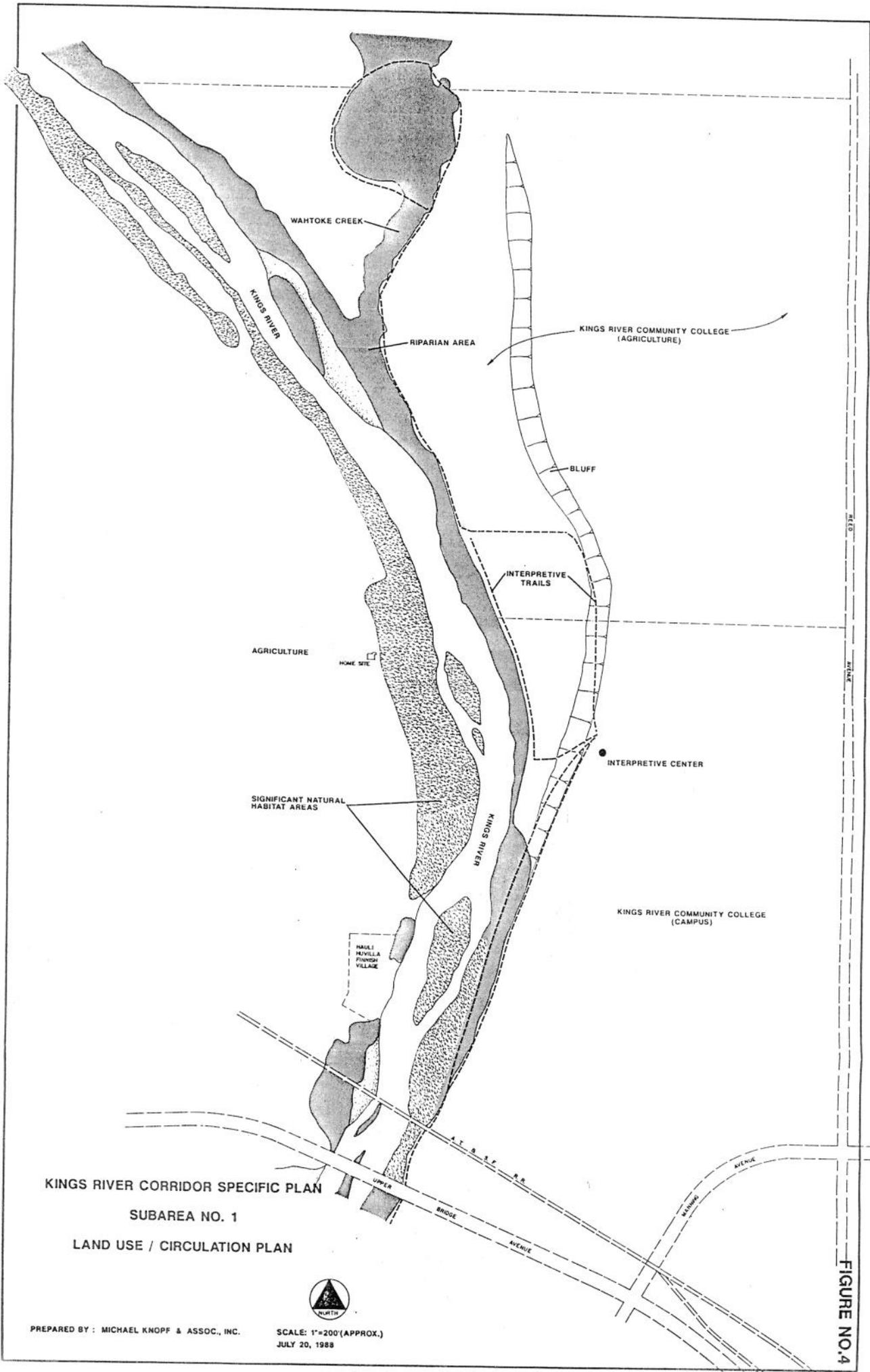
Subarea 3 encompasses 160 acres below the Olson Avenue Bridge in the southern portion of the Planning Area. It is bisected by the Kings River. The Reedley Cemetery is located on the east side of the river. The City's Wastewater Treatment Plant and Cricket Hollow park and boat ramp are located on the west side. Subarea 3 also includes 33 acres of land north of the treatment plan that has a General Plan designation of "medium density residential". A development plan, with a total of 181 units, has been approved for 25 acres of this property.

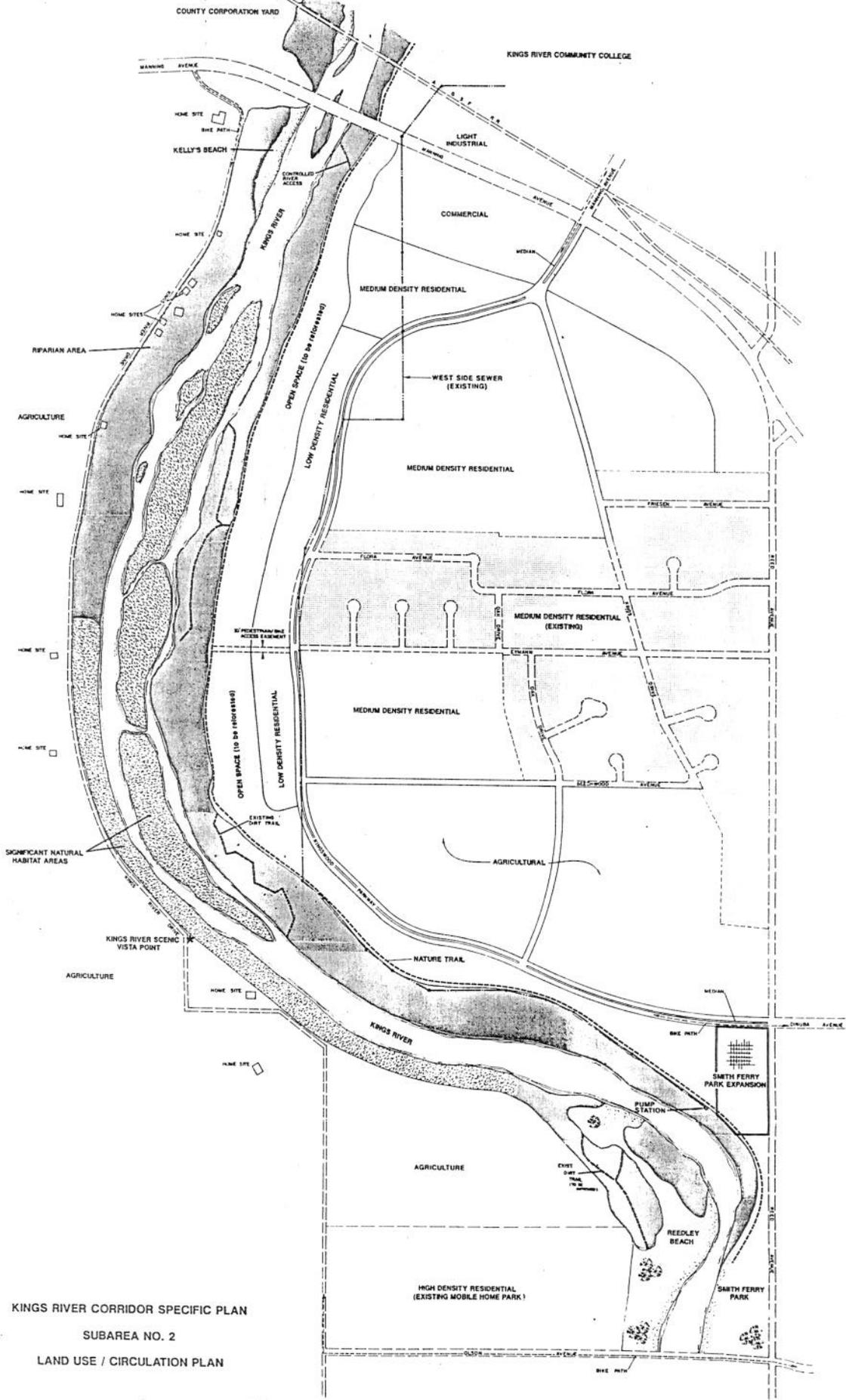
Action Plan

The Specific Plan's land use designations are generally consistent with those of Reedley's existing General Plan. Significant land use changes in the Planning Area include the addition of "low density residential" development west of the planned collector, Kingswood Parkway, the expansion of the commercial frontage on Manning Avenue, and the addition of agriculture land in Subarea 2. The Specific Plan also proposes to reduce the areas in Subarea 2 that are designated for "open space" and "medium density residential" by the General Plan.

Existing General Plan land use designations and configurations in Subareas 1 and 3 will not be changed by the Specific Plan. Refer to Figures 4 (Subarea 1), 5 (Subarea 2) and 6 (Subarea 3) for the key land use features of the Specific Plan.

The Specific Plan does recommend a land use change on property adjoining the Planning Area. This change consists of expanding the commercial area to the west of Upper Bridge Avenue.



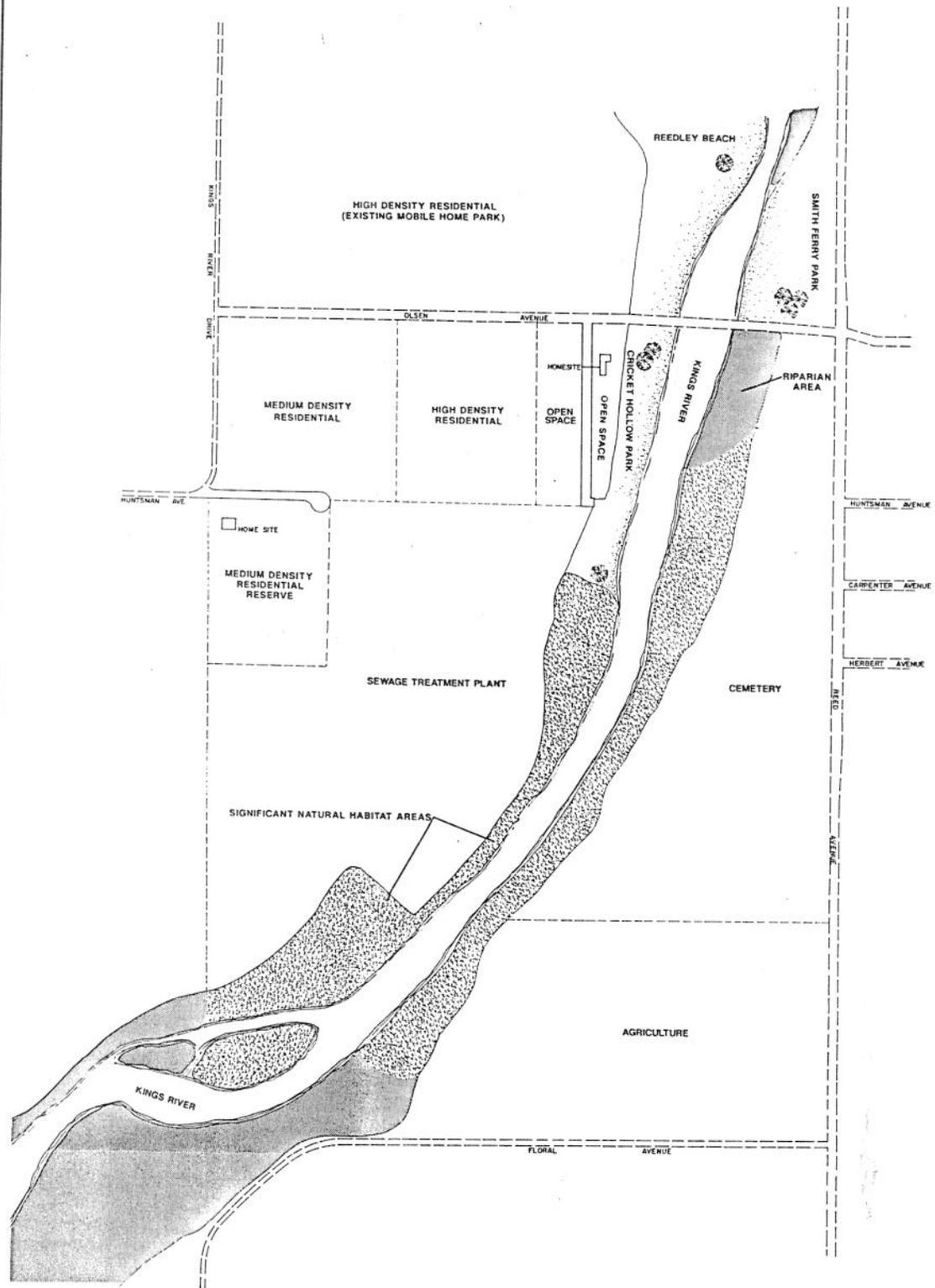


KINGS RIVER CORRIDOR SPECIFIC PLAN
 SUBAREA NO. 2
 LAND USE / CIRCULATION PLAN

PREPARED BY: MICHAEL KNOPP & ASSOC., INC.



FIGURE NO.5



KINGS RIVER CORRIDOR SPECIFIC PLAN
 SUBAREA NO. 3
 LAND USE / CIRCULATION PLAN

PREPARED BY: MICHAEL KNOPF & ASSOC., INC.

SCALE: 1"=200' (APPROX.)
 JULY 20, 1988



FIGURE NO. 6

The details of the Specific Plan's land use action plan are presented below.

- 1.0 To protect agriculture and Reedley's waste water treatment plant from incompatible land uses and activities, the Plan recommends the following actions for lands on the west side of the river:
 - 1.1 Properties which are not presently developed, or have not been approved for development, shall continue to be designated "agriculture" in accordance with the Reedley General Plan.
 - 1.2 The City should consider acquisition of properties to the west of the treatment plant for future plant expansion and protection from potential conflicting land uses.
- 2.0 To promote contiguous and concentric urban growth in the City of Reedley, lands in Subarea 2 on the east side of the Kings River should be developed prior to urbanizing other fringe areas around Reedley that are presently not designated for development under the existing General Plan. This will prevent the urbanization of agricultural land in other parts of the community, and reduce the need to extend City services and infrastructure.
- 3.0 To protect areas along the Kings River which offer scenic, recreational and open space opportunities, and to avoid land use conflicts between single family residential development and other uses in Subarea 2, the plan recommends the following:
 - 3.1 Limit development on the west side of the proposed collector street, Kingswood Parkway, to 14 acres of "low-density residential" lots along the interior portion of the roadway, and 13 acres of commercial and 10 acres of "medium density residential" uses near Manning Avenue (see Figure 4).
 - 3.2 Designate the remaining 41 acres of existing agricultural land that generally exists between the Kings River and the Parkway as "open space", in general accordance with the City's current General Plan. This "open space" area ranges from about 100 feet to nearly 300 feet in width.
 - 3.3 Owners of property in the "open space" area who choose not to develop their property, will be allowed to keep their land in agricultural production.
 - 3.4 The City shall acquire the designated "open space" land between Kingswood Parkway and the river from landowners by dedication (as a condition of subdivision approval), purchase with State Park funds, or other suitable means. Alternatively, the property owner can with

- the City's conditional approval, dedicate a 100 foot wide strip along the river and retain the remainder in private open space without development rights. The actual method by which the open space lands are acquired shall be determined at the time the land is subdivided. Developers that dedicate designated open space property to the City may apply to transfer a "density bonus" to their property on the east side of the proposed collector.
- 3.5 Uses in the open space area shall be limited to agriculture, public parks, reforested open space and public recreation facilities, including nature trails and bike paths. Private development shall be prohibited in the open space area.
 - 3.6 Designate the 77 acres in Subarea No. 2 that lies east of the Parkway and north of Beachwood Avenue as "medium density residential", in general accordance with the current Reedley General Plan. Eighteen acres of this area is already developed with single family homes. The remaining 59 acres of undeveloped land could support an estimated 236 housing units.
 - 3.7 Preserve the existing agricultural land use of the 55 acres that lies south of Beachwood Avenue between the Kings River and Reed Avenue with an "agriculture" designation.
 - 3.8 Designate the area north of Friesen Avenue between Kings Drive and Upper Bridge Avenue (which adjoins the Planning Area) in general accordance with the existing General Plan. The area along Upper Bridge Avenue shall have a commercial designation. This 15 acres has an average depth of about 400 feet. The 15 acres north of Friesen Avenue and east of River Drive is designated for "medium density residential" development.
 - 3.9 Existing land uses along the west side of the river will not be changed.
- 4.0 Maximize the commercial development potential of properties on or near Manning Avenue and Upper Bridge Avenue, which have unique characteristics not found in other areas of Reedley. This will enhance economic development in Reedley and provide for commercial and office development on the west side of the community. Specific actions related to the development of commercial uses along Manning and Upper Bridge Avenues are as follows:
- 4.1 The depth of the currently designated commercial property along Manning Avenue should be expanded to provide additional marketable commercial sites in Subarea 2. This area, with 12 acres west of Kingswood Parkway and 15 acres east of the Parkway (as discussed

above), should be designated "community" commercial. This strategy enhances Reedley's ability to capture additional sales tax dollars and provides needed services to residents of the community in general, and the Planning Area in particular.

- 4.2 The City of Reedley and the Reedley Chamber of Commerce should jointly work with the current property owner of the commercial area to develop a hotel-restaurant complex on the knoll located west of the Kingswood Parkway. This site can take advantage of the panoramic view of the Kings River, and Manning Avenue's high traffic volume and link to Highway 99. This complex will increase the amount of sales and transient occupancy tax dollars generated in the community.

Summary

The Specific Plan land uses for the Planning Area are presented in Table 1. In addition to the land uses presented in Table 1, the Specific Plan also provides for 15 acres of commercial uses and 15 acres of "medium density" residential development on adjoining lands. The existing agricultural lands on the east side of the river in Subarea 2 that have the residential, commercial, and open space designations are divided into five properties, as shown in Figure 7. The total acreage of each property within the Planning Area is presented in Table 2. Also shown in Table 2 is the acreage of each property that is in the open space area and the percentage of the total property that the open space area represents.

3.2 CIRCULATION

This section identifies the alignment, classification and general design of streets which are necessary to serve the Land Use component of the Specific Plan (See Figures 4-6).

Existing Conditions

In general, excellent street access is provided to properties in and adjacent to the Planning Area. A capacity analysis performed for streets in and immediately adjacent to the Planning Area indicated that all streets are currently operating at a level of service (LOS) of "C" or better. A LOS of "C" or better indicates that there is a general free flow of traffic with an occasional delay due to intersection congestion. Refer to the Specific Plan EIR for further details.

Reed Avenue is the major north/south route for the Planning Area. Recent traffic counts for this street ranged from 4,700 to 8,900 cars per day. Manning Avenue is the major east/west route for the Planning Area, as well as the community as a whole. This arterial links Reedley with State Highway 99, 12 miles to the west. Traffic counts for

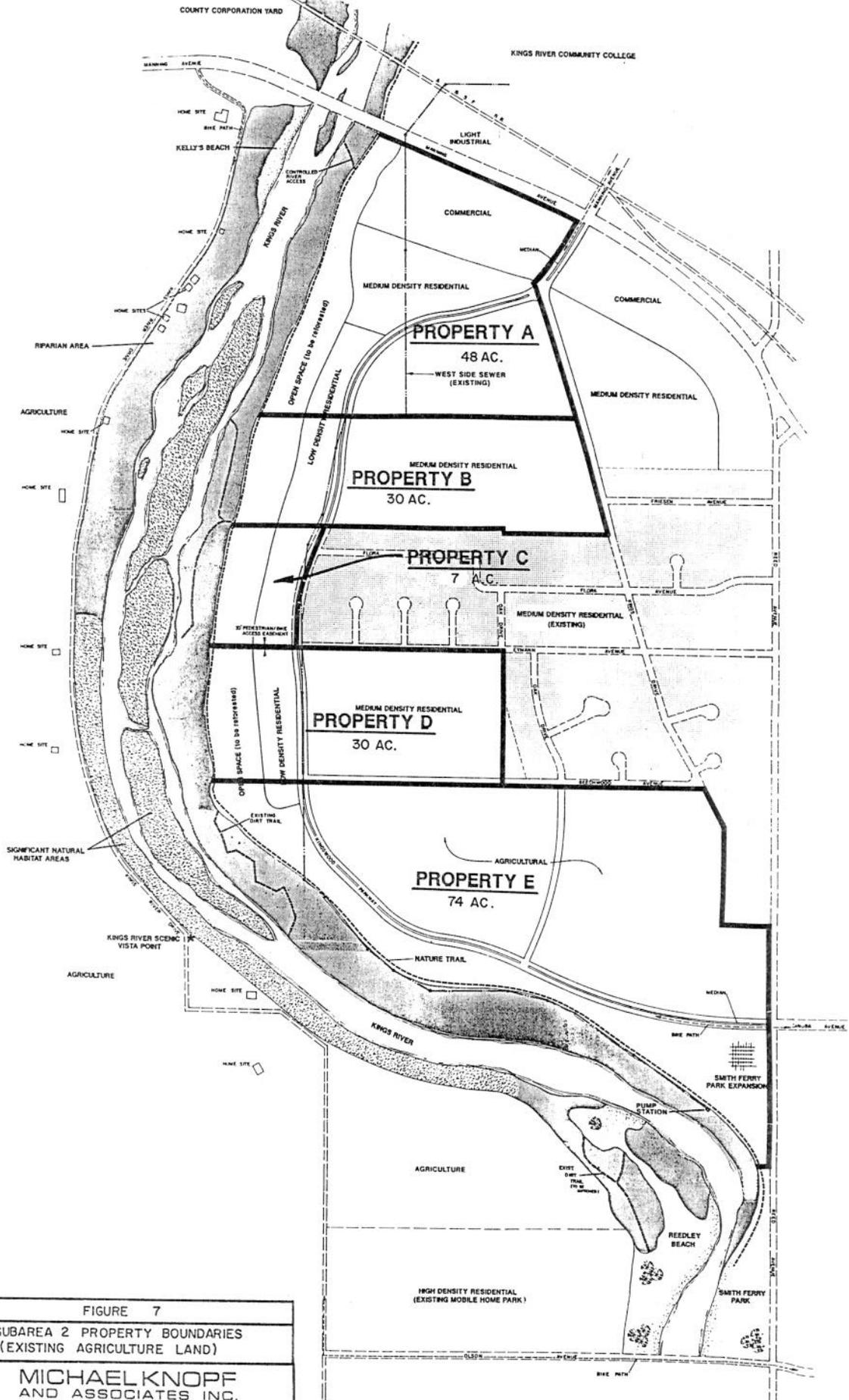


FIGURE 7
 SUBAREA 2 PROPERTY BOUNDARIES
 (EXISTING AGRICULTURE LAND)
 MICHAEL KNOPF
 AND ASSOCIATES INC.
 KINGS RIVER
 SPECIFIC PLAN

TABLE 1
SPECIFIC PLAN LAND USES

<u>Land Use</u>	<u>Acreage</u>
Low Density Residential	14
Medium Density Residential	120
Community Commercial	13
Open Space (with future 5 acre park site)	41
Industrial	8
Kings River (riparian habitat)	235
Community College	259
Cemetery District	33
Sewer Treatment Plant	36
Parks (existing)	38
Agriculture	141
Other	20

TABLE 2
AREA OF PROPERTIES DESIGNATED FOR DEVELOPMENT IN SUBAREA 2¹
(agricultural lands on the east side of the Kings River)

<u>Property</u> ²	<u>Undeveloped</u> <u>Acreage</u>	<u>Proposed</u> <u>Open Space Acreage</u>	<u>Percent</u> <u>Open Space</u>
A	48	7.7	16
B	30	4.3	14
C	7 ³	4.3	61
D	30	5.1	17
E	<u>74</u>	<u>20.2</u>	27
Total:	189	41.6	

¹ Boundaries based on Fresno County Assessor's Maps

² See Figure 7 for location of properties

³ Undeveloped portion of Kingswood Estates Subdivision

this route range from 8,500 to 13,600 cars per day. Other major east/west routes are Dinuba Avenue which connects the Planning Area to southeast Reedley and Olson Avenue which crosses the Kings River and provides access to the west side of the river.

The Reedley General Plan indicates that a new collector street (Kingswood Parkway) shall be constructed at the eastern edge of the designated "open space" area between Dinuba and Manning Avenues. This collector will serve development in Subarea 2 and should relieve traffic congestion along Reed Avenue. A 700 foot long segment of this planned roadway has been constructed between Flora and Eymann Avenues with a 64 foot curb-to-curb width and an 84 foot right-of-way.

Action Plan

The actions presented below are generally consistent with the Reedley General Plan.

- 1.0 To insure that development in Subarea 2 is provided with a circulation system that is safe and has adequate carrying capacity, the following actions are recommended:
 - 1.1 Construct Kingswood Parkway as a divided two-lane roadway with parking and bike lanes on both sides in the residential areas. In the designated commercial area, the Parkway shall be constructed as a divided four-lane roadway with no parking or bike lanes.
 - 1.2 Kingswood Parkway shall intersect with Kings Drive at the south side of the commercial area. In order to improve access to these commercial properties, the alignment of Kings Drive should be extended west of the Parkway.
- 2.0 To improve traffic safety along Manning and Upper Bridge Avenues, and to enhance the value of commercial properties along this route, the Specific Plan recommends the following actions:
 - 2.1 Commercial properties shall dedicate sufficient right-of-way along Manning Avenue to allow for right turn deceleration lanes.
 - 2.2 Limit direct access from commercial properties onto Manning Avenue. The frontage road that currently exists along Upper Bridge Avenue shall not be extended to serve the new commercial properties.
 - 2.3 Ingress/egress points to commercial properties along River Drive shall not be any closer than 300 feet. This standard will promote safer traffic flow along this route.

3.3 RECREATION, OPEN SPACE AND PUBLIC ACCESS

Existing Conditions

Over seventy-five percent of the Planning Area currently exists as undeveloped open space. This open space consists primarily of agricultural lands and the riparian environment of the Kings River. Other open space uses include parks and playing fields on the Kings River Community College Campus. Policies in the Specific Plan and Reedley's General Plan strongly support the preservation of the riparian open space, a position that was generally supported by opinions expressed in the community survey and input received during the public workshops.

During the preparation of the Specific Plan, a comprehensive biotic survey was conducted to determine the presence of rare and endangered plants and animals in the Planning Area. Although no rare or endangered species were identified, the biotic report did indicate that the riparian area along the Kings River is a diminishing resource in that nearly 95% of the once vast riparian forests in the State have been destroyed by agriculture and urbanization. The report also noted that relatively undisturbed "significant natural habitat" exists on the islands and west bank of the river in Subarea 1, and on the islands and steep banks in the other two subareas.

The community survey indicated that the most popular public use of the open space along the Kings River was passive recreation: walking, fishing, floating, seeking solitude, bird watching, and viewing. These types of recreational opportunities are generally available in the four parks that are situated along the river: Smith Ferry (public), Reedley Beach (public) and Kelly's Beach (private) Subarea 2, and Cricket Hollow (public) is in Subarea 3. However, there is currently no trail system that connects these parks. The lack of a trail system that can be used for biking, walking and jogging along the river prevents the public from realizing the full enjoyment of the Kings River environment. Further, when an established trail is not available, people often create their own access to the river area; a situation that can promote trespassing, vandalism, littering and other nuisance activities.

Action Plan

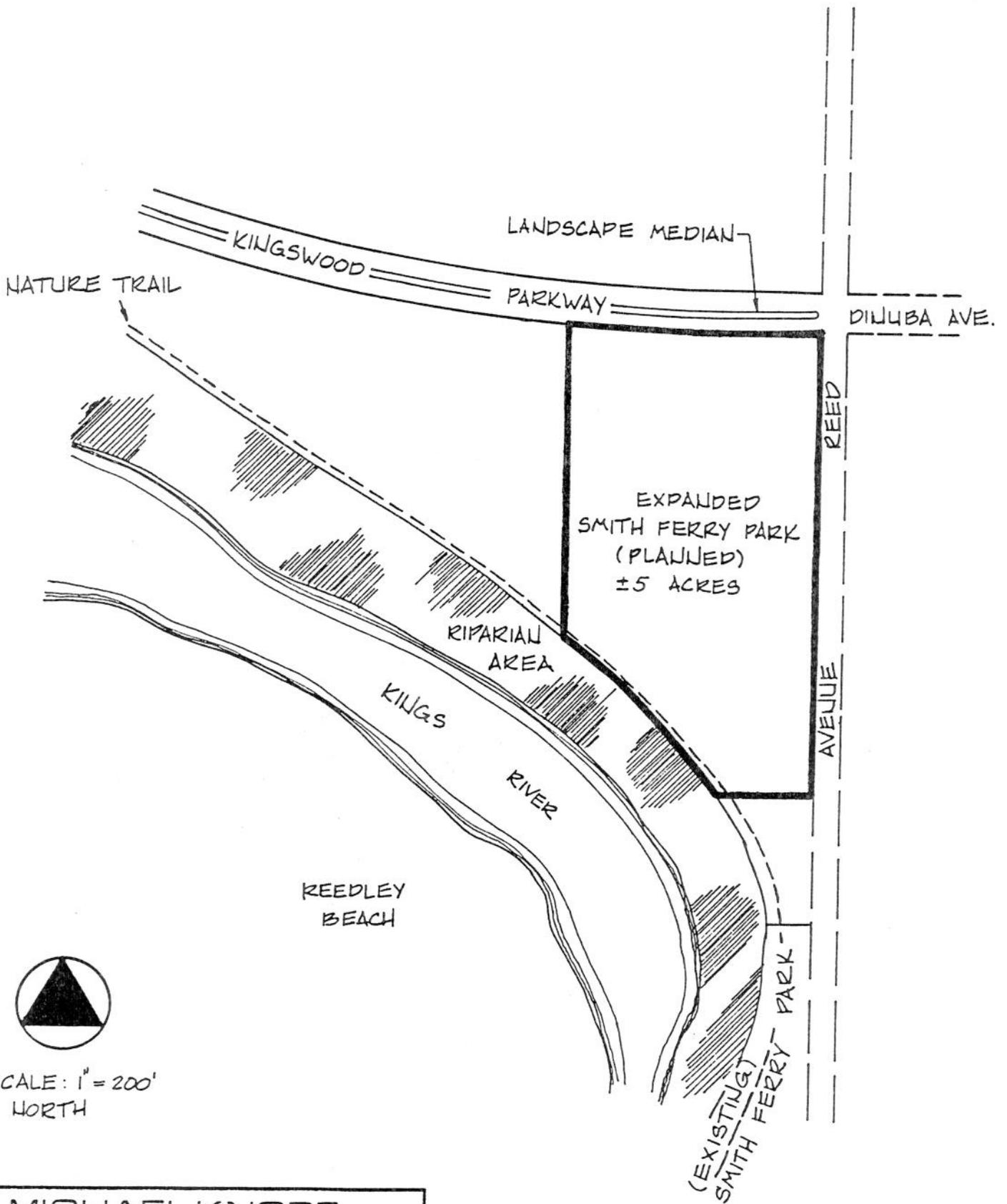
Development of the Recreation, Open Space, and Public Access action plan was guided by the policies of the Specific Plan, input received during public workshops, and communications with public agencies and local residents. The plan recommends the following:

- 1.0 Construct a nature trail along the east side of the Kings River in Subarea 2. A primary trail, to be constructed of decomposed granite, will extend from Smith Ferry Park to the Manning Avenue bridge and then connect with the proposed Subarea 1 trail system. This trail will provide the public access to the river that will be required by State law when the privately owned lands along the river are subdivided.

The primary trail will generally be located on the existing dirt road that is established along the edge of the riparian area. Existing dirt trails that meander through the riparian area will be accessible from the primary trail.

- 2.0 Enhance and maintain the existing walking trail system which exists along the east side of the Kings River north of the Manning Avenue Bridge. Create an interpretive trail system in this area by providing signage with information on vegetation, wildlife and habitat. Signing and maintenance could be provided by students and staff from Kings River Community College, and local groups and individuals on a volunteer basis.
- 3.0 Establish an interpretive nature center on the campus of Kings River Community College. This center would serve as the beginning point of the interpretive trail system. Construction of this center could be encouraged as a cooperative effort between students and staff from the College science, building, and landscaping design programs.
- 4.0 Construct Kingswood Parkway with a striped bike lane on both side of the roadway. These bike lanes should connect with the existing bikepath system in Reedley, as will as the regional system planned by Fresno County.
- 5.0 Plan for a future paved bikepath paralleling the nature trail in Subarea No. 2.
- 6.0 Plan for a future bikepath along the west edge of the Kings River College property that connects with the bikepath in Subarea No. 2. This bikepath will extend north to the Wahtoke Creek area. Consideration shall be given to linking with Reed Avenue to the east.
- 7.0 Meet with Fresno County park officials to determine the feasibility of creating a public parking area and access point to the Kings River on county-owned property located west of the river, immediately north of the Manning Avenue Bridge. This area has historically served as an exit point from the river by floaters and its closure would increase pressures on other less suitable locations.
- 8.0 Encourage the formation of a private, non-profit organization to oversee the management of the Kings River riparian area. This organization working with the college, the City's Parks and Recreation Department, and county and State agencies, could promote management programs that involve the re-establishment of native vegetation along the river and the removal of non-native plant species.

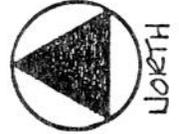
- 9.0 Implement a reforestation program in the "open space" area in Subarea 2 between the edge of the riparian habitat and Kingswood Parkway. This planting program should create an oak savannah habitat that includes only species indigenous to the Planning Area. See Appendix C for the low-maintenance "open space" reforestation plan.
- 10.0 Construct a 10-foot wide decomposed granite trail between the Parkway and the river nature trail on the Eymann Avenue alignment. This trail will provide residents of the Planning Area with direct access to the river.
- 11.0 Expand Smith Ferry Park as currently planned by the City Parks and Recreation Department. This action will provide a larger park area for more active recreational opportunities, including playground equipment and picnic tables. This enlarged park area will also become a destination point for the nature trail which parallels the Kings River. A conceptual plan of the Smith Ferry Park expansion is presented in Figure 8.
- 12.0 Attempt to acquire additional land west of Cricket Hollow Park or encourage development of private facilities to improve local circulation and expand parking for trailers, cars and recreational vehicles. Consider future relocation of the pistol range to a more secluded area to minimize noise conflicts and allow expansion of Cricket Hollow Park on city owned land. See Figure 9 for a conceptual plan of the expanded Cricket Hollow Park.
- 13.0 Expand existing parking and enhance existing dirt trail system at Reedley Beach. This will provide needed additional downstream parking for floaters and protect habitat from uncontrolled access to beach areas. The stands of giant reed at the north end of the parking lot shall be replaced with suitable native vegetation. Designated fire pits will be provided on the beach areas. See Figure 10 for a conceptual plan of the expanded Reedley Beach facility.
- 14.0 Vehicular access to the public parks and bikepath shall be prohibited after 10:00 p.m. Access shall be denied by a chain or gate across the park entrances.
- 15.0 Establish a scenic vista site along Kings River Drive (see Figure 4 for the recommended location). In order to provide a safe parking area on the existing shoulder, Kings River Drive should be realigned with a large radius curve.



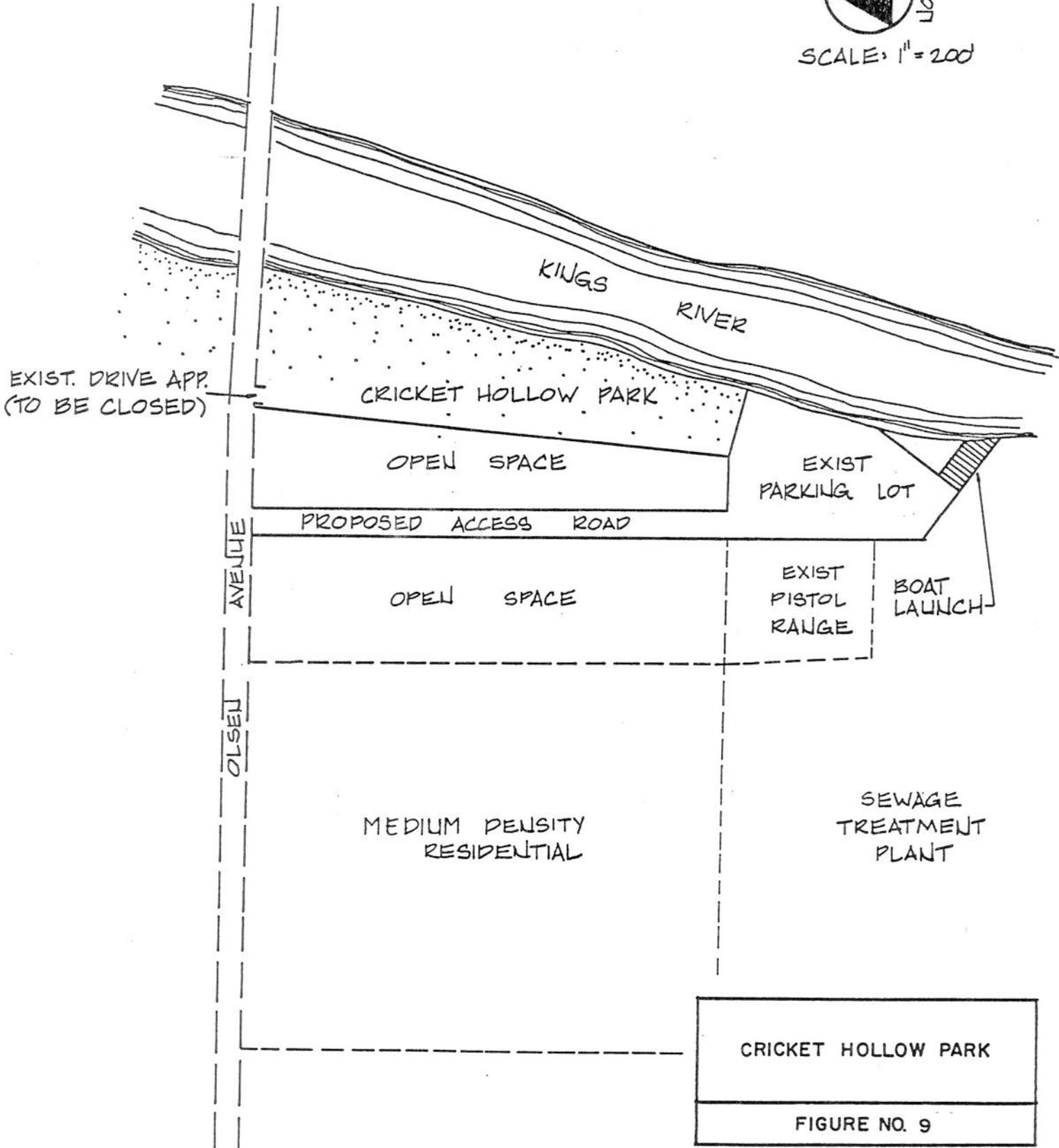
SCALE: 1" = 200'
NORTH

MICHAEL KNOPF AND ASSOCIATES INC.		
	KINGS RIVER SPECIFIC PLAN	

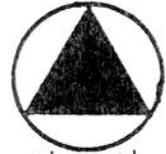
SMITH FERRY PARK
FIGURE NO. 8



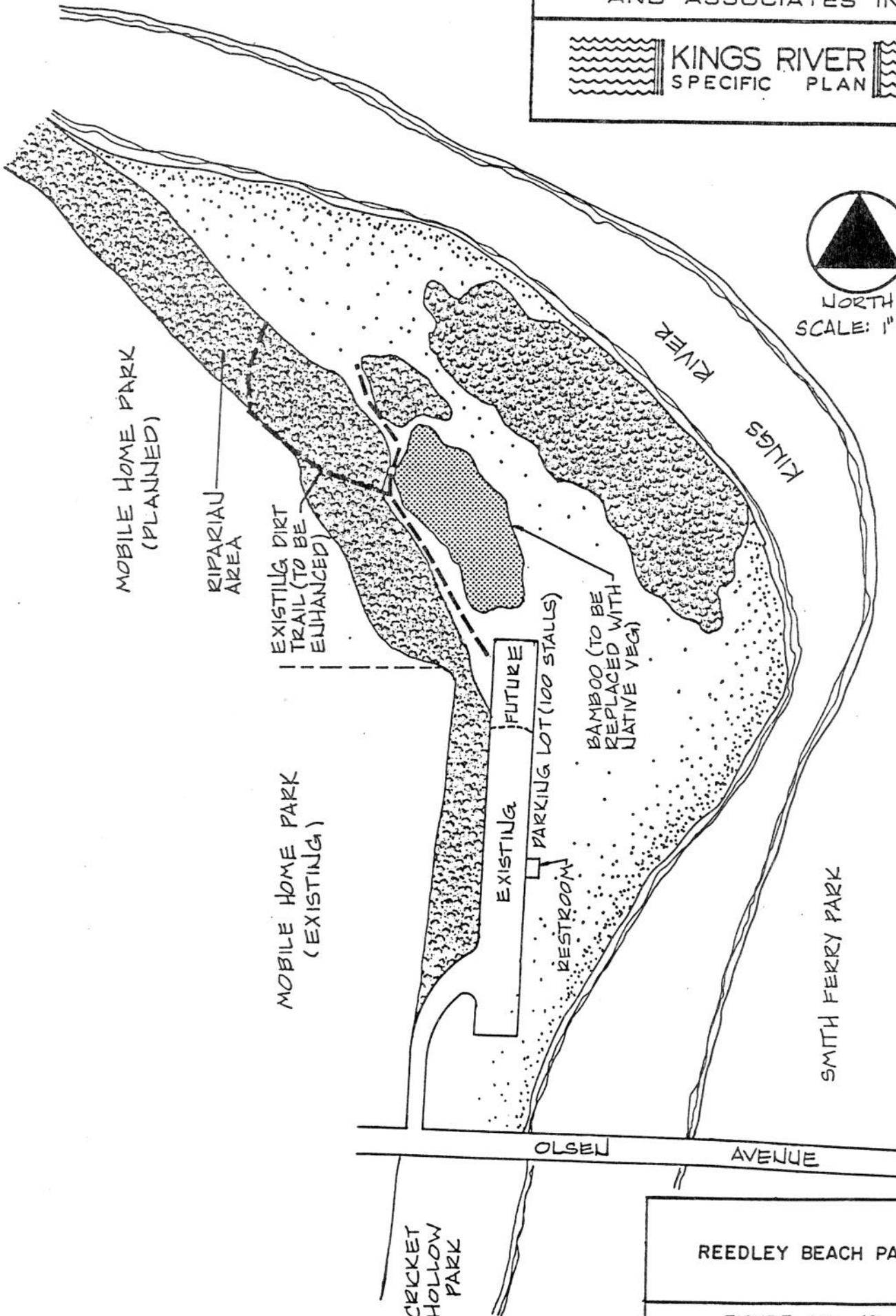
SCALE: 1" = 200'



CRICKET HOLLOW PARK
FIGURE NO. 9



NORTH
SCALE: 1" = 200'



REEDLEY BEACH PARK
FIGURE NO. 10

3.4 PUBLIC INFRASTRUCTURE, FACILITIES AND SERVICES

Existing Conditions

Because the Planning Area is both in the County and the City, the area is jointly served by the Fresno County Sheriff's Department and the Reedley Police Department. Fire protection is provided by the Mid-Valley Fire District and the Reedley Fire Department. As county land is annexed and developed, the City of Reedley will be solely responsible for providing these services.

The most significant public safety problems in the Planning Area involve activities occurring in and along the Kings River. During the summer, conflicts exist among boaters, floaters and swimmers. Drownings are also a safety problem. When the river is low or dry, the use of off-road vehicles results in excessive noise and the disturbance of vegetation and soils. During the summer and fall months, fires in the river bottom are a potential hazard, especially among stands of bamboo and eucalyptus. Throughout the year, property owners along the river must cope with trespassing, shooting, littering and excessive noise from motorized vehicles.

The City of Reedley has adopted sewer, water and storm drainage master plans that provide for these services in the Planning Area. A review of the master plans indicates that development consistent with the Specific Plan can be adequately served by these systems. See Figures 11, 12, and 13 for the existing and planned sewer, water and storm drainage systems.

Developers are required to install and/or extend infrastructure to their development. Therefore, most of the systems will be installed at the developer's expense. In addition, connection fees for housing or commercial projects finance the cost of other segments of the infrastructure, including the construction of water wells and lift stations, and the expansion of the sewer treatment plant.

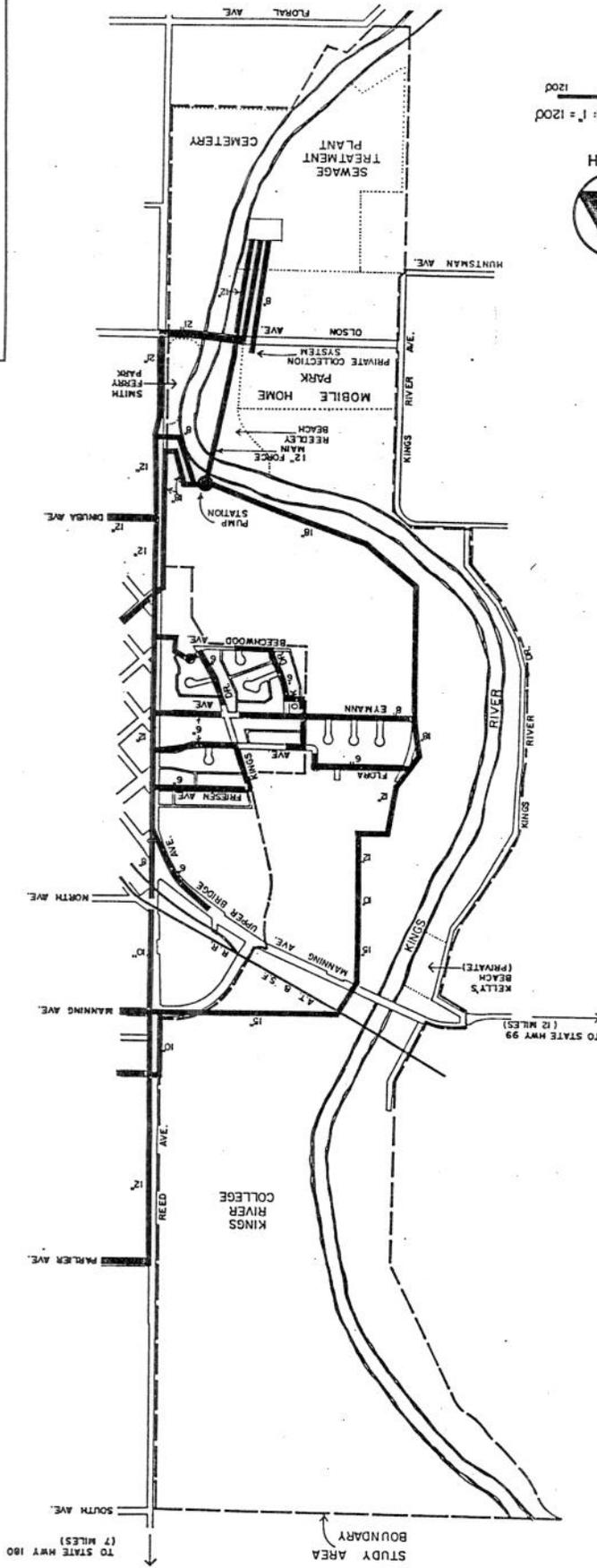
Action Plan

Based on the previously described existing conditions and Specific Plan policies, the Plan recommends the following actions;

- 1.0 The 10-foot wide decomposed granite trail that will be constructed along the east side of the Kings River between the expanded Smith Ferry Park and Manning Avenue will also serve as a service road for emergency vehicles. By providing access for these vehicles, patrol and enforcement capabilities in and along the river, which was identified as a problem during the public workshops, can be improved. The access trail on the Eymann Avenue alignment will also provide public safety vehicles with access to the river from Kingswood Parkway.
- 2.0 Public parking lots will be constructed on the expanded Smith Ferry Park. A public restroom should also be provided at the Smith Ferry Park.

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KINGS RIVER
SPECIFIC PLAN



SOURCE: City of Reedy (1988)

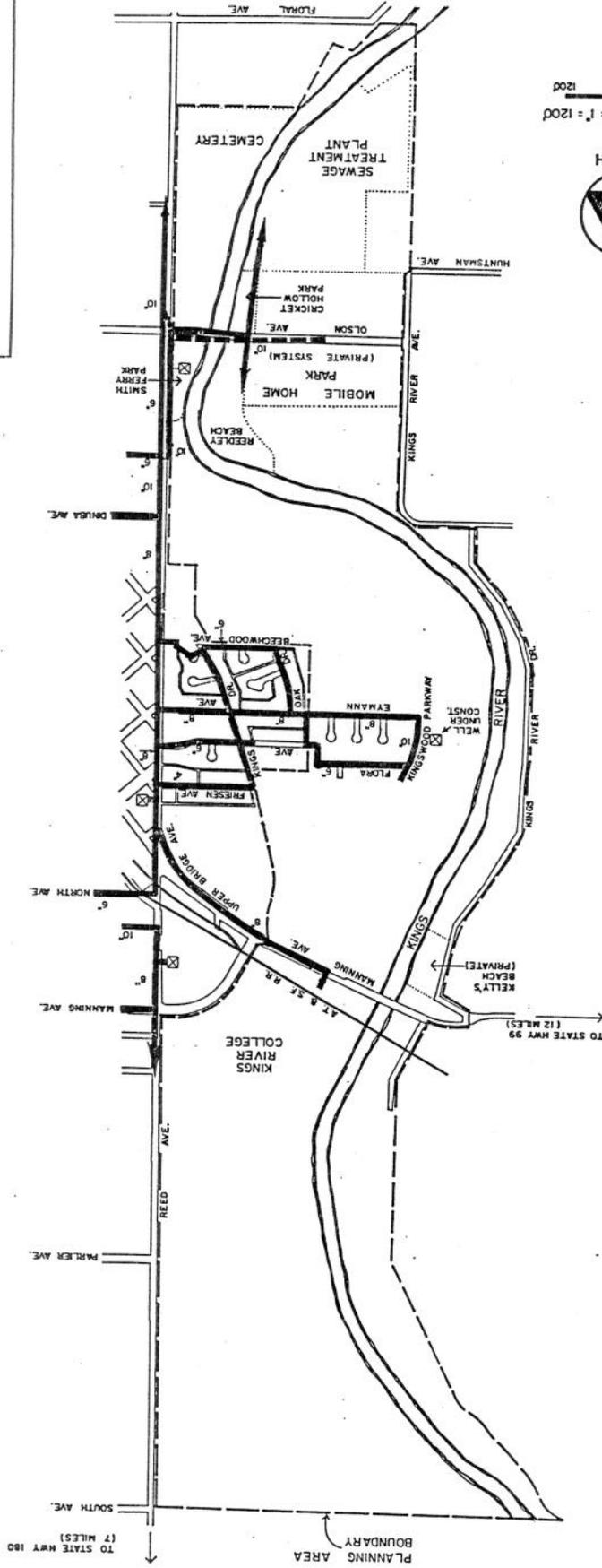
LEGEND
 18" Line Diameter
 Existing Sewer Line

PROPOSED & EXISTING
SEWER SYSTEM

FIGURE NO. 11

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AND ASSOCIATES INC.

KINGS RIVER
SPECIFIC PLAN



APPROX. SCALE: 1" = 1200'
0 300 600 1200'



SOURCE: City of Reedley (1988)

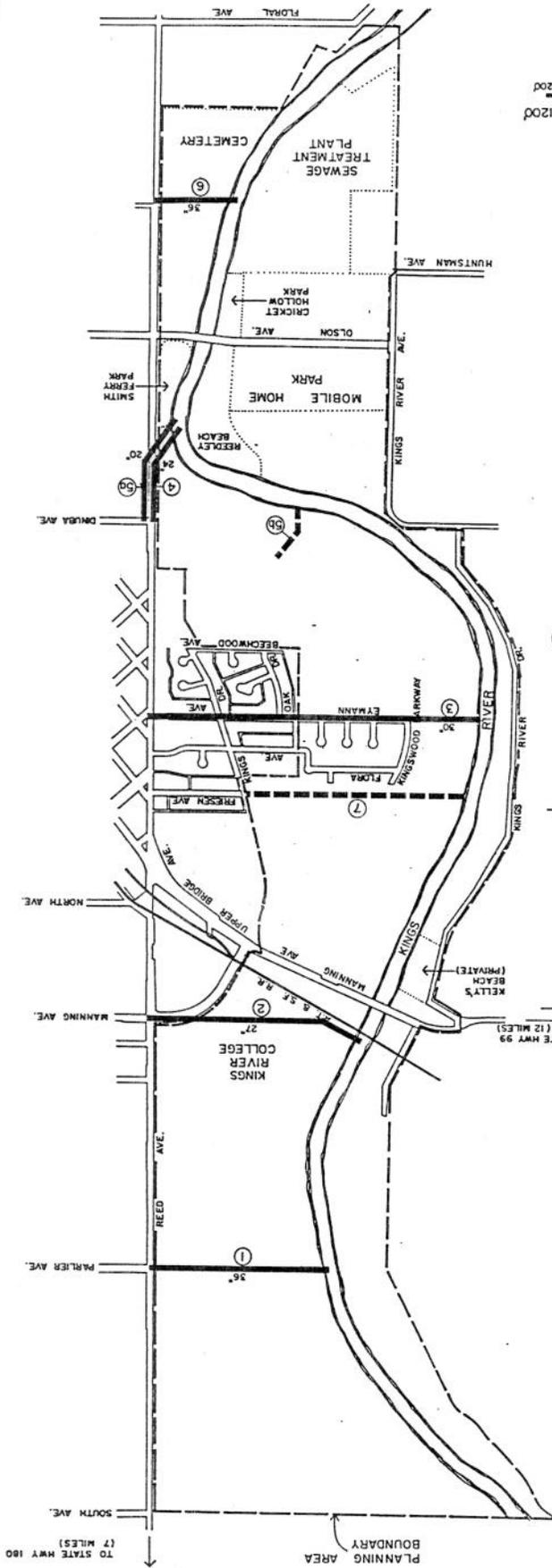
LEGEND
 - - - - - Proposed Water Line
 _____ Existing Water Line
 8" Water Line Diameter
 ⊠ Well

PROPOSED & EXISTING
WATER SYSTEM

FIGURE NO. 12

MICHAEL KNOPF
AND ASSOCIATES INC.

KINGS RIVER
SPECIFIC PLAN



APPROX. SCALE: 1" = 1200'



SOURCE: Jones & Stokes Associates, Inc. (1983)
Blair, Church & Flynn (1982)
City of Reedy (1988)

OUTFALL	AREA (Acres)	DESIGN CAPACITY (cfs.)
1	353	39
2	76	14
3	100	13
4	283	32
5a & b	13	16
6	437	39
7	100	13

LEGEND

- ① Outfall number
- 20" Outfall diameter
- Existing Storm Drain Outfall
- Proposed Storm Drain Outfall

PROPOSED & EXISTING STORM
DRAIN OUTFALLS

FIGURE NO. 13

TO STATE HWY 99 (12 MILES)

TO STATE HWY 180 (17 MILES)

4.0 DESIGN GUIDELINES AND LAND USE REGULATIONS

This section contains the design guidelines and land use regulations that apply to development in the Planning Area. The purpose of these guidelines and regulations is to insure that development complies with the intent of the goals and policies of the Specific Plan. The design guidelines will insure that the scenic resources of the riparian/open space area will be preserved; a safe and convenient circulation system is provided; and development is well designed and visually pleasing. The land use regulations will identify the types of uses that are consistent with the policies of the Specific Plan.

All development projects in the Planning Area will be reviewed for consistency with the Specific Plan, as well as existing applicable ordinances and development standards. Single family residential projects will be evaluated during the subdivision review process, while multi-family, commercial, and public building projects will be examined during the site plan review process.

Design guidelines and regulations are provided below for future single family residential, multi-family residential, and commercial developments in the Planning Area. Design guidelines are also provided for the circulation system in the Planning Area.

4.1 SINGLE FAMILY RESIDENTIAL

Design Guidelines

The following design guidelines shall be applied during the subdivision review process:

Low Density Residential Lots

- 1) The low density residential lots on the west side of Kingswood Parkway shall have a minimum size of 30,000 square feet. The lots shall have a minimum width of 150 feet and a minimum front yard setback of 50 feet to accommodate circular driveways. The depth of these lots shall not exceed 200 feet.
- 2) The minimum side yard setback shall be 25 feet. The rear yard setback shall be 20 feet.
- 3) The rear lot lines of the residential lots fronting onto the west side of Kingswood Parkway shall be improved with a combination of decorative river rock and wrought iron fence. This rear lot line treatment shall be

attractive, durable, and consistent from lot to lot. The fence shall be maintained in good condition at all times, and shall be designed to adequately pass stormwater surface flows in a dispersed manner.

- 4) The subdividers of low density development property along the east side of the Parkway shall be encouraged to locate lot lines over the manholes of the westside sewer line when manholes are located outside of the Parkway (primarily near Flora Avenue). The subdividers shall construct an all-weather road that provides access to the manholes and grant an access and maintenance easement to the City.

Medium Density Residential Lots

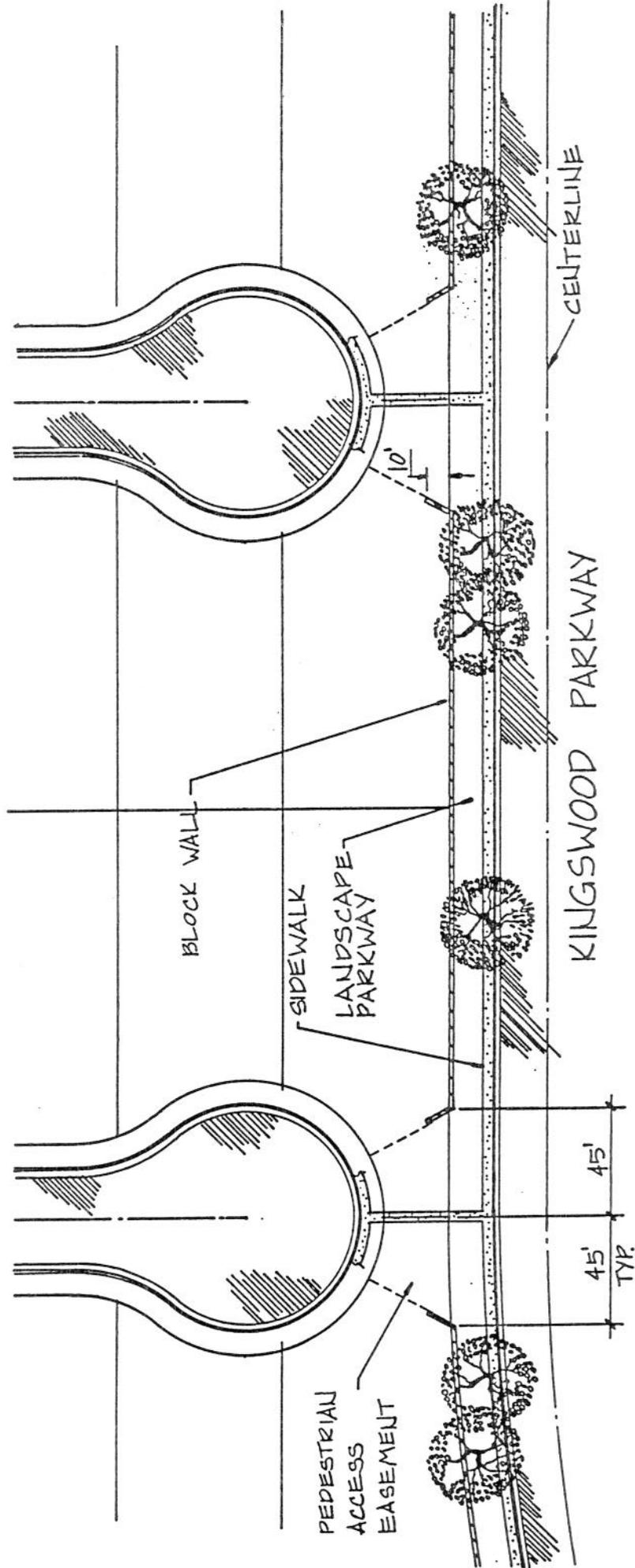
- 1) The subdividers of medium density lots along the Parkway shall be encouraged to create lots with a side or rear yard orientation to the roadway.
- 2) Lots fronting onto the Parkway shall have a minimum width of 100 feet and minimum front yard setback of 25 feet to accommodate circular driveways.
- 3) Lots with a side or rear yard orientation to the Parkway shall provide a 20-foot wide landscaped parkway and block wall along the street (Note: The four-foot wide sidewalk behind the curb) is included in the parkway). Landscape and lighting maintenance districts shall be formed to maintain the landscaped parkways within each development.
- 4) Block walls shall be constructed to a height of six to seven feet. Decorative features, such as split faced or fluted blocks shall be incorporated into the wall design. Vines or other decorative landscaping on the wall is encouraged. The wall shall be discontinuous, with a maximum unbroken length of 200 feet. A City block wall design standard shall be established to insure consistency between developments.
- 5) Pedestrian access easements shall be provided between interior local streets and the parkway to allow local residents direct access to the open space. The City shall determine the number, location and dimensions of these easements for each proposed subdivision during the subdivision review process. The parkway block wall shall not extend across the easements (see Figure 14).

Land Use Regulations

Existing single family residential districts contained in the Reedley Zoning Ordinance shall determine permitted and conditional uses. Development shall be consistent with existing district standards except where modified by the Specific Plan design guidelines.

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KINGS RIVER
SPECIFIC
PLAN



CUL - DE - SAC
LOT LAYOUT

FIGURE NO. 14

SCALE: 1" = 60'

Planned Unit Developments (PUDs) will be considered on the designated medium density residential areas immediately south of the commercial development area along Manning Avenue because these medium density residential areas are located adjacent to commercial property and they are relatively deep (see Figure 4). The existing City PUD ordinance allows deviations from traditional residential development standards if the PUD creates a more functional, aesthetically pleasing and harmonious environment.

Under existing City code, higher density residential uses, i.e. two and three-family dwelling units per site, can be developed in new single-family areas with the granting of a conditional use permit in accordance with current medium density residential development criteria and standards. These standards include the following:

- 1) Lots of sufficient area, width and depth shall be created for such dwelling units only through the subdivision or parcel map land division process, unless the Planning Commission or City Council finds that a parcel created by metes and bounds is adequate for the purpose intended.
- 2) The total number of all dwelling units within the entire subdivision shall not exceed a ratio of seven (7) dwelling units per net acre of land.
- 3) There shall be a minimum of 3,000 square feet of site area per dwelling unit.
- 4) Lots shall have frontage on, or in be close proximity to an arterial or collector street.

Residential densities that are higher than three-family dwelling units per site are allowed with the granting of a general plan amendment and change of zone in accordance with the criteria and standards established by the General Plan. These criteria include the following:

- 1) As a means to transition from commercial uses or industrial uses to lower density residential uses.
- 2) Areas which, because of their size and shape or unusual characteristics, cannot be developed in a traditional way.
- 3) Area fronting onto main arterial streets.

4.2 MULTI-FAMILY RESIDENTIAL

Design Guidelines

The following design guidelines are to be applied during the site plan review process.

- 1) Straight uninterrupted building lines shall be discouraged. To achieve this objective, a building's perimeter will be broken by staggering individual units, extensive landscaping, limiting the size of the building and alternating building materials.
- 2) Horizontal architectural elements, such as balconies, and varied roof elements shall be encouraged.
- 3) On-street parking by residents of multiple family development shall be discouraged. This can be achieved by constructing fencing or installing landscaping between the residential units and the street, locating off-street parking between residential units and the street, orienting the ends of buildings toward the street, and minimizing the number of front doors facing the street.
- 4) Common facilities, including pool, activity room, and spa, should be centrally located.
- 5) All mechanical equipment shall be hidden from view or placed on the ground.
- 6) Two-story buildings shall be designed and oriented so that overviews into private backyards and patio areas of on-site and adjacent development is eliminated. A minimum building setback of 25 feet from existing or proposed single family residential zone districts shall be required.
- 7) The major treatment for all yard areas which front onto streets shall be lawn and trees. Seventy-five percent of this yard area shall be composed of turf.
- 8) Trees to be installed in the yard area which front onto streets shall be a combination of 15-gallon (75 percent) and 24 inch box (25 percent) specimens.
- 9) Parking lots shall include a landscaped island, with trees for shading, for every ten parking stalls.
- 10) Trash enclosures shall meet City standards. A concrete sloping apron shall be constructed in front of the trash enclosure to facilitate easy pickup by the solid waste collection operator.

Land Use Regulations

The multiple family residential districts contained in the Reedley Zoning Ordinance shall determine permitted and conditional uses. Development shall be consistent with existing district standards except where modified by the Specific Plan design guidelines.

4.3 COMMUNITY COMMERCIAL

See development standards and land use regulations in Reedley Zoning Ordinance.

4.4 CIRCULATION SYSTEM

Design guidelines for Kingswood Parkway, the major component of the Planning Area circulation system, are presented below. These guidelines are, to the greatest extent possible, consistent with existing City standards. Design guidelines for local streets in the Planning Area, the nature trail along the Kings River, and the Eymann Avenue access trail are also presented.

Kingswood Parkway

Kingswood Parkway shall be constructed with an 84-foot right-of-way and a 64-foot wide (curb-to-curb) roadway. Salient features of the Parkway are presented below.

Median: The Parkway shall have a ten-foot wide landscaped median that is intended to enhance the streetscape. The developer will be responsible for installing curbing around the median, all landscaping, and all irrigation improvements. The City will be responsible for the costs of providing decorative concrete within the median area. The median will be maintained by the landscaping and lighting maintenance districts that are formed for each development. The design of the Kingswood Parkway landscaped median is set forth in Appendix D.

Curb, Gutter, and Sidewalk: Both sides of the roadway shall have curbing, gutters, and sidewalk. The sidewalk shall be four feet wide along residential properties and ten feet wide, with City standard street planters, along commercial properties.

Landscaped Pedestrian Parkway: A 20-foot wide landscaped pedestrian parkway, which includes a decorative block wall, shall be provided along residential lots that have a side or rear yard orientation to Kingswood Parkway (Note: 10 feet of the landscaped parkways will be outside of the public right-of-way). The landscaped parkways will be maintained by the landscaping and lighting maintenance districts.

Reed Avenue Entryway: Sixty-four foot wide roadway includes a left-turn pocket, one through travel lane, and a right-turn lane for eastbound traffic; and two travel lanes for westbound traffic.

Reed Avenue Entryway to Kings Drive: Sixty-four foot wide roadway includes two travel lanes, and parking and bike lanes on both sides of the street. See Figure 15 for a typical cross-section.

Manning Avenue Entryway: Sixty-four foot wide roadway includes four travel lanes, and left-turn pockets for northbound traffic at Manning Avenue and southbound traffic at Kings Drive. Parking and bike lanes are not provided.

Local Streets

Local streets in the Planning Area shall be constructed with a 60 foot right-of-way that includes a 40 foot roadway. See City Standard St-1 for a local street cross-section.

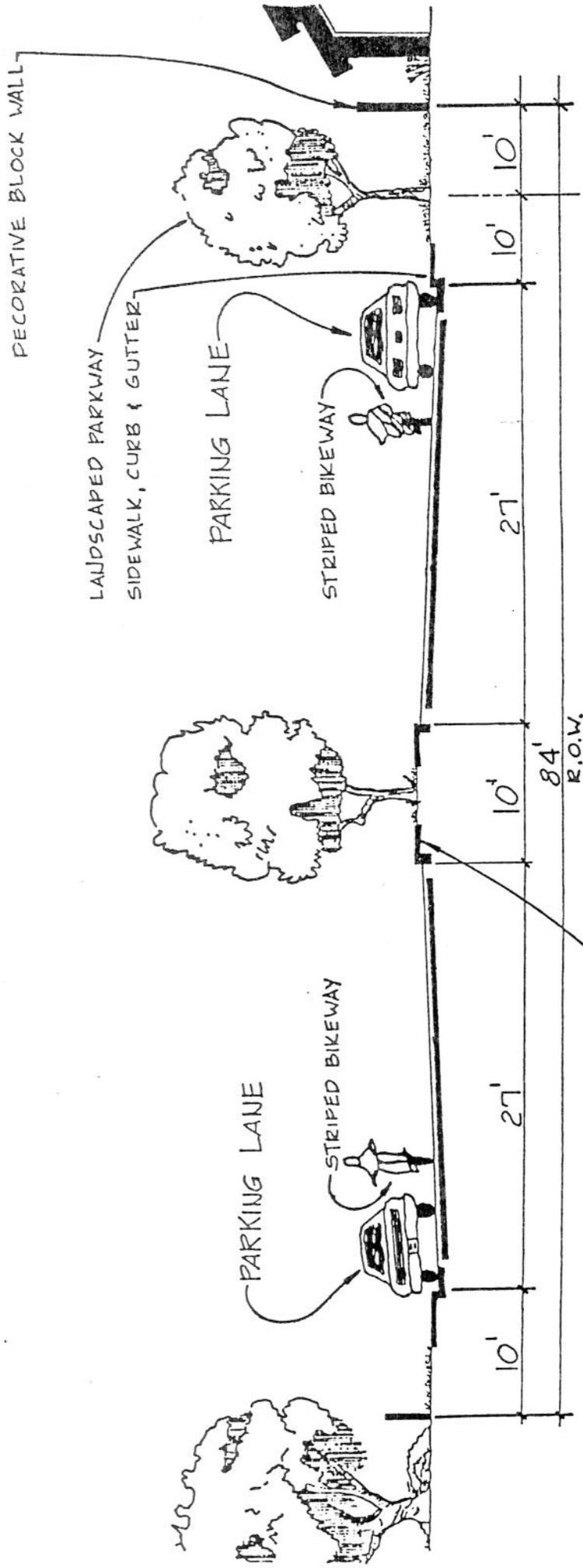
Kings River Nature Trail

The 10-foot wide nature trail that is proposed along the eastern edge of the riparian area in Subarea 2 shall be constructed with decomposed granite. See Figure 16 for a typical cross section. This trail should be capable of accommodating emergency and patrol vehicles.

The interpretive trails proposed in Subarea 1 will be established along existing trails that only require limited maintenance.

Eymann Avenue Access Trail

The 10-foot wide access trail on the Eymann Avenue alignment shall be constructed with decomposed granite so the trail is capable of carrying public safety vehicles. The trail will be constructed in an existing 30-foot wide City storm drain easement. Fencing that is consistent with the rear lot line fencing of the low density residential lots on the west side of the parkway shall be constructed on both sides of the easement. The City shall construct the fencing on the north side while the subdivider of the adjoining southerly property shall construct the south side fence. The non-trail portion of the easement shall be planted in trees in accordance with the recommended open space reforestation plan. A lockable gate shall be installed at the west entry to the trail.



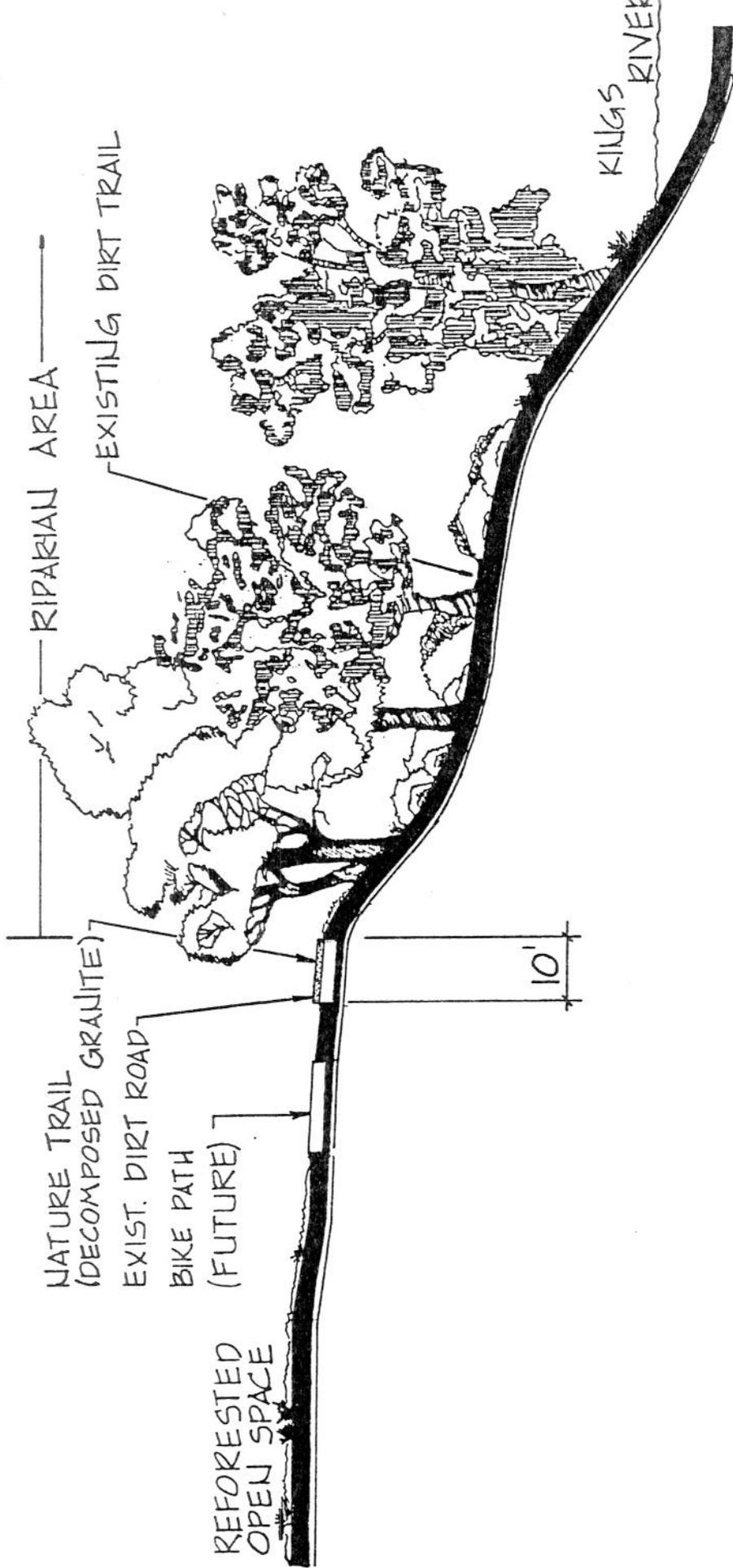
NOTE: SIDEWALK IS FOUR FT. WIDE FOR
RESIDENTIAL PROPERTY, TEN FT.
WIDE FOR COMMERCIAL PROPERTY.

2" CONCRETE EDGING
(WITH DECORATIVE TREATMENT)
THAT IS SLOPED INWARD.

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 KINGS RIVER SPECIFIC PLAN	

COLLECTOR STREET: TWO LANE DIVIDED CROSS SECTION (TYR.)
FIGURE 15

TYPICAL CROSS SECTION
FOR
SUBAREA 2



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 KINGS RIVER SPECIFIC PLAN	

BIKE PATH/ NATURE TRAIL SYSTEM
FIGURE NO. 16

5.0 IMPLEMENTATION AND FINANCING

Implementation of the Kings River Corridor Specific Plan will involve the joint cooperation of numerous agencies, participation by the public, and the commitment of the City of Reedley to pursue numerous financing mechanisms. The City of Reedley is also vested with the task of insuring that the goals, policies and action plans of the Specific Plan are implemented within the next 20 years.

The success with which the Specific Plan is implemented will be determined by the City Council's present and future dedication to the Specific Plan's vision for the Planning Area. The implementation process, including development phasing, is described below.

5.1 ADOPTION PROCEDURES

This section discusses the adoption process for the Kings River Corridor Specific Plan and amending related documents, including the zoning ordinance and general plan. The Specific Plan also recommends the preparation of a Quimby Ordinance and redevelopment plan.

Public notification and hearings are required prior to the adoption of the Specific Plan. Both the Reedley Planning Commission and City Council are required to conduct these hearings. In addition, it is sometimes necessary to have additional public agencies or commissions conduct hearing on these documents. These hearings and multi-agency processing requirements can cause adoption procedures to take several months. A description of the various steps of the adoption process follows.

Adoption of Kings River Corridor Specific Plan: City of Reedley and County of Fresno

Adoption of the Specific Plan amends the Reedley General Plan. The Specific Plan becomes the regulating document with regard to development, circulation and public improvements in the Planning Area. All development action would require consistency with the Specific Plan.

Since a portion of the Planning Area is in the unincorporated area of Fresno County, the County Planning Commission and Board of Supervisors will also have to adopt the Specific Plan.

Amend Reedley General Plan: City of Reedley and County of Fresno

Adoption of the Specific Plan necessitates the amendment of three of Reedley's General Plan elements: land use, circulation, and open space and recreation. Amendment of these elements insures internal consistency between the Specific Plan and General Plan.

If these amendments involve unincorporated land in Fresno County, the County Planning Commission and the Board of Supervisors would also have to adopt the Reedley General Plan amendments.

Amend Reedley Zoning Ordinance

Adoption of the Specific Plan necessitates amending the Reedley Zoning Ordinance to create new preservation oriented open space guidelines and standards.

Prepare Redevelopment Plan - City of Reedley (Optional)

The formation of a Reedley Redevelopment District would provide the City of Reedley with an opportunity to eliminate blight within the redevelopment district by financing needed public improvements, rehabilitate residential and commercial structures, facilitate new commercial development, and promote affordable housing, increase employment opportunities, and promote development and improvements consistent with the Kings River Corridor Specific Plan and Reedley General Plan. This district could include portions of the planning Area.

Formation of a redevelopment district would generate tax increment revenues for the redevelopment agency as new development occurs or existing uses are rehabilitated. These revenues can be used by the agency to implement the objectives previously mentioned. It also affords the agency the opportunity to issue tax allocation bonds. Revenue from these bonds can be used to finance major projects within the district, including construction of public improvements, acquisition of land or residential rehabilitation.

The formation of a redevelopment district would also provide the City of Reedley with a community development strategy which could promote development consistent with the Specific Plan and help to finance many of the Specific Plan improvements that are recommended.

5.2 FINANCING METHODS

In order to insure that the Planning Area is developed, preserved and managed in a manner consistent with the Kings River Corridor Specific Plan, methods of financing improvements and maintenance must be devised. Possible methods the City of Reedley could utilize to achieve the financing goals of the Specific Plan are summarized below. A fiscal analysis for implementing the Specific Plan is presented in Appendix E.

Private Sector

In order to provide needed services to the residents of new developments, the City requires persons developing property in the City to construct or install certain improvements associated with the development. Based on this policy, developers of property in the Planning Area will be required to dedicate right-of-way for streets and

other easements; construct streets, curbs, gutters and sidewalks; install street lights, fire hydrants, parkways, and landscaping; and build a block wall or wrought iron fence (where specified). The developer would also be required to extend all infrastructure necessary to serve the development.

In addition to paying for the above improvements, developers are also required to pay fees for building permits and connection to the City sewer, water and storm drainage systems. A portion of the connection fee finances the depreciation, construction, and expansion of these systems. Adoption of a parks and recreation (Quimby) ordinance, as recommended by the Specific Plan, would require the developer to pay a fee or dedicate land for parks and recreation improvements.

General Fund

The City of Reedley can reserve a portion of its general fund for capital expenditures. In the case of the Specific Plan, capital expenditure funds could be used for the acquisition of a future park site. This fund is often limited in terms of the amount of money which can be set aside for these types of improvements.

CDBG Funds

The Community Development Block Grant (CDBG) program administered by the U.S. Department of Housing and Urban Development is a major source of funding for infrastructure, construction of affordable housing, rehabilitation of deteriorated housing and economic development programs. CDBG funds are typically made available to only projects which benefit low income families or provide employment opportunities.

Transportation and Gas Tax Funds

These two sources of revenue are restricted to transportation projects. In regards to the Specific Plan, the funds could be used for signalization, when necessary, at the intersections of Kingswood Parkway with Manning Avenue and Reed Avenue.

Assessment Districts

State law has provided certain assessment acts whereby property owners within an assessment district pay a "special" tax for the financing of certain public capital improvements and services. These districts are typically used by communities to provide for police services and recreation programs, or the construction of water wells, storm drainage lines⁵ or parks. Such districts place the cost of development and operation on the property owner. Approval of the assessment district generally requires a majority of registered voters or two-thirds or more of the property owners if there are fewer than 12 registered voters.

Maintenance District

The Landscaping and Lighting Act of 1972 can be used to finance the construction of landscaping, lighting and park and recreational improvements, and the maintenance and servicing of any of these improvements. The Act provides for the creation of a district which can be broken down into zones. A zone can be exempted from the district or assessed differently based on the level of benefit to properties within the zone.

This financing mechanism is an excellent means of maintaining and servicing the common space and recreation improvements in each residential development. Another option would be to consider forming a maintenance district which encompasses the entire community, however, the funds generated would only apply to the maintenance of the public improvements along the Kings River.

Park and Recreation Fees (Quimby Ordinance)

Under State Government Code Section 66477 the City of Reedley can, by ordinance, impose the requirement that residential developments dedicate land, pay a fee, or a combination of both, for purposes of park and recreation development. This ordinance would include standards for determining the amount of the fee and a dedication formula of three to five acres per 1,000 persons. Adoption of this ordinance would allow the City of Reedley to require that a developer of property fronting on the Kings River dedicate land along the river, pay a fee for park and recreation improvements or a combination of both.

Most communities in Fresno County have adopted a Quimby Ordinance. It has afforded them the monies to construct new parks, purchase playground equipment or combine the funds with State park bond funds to complete larger park/recreation projects.

Specific Plan Fees

Government Code Section 65456 indicates that a City may impose a specific plan fee upon persons seeking approvals within the specific plan area. The fee can equal, but not exceed, the cost of preparation, adoption, and administration of the Specific Plan. This fee, once calculated, could be collected at the time building permits are issued.

The developers of land in the Planning Area benefit from the preparation of a Specific Plan (and EIR). If a residential development project is consistent with the Specific Plan, it is not required to undergo additional environmental review, unless certain conditions exist as described in California Government Code Section 65457(a). The exemption from further environmental review will reduce the processing time for the project and will provide assurances that environmental concerns will not delay the project.

Tax Increment, Redevelopment District

Redevelopment Law allows cities to utilize tax increment revenue to finance the acquisition of land for public purposes; construct public facilities, such as parks, sewers and streets; and for administration. However, the establishment of a redevelopment district can be a lengthy and costly process, and the implementation of a redevelopment plan can be controversial if condemnation of property is considered.

Should the Reedley City Council, who would also sit as the Redevelopment Board, wish to construct major improvements early in the life of the district in order to encourage development momentum, tax allocation bonds could be issued. These tax allocation bonds would provide the City with money to finance projects in the district. The debt on the bonds would be serviced by tax increment revenue generated in the years following the issuance.

A portion of the Planning Area, land along Manning Avenue, and the original Reedley townsite could be placed in the district. Tax increment or bond money could be used to facilitate commercial development along Manning Avenue, or install entryway improvements along Kingswood Parkway.

State Grants

Passage of Proposition 70, along with earlier park bond propositions, has made monies available for the construction of parks, educational and recreation facilities, and acquisition of lands for parks, nature preserves and open space. Some of these funds will automatically accrue to the City of Reedley while other funds are awarded through a competitive selection process. Reedley is in an excellent position to receive funds which are awarded on a competitive basis because each applicant must have a plan which identifies how the money will be spent. Adoption of the Kings River Corridor Specific Plan will satisfy that requirement. Further, the awarding of State park bond monies is heavily weighted towards projects which provide for trails and bike paths, preservation of riparian habitat, and nature interpretive improvements.

Entrance Fees

The Specific Plan recommends that improvements be considered at two parks in the Planning Area: Cricket Hollow Park and Reedley Beach. To help finance these improvements and their long-term maintenance, entrance fees could be established at each park. Further, these fees could help finance the River Safety Program mentioned earlier in this report.

Gifts and Contribution

Gifts in the form of land or improvements could help defray the cost of implementing the Specific Plan. Certain tax incentives could be explored for individual corporations gifting land. One time purchase of nature trail signs could be paid for by interested service clubs or local organizations.

Other Agencies

The City of Reedley should explore the opportunities to involve other agencies with the implementation of the Specific Plan. For example, Fresno County might be willing to offer land they own along the Kings River as a park or parking area; or Kings River Community College might be willing to take on the responsibility of constructing, maintaining and operating a nature trail and interpretive center mentioned in the Specific Plan.

5.3 PHASING

The purpose of this section is to discuss implementing the Specific Plan through the phasing of development and financing of infrastructure in the Planning Area.

Private and Public Improvements

Infrastructure and public services are presently available to Subarea No. 2 properties that are designated for development by the Specific Plan. Private landowners can develop their properties at any time. It is generally not necessary for them to wait for infrastructure to be extended, or to rely on adjacent property owners to develop before developing themselves. Conditions that would be required of developers in this area are as follows:

- o Dedicate land for street right-of-way as per City standards,
- o Construct street improvements as per City standards,
- o Install street lights and fire hydrants as per City standards,
- o Construct concrete block wall/wrought iron fence as per Specific Plan guidelines, and
- o Dedicate all or a portion of the "open space" land west of the Kingswood Parkway as per Specific Plan action plan.

The phasing of the installation of public improvements is a critical issue in terms of gaining community support for the Specific Plan. For the Specific Plan to be successful, the community must see some progress made towards the installation of the nature trail and bike path along the river. The actual installation for these improvements will be dependant on the amount of river frontage under public control and the availability of funding from the State and other sources.

The installation of these improvements, assuming the financing is available, can take place on various fronts. For example, the City of Reedley could be constructing the nature trail along the Kings River, while the Subarea No. 1 interpretive center and trail, could be constructed by volunteer labor and the Kings River Community College.

Financing

To finance the improvements required by the Specific Plan, the City can utilize the various funding sources described earlier, including State park grants, park and recreation fees, and general fund monies. The following general financing sequence is recommended for the next five years.

- 1) Establish a Kings River Corridor Planning Area account in the budget. The City Parks and Recreation Commission shall recommend to the City Council a priority list for expenditures.
- 2) Utilize the recently adopted Parks and Recreation Fee Ordinance (City of Reedley Ordinance No. 737) to generate park and recreation funds. Dedication of land under the Parks and Recreation Fee Ordinance shall be credited against the dedication of open space land required by this Specific Plan, provided that where such open space land dedication exceeds the amount of dedication required under the Parks and Recreation Fee Ordinance, the full open space dedication shall nonetheless be provided. Conversely, when the Parks and Recreation Fee Ordinance requires a dedication which exceeds the dedication of open space lands as required in this Specific Plan, the excess Parks and Recreation Fee obligation shall be given to the City of Reedley in the form of in lieu fees.
- 3) Apply for State park bond funds to provide park and open space acquisition and improvements.
- 4) Attach fees to building permits issued in the Planning Area to reimburse the general fund for the preparation of the Specific Plan. The cost of the Specific Plan would be spread over the potential number of residential units in the Planning Area.

To fund the maintenance of the private and public improvements in the Planning Area, the City must provide for the mechanism to achieve this task. For private improvements, such as the street parkways, maintenance can be provided by a landscaping maintenance district which is formed prior to the construction of the residential development.

To fund the maintenance of the public improvements along the Kings River, such as the parks, trails and reforestation plan, a city-wide assessment district is the recommended approach. Funds generated by the entire City would be used for the maintenance of the public facilities along the river. The formation of such a district would require a two-thirds affirmative vote.

The Specific Plan is a 20-year plan. Within this time frame, there will be near-term and long-term programming. Near-term improvements could include the interpretive center-trail system in Subarea No. 1, and the Subarea No. 2 trail on public owned lands.

Expected long-term improvements include the expansion of Cricket Hollow Park, Smith Ferry Park, and Reedley Beach.

The phasing of improvements recommended in the Specific Plan depends on a number of factors, including community priorities, funding, the availability of grants, and the rate at which property develops in the Planning Area.

In an effort to expedite installation of the trail system along the river in Subarea No. 2, the City of Reedley should attempt to obtain an easement for the trail across lands that are not expected to be developed in the near-term.

A near-term priority list of public improvements that should be completed is presented below.

City of Reedley

- 1) Secure land for expansion of Smith Ferry Park.
- 2) Acquire lands designated as Open Space along the east side of the Kings River in Subarea No. 2 in conjunction with the granting of discretionary development permits (e.g., tentative subdivision maps, parcel maps, conditional use permits, site plan reviews, etc.) as a means of protecting and enhancing the river environment, and furthering the goals and policies set forth in this Specific Plan.
- 3) Obtain an easement for the trail system across lands that will not be developed in the near-term.
- 4) Begin reforestation of public open space lands west of the Kingswood Parkway (with the support of private organizations).
- 5) Begin removal of non-native plants along the river.

Kings River Community College (volunteer aid)

- 1) Establish the interpretive nature trail system (with signage) in Subarea 1).
- 2) Construct the interpretive nature center.

APPENDIX A

KINGS RIVER CORRIDOR SPECIFIC PLAN
COMMUNITY SURVEY RESULTS

KINGS RIVER CORRIDOR SPECIFIC PLAN

COMMUNITY SURVEY

As an early step in the process of preparing the Kings River Corridor Specific Plan, the City of Reedley distributed 5,800 questionnaires to the community in April of 1988. The goal of the survey was to identify the needs, interests and concerns of the community in the Planning Area.

In excess of 500 questionnaires were returned, nearly 10% of the number that were distributed by the City. Because a response of three percent is generally considered to be statistically valid, it was felt that the relatively large response to the Specific Plan questionnaire accurately reflected the attitudes and opinions of the community.

The results of the survey are presented on the following pages.

- 1) **QUESTION:** *In what ways do you currently use or enjoy the Kings River in Reedley?*

<u>Choice</u>	<u>Response</u>
Swimming	8%
Jogging/Walking	23%
Off Road Vehicles	2%
Boating/Floating	23%
Fishing	12%
Solitude	32%

- 2) **QUESTION:** *What do you like most about the Kings River in Reedley?*

<u>Choice</u>	<u>Response</u>
Recreational Opportunities	23%
Development Potential	3%
Historical Significance	9%
Scenic Qualities	46%
Open Space	18%
Other: Picnics, Wildlife	1%

- 3) QUESTION: *What problems do you think currently exist in the Kings River area?*

<u>Choice</u>	<u>Response</u>
Noise	14%
Not Enough Access	9%
Habitat Damage	16%
Littering	38%
Excessive Access	8%
Not Enough Recreational Facilities	9%
Others: No Parking for Floaters	6%
Not Enough Picnic Tables	
Rowdy Behavior	

- 4) QUESTION: *Which of the following alternatives best describes your attitude towards this area?*

<u>Choice</u>	<u>Response</u>
No Change	23%
Preserve Area	25%
Widen Open Space	34%
Reduce Open Space	0%
Eliminate Open Space	2%
Mixed Land Use	16%

- 5) **QUESTION:** *If you feel that open space land use along the river should be kept, what should be done with the open space?*

<u>Choice</u>	<u>Response</u>
Parkway with Open Space Agriculture	11%
Natural Open Space	20%
Passive/Natural Parkway with Trails	35%
Extensive Landscaped Parkway with Fields	15%
Golf Course with Trails	15%
Resort Golf Course	4%
Other: Bird Sanctuary	

- 6) **QUESTION:** *What kind of recreation facilities would you like to see in a parkway along the river?*

<u>Choice</u>	<u>Response</u>
Bike Path	19%
Equestrian Trails	5%
Sports Fields	3%
Playgrounds	5%
Jogging/Walking Trails	51%
Landscaped Parks	10%
Observation/Fishing Decks	6%
Amphitheater	1%
Others: Golf Course, Picnic Areas	

- 7) QUESTION: *What type of public pedestrian and bicycle access should be available in an open space area along the river?*

<u>Choice</u>	<u>Response</u>
Every 1000 to 2000 feet	58%
Olsen Avenue & Manning Avenue	42%
Others	None
Near Eyemann Avenue	
Parking at North End for Floaters	

- 8) QUESTION: *If a parkway is established along the river, how should the City recover the cost of constructing and maintaining the parkway?*

<u>Choice</u>	<u>Response</u>
Developers/New Home Buyers	10%
Corridor Residents	3%
City Assessment District	27%
City General Fund	28%
Combination	32%
Other:	
Grants	
User Fees	
Contributions	

APPENDIX B

UNDESIRABLE NON-NATIVE PLANT SPECIES

KINGS RIVER CORRIDOR SPECIFIC PLAN

PRIORITIZED LIST OF UNDESIRABLE NON-NATIVE (WEEDY) PLANT SPECIES

(to be considered for selective removal from Riparian Habitat)

Category 1: These species are few in number, not widespread, and can be eradicated or controlled with a minimum of effort. They all have the potential to spread and become more serious exotic (non-native) species than they are now. A moderate effort expended to control these nine species would allow ongoing efforts to focus on the remaining seven species (the most troublesome ones in Categories 2 and 3.

- 1) English Ivy - Hedera helix
- 2) Western Catalpa - Catalpa speciosa
- 3) Casuarina or Ironwood - Casuarina species
- 4) Giant Reed - Arundo donax
- 5) Bamboo - Phyllostachys species
- 6) Peach - Prunus persica
- 7) Weeping Willow - Salix babylonica
- 8) Tree of Heaven - Ailanthus altrissima
- 9) Tamarish or Salt Cedar - Tamarix species

Category 2: These species are widespread and numerous. They will require concerted, systematic removal efforts to eradicate them from the area or to bring them under control.

- 1) Milk Thistle - Silybum marianum
- 2) California Black Walnut - Juglans hindsii
- 3) Common Fig - Ficus carica
- 4) Blue Gum - Eucalyptus globulus
- 5) Tree Tobacco - Nicotiana glauca

Category 3: These species are widespread, abundant, and very invasive. The most thorough control efforts will be needed to control these species; they may never be entirely eradicated from the area.

- 1) White Mulberry - Morus alba
- 2) Himalaya-Berry - Rubus procerus

APPENDIX C

OPEN SPACE REFORESTATION PLAN

KINGS RIVER CORRIDOR SPECIFIC PLAN

RIPARIAN REFORESTATION PLAN

Introduction: This plan is offered to planners as an informational document to help answer the following questions about a riparian restoration project:

- 1) Which species should be planted?
- 2) How are they planted and maintained?
- 3) What will this area look like as it matures?
- 4) What are some approximate costs?
- 5) What are some of the limitations?

1) Which species will be planted?

Riparian habitat in the Reedley area consists of many species but there are four major strata of vegetation that make up this type of habitat. The dominant species in these four strata are listed:

Tree Canopy Species

Valley Oak (Quercus lobata)
Fremont Cottonwood (Populus fremontii)
Western Sycamore (Platanus racemosa)
White Alder (Alnus rhombifolia)

Understory Species (shade-tolerant trees and shrubs)

Valley Willow (Salix gooddingii)
Sandbar Willow (Salix hindsiana)
Arroyo Willow (Salix lasiolepis)
Oregon Ash (Fraxinus latifolia)
Southwest Elderberry (Sambucus mexicana)
Buttonbush (Cephalanthus occidentalis var. californicus)
Mule Fat (Baccharis viminea)
California Blackberry (Rubus ursinus)

Ground Cover Species

Creeping Wildrye (Elymus triticoides)
California Mugwort (Atrémisia douglasiana)
Western Ragweed (Ambrosia psilostachya)
California Goldenrod (Solidago californica)
Santa Barbara Sedge (Carex barbarae)

Liana Species (climbing vines)

California Wild Grape (Vitis californica)
Western Virgin's Bower (Clematis ligusticocolia)

2) How are they planted and maintained?

Oaks are grown from acorns in soil-filled tubes until they have a three-foot long tap root. Other trees are started from 15-inch long dormant slips (no lateral branches) collected in February. After rooting in a green house, buds appear in March. Three planting, done in April, is done into pre-augured holes.

Wildrye and sedge are planted from plugs. Layering is used to propagate wild grape and blackberry. Mugwort, ragweed, and goldenrod will grow from seed. Lianas should be planted last, after trees are tall and strong enough to support these climbers.

Most of these plants will need irrigation (drip for trees, shrubs, and lianas; sprinklers for ground cover species) in their first year from at least April through August. Once established (tapped into groundwater) these species should flourish on their own. Weed-control may be called for especially in the first five to ten years to help make room for the newly established native species.

3) What will this area look like as it matures?

Under ideal conditions, willow and most other trees will be at least five-feet high after one year. When first planted, oaks may only be 12 to 15 inches tall but, they too, can grow as much as five-feet per year. At the end of the ten years, some of these trees will be 25 to 30 feet tall. Shrubs and shade-tolerant tree species should top out at 15 to 30 feet while the four canopy species should continue growing to heights which may exceed 50-feet sometime after the turn of the century.

It should be understood that reforestation is a gradual process. The mature forests we see along the Kings River today took decades to achieve their present appearance. During the first five to ten years, many weedy species will grow on the open, dry ground in those areas where native groundcover has yet to fill in

between the taller trees and shrubby understory. Weeds will eventually be replaced by the better adapted, longer-lived perennial natives. Appreciation of the forest's appearance in the first five to ten years is an acquired taste; the public may require some education in those early years in order to understand why the young forest is not as neat and manicured as a typical park or golf course.

The mature forest should have a layered, almost "jungle-like" appearance with tall canopy tree species standing above a variety of smaller trees and fruit-bearing shrubs. Open areas will be covered with waist-high ground cover and eventually, lianas will climb high into the taller trees.

4) What are some approximate costs

When propagation, augering, irrigation, and weed control are figured into the reforestation process, costs during the initial years can be \$2,200 per acre or more. A decision to use commercial native plant nurseries may yield some cost savings when compared with complete reliance on City or County staff and facilities. An active, well-organized volunteer effort can also help cut costs tremendously.

5) What are some of the limitations?

Most successful riparian reforestation has been done near unregulated stream channels where depths to groundwater average four or five feet. In the Reedley area, the Kings River often experiences low flows and depths to water may be 40+ feet in much of the area being considered for reforestation. This may severely restrict the extent of reforestation efforts.

APPENDIX D

KINGSWOOD PARKWAY MEDIAN LANDSCAPING

APPENDIX E

PLAN IMPLEMENTATION FISCAL ANALYSIS

KINGS RIVER CORRIDOR SPECIFIC PLAN

PLAN IMPLEMENTATION FISCAL ANALYSIS

- 1) LAND ACQUISITION: 41 acres of open space

Acquisition Alternatives

- 1) Dedication: 18 acres (100 ft strip along river)

- 2) Purchase: 23 acres @ \$7,500 per acre

Total Purchase Cost: \$172,500

Annualized Cost (20 yr, 8%): \$17,500

Funding Alternatives

- 1) Assessment District: (city-wide - 4000 single family units)

<u>Annual Cost</u>	<u>Annual Cost per Unit</u>
\$17,500	\$4.39

- 2) Park Impact (Quimby) Fee (188 new units per year)

<u>Annual Cost</u>	<u>Annual Cost per Unit</u>
\$17,500	\$93

2) IMPROVEMENTS AND MAINTENANCE

	<u>Development Costs</u>	<u>Maintenance Costs</u>
Parkland (5 acres)		
o Unit Cost	\$35,000/ac	\$3,500/ac/yr
o Total Cost	\$175,000	\$17,500/yr
o Annualized cost	\$17,800	N/A
o Funding Alternatives		
1) Assess. Dist.	\$4.45/unit/yr	\$4.38/unit/yr
2) Impact Fee	\$95/unit	N/A
 Reforestation (40 acres)		
o Unit Cost	\$7,000/ac	\$500/ac/yr
o Total Cost	\$280,000	\$20,000/yr
o Annualized Cost	\$28,500	N/A
o Funding Alternatives		
1) Assess. Dist.	\$7.13/unit/yr	\$5.00/unit/yr
2) Impact Fee	\$152/unit	N/A
 Nature Trail (15,000 l.f., 10 ft wide)		
o Unit Cost	\$0.75/sf	\$0.10/sf/yr
o Total Cost	\$112,500	\$22,500/yr
o Annualized Cost	\$11,500	N/A
o Funding Alternatives		
1) Assess. Dist.	\$2.88/unit/yr	\$3.75/unit/yr
2) Developer Fees	\$61/unit	N/A

Notes:

1. Annual costs determined for 20 year period with 8% interest.
2. Assessment district costs based on 4000 single family units.
3. Developer fee costs based on 188 units constructed per year.
4. Maintenance costs based on 1989 dollars.

3) SUMMARY

	Total (\$)	Assessment District (\$/unit/yr)	Impact Fee (\$/unit/yr)
Land Acquisition (23 acres)	172,500	4.39	93
Improvements			
o Parkland (5 ac)	175,000	4.45	95
o Reforested Area (40 ac)	280,000	7.13	152
o Nature Trail (15,000 l.f.)	<u>112,500</u>	<u>2.88</u>	<u>61</u>
Subtotal:	\$567,500	\$14.46	\$308
Maintenance			
o Parkland (5 ac)	17,500	4.38	
o Reforested Area (40 ac)	20,000	5.00	
o Nature Trail (15,000 l.f.)	<u>22,500</u>	<u>3.75</u>	
Subtotal:	\$58,000	\$13.13	
TOTAL:	\$798,000	\$31.98	\$401

Notes:

1. Annual costs determined for 20 year period with 8% interest.
2. Assessment district costs based on 4000 single family units.
3. Developer fee costs based on 188 units constructed per year.
4. Maintenance cost based on 1989 dollars.

KINGS RIVER CORRIDOR

SPECIFIC PLAN

ENVIRONMENTAL IMPACT REPORT

**KINGS RIVER CORRIDOR
SPECIFIC PLAN**

**FINAL ENVIRONMENTAL
IMPACT REPORT**

INTRODUCTION

A draft Environmental Impact Report (DEIR) for the Kings River Corridor Specific Plan has been prepared and circulated for public review in accordance with the California Environmental Quality Act (CEQA) Guidelines, as amended. The Draft EIR was circulated to appropriate agencies and citizens by the City of Reedley and by the State Clearinghouse. These agencies and citizens were asked to comment.

This document is the Final EIR for the Kings River Corridor Specific Plan. The purpose of the Final EIR is to bring together the comments and responses on the draft EIR so that decision-makers and the public can evaluate the impacts of the project on the environment.

The contents of the Final EIR includes the following components:

- A summary of the comments and recommendations received on the Draft EIR and the responses to significant environmental points raised in the review and consultation process.
- Errata.
- The letters received by the City regarding the Draft EIR (Appendix A).
- The Draft EIR (Appendix B).

COMMENTS, RECOMMENDATIONS AND RESPONSES

The following are responses to comments received from individuals and agencies who responded to the Draft EIR. Each response from the Consultant corresponds to a numbered comment within the letter received. Some of the comments contained in the letters refer to the Specific Plan or are of a general nature and do not require a response. Comments received on the Draft EIR are as follows:

County of Fresno, Public Works and Development Services Department, August 13, 1990

Comment No. 1: Although Reedley is not required to adhere to the County plans, we recommend that future specific plans which affect unincorporated lands be coordinated to be consistent with County plans, in this case, the Reedley Community Plan and Kings River Regional Plan.

Response No. 1: The Specific Plan applies to incorporated and unincorporated lands within the Planning Area. It will supersede Reedley's General Plan, Land Use Element, and the County's Reedley Community Plan. As lands within the Planning Area are annexed to the City they will be required to develop in conformity with the Specific Plan. The Specific Plan is generally in conformity with the County's Kings River Regional Plan.

Comment No. 2: For future specific plans, we recommend specification in the text that unincorporated lands which are affected by the project should be consistent with County plans and policies.

Response No. 2: This comment is acknowledged.

Comment No. 3: Comments summarized. The triangular area bounded by Kings River Drive on the west, Manning Avenue on the north and the river on the east does not have a clear designation. The Department recommends that this area be designated open space. Should the Specific Plan designate this area something other than open space, the impacts of such a designation should be discussed in the DEIR.

Response No. 3: The triangular parcel of land is designated agriculture. The impact of this land use designation on surrounding land uses is discussed in Section 4.08, Land Use and Activity Conflicts, of the DEIR. This designation will not adversely effect existing or future surrounding land uses.

Comment No. 4: Page 46 of Plan. It should be added that another way to discourage on-street parking is to require curb and gutters and use the "no-parking" sign. Also requiring enough on-site parking to supply the realistic parking needs at the units will reduce the demands for on-street parking.

Response No. 4: This Consultant concurs with these recommendations. Parking for multi-family developments will be addressed during site plan review. Off-street parking requirements for multi-family units are already outlined in the Reedley Zoning Ordinance.

Comment No. 5: *Page 47 of the Plan. Since a portion of the planning area is in the unincorporated area of Fresno County, the County (roadway) standards should be applicable in these areas.*

Response No. 5: This comment is acknowledged.

Comment No. 6: *Page 48 of the Plan. On-street parking in this section should be consistent with the design guidelines for multi-family residential development.*

Response No. 6: The treatment of on-street parking is only discussed in general terms regarding multi-family development and the Kingswood Parkway. Consistency between these two topics is not relevant because one is a traffic circulation issue on a public roadway while the other is a design consideration for multi-family residential projects.

Comment No. 7: *The County cannot support the concept of a two lane divided road. The concept of a parking lane with a bike lane on the outside of the parking lane is undesirable and should be avoided.*

Response No. 7: This comment is acknowledged. The Reedley Engineering Department will review the development standards along the Kingswood Parkway to determine if the proposed design is safe for motorists and bikers. One alternative the Engineering Department might consider would be to move the bike way onto the parkway (Note: the sidewalk would be required to be widened in order to accommodate both bikers and pedestrians).

Comment No. 8: *Manning is classified as an expressway west of the Kingswood Parkway. No direct access should be allowed west of Kingswood Parkway.*

Response No. 8: This comment is acknowledged. The Reedley Engineering Department will review this recommendation as projects are submitted for Manning Avenue west of the parkway.

Comment No. 9: *Road designations, classifications, and geometrics being proposed in the Specific Plan are in some cases inconsistent with those that apply to County development. Development within the unincorporated areas of the County is subject to County standards.*

Response No. 9: This comment is acknowledged.

State Lands Commission, September 7, 1990

Comment No. 1: *Comments summarized. The Commission commends the City in their foresight in preserving the riparian habitat along the Kings River. The Commission recommends the City implement biotic management recommendations contained in Appendix B.*

Response No. 1: The recommendations mentioned on pages 23-28 of the Biotic Study are recommended for implementation in those open space areas along the Kings River that are proposed to be reforested.

Comment No. 2: *Comments summarized. The Commission would like to review future projects proposed along the Kings River.*

Response No. 2: The City of Reedley will notify the SLC of any projects proposed within the river area as part of the environmental consultation process as required by CEQA.

Comment No. 3: *Comments summarized. The Commission is concerned about the resources and recreational opportunities along the Kings River and any projects that might impact these areas of concern.*

Response No. 3: The Specific Plan was proposed to protect and enhance the natural resources and recreational opportunities along the Kings River. This goal is consistent with the SLC's interest in the river environment.

Comment No. 4: *The Specific Plan addresses impacts to water quality from runoff, oils and grease, sediment and litter. What are the impacts to water quality from additional people using the beach and waters via new and improved access points?*

Response No. 4: The Consultant agrees that the proposed Specific Plan will increase the degradation of water quality along the Kings River by encouraging more persons to access the river. This degradation will include litter and human waste. To mitigate this impact, the design of open space areas along the Kings River should include an adequate number of accessible public restrooms and well positioned trash receptacles. These mitigation measures should reduce this impact to a level of insignificance.

Comment No. 5: *The EIR discusses existing conditions and mitigation measures to prevent the adverse impact of flooding. Mitigation measures discussed include proposing no permanent development within the 100-year floodplain and requiring permanent structures to have a floor elevation of one foot above the 100-year floodway flood elevation. The Commission also feels that the 100-year floodplain is larger than what is depicted on Exhibit No. 10 in the EIR.*

Response No. 5: Exhibit No. 10 identifies lands in the Planning Area that are subject to flooding, either a 100-year or 500-year flood. The EIR has recognized that some areas within the 500-year floodplain are lower than the 100-year flood elevations. For this reason, as a mitigation measure, the City will require that any building constructed in the 500-year floodplain be one foot above the nearest 100-year flood elevation.

To further mitigate this potential problem, the City should consider requiring that all construction along the Kings River have a ground floor elevation 18 inches above the highest recorded flood elevation that can be documented by the Federal Flood Insurance Rate maps.

Comment No. 6: *Designated sewer systems appear to be sufficient to support increased residential development. However, the Plan does not mention the medium and low density residential development indicated west of the River across from the cemetery in the southern reach of the corridor.*

Response No. 6: The Specific Plan shows medium density residential, medium density residential reserve and high density residential designations for Subarea No. 3; low density residential is not proposed for this area. Development occurring on these lands would be required to connect to the Reedley waste water treatment plant upon development. Page 38 of the DEIR indicates that the peak flow to the treatment plant in 1988 was 1.9 million gallons per day. The plant is designed to treat 2.7 million gallons per day. Assuming the 1988 peak flow of 1.9 mgd has increased five percent annually, the plant would be operating at 76 percent of capacity in 1990. Sufficient capacity is available in the treatment plant to service the residential units that would be generated by the land use designations previously discussed. Based on 115 gallons per day and 3.1 persons per unit, the current capacity in the plant could accommodate another 1820 residential units. The plant can easily handle the effluent that would be generated by Subarea No. 3 given that this area will potentially generate only approximately 300 residential units.

Typically, as a treatment plant nears capacity, the responsible entity will prepare plans for expansion and financing well in advance of the plant reaching capacity.

Comment No. 7: *The section under Circulation, on page 43 does not discuss the severe seasonal aspect of traffic on Manning and Upper Bridge from late March to September during the fruit harvesting season. This peak seasonal traffic should be discussed in the circulation analysis in addition to yearly averages.*

Response No. 7: Consultant concurs that there are peak traffic flows along the Manning and Upper Bridge roadways from March to September. This peak agriculturally-related traffic does cause congestion problems along these roadways during certain hours of the day during these months. However, based on average daily traffic counts (see Table No. 9), these roadways are still operating at a level of

service A. Implementation of the Specific Plan along with growth in other parts of the community will cause the level of service along these roadways to increase to D, an unacceptable LOS.

The DEIR recommends numerous mitigation measures to reduce the circulation impact. These measures are listed on page 52. Even with these mitigation measures, the DEIR notes that Manning from Upper Bridge to Reed will still be operating at a D service level.

Comment No. 8: Comments summarized. The Alternative Section does not consider what the impacts would be if 121 acres of agricultural land were not converted to urban uses. This would eliminate the primary adverse effects of the Specific Plan.

Response No. 8: By not converting 121 acres of land from agriculture to urban uses many of the impacts mentioned in the DEIR would be reduced. However, it is important to note that most of this 121 acres is already devoted to urban development under Reedley's current General Plan, Land Use Element. In fact, the Specific Plan changes 55 acres of land from the open space and medium density residential designations to the agricultural designation. This will offset and reduce potential impacts of converting agricultural land to urban uses.

California Regional Water Quality Control Board, Central Valley Region, September 13, 1990

Comment No. 1: Comment summarized. The Board is in charge of maintaining water quality in the Kings River and is concerned with any projects that might harm water quality in this body of water.

Response No. 1: The Consultant notes that the Water Quality Control Board is responsible for the quality of the water in the Kings River and the Tulare Lake Basin. The Specific Plan and the mitigation measures contained in the DEIR attempt to insure that the water quality in the river and underground are protected.

Department of Fish and Game, June 27, 1990

Comment No. 1: Comments summarized. The Department has participated in the formulation of this Specific Plan and notes that the open space buffer area has been reduced in this revised Specific Plan.

Response No. 1: The Department has noted that the revised Specific Plan has reduced the size of the open space buffer along the Kings River and altered the land use designations adjacent to this open space. The Department has concluded that

these changes could potentially impact riparian and upland wildlife habitat.

The proposed low density residential designation (30,000 square foot lots) proposed for an area west of the Kingswood Parkway area should not have a significant impact on the river environment, and may even be beneficial to the adjacent riparian area by prohibiting unrestricted public access to the river environment. This potential development will not encroach into the existing riparian area and will be separated from this area by a buffer of open space lands that are proposed to eventually be reforested. No significant adverse impacts to the riparian area are therefore anticipated to occur as a result of the designation of additional lands on the west side of the Kingswood Parkway as low density residential.

Comment No. 2: Comments summarized. The Department is concerned about the impact on the river environment with housing being located on the west side of the Parkway.

Response No. 2: The Department is concerned that increased residential densities immediately east of the open space buffer area will have an adverse impact on wildlife. Increased housing densities will mean more disturbance, pets, trash, and unauthorized use of the open space area. This will lower the value of the habitat for wildlife and hinder revegetation efforts.

The Department feels that single and multiple family units adjacent to the upland wildlife habitat would be undesirable. The Department feels that only low density residential lots should be allowed on the west side of Kingswood Parkway. Section 4.02, Loss of Biotic Resources, of the DEIR discusses the impacts associated with single and multiple family units located on the west side of the Parkway.

Low density development on the west side of the Parkway may serve to deter people from accessing the river and thereby causing damage to this resource.

Comment No. 3: We recommend that a bike and/or jogging path be positioned immediately behind the low density residential lots on the west side of Kingswood Parkway. We further recommend that a solid material fence, such as river rock or decorative block, at least 6 feet high, be provided along the back of the residential and commercial area.

Response No. 3: The Department suggests that the bike and/or jogging path be positioned immediately behind the low density residential lots. The Consultant assumes that by moving the path away from the river, the likelihood of the river environment being disrupted will be reduced. The specific alignment of the path will be determined at a future date. Said alignment will be determined by a team of persons with expertise in biotic issues and engineering. They will consider impacts to wildlife within the riparian area as well as other pertinent issues, such as the position of adequate pedestrian ways for the public to enjoy the river environment.

The decorative block wall suggested by the Department is a development requirement of the Specific Plan.

Department of Boating and Waterway, State Resources Agency, August 22, 1990

Comment No. 1: *The Department notes that the City of Reedley has no city ordinance regarding Sections 660 and 662 of the Harbors and Navigation Code. Enclosed is information regarding these two sections. The Department also notes a needed correction on Page 16 regarding jet skies.*

Response No. 1: These comments are acknowledged and the correction regarding jet skies will be incorporated into the final version of the Specific Plan.

Tulare County Planning and Development Department, August 14, 1990

Comment No. 1: *Comments summarized. The Department is concerned about the impact of septic tanks on the quality of surface and ground waters.*

Response No. 1: Some housing units within the planning area are connected to septic tanks. As these units are annexed to the City of Reedley and as sewer becomes available these units they will be required to connect to the City sewer lines.

Comment No. 2: *Comments summarized. The Department is concerned with the Plan's impact on surface water quality and recommends that Alternative 6.02 be adopted rather than the proposed Specific Plan.*

Response No. 2: The Department's recommendation of adopting Alternative 6.02 because of water quality concerns will be considered by the Reedley City Council when they consider the Specific Plan and certification of the Final EIR.

Comment No. 3: *Comments summarized. The Department describes why Alternative 6.02 is the environmentally preferred alternative.*

Response No. 3: The Department notes that Alternative 6.02 is the "environmentally preferred" alternative because it replaces the proposed low density residential development with an open space designation that will eventually be reforested. This alternative increases the distance between the river environment and proposed urban improvements.

Comment No. 4: *Comments summarized. The Department notes the designation of open space between the City of Reedley and the Tulare/Fresno County line.*

Response No. 4: The Department notes that the Specific Plan addresses the retention and restoration of significant natural habitat areas and retains an agricultural designation south of the cemetery so that an open space buffer is maintained between the City and the Fresno/Tulare County line. This comment is acknowledged.

Kings River Conservation District, August 17, 1990

Comment No. 1: *Comments summarized. The District describes the findings of a two-year study that was conducted on the Valley Elderberry Longhorn Beetle.*

Response No. 1: The District has recently completed a two-year study on the Valley Elderberry Longhorn Beetle, Desmocerus californicus dimorphus. The findings of this study are offered to the City of Reedley to be used in their planning process and to supplement the biotic study contained in Appendix B of the DEIR. The study indicated there was a good chance that this threatened subspecies of beetle was located in the Specific Plan's river corridor. These beetles inhabit elderberry bushes, which can be found in riparian habitat, upland floodplains, and agricultural lands. The nearest recent siting of this beetle was found on the Kings River near Annadale Avenue.

The Specific Plan proposes protection of the entire riparian corridor along the river and it proposes substantial native reforestation of lands along this corridor. These measures will preserve and add to the habitat that supports this beetle.

ERRATA

The following are corrections of errors or minor changes or additions to the EIR mentioned by various agencies and departments within the City of Reedley.

Department of Boating and Waterway, State Resources Agency, August 22, 1990

Page 16 of the Specific Plan will be amended to state that jet skies can operate at 5 MPH north of the Olsen Avenue Bridge.

Reedley Community Services Department, August 6, 1990

All references to Parks and Recreation Department should be changed to Community Services Department.

Page 60 of the DEIR will be amended to the DEIR will be amended to change title of Richard Fernbaugh to Community Services Director, Tom Butch to former City Manager, Vi Grinsteiner to former Planning Director, Abel Sykes former President, and Richard Giese to President.

August 13, 1990

Fred Brusuelas
Interim Planning Director
City Hall
845 "G" Street
Reedley, CA 93654-2696

Dear Mr. Brusuelas:

Subject: Draft Specific Plan and Draft Environmental Impact Report, Kings River Corridor Specific Plan

The above referenced document was circulated in the Public Works & Development Services Department and the following concerns were noted:

1. Planning Staff had the following comments:

a. Page 5, CONSISTENCY WITH THE GENERAL PLAN (1.5)

1 Although Reedley is not required to adhere to the County plans, we recommend that future specific plans which affect unincorporated lands be coordinated to be consistent with County plans (in this case, the Reedley Community Plan and Kings River Regional Plan).

b. Page 9, GOALS AND POLICIES (2.0)

2 For future specific plans, we recommend specification in the text that unincorporated lands which are affected by the project should be consistent with County plans and policies.

c. Page 26, Figure No. 5, Subarea No. 2 - LAND USE/CIRCULATION (see page 7, Draft EIR).

3 The triangular area bounded by Kings River Drive on the west, Manning Avenue on the north and the river on the east, does not have a clear designation. In our June 7, 1990 comments for Notice of Preparation, we recommended an Open Space designation for consistency with the Reedley General Plan. Alternatively, the EIR should provide a discussion of potential impacts of proposed developments on surrounding open space uses. Neither of these recommendations were implemented in this administrative draft.

Should the triangular area be designated other than Open Space, the following modifications should be made to the EIR:

1. Specify the designation on the Land Use/Circulation Plan for Subarea No. 2 in Exhibit 5.
2. Identify the urban designation in the text of the land use section on page 5.
3. Discuss in the ENVIRONMENTAL IMPACT ANALYSIS sections (4.0 et. seq.) potential impacts proposed developments would have on surrounding open space uses. These may include: (1) loss of biotic resources; (2) increased vandalism; (3) flooding; (4) land use and activity conflicts; (5) infrastructure; and (6) circulation.

2. Development Engineering Staff comments included:

- a. Page 46, MULTI-FAMILY RESIDENTIAL (4.2-3)
It should be added that another way to discourage on-street parking is to require curb and gutters and using the "No Parking" sign.
4 Also, requiring enough on-site parking to supply the realistic parking needs at the units will reduce the demands for on-street parking.
- b. Page 47, CIRCULATION SYSTEM (4.4)
5 Since a portion of the planning area is in the unincorporated area of Fresno County, the County Standards should be applicable in these areas.
- c. Page 48, CIRCULATION SYSTEM (4.4)
6 On-street parking in this section should be consistent with the design guidelines for multi-family residential development.
- d. Figure 15. The County cannot support the concept of a two (2) lane
7 divided road. The concept of a parking lane with a bike lane on the outside of the parking lane is undesirable and should be avoided.
- e. Manning is classified as an expressway west of the Kingswood
8 Parkway. No direct access should be allowed west of Kingswood Parkway.
- f. Road designations, classifications, and geometrics being proposed in
9 the Specific Plan are in some cases inconsistent with those that apply to County development. Development within the unincorporated areas of the County is subject to County Standards.

Thank you for the opportunity to comment on this project. Please contact me at (209) 453-5055 if you have any questions.

Very truly yours,

Jerry K. Boren
Development Services Manager

Bob Torzynski
Bob Torzynski
Staff Analyst I

BT:gah
2696K

cc: Paul Marquez, Planning Department
Casey Cheng, Development Engineering

STATE LANDS COMMISSION

LEOT. McCARTHY, Lieutenant Governor
GRAY DAVIS, Controller
JESSE R. HUFF, Director of Finance

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814
CHARLES WARREN
Executive Officer

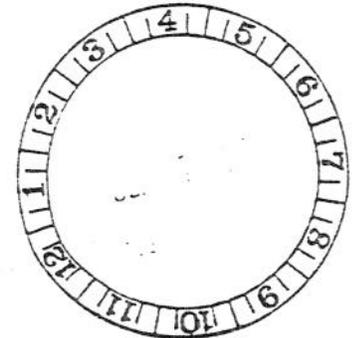
September 7, 1990

Dr. Gordon Snow
State Projects Coordinator
The Resources Agency
1415 Ninth Street
Sacramento, CA 95814

Mr. Fred Brusuelas
City of Reedley
845 G Street
Fresno, CA 93654

Dear Dr. SNOW:

Staff of the State Lands Commission (SLC) has reviewed the Specific Plan and the draft Environmental Impact Report (DEIR) for the Kings River Corridor Specific Plan. Based on this review, we offer the following comments.



- 1 First, we commend the foresight of the City of Reedley in their approach to the preservation and enhancement of riparian vegetation and habitat. As indicated, this type of habitat has been reduced significantly statewide, a circumstance which has had a correspondingly significant impact on wildlife dependent on such habitat and on the visual character and biological viability of the State's waterways. We urge the City to incorporate within its plan, to the maximum extent feasible, the recommendations contained on pages 23-28 of Appendix B.
- 2 As indicated in the draft document, the SLC claims ownership of all land in the river bottom below the mean low water line as it last naturally existed, and a Public Trust easement between the high and low water lines of the river. Commission approval would, therefore, be necessary for any proposed project located within the Kings River. The Commission would also appreciate the opportunity to be involved in the review of projects which may be proposed within the Public Trust easement so that we may determine their consistency with the Public Trust resources within the easement.
- 3 The SLC is particularly concerned with the natural resources and recreational opportunities of lands under its jurisdiction. We are concerned with any adverse impacts on sensitive plant and animal species, impacts on areas of archaeological and historical importance, any changes in river hydrology and impacts to riparian and aquatic ecosystems. Additionally, the Commission is concerned with any proposed upland activities which could have an adverse effect on the environmental and other Public Trust uses of the River.

Staff believes the plan and draft EIR generally addresses those issue areas of concern to the Commission. We would, however, like to provide the following specific comments.

4 1) Page 1-5 of the specific plan addresses impacts to water quality from urban runoff, i.e. oils and greases, sediment and litter. What of impacts to water quality from additional people using the beach and waters via new and improved access points?

5 2) Page 25-26, Section 4.041-4.043 of the EIR, discusses existing conditions and mitigation measures to prevent adverse impacts from flooding. Mitigation measures discussed include proposing no permanent development within the 100 year floodplain and requiring permanent structures to have a floor elevation of one foot above the 100 year floodway flood elevation.

A visual survey of the area during those years discussed, indicates that flood waters covered a considerably larger area and higher elevation than that shown in Figure No. 10. Therefore, the mitigation measures discussed may be inadequate to reduce flooding impacts to a level of insignificance.

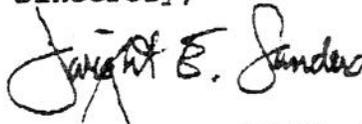
6 3) Designated sewer systems appear to be sufficient to support increased residential development. However, the Plan does not mention the medium and low density residential development indicated west of the River across from the cemetery in the southern reach of the corridor.

7 4) The section under Circulation, starting at page 43 of the DEIR, does not discuss the severe seasonal aspect of traffic on Manning and Upper Bridge from late March to September during the fruit harvesting season. This peak seasonal traffic should be discussed in the circulation analysis in addition to yearly averages.

8 5) The Alternatives Section does not consider what the impacts would be if 121 acres of agricultural land were not converted to urban uses, i.e., directing development to the east or north of the city. This would eliminate the primary adverse effects of the plan.

Thank you for the opportunity to comment. If you have any questions, please contact Kirk Walker at (916) 322-0530.

Sincerely,



DWIGHT E. SANDERS, Chief
Division of Research
and Planning

cc: Kirk Walker

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
CENTRAL VALLEY REGION**

SAN JOAQUIN WATERSHED BRANCH OFFICE:
3614 EAST ASHLAN AVENUE
FRESNO, CA 93726
PHONE: (209) 445-5116



13 September 1990

Mr. Fred Brusuelas
City of Reedley
845 "G" Street
Reedley, CA 93654

SCH#90020457, KINGS RIVER CORRIDOR SPECIFIC PLAN

- 1 The subject plan, developed for the City of Reedley, provides guidance for the management of 958 acres of land along the Kings River, most of which is under the City's jurisdiction. The plan recognizes that federal and state regulations take precedence over any local ordinances; thus, the plan endeavors to support these regulations. The plan, however, does not acknowledge the Water Quality Control Plan for the Tulare Lake Basin, which contains the beneficial uses, and water quality objectives for waters within the Basin, including the Kings River. Any plans for the area should not eliminate any of the beneficial uses or degrade the Kings River beyond any of its objectives. In addition, the State Water Resources Control Board is planning to adopt statewide objectives for some of the federal priority pollutants. The Kings River will be affected by these proposed objectives and the City should ensure that these objectives will not be exceeded by any activities within the Kings River Corridor.

Questions concerning this matter should be directed to Betty Yee of this office at (209) 445-5128.

Betty Yee for

LONNIE M. WASS
Senior Engineer

BY:cjs

cc: Ms. Lynne Coughlin, State Clearinghouse, Sacramento

DEPARTMENT OF FISH AND GAME
REGION 4
1234 East Shaw Avenue
Fresno, CA 93710
(209) 222-3761



June 27, 1990

Mr. Fred Brusuelas
Interim Planning Director
City of Reedley
845 G Street
Reedley, CA 93654

Dear Mr. Brusuelas:

Subject: Notice of Preparation - Kings River Corridor Specific Plan

We have reviewed the Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for the Kings River Corridor Specific Plan. The Specific Plan would direct the future development of approximately 960 acres along the Kings River on the west side of Reedley, Fresno County.

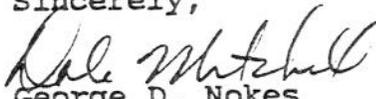
- 1 The Department has participated in public hearings and planning meetings for the development of the original Specific Plan and DEIR. We have responded in writing regarding potential wildlife impacts and mitigation measures in letters dated May 23, 1988, July 26, 1988, and September 9, 1988. The current proposal has reduced the size of the open space buffer area adjacent to the Kings River, and altered land use zoning immediately adjacent to the open space. These changes have the potential to significantly impact riparian and upland wildlife habitat.
- 2 We would like you to continue to refer to the comments in our previous letters. In addition, we are concerned that the increased residential densities immediately east of the open space buffer area will have adverse impacts on wildlife. As indicated by the results of the "Kings River Corridor Survey," the residents of Reedley support a large open space buffer area along the river which provides riparian and upland wildlife habitat. Increased housing densities will mean more disturbance, pets, trash, and unauthorized use of the open space area. These types of disturbance will lower the value of the habitat for wildlife, and may hinder revegetation efforts. We believe medium density residential zoning (single and multifamily units) adjacent to the upland wildlife habitat as proposed in the NOP would be undesirable. We continue to recommend that only low density residential lots be allowed on the west side of Kingswood Parkway with a large (minimum 70,000-square-foot) lot size. The DEIR should discuss the potential losses of habitat value (direct and cumulative) associated with medium density, and smaller (30,000-square-foot) low density residential development.

Mr. Brusuelas
Page Two

- 3 We recommend that a bike and/or jogging path be positioned immediately behind the low density residential lots on the west side of Kingswood Parkway. We further recommend that a solid material fence, such as river rock or decorative block, at least 6 feet high, be provided along the back of the residential and commercial area.

Department biologists are available to assist with the development of measures to protect and enhance the open space and wildlife habitat area. Please notify us of any upcoming public hearings and provide us with a copy of the DEIR for review. If you have any questions, please contact John Beam, Associate Wildlife Biologist, at the address or telephone number listed above.

Sincerely,

for 
George D. Nokes
Regional Manager

Memorandum

To : (1) Dr. Gordon F. Snow
The Resources Agency

(2) City of Reedley
Attention: Fred Brusuelas
845 'G' Street
Reedley, CA 93654

Date : August 22, 1990

Subject: SCH# 90020457
Kings River Corridor
Specific Plan, Fresno
County

From : Department of Boating and Waterways

The Department of Boating and Waterways has reviewed subject Draft Environmental Impact Report for the Kings River Corridor Specific Plan in Fresno County, and would like to offer the following comments:

- 1 Page 16, items 1.6 and 1.7, refer to the regulation of boating within the City of Reedley. The Department of Boating and Waterways has no record of a city ordinance as required by Sections 660 and 662 of the Harbors and Navigation Code. We have enclosed a copy of these sections for your use. In addition, the "note" shown on page 16, item 1.7, which refers to jet skis as not being able to operate at 5 miles per hour or less, is incorrect. Personal watercraft can, in fact, operate at 5 m.p.h.

We appreciate the opportunity to comment on the proposed project.


WILLIAM H. IVERS
Director

Enclosure



CALIFORNIA BOATING LAW

659. Uniform navigational marking of waters. The department may make rules and regulations for the uniform navigational marking of the waters of this state. Such rules and regulations shall not be in conflict with markings prescribed by the United States Coast Guard. No city, county, or person shall mark the waters of this state in any manner in conflict with the markings prescribed by the department.

660. Application of chapter to all waters; local boating regulations. (a) The provisions of this chapter, and of other applicable laws of this state, shall govern the use, equipment, and all other matters relating thereto whenever any boat or vessel shall be used on the waters of this state, or when any activity regulated by this chapter shall take place thereon. Nothing in this chapter shall be construed to prevent the adoption of any ordinance, law, regulation or rule relating to vessels by any entity otherwise authorized by law to adopt such measures, including but not limited to any city, county, city and county, port authority, district or state agency; provided, however, that such measures relating to boats or vessels shall pertain only to time-of-day restrictions, speed zones, special-use areas, and sanitation and pollution control, the provisions of which are not in conflict with the provisions of this chapter or the regulations adopted by the department. Such measures shall be submitted to the department prior to adoption and at least 30 days prior to the effective date thereof.

(b) The department is authorized to make special rules and regulations with reference to the use of any boats or vessels on any body of water within the territorial limits of two or more cities, counties, cities and counties or other political subdivisions where no special rules or regulations exist or when required to establish uniformity in such special rules or regulations as the department may determine (1) are not uniform under local laws and (2) as to which uniformity is practicable and necessary.

(c) Any entity, including but not limited to any city, county, city and county, port authority, district or state agency, otherwise authorized by law to adopt measures governing the use and equipment, and matters relating thereto, of boats or vessels, may adopt emergency rules and regulations which are not in conflict with the general laws of the state relating to boats and vessels using any waters within the jurisdiction of the entity if such rules and regulations are required to insure the safety of persons and property, because of disaster or other public calamity. Such emergency rules and regulations shall become effective immediately upon adoption and may remain in effect for not to exceed 60 days thereafter. Upon submission of such emergency rules and regulations to the department, the department may authorize the entity to make the emergency rules and regulations effective for such period of time greater than 60 days as is necessary in view of the disaster or circumstances.

662. Filing of local boating regulations. A copy of the ordinances or local laws adopted pursuant to this chapter, and of any amendments thereto, shall be filed in the office of the department.

Tulare County
Planning and Development
Department

Tulare County Courthouse

Civic Center Rm. 111

Visalia, CA 93291-4593

209-733-6254 (Planning)

209-733-6281 (Building Permits)

Eugene E. Smith, Director

George E. Finney, Assistant

August 14, 1990

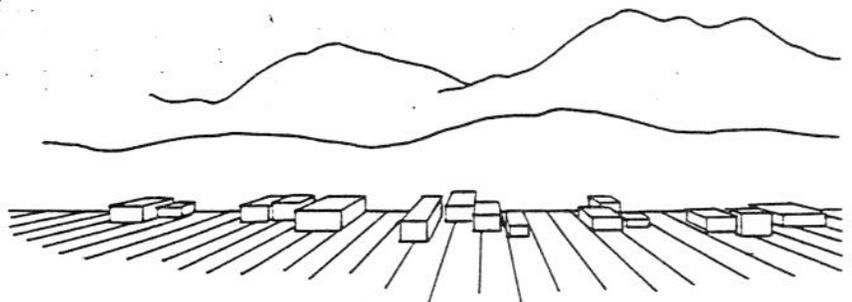
Fred Brusuelas
Interim Planning Director
City of Reedley Planning Department
City Hall
845 G Street
Reedley, California 93654-2696

Re: Draft Kings River Corridor Specific Plan and Draft Environmental
Impact Report-State Clearinghouse No. 90020457.

Dear Mr. Brusuelas:

Thank you for the opportunity to review the Kings River Corridor Specific Plan and Draft Environmental Impact Report. With reference to the Plan, Tulare County Planning and Development Department has a few comments to offer.

- 1 The Plan indicates that "some" housing units within the planning area are utilizing septic systems. To mitigate any potential impacts on the Kings River and ground water quality which may impact Tulare County by failing or ineffective septic systems, these dwellings should be required to connect to the City sewer system as facilities become available.
- 2 The Plan identifies as a significant impact the potential for degradation of water quality in the Planning Area and in the Kings River which will primarily result from urban storm water runoff entering the Kings River. The runoff which emanates from roads, buildings, and yards may contain heavy metals, fossil fuels, sediments, fertilizers, litter and animal waste. These foregoing contaminants may impact the quality of the Kings River and residents of Tulare County. In order to mitigate these possible concerns Tulare County recommends that Plan Alternative 6.02 be implemented.
- 3 Plan Alternative 6.02 recommends the low density residential designation proposed for the west side of the Kingswood Parkway be removed and replaced with an open space designation. This open space would become a part of the Specific Plan's reforestation program. This would mitigate the foregoing concern by reducing impervious surfaces and development which may direct flood waters into the Kings River to impact the residents of Tulare County. The Draft Environmental Impact Report identifies this alternative to be the environmentally preferred alternative.



Fred Brusuelas
August 14, 1990
Page 2

- 4 The Plan adequately addresses the retention and restoration of significant natural habitat areas and retains an agricultural designation south of the cemetery located in the Plan Subarea No. 3 as a buffer-open space area between the City of Reedley and the Tulare County/Fresno County line.

If you have any questions, please contact me at (209) 733-6790.

Sincerely,

Sandra Reeder
Sandra Reeder
Planner I
Countywide Planning

cc: Mike Olmos
Division Manager



Kings River Conservation District

4886 E. Jensen Avenue • Fresno, California 93725-1899
Telephone: (209) 237-5567

File: 300.43
325.20.01

August 17, 1990

City of Reedley
Planning Department
Attn: Mr. Fred Brusuelas
Interim Planning Director
City Hall
845 "G" Street
Reedley, CA 93654-2696

Subject: Draft Kings River Corridor Specific Plan and Draft
Environmental Impact Report - State Clearinghouse
No. 90020457.

Re: Valley Elderberry Longhorn Beetle, Desmocerus
californicus dimorphus (Insecta: Coleoptera:
Cerambycidae) - A Federally Listed Threatened Species.

Dear Ladies and Gentlemen:

1

The following comments are presented to assist the City of Reedley in their planning process and to clarify information in your DEIR Appendix B, page 19, concerning the Valley Elderberry Longhorn Beetle.

The District has recently completed a two-year study which evaluated the classification and distribution of Nearctic Desmocerus beetles, including the Federally Listed Threatened subspecies Desmocerus californicus dimorphus.

1. The threatened subspecies and the Desmocerus californicus beetles we've found in the lower San Joaquin Valley belong to the same taxon. Hence, the beetles and their habitat in the San Joaquin Valley are protected by the Endangered Species Act's laws and regulations.
2. There is a good chance that this beetle may occur in your Corridor Zone. Through our surveys, we have discovered beetles along the San Joaquin, Kings, and Kaweah Rivers. The closest beetle record to your Corridor Zone that we know is on the Kings River near Annadale Avenue. However, we have not conducted any surveys in the Reedley area.

BOARD OF DIRECTORS

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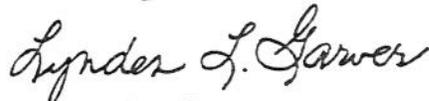
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GEORGE L. MARTIN, Auditor Controller
EDWARD J. TIEDEMANN, Attorney-At-Law

City of Reedley
August 17, 1990
Page 2

3. Elderberry bushes/trees can be found not only in riparian habitat, but also in upland floodplains, semi-urban lands, and agricultural lands (e.g., along fence lines and ditches, around equipment storage areas, around power poles).
4. A couple of minor points include: the beetle larvae consume and bore the pith of elderberry bushes/trees [not under the bark] and emergence holes are made by the adult beetles [not the larvae].

If you have any questions, please don't hesitate to call.

Sincerely,



Lynden L. Garver
Chief, Planning Division

LLG/arc

APPENDIX A

CORRESPONDENCE

MID VALLEY FIRE PROTECTION DISTRICT
210 S. ACADEMY AVENUE
SANGER, CALIFORNIA 93657
PHONE 485-7500 • AREA CODE 209



May 24, 1990

City of Reedley
845 G Street
Reedley, CA 93654-2696

Attention: Fred Brusuelas, Acting Planning Director

RE: Kings River Corridor Specific Plan

Mr. Brusuelas:

Thank you for the notification that the City of Reedley is planning to prepare an environmental impact report for the above referenced project.

Mid Valley Fire Protection District has some concerns with the potential for that area within the project, that is not currently within the City of Reedley, to be annexed by Reedley. This would result in a reduced level of emergency service since Mid Valley Fire District maintains a fully staffed fire station that responds to emergencies. Should this area be annexed, service would be provided by a volunteer fire department resulting in slower response times.

On page 6 of the Notice of Preparation it states in part "Police and Fire Protection throughout the Planning Area will be provided by the City of Reedley.". Mid Valley Fire District as nearly as I can determine, has the primary fire protection responsibility for those areas outside the city and expects to continue to provide the same level of fire protection to that area unless and until that area is annexed into the city.

As for significant environmental issues and reasonable alternatives and mitigation measures that we would like discuss in a Draft Environmental Impact Report:

Does the City of Reedley intend to annex those portions of the Specific Plan Area not already within the city limits?

If the City of Reedley does intend to annex, what is the approximate timetable for that annexation?

If the City of Reedley proposes to provide fire protection to the Project area, how does the city propose to mitigate the lower level of fire protection that would result?

If the City of Reedley does intend to annex, what will be the financial impact to Mid Valley Fire Protection District? Mid Valley realizes that the individual impact of this project may not be significant by itself but, when coupled with other projects by Reedley and other cities, what is the cumulative impact to the Fire District? How will any potential loss of revenue to the Fire District through annexation be mitigated?

Mid Valley Fire District proposes that when any annexation takes place, that the Fire District continue to maintain its current tax increment on both the base valuation and on any increases that may be realized through development.

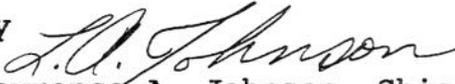
The City of Reedley currently enjoys a greater level of fire service than it is paying for since the Fire District effectively subsidizes fire protection within the City by providing a well equipped and well trained staff. Reedley calls upon that staff on an as needed basis and pays only for those times when it utilizes the Fire District's manpower and equipment. All standby costs are borne by the District resulting in what amounts to a paid Fire Department at virtually no cost to the City.

Mid Valley Fire District feels that both the City of Reedley and the Fire District can prosper by working together and we look forward to discussing the matter with you.

If you have any questions about this or any other matter, please contact Chief Johnson at (209)485-7500.

Sincerely,

FRED H. BATCHELOR
CHIEF

by 
Lawrence A. Johnson, Chief
Fire Protection Planning

June 7, 1990

Fred Brusuelas
Interim Planning Director
City Hall
845 "G" Street
Reedley, CA 93654-2696

Dear Mr. Brusuelas:

Subject: Notice of Preparation (NOP): Kings River Corridor Specific Plan

The above-referenced NOP was circulated in the Public Works and Development Services Department for review and comment. The following concerns were noted:

1. Development Engineering Staff indicated that:
 - a. The Circulation Plans (Figure 4, 5, and 6) do not have the classification of the roadways shown or designated. It should be shown on the plans.
 - b. Page 9 of the Specific Plan NOP indicates that the circulation element designates Olsen, Reed and Manning Avenues (within the City limits) as arterial streets. It should be noted, however, that the Fresno County General Plan, Circulation System has Olsen Avenue classified as a collector from Reed to Frankwood and Reed Avenue a collector from south of Olsen Avenue to Floral Avenue.
2. Planning Staff had the following comments:
 - a. On the Subarea No. 2 map, the triangular shaped area south of Manning Avenue between Kings River Drive and the river does not have a clear land use designation. We recommend that the subject area be designated Open Space or that the EIR include a discussion of the potential impacts proposed developments in this area would have on surrounding open space uses.
 - b. Any land use inconsistencies between the Kings River Corridor Specific Plan map and the Fresno County Reedley Community Plan map will occur within the Reedley city limits. We will propose the necessary changes in our next Reedley Community Plan Update.

Thank you for the opportunity to comment on this project. Please contact me at (209) 453-5055 if you have any questions.

Very truly yours,

Jerry K. Boren
Development Services Manager



for Leslie Kline
Staff Analyst II

LK:gah
2069K

cc: Paul Marquez, Planning Dept.
Casey Cheng, Development Engineering



KINGS RIVER COMMUNITY COLLEGE

June 5, 1990

Mr. Fred Brusuelas, Planning Director
City Hall
845 G Street
Reedley, CA 93654

Dear Mr. Brusuelas:

The college is in receipt of Notice of Preparation - Kings River Corridor Specific Plan. I would like to commend the City Planning Department for their long range planning efforts and willingness to communicate those plans. I believe well thought out plans with consideration to environmental implication are critical to future preservation of our natural resources.

The college has reviewed the Notice of Preparation and at this point does not object to the proposal as stated. The college would have the following concerns if conditions of the proposal were to change:

1. Possibility of liability exposure due to public access to college property or use thereof.
2. The requirement of the college to relinquish property or Title to any parcel.
3. Financial obligation due to installation, construction or maintenance of access.

I hope this response establishes the college's position and adequately states our concerns relative to the Notice of Preparation. If you have need for additional information or clarification please contact me.

Sincerely,

Richard J. Giese
President

ch

A P P E N D I X B

**KINGS RIVER CORRIDOR
SPECIFIC PLAN**

**DRAFT ENVIRONMENTAL
IMPACT REPORT**

TABLE OF CONTENTS

<u>Chapter</u>		<u>Page</u>
	Executive Summary	i
1.0	Introduction	1
2.0	Project Description	3
	2.01 General Project Description	3
	2.02 Location	3
	2.03 Planning Area	3
	2.04 Specific Project Objectives	4
	2.05 Development Potential	7
	2.06 Specific Plan Objectives	8
	2.07 Project Compatibility with Applicable Plans	8
3.0	Environmental Setting	14
4.0	Environmental Impact Analysis	19
	4.01 Urbanization of Agricultural Land	19
	4.02 Loss of Biotic Resources	21
	4.03 Vandalism, Trespassing and Littering	23
	4.04 Flooding	25
	4.05 Water Quality	27
	4.06 Air Quality	28
	4.07 Aesthetics	31
	4.08 Land Use and Activity Conflicts	34
	4.09 Infrastructure	38
	4.10 Services	40
	4.11 Circulation	43
5.0	Unavoidable Adverse Environmental Effects	55
6.0	Alternatives to the Proposed Action	56
7.0	Long-Term Implications of the Proposed Project	57
	7.01 Short-Term versus Long-Term Productivity	57
	7.02 Irreversible Environmental Changes	57
	7.03 Growth-Inducing Impacts	57
	7.04 Cumulative Impacts	57

8.0	Effects Found Not To Be Significant	59
9.0	Agencies, Organizations and Persons Consulted	60
	Appendix A: NOP Response Letters	
	Appendix B: Biotic Survey	

LIST OF EXHIBITS

<u>Exhibit</u>		<u>Behind Page</u>
No. 1	Regional Location	3
No. 2	Project Area	3
No. 3	Planning Area Subareas	4
No. 4	Subarea No. 1: Specific Plan	6
No. 5	Subarea No. 2: Specific Plan	6
No. 6	Subarea No. 3: Specific Plan	6
No. 7	Reedley Land Use and Circulation Element	8
No. 8	Soils	15
No. 9	Existing Land Use	16
No. 10	Kings River Floodplains	25
No. 11	Floodway Schematic	25
No. 12	Kings River Scenic Vistas	31
No. 13	Existing Sewer System	38
No. 14	Existing Water System	39
No. 15	Existing Storm Drainage System	40
No. 16	Existing 24-Hour Traffic Volumes	45
No. 17	Specific Plan Buildout 24-Hour Traffic Volumes	48
No. 18	Mitigation Measures	52

LIST OF TABLES

<u>Tables</u>		<u>Page</u>
No. 1	Soil Characteristics	15
No. 2	Existing Land Use	16
No. 3	Land Ownership	17
No. 4	Environmental Effects of Surface Water Contamination	28
No. 5	Ozone and PM 10 Concentrations	29
No. 6	Recreational Uses in the Kings River Planning Area	34
No. 7	Functional Classification	44
No. 8	Level of Service Description	46
No. 9	Existing Conditions Analysis	47
No. 10	Future Conditions Analysis	49
No. 11	Streets Operating Below Level of Service "C"	50
No. 12	Intersection Analysis	51
No. 13	Future Conditions Analysis- with Mitigations	53
No. 14	Streets Operating Below Level of Service "C"	54

EXECUTIVE SUMMARY

PROJECT DESCRIPTION

The City of Reedley, in order to further implement its general plan, has prepared a specific plan, *Kings River Corridor Specific Plan*. Implementation of the Specific Plan will occur over the next 20 years. A draft environmental impact report (DEIR) has been prepared for this document as per the California Environmental Quality Act. A brief summary of the project, its environmental ramifications, and the mitigation measures and plan alternatives which were used to reduce the environmental impacts are described below.

The Planning Area covers 958 acres of land along the Kings River adjacent to the City of Reedley in Fresno County. A 3.75 mile stretch of the Kings River flows through the Planning Area. The river, along with its forest of riparian vegetation, is the major natural feature in the Planning Area. Other major features in the Planning Area include the Kings River Community College, Reedley Cemetery, Reedley Beach and Cricket Hollow Park. Presently, over 70 percent of the Planning Area is either in agriculture or open space (river bottom); only about 15 percent has been developed with buildings.

The Specific Plan proposes to maintain a major portion of the Planning Area in its current state, either as agriculture or open space. Land uses which would remain unchanged include the Reedley Cemetery, Kings River Community College, Cricket Hollow Park, Reedley Beach and the Reedley sewage treatment plant. However, the Specific Plan does recommend that 134 acres of land be developed to residential uses, ranging from low to medium density residential; that 41 acres of open space be preserved along the east side of the Kings River; that 13 acres of land along Manning Avenue be designated for community commercial uses; and that 235 acres of Kings River river bottom (land within the 100-year floodplain) remain as open space. The Specific Plan also proposes to provide for the following changes over the next 20 years.

- Five acres of new park land, which will be an extension of Smith Ferry Park, along the east side of the Kings River
- Thirty-six acres of reforested open space along the east side of the Kings River
- Three miles of pedestrian paths along the Kings River
- A nature interpretive center on the campus of Kings River College
- A new collector street with a landscaped median and paralleling bikepaths

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

The following is a summary of the environmental impacts, mitigation measures and plan alternatives that were discussed in the Kings River Corridor Specific Plan DEIR.

Significant Unavoidable Adverse Environmental Impacts

These are impacts caused by the project (Specific Plan) for which the decision-maker must issue a "Statement of Overriding Considerations" under Section 15093 of the CEQA Guidelines, as amended, if the project is approved.

Loss of Agricultural Land - Impact

The Specific Plan will eventually lead to the conversion of approximately 175 acres of agricultural land to urban or open space uses. This is a significant unavoidable environmental effect. The Alternative Plan does recommend designating approximately 40 acres of this agricultural land, located on the west side of the river near the sewage treatment plant, to agriculture.

The Specific Plan proposes to amend the land use element to redesignate approximately 55 acres from open space and medium density residential to agriculture. This will have a positive impact on agriculture resources.

Loss of Agricultural Land - Mitigation Measures

Specific Plan policies and alternative land use designations recommended in the Alternative Plan can partially mitigate the project's impact on the consumption of agricultural land.

Loss of Agricultural Land - Residual Impact

Significant, unavoidable impact.

Police Services - Impact

Additional public usage of the Planning Area will increase the need for additional police services.

Police Services - Mitigation Measures

Increase police staffing and equipment in order to provide for additional patrolling of the Kings River and its adjacent open space uses.

Police Services - Residual Impact

Significant impact.

Circulation - Impact

Implementation of the Specific Plan will have a cumulative impact in that the traffic generated within the Planning Area will be added to traffic generated in other parts of the City. Together, they will have an adverse impact on the roadways in and around the Planning Area.

Circulation - Mitigation Measures

Roadways are proposed for widening, signalization, and extension from one part of the Planning Area to another.

Circulation - Residual Impact

Significant impact.

Significant Adverse Environmental Impacts that can be Feasibly Mitigated or Avoided

These are impacts caused by the project for which mitigation measures, if implemented, can reduce the level of significance. The decision-maker must make findings under Section 15901 of the CEQA Guidelines, as amended, if the project is approved.

Loss of Biotic Resources - Impact

Loss of native riparian habitat and wildlife along the Kings River could result as the Planning Area develops. This impact has been avoided through the Specific Plan by designating 41 acres of land the east side of the Kings River as open space. This is in addition to the 235 acres on the river bottom being designated open space. This linear open space area serves as a buffer between urban development on the east - residential and commercial uses, and the Kings River on the west. The Specific Plan proposes that 36 acres of this land be reforested with native vegetation and that the remaining 5 acres be used for additional park facilities.

Loss of Biotic Resources - Mitigation Measures

Adoption of the Alternative Plan, which recommends open space instead of low density residential on the west side of the Kingswood Parkway, will reduce the project's potential impact on the biotic resources to a level of insignificance.

Even without the adoption of the Alternative Plan, the Specific Plan will improve the biotic resources in the Planning Area in that 36 acres of land will be reforested with native plants.

Loss of Biotic Resources - Residual Impact

Less than significant.

Vandalism, trespassing and littering - Impact

The Specific Plan will encourage the increased use of the Kings River environs over the next 20 years. This could create the potential for more vandalism, trespassing and littering along the river. To mitigate this potential, the Specific Plan provides for a pathway which is wide enough so that police vehicles can drive along the east side of the river and patrol the area between the two bridges. The Specific Plan also recommends that signed and maintained public access points be established along the river. This will mitigate the problem of having a number of noncontrolled and

unmanaged access trails scattered along the river. Policies in the Specific Plan recommend that the use of off-road vehicles and firearms be prohibited in or along the river.

Vandalism, trespassing and littering - Mitigation Measures

Increased police patrol along the Kings River will reduce this potential impact.

Vandalism, trespassing and littering - Residual Impact

Less than significant.

Flooding - Impact

The potential for loss of property or life due to flooding has been avoided by designating the 100-year floodplain area as open space. State floodplain regulations preclude building and certain types of improvements in this area.

Flooding - Mitigation Measure

The City of Reedley requires that all structures within the 100-year floodplain have a base floor elevation one foot above the base flood elevation.

Flooding - Residual Impact

No impact.

Water Quality - Impact

The water quality of the Kings River will decline as runoff from the Planning Area enters the river. This urban runoff contains oils and greases, sediment and litter.

Water Quality - Mitigation Measure

This impact could be mitigated by constructing detention ponds to retain the runoff before it enters the river. As the water evaporates from the basin the contaminants would be absorbed by the soil rather than entering the Kings River.

Water Quality - Residual Impact

Less than significant impact.

Air Quality - Impact

The air quality of Reedley will be degraded as development in the Planning Area occurs. Short-term air quality impacts involve fugitive dust from construction sites. Long-term air quality impacts involve increased ozone and PM 10 emissions.

Air Quality - Mitigation Measures

Although this impact can not be reduced to an insignificant level, the Specific Plan does attempt to mitigate this effect by providing alternative sources of transportation like bikepaths along Kingswood Parkway. This new collector will also relieve congestion on nearby streets.

Air Quality - Residual Impact

Less than significant.

Aesthetics - Impact

The scenic and rural appearance of the Planning Area will be diminished as it becomes more urbanized.

Aesthetics - Mitigation Measures

To mitigate this potential condition, the Specific Plan proposes that land in and along the Kings River be designated open space and agriculture. Also provided by the Specific Plan is the installation of pathways along the river so that people using these facilities can enjoy the visual amenities of the river.

Other measures that will preserve the visual amenities of the area or facilitate well-designed projects include the utilization of the site plan review process on new commercial development along Manning Avenue and a recommendation in the Alternative Plan that precludes low density residential development on the west side of the Kingswood Parkway.

Aesthetics - Residual Impact

Less than significant.

Land Use and Activity Conflicts - Impact

As the Planning Area develops over the next 20 years, conflicts will arise between various types of land uses - agriculture versus urban, single family dwellings versus commercial, and sewage treatment plant versus urban uses.

As the number of persons who use the river and adjacent public facilities increase, so does the potential for conflicts between activities - bird-watchers versus off-road vehicle users, residents and users of public facilities, and bicyclists and walkers/joggers.

Land Use and Activity Conflicts - Mitigation Measures

To avoid land use conflicts, the Specific Plan recommends that certain land uses be spatially separated from each other using features such as the river, streets or open space areas. Mitigation of land use conflicts are provided for by design guidelines and policies outlined in the Specific Plan.

The Specific Plan mitigates some of the conflicts between activities by recommending additional police patrol along the Kings River and its adjacent park facilities, and the prohibition of off-road vehicle use in or along the Kings River. Mitigation of activity conflicts are also provided for by design guidelines and policies outlined in the Specific Plan.

Land Use and Activity Conflicts - Residual Impacts

Less than significant

Infrastructure - Impacts

Implementation of the Specific Plan will not have an adverse impact on Reedley's sewer, water or storm drainage systems. The development that would result from implementation of the Specific Plan can be easily handled by the aforementioned systems.

Infrastructure - Mitigation Measures

None.

Infrastructure - Residual Impacts

No impact.

Services - Impacts

Implementation of the Specific Plan will not have an adverse impact on Reedley's school, fire, or solid waste collection systems. The development that would result from implementation of the Specific Plan can be easily handled by the aforementioned systems.

Services - Mitigation Measures

None.

Services - Residual Impacts

No impact.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

1.0 INTRODUCTION

1.01 California Environmental Quality Act (CEQA)

Under the California Environmental Quality Act (CEQA) as amended, the City of Reedley is required to determine whether a project, as defined by Sections 15180 and 15378 of CEQA, will have a "significant" impact on the environment. The project, the Kings River Corridor Specific Plan (hereinafter referred to as Specific Plan), is proposed for adoption and implementation by the City of Reedley. To determine significance, the City was required to prepare an initial environmental study on this project consistent with Section 15063 of CEQA. The findings from this initial study indicated that environmental impacts associated with this project would be significant and that many of these could not be reduced to an insignificant level. Based on these findings, Reedley has determined that an environmental impact report (EIR) be prepared for the Kings River Corridor Specific Plan.

The City sent a Notice of Preparation (NOP) with an attached initial environmental study to public agencies and private organizations seeking their input on issues that should be discussed in the draft EIR. Concerns from these parties have been received and are addressed in the draft EIR (See Appendix A for NOP response letters).

1.02 Purpose

The purpose of this draft environmental impact report (DEIR) is to inform the public and local decision-makers of the potential environmental effects associated with the implementation of the Specific Plan. The DEIR will identify mitigation measures that could reduce the level of environmental impact created by the Specific Plan. Section 15370 of CEQA states that mitigation includes:

"(a) Avoiding the impact altogether by not taking a certain action or parts of an action. (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. (c) Rectifying the impact by repairing, rehabilitating, or restoring the impacted environment. (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. (e) Compensating for the impact by replacing or providing substitute resources or environments."

The DEIR will also discuss a series of alternatives to the Specific Plan ranging from the "no project" to the "environmentally preferred".

Kings River Corridor Specific Plan
Draft Environmental Impact Report

1.03 Specificity and Subsequent Use

The Kings River Corridor Specific Plan will amend Reedley's land use, circulation and open space and conservation elements. The Specific Plan proposes a detailed plan for the location of land uses, roadways, and open space; standards for recreation, median and streetscape improvements; and strategies for resource management and financing of development. Section 15146 of CEQA states that an EIR should be as specific as the project being proposed. Because of the specificity of this project, this EIR will describe the environmental effects caused by the project in detail.

Future development projects or infrastructure improvements proposed for the Planning Area that are consistent with the Kings River Corridor Specific Plan will not require the preparation of a negative declaration or EIR, as per Section 15162 of CEQA, unless new information of substantial importance becomes available that was not detailed in the original EIR or that the project being proposed is not consistent with the adopted Specific Plan and would create significant environmental effects not discussed in the original EIR.

1.04 Previous Kings River Corridor Specific Plan EIR

The original Kings River Corridor Specific Plan was prepared in the summer of 1988. A Final Environmental Impact Report was completed on this Specific Plan. Significant amendments to the Specific Plan were made by the Reedley City Council during their final consideration of this matter. The amendments to the plan were significant enough to warrant revising both the Specific Plan and the Environmental Impact Report. Both documents have been recirculated for review and comment.

2.0 PROJECT DESCRIPTION

2.01 General Project Description

The City of Reedley is proposing the adoption and implementation of the Kings River Corridor Specific Plan, defined as the "project" under the California Environmental Quality Act (CEQA) of 1970, as amended. The Kings River Corridor Specific Plan will apply to lands in the Reedley city limits and the unincorporated area of Fresno County. The contents of the Plan are consistent with Government Code Section 65451. Included in the Plan are goals and policies, land use and circulation designations, public/private improvements, development standards, resource management, and public improvement financing strategies.

The term "Specific Plan" shall refer to the Kings River Corridor Specific Plan. The term "Planning Area" shall refer to all lands that are contained within the Specific Plan boundary. "Subarea" shall refer to identifiably separate areas within the Planning Area.

2.02 Location

The Planning Area is generally located on the west side of the City of Reedley, 20 miles southeast of the City of Fresno and 12 miles east of State Highway 99 in Fresno County (see Figure No. 1).

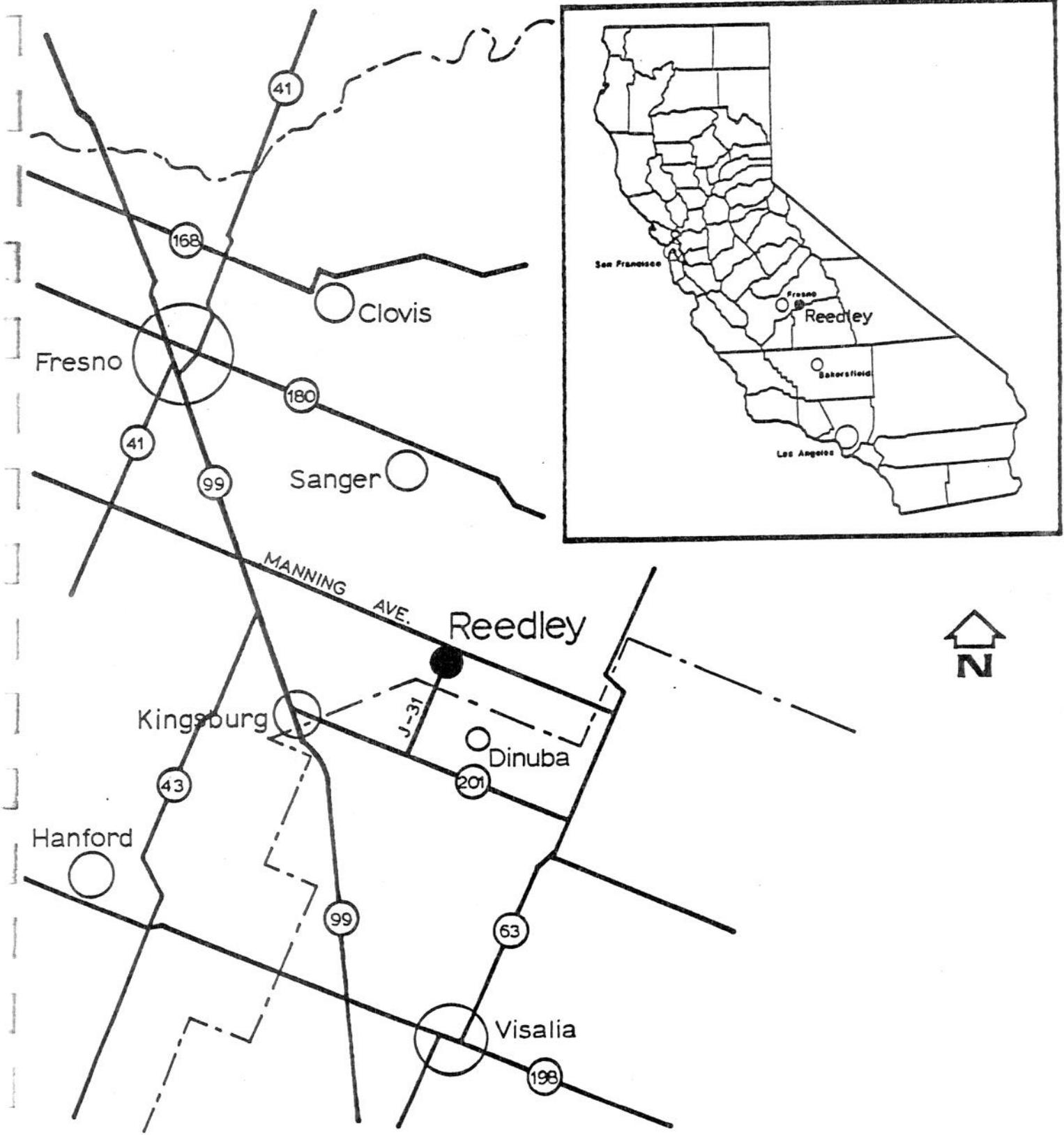
The Planning Area includes lands that are both within the County of Fresno and the City of Reedley. These lands are specifically located east of Kings River Drive, west of Reed Avenue, south of South Avenue and north of Floral Avenue.

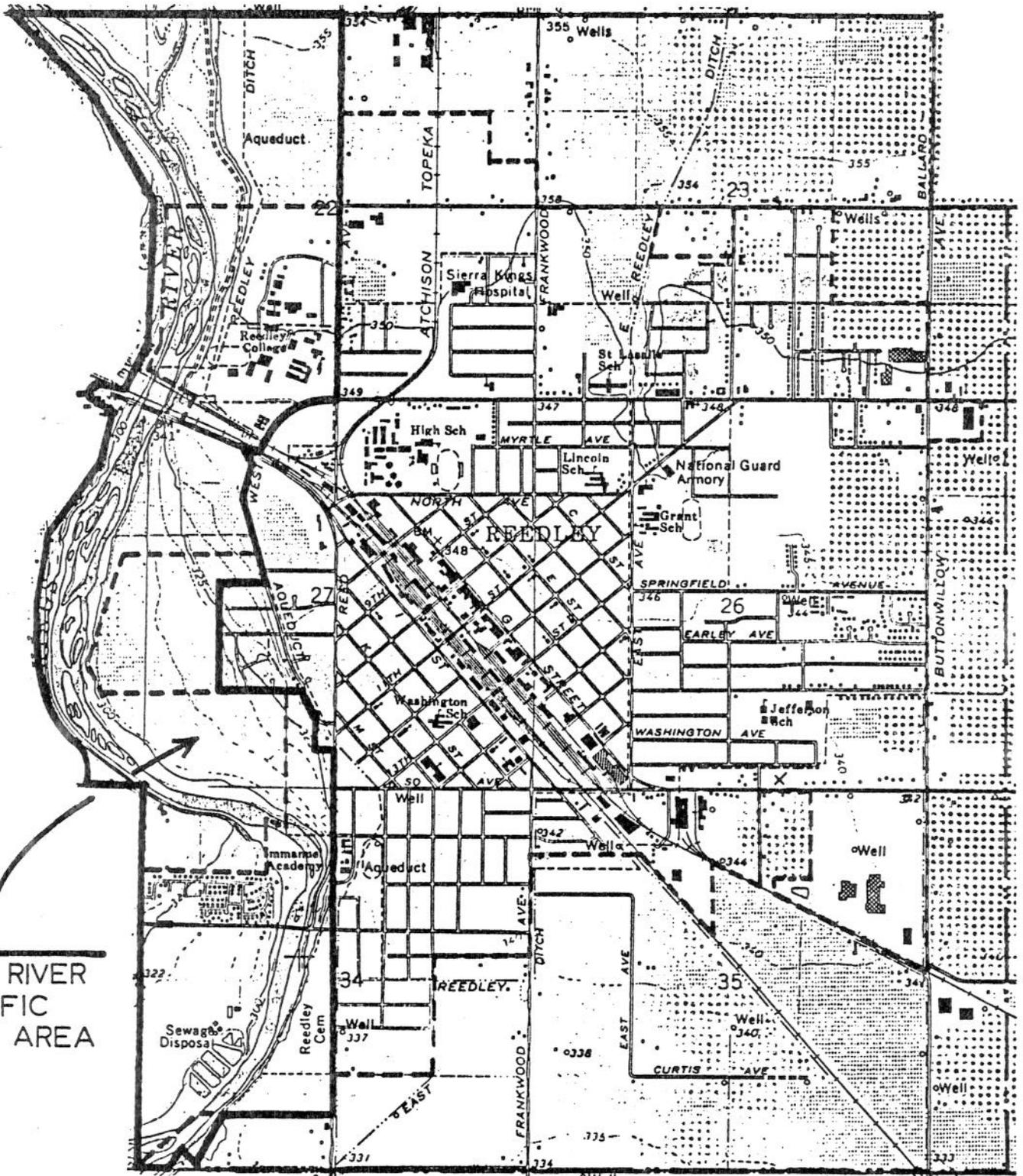
The general legal description of the Planning Area is the western half of Sections 22, 27, 34 and the eastern half of Sections 21 and 28, Township 15 South, Range 23 East. (see Figure No. 2).

2.03 Planning Area

The Planning Area encompasses a total of 958 acres of land along the Kings River. Approximately 60 percent of the Planning Area is currently inside the Reedley city limits, while the balance is in the unincorporated portion of Fresno County.

The Planning Area is three miles in length from north to south and approximately one-half mile wide. A 3.8 mile stretch of the Kings River winds through it as it flows in a westerly direction from Pine Flat Reservoir towards the Valley floor. The





KINGS RIVER
SPECIFIC
PLAN AREA

- KINGS RIVER SPECIFIC PLAN BOUNDARY
- - - - - REEDLEY CITY LIMITS
- · · · · SPHERE OF INFLUENCE



Kings River Corridor Specific Plan
Draft Environmental Impact Report

Planning Area is situated just west of the original Reedley townsite and Reedley's central business district.

Because of certain physical features, existing land use patterns, ownership, and development potential, the Planning Area has been divided into three subareas (see Figure No. 3).

Subarea No. 1 includes 423 acres of land north of the Atchison Topeka and Santa Fe Railroad tracks and generally east of the Kings River. The majority of this Subarea is under the jurisdiction of the State Center Community College District. The District's property is composed of the Kings River Community College campus and the college farm. Subarea No. 1 also contains a narrow strip of land on the west side of the river. It is primarily used for agriculture. It also contains a small Finnish resort colony.

Subarea No. 2 encompasses 375 acres of land located between the Atchison Topeka and Santa Fe Railroads and the Olson Avenue bridge. The Kings River flows through the Subarea. The east side of the river is dominated by agricultural uses; the west side by a mix of uses, including a mobile home park, rural residential dwellings, agricultural land and three parks, Reedley Beach, Smith Ferry and Kelly's Beach. The Subarea is transitioning from agricultural uses to residential, commercial and open space uses. Of the three subareas, Subarea No. 2 contains the greatest potential for new urban development because it is predominately under private ownership; sewer, water, and storm drainage lines exist within the area; and portions of the area are currently zoned for residential and commercial uses.

Subarea No. 3 encompasses 160 acres of land located between Olson Avenue bridge and Floral Avenue. The Reedley Waste Water Treatment Plant, Reedley Cemetery and Cricket Hollow Park are contained within this Subarea. Privately-owned property is limited to 35 acres of agricultural land north of the treatment plant and a residential dwelling on the east side of the river north of Floral Avenue.

2.04 Specific Project Description

The Kings River Corridor Specific Plan provides for a planning framework that will guide land use development, the installation of improvements, the provision of services and the management of resources within the Planning Area for a 20 year planning period. An overview of the significant features of the Specific Plan are discussed below. Figures No. 4, 5, and 6 illustrate the key land use, circulation, and open space features of the Specific Plan.

FIGURE NO.5

PREPARED BY: MICHAEL KNOFF & ASSOC., INC.



KINGS RIVER CORRIDOR SPECIFIC PLAN
SUBAREA NO. 2
LAND USE / CIRCULATION PLAN

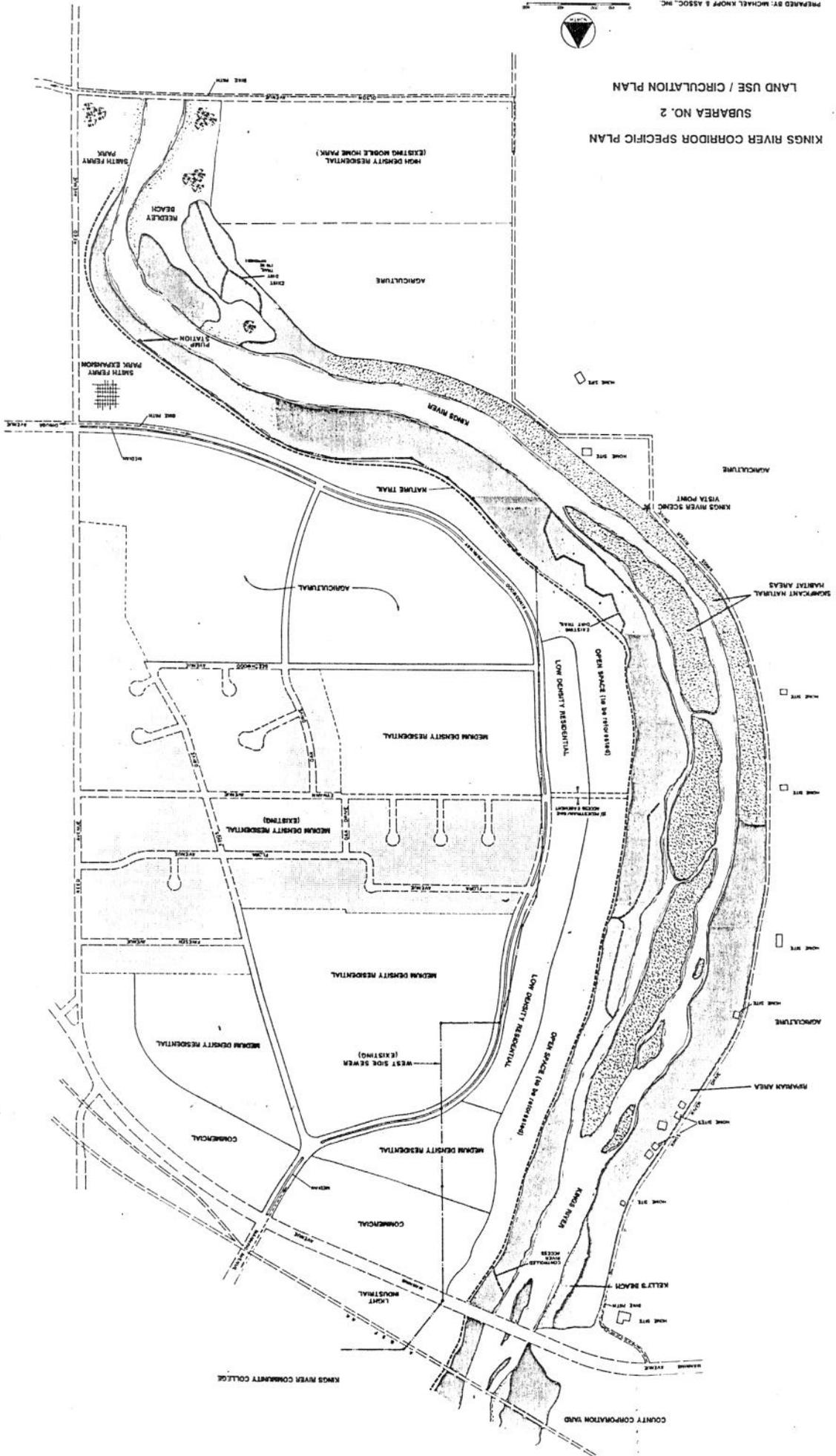
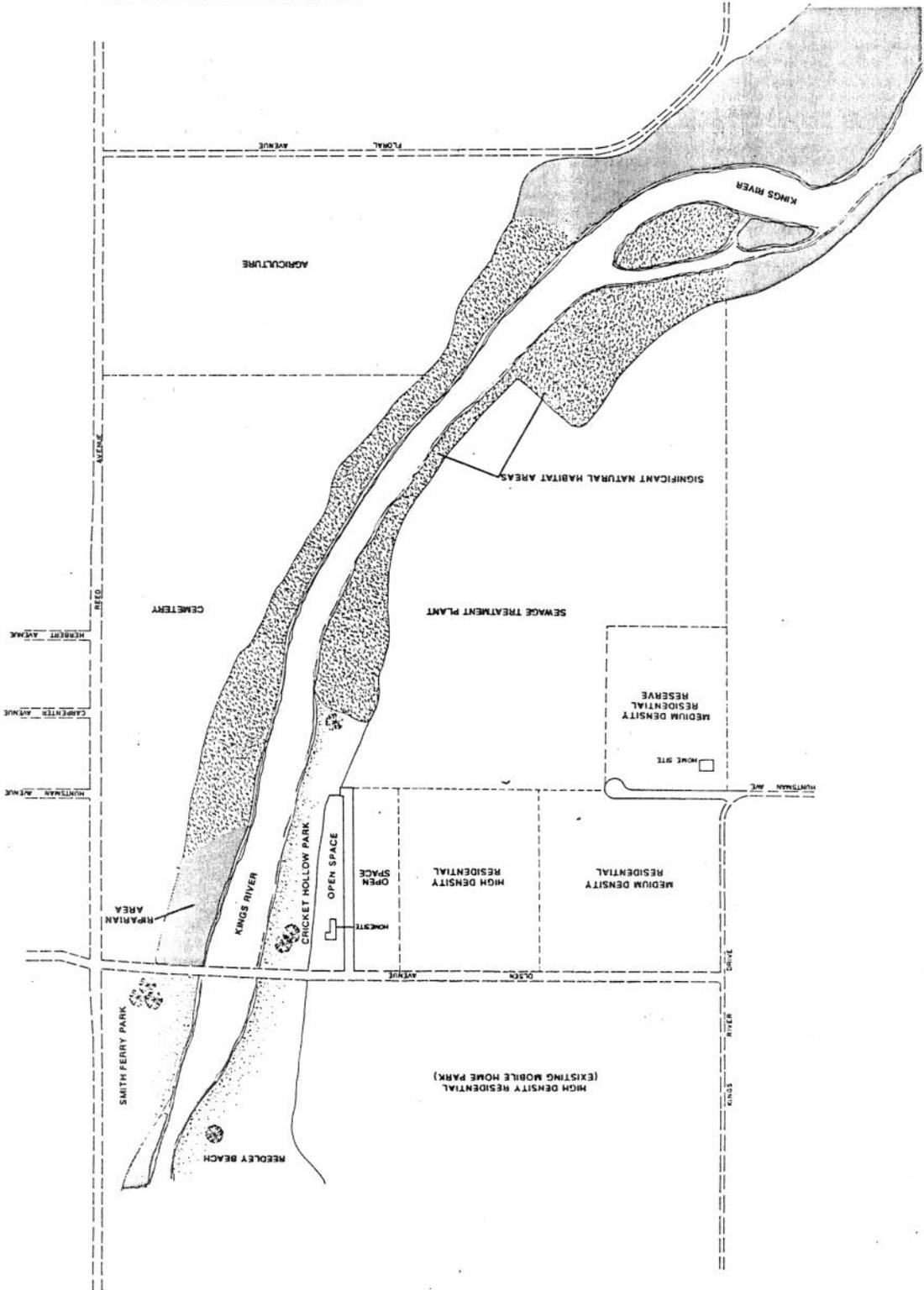


FIGURE NO.6

PREPARED BY: MICHAEL KNOPF & ASSOC., INC.
SCALE: 1"=200'(APPROX.)
JULY 20, 1988



KINGS RIVER CORRIDOR SPECIFIC PLAN
SUBAREA NO. 3
LAND USE / CIRCULATION PLAN



Kings River Corridor Specific Plan
Draft Environmental Impact Report

land use

The Specific Plan's proposed land use designations are generally consistent with the Land Use Element of Reedley's General Plan. The Specific Plan will maintain the land use designations in Subarea No. 1 as community college and agriculture and sewage treatment plant, cemetery, agriculture, open space and medium and high density residential for Subarea No. 3.

In Subarea No. 2, the Specific Plan recommends that Reedley's Land Use Element be amended. Low Density Residential is proposed for approximately 14 acres on the west side of the proposed Kingswood Parkway from Beechwood Avenue to a point approximately 1200 feet north of Floral Avenue. This Low Density Residential corridor would have a depth of about 200 feet and eventually accommodate twenty, 30,000 square foot lots (150 feet wide and 200 feet deep).

Lands between the proposed Kingswood Parkway and Beechwood Avenue are designated for agriculture. Under Reedley's Land Use Element, this land is designated for medium density residential and medium density residential reserve.

The Specific Plan also amends the Land Use Element by expanding the depth (approximately 100 feet) of the commercial located along the south side of Manning Avenue and Upper Bridge Street, and it reduces the width of the open space designation between the Kings River and the Kingswood Parkway.

circulation

The Specific Plan's proposed circulation designations are generally consistent with the Circulation Element of Reedley's General Plan. The general alignment of the Kingswood Parkway is delineated in the Circulation Element, however, the Specific Plan provides for a more exact roadway alignment and specific design standards. The Specific Plan proposes an 84-foot right-of-way and a 64-foot pavement width. The Parkway will contain two travel lanes, a 10-foot landscaped median, and parking and bike lanes on both sides of the roadway.

The Specific Plan identifies the general alignment of three future local streets. Beechwood Avenue will be extended west, Oak Drive will be extended south, and Kings Drive will be extended north. All roadways will intersect with the proposed Kingswood Parkway.

Contained in the Specific Plan is a proposed trail system that will generally parallel the east side of the Kings River. The trail system will extend north from Smith Ferry Park to Manning Avenue. At that point, it will pass under Manning and the A.T. & S.F. Railroad and connect with the already existing trail that is situated on the Kings River Community College grounds. The trail will be 10 feet wide and will

Kings River Corridor Specific Plan
Draft Environmental Impact Report

be constructed of decomposed granite. Access to this trail will be from Smith Ferry Park and a storm drainage easement stemming from Kingswood Parkway, located at the intersection of the Parkway and Eymann Avenue.

open space/conservation

The Specific Plan's proposed open space designations are generally consistent with the Open Space and Conservation Elements of Reedley's General Plan. The Open Space Element designates the land between the Kings River and the proposed Kingswood Parkway for open space. Under the Specific Plan, the width of this open space has been reduced. The Specific Plan also provides for a low density residential corridor in this area.

The Specific Plan recommends that the Open Space Element be amended to show an expanded Smith Ferry Park. The expansion would occur north of the existing park and eventually connect the park with the Kingswood Parkway. The expanded Smith Ferry Park is proposed to be improved with turf and trees, an irrigation system, parking, and other park improvements, as needed. The addition will be approximately 5 acres in size. The land designated for open space along the Kings River will be restored to an oak savannah plant community. Native plants will be planted or encouraged to grow in this area. Exotic plant species will be removed in order to promote a more natural environment.

Open space along the river will be dedicated to the City upon subdivision. Land exceeding reasonable dedication will be acquired by the City or left under private ownership.

development standards

The Specific Plan proposes numerous development standards for new residential, commercial, and open space uses. The most significant standards are as follows:

1. Lots that front onto the west side of the Kingswood Parkway will be required to have 50 foot front yards, 25 foot side yards, 20 foot rear yards and a lot width of 150 feet; on the east side, 25 foot front yards and a lot width of 100 feet.
2. Decorative river rock walls, wrought iron fences, or combination thereof shall be required to be constructed along the rear lot lines of lots that back onto the Kings River.
3. Decorative block walls, fences or combination thereof shall be required to be constructed along rear lot lines of lots backing onto Kingswood Parkway.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

4. Decorative block walls, fences or combination thereof shall be required to be constructed along the storm drainage easement that connects the trail along the Kings River to the Kingswood Parkway.
5. Kingswood Parkway shall contain a 10-foot wide landscaped median.

Public Infrastructure, Facilities and Services

The Specific Plan indicates that new development will be served by City sewer, water and storm drainage systems. Developer fees will pay for the cost of maintaining and replacing the infrastructure system that serves the Planning Area. Streets will be installed by the private sector as each property is developed. A portion of the Kingswood Parkway and landscaped median will be financed by the City of Reedley. Maintenance of the median will be financed by a landscaping maintenance district. This district will also maintain any landscaped areas outside walls or fences that front onto the Kingswood Parkway.

The expansion of Smith Ferry Park, reforestation of the open space along the Kings River, the river trail and other open space-related improvements will be financed by the City of Reedley through park fees and State grants.

Police and fire protection throughout the Planning Area will be provided by the City of Reedley. The river trail is to be constructed so that public safety vehicles can patrol the Kings River.

2.05 Development Potential

The Specific Plan proposes that the Land Use Element be amended to provide for 14 acres to low density residential, which would replace an open space designation, and 51 acres of agriculture, which would replace medium density residential reserve and open space designations. The land use designations for the balance of the Planning Area will remain similar to the current land use element.

Buildout of the Planning Area, with 102 acres designated to medium density residential and 14 acres to low density residential could generate approximately 428 housing units. The potential to generate 428 housing units, makes the Planning Area a major residential growth area in the community. In fact, based on the State Department of Finance's population projection of 20,800 for 2000, and the need to construct approximately 2200 housing units to reach that population, the Planning Area could potentially provide 20 percent of Reedley's housing stock over the next 12 years.

2.06 Specific Plan Objectives

The objectives of the Kings River Corridor Specific Plan are to: (1) implement the policies of the Reedley General Plan; (2) address the issues and concerns identified in the Kings River Corridor Specific Plan community survey; and (3) minimize the environmental impacts on the Planning Area as the Specific Plan is implemented.

2.07 Project Compatibility with Applicable Plans

Section 65454 of the State Government Code states, "No specific plan may be adopted or amended unless the proposed plan or amendment is consistent with the general plan." The Reedley General Plan consists of several elements - Land Use; Open Space and Conservation; Transportation (Circulation); and Safety and Seismic Safety. These elements have been used as a "blueprint" for the Planning Area in the arrangement of land uses, roadways, and open space; and the management of land and the standards to which new development will be constructed. The Specific Plan has been prepared in order to more specifically implement the policies contained in the above elements. It also recommends that certain portions of the above elements be amended. These amendments have already been mentioned in a previous section of this DEIR. A discussion of Reedley's General Plan elements that the Specific Plan proposes to amend or maintain consistency with are discussed as follows:

LAND USE ELEMENT

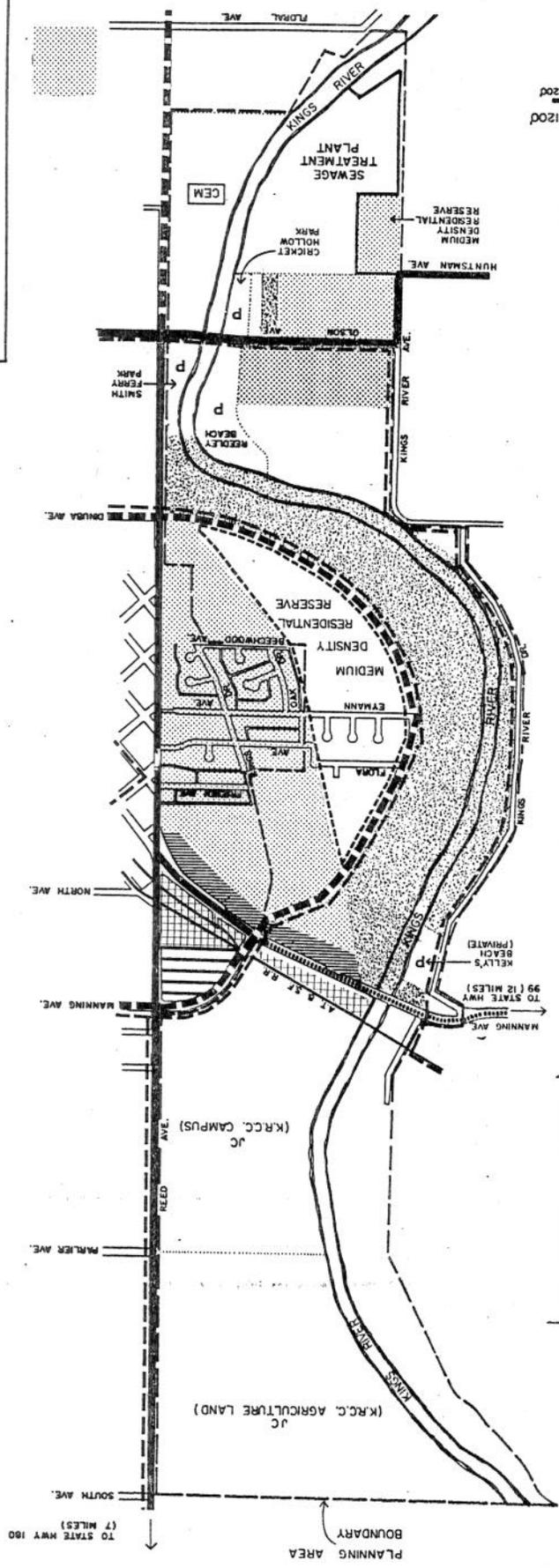
The Reedley Land Use Element was adopted in October, 1977. Figure No. 7 delineates the current land use designations within the Planning Area. Portions of the Land Use Element are proposed for amendment by the Specific Plan.

Subarea No. 1 is designated as JC (community college) and agriculture. This area contains the Kings River Community College campus and its farm.

Subarea No. 2 is primarily designated for open space, medium density residential and medium density residential reserve. Approximately one half of this residential area is designated reserve. Other land use designations in Subarea No. 2 include industrial between the Southern Pacific and A.T. & S.F. Railroads, service commercial along the south side of Manning and Upper Bridge Avenues, park for Reedley Beach, Smith Ferry, and Kelly's Beach; high density residential for the mobile home park located on the northeast corner of Kings River Avenue and Olsen Avenue and agriculture for properties being farmed on the west side of the river.

MICHAELKNOPF
AND ASSOCIATES INC.

KINGS RIVER
SPECIFIC PLAN



SOURCE: Reedley General Plan (1977)

LEGEND

[Stippled]	Open Space
[Cross-hatched]	Residential
[Dotted]	Medium Density
[Solid Black]	High Density
[Horizontal Lines]	Commercial
[Vertical Lines]	Community
[Diagonal Lines]	Service
[Grid]	Industrial (Limited)
[White]	Agriculture
[Dashed]	Public Facilities
[Dotted]	Park (Existing)
[Dotted]	Cemetery
[JC]	Community College
[Thick Solid]	Major Arterial
[Solid]	Arterial
[Dashed]	Collector
[Dotted]	Bikeways

REEDLEY GENERAL PLAN
LAND USE DESIGNATIONS
& CIRCULATION PLAN
FIGURE NO. 7

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Subarea No. 3 includes three public facility designations: park, sewer plant, and cemetery for Cricket Hollow Park, Reedley's sewage plant, and the Reedley Cemetery, respectively. Land located between Olsen Avenue and the sewage treatment plant is designated for medium density residential and medium density residential reserve.

The Land Use Element includes a number of policies which influenced the preparation of the Kings River Corridor Specific Plan. These policies are summarized as follows:

Urban Growth Management Policies

- o Reedley should foster the establishment of a concentrated urban development pattern, with land outside the planned urban area being designated exclusively for "agriculture".
- o New urban development should be phased so that it occurs in an orderly manner with initial development occurring on the available undeveloped properties which are closer to the built-up area.
- o Urban growth "reserves" should be established within areas which are generally suitable for eventual development within the planning period because of their location on the outer fringe of the community, are currently either: (1) beyond the urban service delivery system, or (2) are located adjacent to the currently undeveloped lands which are closer-in to the built-up area.

Residential Land Use Policies

- o "Medium density residential" provides for a residential environment generally found in conventional single family subdivisions, and permits a minimum, generally, of 6000 square feet of lot area per dwelling unit. Two- and three- family dwelling units, at a minimum of 3000 square feet of lot area per dwelling unit may, however, be permitted on a limited basis where the higher density use will not adversely affect the predominant single family residential use.

Mobile Home Park Policies

- o Mobile home parks may be permitted in planned residential areas.
- o The most desirable location for a mobile home residential zone district is on the periphery of a residential neighborhood or in a transitional land use area.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Commercial Policies

- o "Service commercial" uses should be located along major streets where adequate vehicular access is available and where the permitted use will not adversely affect surrounding land uses.

Public and Institutional Policies

- o Provide adequate park and recreation facilities in accordance with the policies of the Open space, Conservation, and Recreation Element.
- o Planned public facilities in areas exhibiting moderate-to-severe soil limitations with respect to building foundation shall be permitted to develop in accordance with Safety Element policies.
- o Public uses shall be permitted in flood-prone areas when the use is consistent with the General Plan map and in accordance with the Safety Element.

Planned Unit Development Policies

- o Planned unit developments may be permitted in all areas designated for residential, commercial, industrial, or public facility uses within a planned unit development zone district.
- o The design of a planned unit development shall insure compatibility with existing and planned uses of adjacent properties. Design elements to be considered include, but are not limited to, architectural style, placement of buildings upon land, building heights and bulk, off-street parking, open space, privacy and landscaping.

TRANSPORTATION (CIRCULATION) ELEMENT

The classification and location of major roadways in the Planning Area are indicated on Figure No. 7. The most significant roadway identified in the Circulation Element, as it relates to the Specific Plan, is the curved collector street that will connect Manning Avenue with Dinuba Avenue. This roadway will provide internal access to lands within Subarea No. 2.

Street and Highway Circulation Policies

- o Arterials shall provide for through traffic movement of continuous routes with no direct access to abutting property.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

- o Collectors shall provide internal traffic movement within an area and connect local roads to the arterial system.
- o New residential subdivisions should be designed with a minimum number of lots fronting directly on collector streets and with no lots fronting directly on arterial streets.
- o Turnaround driveways would be required on parcels (lots) which have direct access to arterial or collector streets.
- o The city should minimize the adverse environmental impact of street and highway development by utilizing road construction methods which reduce the air, water, and noise pollution associated with such development.

Bikeway Policies

- o Priority should be given to bikeways what will serve the most cyclists and destinations of greatest demand.
- o Bikeways should be designated near major traffic generators such as commercial and employment centers, schools, recreational areas, and major public facilities.
- o A visually clear, simple, and consistent bikeway system with clearly defined areas and boundaries should be established.
- o Bikeways should be continuous and should be linked to other bikeways and recreation facilities.
- o For the safety of those who use the bikeways, the City should consider stopping a bikeway before a major street intersection or dangerous railroad crossing and starting it again after the area has been passed.
- o A bikeway route should be planned which parallels Kingswood Parkway.
- o The Reedley Bikeway Plan should tie into the Fresno County Recreation Trails Plan.

SAFETY AND SEISMIC SAFETY ELEMENT

The purpose of this element is to minimize environmental risk to residents of Reedley as a result of flooding, fire, earthquakes, and building failure due to underlying unstable soils. The policies of this element are summarized below.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Flood Hazards Policies

- o Emphasize a floodplain management approach in flood hazard areas that are presently undeveloped, by regulation of land uses rather than concentrating on structural flood-control facilities.
- o Flood hazard regulations shall apply to all property subject to a 100-year floodplain.
- o Designated floodways shall be that portion of the 100-year flood hazard area to remain free of all new obstructions in order to reasonably provide for the passage of floodwaters.
- o Open space uses should be encouraged in flood-hazard areas and Land Conservation contracts and open space and scenic easements should be made available by the County to property owners within the 100-year flood areas located in the unincorporated area.

Geologic Hazards Policies

- o Building foundation design and site planning standards should be developed and applied to sites found to have geologic hazards determined by a soils investigation.

Fire Hazards Policy

- o Review land use development proposals for fire safety considerations.

OPEN SPACE, CONSERVATION, AND RECREATION ELEMENT

Open space generally refers to any water or land which has value for single or multiple open space functions. Specifically there are five different types of open space. These include open space for: (1) the preservation of natural resources (river and riparian habitat); (2) agricultural land; (3) floodplains and unstable soils; (4) controlling urban form and preventing inefficient patterns of development; and (5) outdoor recreation - including parks and areas of historical and cultural value. The policies of this element are as follows:

- o Assure the preservation of the natural environment of the City-owned islands which are located within the channel of the Kings River.
- o Foster and maintain the scenic atmosphere of the river front area.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

- o Protect areas of natural ground water recharge from land uses and disposal methods which would degrade water sources.
- o Establish local standards for parks and other urban recreation facilities.
- o Establish priorities for the development of planned parks based on anticipated community needs, and acquire and develop the proposed park sites in accordance with these priorities.
- o Pursue State and federal funds for park improvement and recreation programs.
- o Amend the subdivision ordinance to require the dedication of land, or payment of fees for park acquisition and/or development as a condition of approval of subdivisions.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

3.0 ENVIRONMENTAL SETTING

The City of Reedley is located in Fresno County on the eastern side of the San Joaquin Valley. The community is situated on the relatively flat alluvial plain of the Kings River. The City's mean elevation is 337 feet above sea level.

Climate

Reedley's Mediterranean climate is characterized by hot dry summers and cool moist winters. Daytime temperatures average between 45 and 55 degrees in the winter and 90 to 100 degrees in the summer. The average rainfall is 11 inches, with most of the precipitation occurring during the months of November through February.

A unique climate feature of the Valley is radiation fog. These fogs occur during the months of November to January. Visibility problems occur when the fog is heavy and hangs near the ground. Winds in the Central San Joaquin Valley average 5 to 10 mph. Spring, summer and early fall winds originate from the northwest. Winter winds typically come from the west.

Soils

Granitic sediments transported from the Sierra Nevada by the Kings River were deposited on alluvial fans to form the soils found within the Planning Area. The coarsest textured and most recent deposits are found adjacent to the active river channel and are subject to frequent flooding. Contiguous to the river channel are the soils of the secondary floodplain. These soils consist of more finely textured materials and are more fertile. Higher up on the alluvial terraces the fine textured, extremely fertile soils of the Hanford series are encountered.

Soil mapping units found in the Planning Area include: riverwash, terrace escarpments, and flood channeled soils. The Grangeville series is located in the flood channel. It is formed of poorly consolidated alluvial deposits. These soils tend to be excessively drained and have a low water holding capacity. Generally they are of little value for agriculture, but are ideal for supporting riparian habitat: dense populations of willow, sycamore, cottonwood, valley oak, shrubs and vines. Flooding of the coarse, unconsolidated soils of this series is also a very important source of groundwater recharge to the underlying aquifer.

The sandy loams and loamy sands of the Grangeville, Tujunga and Hanford series lie upon the secondary flood plain and old river channels in the Planning Area. Less prone to flooding, especially since the construction of Pine Flat Reservoir, these soils have characteristics better suited to agricultural uses as evidenced by Storie

Kings River Corridor Specific Plan
Draft Environmental Impact Report

indices ranging from 76 to 95 (U.S. Department of Agriculture, 1971). Tujunga loamy sand is probably the least suited to agriculture due to excessive drainage and an extremely low water holding capacity. However, these characteristics make it ideal for groundwater recharge and riparian habitat. Native vegetation found in this secondary flood plain area included a mix of annual grasses and Valley oak.

Spreading out on the broad alluvial terraces above the flood plain, are the soils of the Hanford series. Hanford fine sandy loam, with a Storie index of 100, is one of the best soils for farming in Fresno County. Native vegetation probably consisted of annual grasses.

Table No. 1 describes the physical factors of the soils found in the Planning Area. Refer to Figure No. 8 for the location of each soil within the Planning Area.

Kings River

The Kings River begins on the western slope of the Sierra Nevada and flows westerly to Pine Flat Reservoir. Twenty-five miles downstream of this reservoir, the river passes along the west side of Reedley as it flows to the Valley floor. Flows in the river at Reedley come from releases from Pine Flat Dam and tributary inflow. The dam, completed in 1954, was constructed for flood control, irrigation, recreation and water conservation.

Land Use

The existing land use in the Planning Area is dominated by open space; agriculture; and public use facilities such as the Kings River Community College (see Figure No. 9). The Planning Area is bounded on the west, north and south sides by rural-agricultural uses and on the east side by urbanized portions of Reedley. Most of the urbanized area along the Planning Area's eastern border (Reed Avenue) is composed of residential uses such as single family dwellings and senior citizen housing. Other uses in this area include a church, private high school and retirement facility.

As shown in Table No. 2, the dominant land use in the Planning Area is open space - agriculture and riverbottom. Agriculture occupies 446 acres, or 46 percent, of the 958 acre Planning Area. The major types of agriculture consist of vines and deciduous trees. Riverbottom occupies 232 acres of the Planning Area. This area contains the Kings River channel and its adjoining riparian woodland. The Kings River Community College is the major developed land use feature in the Planning Area. This two-year junior college has a 104-acre campus and an adjoining 160-acre school farm.

The college's 1987-88 enrollment was 3728 day and evening students. It has 72

TABLE NO. 1

SOIL CHARACTERISTICS

MAPPING UNIT	SOIL/SLOPE	LAND CAPABILITY #	STORIE INDEX *	PHYSICAL PROPERTIES		LAND DEVELOPMENT USES ⁺		
				Permeability	Erosion Potential	Leach Fields	Buildings	Playgrounds
CzaD	Cometa loam, 15-30% slopes	IV	29		high	severe	severe	severe
Gf	Grangeville find sand loam	I	90	mod-rapid	slight	slight	severe	slight
Gp	Grangeville Soils, channelled	II	36			severe	severe	severe
GtA	Greenfield sandy loam, 0-3%	I	90	mod-rapid		slight	mod-severe	slight
Hc	Hanford sandy loam	II	95	mod-rapid	slight	slight	mod-severe	slight
Hm	Hanford fine sand loam	I	100	mod-rapid	slight	slight	mod-severe	slight
PnC	Pollasky sand loam, 9-15%	IV	53	mod-rapid	moderate	severe	moderate	severe
PnC	Pollasky fine sandy loam, 9-15%	IV	59	mod-rapid	moderate	severe	moderate	severe
PnB	Pollasky fine sandy loam, 2-9%	III	63	mod-rapid	slight	slight-mod	moderate	slight-mod
Rh	Riverwash	VII	5	very rapid		severe	severe	severe
Tnf	Terrace Escarpments	VII	10		high	severe	very severe	very severe
TzaA	Tujunga sand, 0-3% slopes	IV	54	very rapid	slight	slight	severe	severe
TzbA	Tujunga loamy sand, 0-3%	III	76	rapid	slight	slight	severe	moderate
TzbB	Tujunga loamy sand, 3-9%	III	68	rapid	slight	slight-mod	severe	severe

Land Capability indicates suitability of the soil for field crops. The Roman numerals indicate progressively greater limitations and choices for practical use.

* Storie index expresses numerically the relative degree of suitability of the soil for general intensive agriculture. An index of 100 indicates excellent soils while 0 indicated very poor soils.

+ Slight: Soil is favorable for indicated use, limitations are minor.

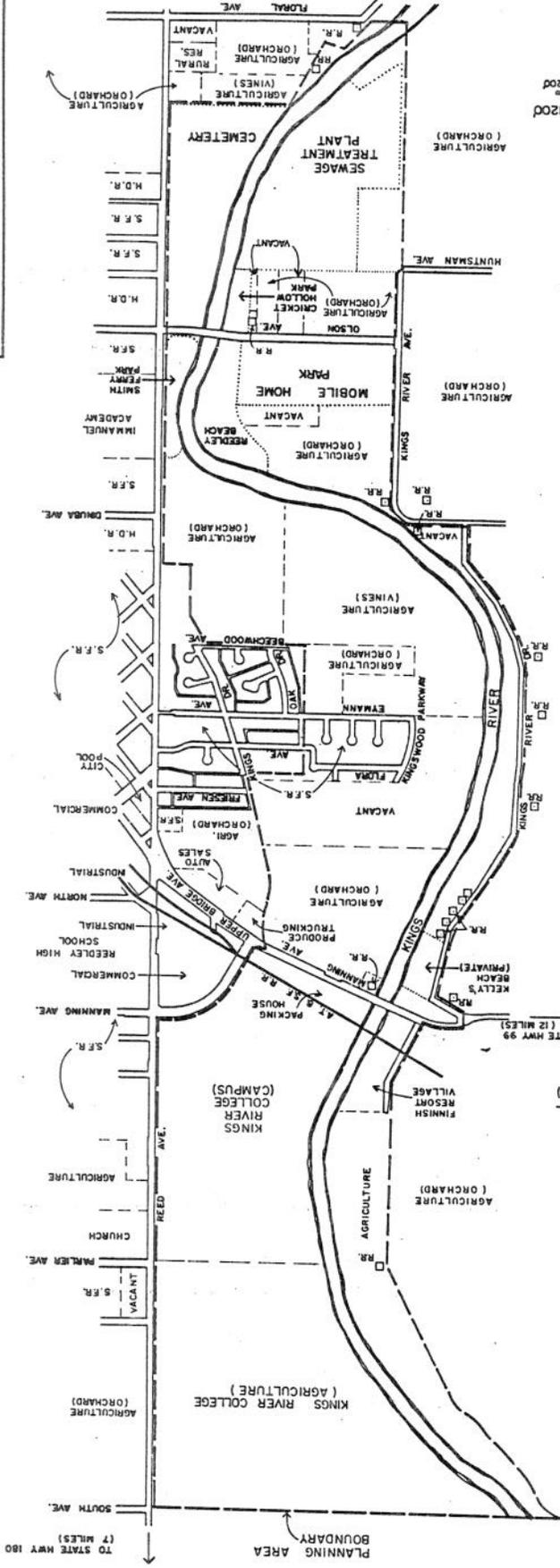
Moderate: Soil is not favorable for indicated use, special planning/design required to minimize limitations.

Severe: Soil is very unfavorable for indicated use, significant increase in cost/maintenance is required.

SOURCE: U.S. Department of Agriculture, 1971

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APPROX. SCALE: 1" = 1200'
0 300 600 1200'

LEGEND
S.F.R. Single Family Residential (Medium Density)
H.D.R. High Density Residential
R.R. Rural Residential
SOURCE: Collins and Costello (1988)

EXISTING LAND USE
FIGURE NO. #9

Kings River Corridor Specific Plan
Draft Environmental Impact Report

full-time and 112 part-time instructors. The campus contains 52 buildings (257,000 square feet) and 1197 off-street parking spaces. In addition to housing a range of academic buildings and support facilities, like parking, cafeteria, dorms, and administrative facilities, the college also has a well-rounded recreational complex. Contained on campus are a swimming pool, 12 racquetball and tennis courts, basketball courts, playing fields, baseball diamonds, a jogging track, gymnasium, two hole golf course and par course.

TABLE NO. 2
EXISTING LAND USE

<u>Land Use</u>	<u>Acres</u>	<u>Percent of Planning Area</u>
Residential	43	4.5
Commercial	1	0.1
Industrial	8	0.8
Kings River C.C. Campus	104	10.9
Agriculture	446	46.6
Riverbottom	232	24.2
Cemetery	33	3.4
Park	36	3.7
Waste Water Treatment Plant	38	4.0
Street and Railroad ROW	<u>17</u>	<u>1.8</u>
TOTAL	958 acres	100 percent

Source: Collins & Castrillo, 1988

The Planning Area includes four parks, three public and one private. These parks, which are located along the Kings River, provide year-round recreational opportunities for residents in and around Reedley. These parks are: Cricket Hollow (city of Reedley), Reedley Beach (city of Reedley), Smith Ferry (city of Reedley), and Kelly's Beach (private).

The Planning area also includes a Finnish Resort Village, called Hauli Huvilla, on the west side of the Kings River, opposite the Kings River Community College campus. The facility is composed of 15 housing units, trailers and a lawn area which borders the river. The village was originally established in the early 1930s as a resort. Today, it still serves as a resort on May Day, July 4th, and other holidays.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Land Ownership

Much of the land within the Planning Area is controlled by public agencies. As shown in Table No. 3, public lands make up about 498 acres, or 52 percent, of the Planning Area, while 460 acres, or 48 percent, are in private ownership. The State Center Community College District is the largest single landowner in the Planning Area, with a total of 259 acres. The City of Reedley is second with about 86 acres, including the sewage treatment plant, three parks, and street right-of-ways.

The State of California, which considers the Kings River to be a navigable waterway, claims ownership of all land in the riverbottom below the mean low water line. A public trust easement exists on land between the high and low water lines on each side of the river. According to the State Lands Commission, private upland landowners may utilize lands between the low and high water lines in any manner that is consistent with the public trust.

TABLE NO. 3

LAND OWNERSHIP

<u>Ownership</u>	<u>Land Use</u>	<u>Acres</u>	<u>Percent of Total</u>
State of California	river bottom	115	12.0
City of Reedley	parks,treatment plant, street ROW	86	9.0
Southern Pacific & A.T. & S.F.	railroad ROW	5	0.5
State Center Community College	campus and ag. land	259	27.0
Cemetery District	cemetery	33	3.5
<u>Private</u>	<u>urban and ag. lands</u>	<u>460</u>	<u>48.0</u>
TOTAL		958 acres	100.0%

Source: Collins & Castrillo, 1988

Population

Reedley's population on January 1, 1987 was estimated at 13,754 (California Department of Finance, 1987). The population is expected to increase to 15,480, 17,950 and 20,800 by the years 1990, 1995 and 2000, respectively, according to projections provided by the Department of Finance.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Housing

Department of Finance figures indicated that Reedley had 4372 housing units in 1987. There were 3055 single family dwellings, or 70 percent, 1138 multiple family dwellings, or 26 percent, and 179 mobile homes, or 4 percent.

Archaeological/Historical

Two archaeological sites, FRE-55 and FRE-66, have been recorded along the Kings River in the Reedley area (California Archaeological Inventory, 1988). FRE-55, described as a prehistoric campsite, was recorded in 1924. A more recent evaluation of this site was completed in 1983 as a part of a Negative Declaration prepared by Jones and Stokes Associates for a City of Reedley storm water drainage project. The site evaluation was conducted by Jane Granskog of the Environmental Studies Center at CSC, Bakersfield. Her survey concluded that site FRE-55 had been destroyed as a result of urban disturbances. Evidence indicated that the site probably existed where Immanuel Academy High School now exists (Granskog, 1983).

FRE-66, which is described as an occupational site with grinding stones was recorded in 1939 by Hewes. It is located west of the Kings River College Campus near the railroad crossings of the river (California Archaeological Inventory, 1988). Based on the age of the recording, site FRE-66 may have been destroyed by subsequent urbanization.

Of historical significance is Smith's Ferry, which was established as a river crossing at the site of what is now the Olsen Avenue bridge in 1855 by James Smith. As discussed earlier, Smith also constructed an 11-room hotel overlooking the ferry crossing on the east bank of the river. The hotel was dismantled in 1886. Smith's grave, shaded by a tree planted by his wife, is located in the northeast corner of the Reedley Cemetery. Historians feel that Smith's Ferry crossing and hotel eventually lead to the development of Reedley. (E Clampus Vitus, undated).

Poole's Ferry was the site of an earlier river crossing. This historical resource was located about one-half mile north of the Planning Area. There presently are no remains of Poole's Ferry.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This section of the DEIR analyzes the impacts the project will have on the physical and human environments. Each subsection is divided into three parts: existing conditions, environmental impacts, and mitigation measures. The purpose of this format is to provide the reader with a discussion that is easily understood and distinguishes the relationships between existing conditions and environmental impacts and between environmental impacts and mitigation measures.

The environmental impacts discussed in this section were identified through the Notice of Preparation (NOP) process, public workshops, and communications with public agencies and local residents. Environmental effects discussed in this section are:

- urbanization of agricultural land
- loss of biotic resources
- increased vandalism, trespassing, and littering
- flooding
- water quality
- aesthetics
- land use and activity conflicts
- infrastructure
- services
- circulation

4.01 URBANIZATION OF AGRICULTURAL LAND

4.011 Existing Conditions

The dominant land use in the Planning Area is agriculture, approximately 450 acres. Most of this land is planted in vines or deciduous trees. Agricultural land in Subarea No. 1 is located north of the Kings River College campus; it is primarily surrounded by other agricultural uses. Agricultural land in Subarea No. 2 is bounded by the Kings River on the west and by urban uses on the east, although the center portion has been developed into a single family residential subdivision.

Reedley's Land Use Element has designated a substantial portion of the agricultural land in Subarea No. 2 for either medium density residential or medium density residential reserve. Although these designations will eventually lead to the conversion of these agricultural lands to urban uses, the transition is required in order for Reedley to accommodate future population growth. If urbanization were not allowed for in the Planning Area, then this conversion of agricultural land would be required to occur in other parts of the community.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

The Specific Plan contains policies and implementation strategies that will protect agricultural lands in the short-term from encroaching urban uses. In addition, the Specific Plan proposes that the Reedley Land Use Element be amended to redesignate a portion of Subarea No. 2 to agricultural from medium density residential and medium density residential reserve. This proposed amendment involves approximately 55 acres. Policies contained in the Specific Plan that pertain to the protection of agricultural land are as follows:

Property owners who wish to continue farming within the Planning Area shall not be responsible for participating in the cost of public improvements until such time as they wish to develop their property.

Existing agricultural uses within the Planning Area may remain as long as the landowners wish to keep their land in production.

Property owners that are developing land for residential or commercial uses adjacent to lands in agriculture shall provide fences, walls, or buffer areas, where possible, in order to discourage trespassing and vandalism on the agricultural lands.

Minimize conflicts between agricultural uses and developing properties through project phasing, orientation, and other means which may be available.

4.012 Environmental Impacts

Implementation of the Specific Plan will eventually lead to the conversion of 121 acres of agricultural land to urban uses. These lands are currently designated for urban uses under the Reedley Land Use Element; however, the Specific Plan does propose that certain properties within Subarea No. 2 be redesignated from medium density residential to agriculture. This redesignation action will reduce the Specific Plan's adverse impact on the agricultural environment in that 55 acres will be maintained in agriculture.

In addition to the conversion of 121 acres to urban uses, the scenic value and rural atmosphere inherent in agricultural lands will also be adversely affected. These attributes will be lost to persons who are nearby residents or to persons who frequently travel through the Planning Area.

4.013 Mitigation Measures

The Specific Plan will lead to the conversion of 121 acres of agricultural lands to urban uses. This impact on the agricultural environment can not be mitigated. Under CEQA, this impact is considered to be a significant irreversible impact.

4.02 LOSS OF BIOTIC RESOURCES

4.021 Existing Conditions

A biotic survey, *Kings River Corridor Biotic Survey*, was conducted in the Planning Area by Hansen's Biological Consulting in May, 1988. The findings and recommendations of the survey are contained in Appendix B of this report.

In summary, the survey concluded that no rare, threatened, endangered or candidate species were evident in the Planning Area. The survey did conclude, however, that significant natural habitat areas (plant communities) did exist within the Planning Area. These include: Great Valley Cottonwood Riparian Forest, Great Valley Mixed Riparian Forest, Great Valley Valley Oak Riparian Forest and Great Valley Willow Scrub.

The survey identified 159 bird and 29 other vertebrate species in the Planning Area. Animals of special note that the survey identified include the Wooduck, Red-shouldered Hawk, woodpecker, fruit eating birds, Blue Grosbeak towhees, ground squirrels and domestic cats and dogs.

The Specific Plan specifies a number of policies and implementation strategies that preserve the natural habitat and wildlife along the Kings River. Most significantly, the Specific Plan proposes an open space area that would parallel the east side of the Kings River. This area would encompass approximately 40 acres and would range in width from 100 to 250 feet. The Specific Plan proposes that the area be restored with native vegetation and that non-native plant species be removed from the area.

The Specific Plan proposes to buffer portions of the open space area from urban uses by using the Kingswood Parkway. In other areas where urban and open space uses interface, fences or walls will separate the two uses.

In addition, the Specific Plan provides for a management program that would minimize adverse impacts on the river environment; a trail system and interpretive center that would inform persons about the environmental aspects of the river; and a financial strategy that would allow the City the resources to complete the above tasks.

4.022 Environmental Impact

The Specific Plan would increase urban development and certain activities associated with encroaching urban development, including hunting, operation of motorized vehicles, and human encroachment into the river environment. In addition, urban development could bring with it non-native plant species that could establish themselves in the natural plant communities along the river. Examples of such species include mulberry and eucalyptus trees and certain species of blackberry.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Non-native animal species could also be introduced, including cats and dogs.

Encroaching urban development and human activities could cause certain animal species to migrate to other areas. This migration can increased biotic pressures on these new areas by increasing the competition for space, food and other resources.

Native vegetation along the river could be adversely affected by human trampling, competition from introduced non-native plant species, or accidental fires. Loss of this vegetation would have an indirect impact on wildlife because it is a source of food, shelter, and nesting sites. Removal of native vegetation can also allow weed species to establish themselves. This also has a negative impact on wildlife along the river in that these weed species do not afford the native animals food and shelter.

The Specific Plan proposes that low density and medium density residential units be located on the west side of the Kingswood Parkway. These units would back onto an open space area that is proposed to be restored to its native habitat. This interface of native habitat and residential units will have an adverse impact on biotic resources because the units and associated human activities will intrude into this proposed habitat corridor. The proximity of these units and activities could discourage certain animal species from frequenting the area. In addition, the residential lots themselves will reduce the amount of land that could potentially be converted to native habitat.

The Specific Plan will have some positive impacts on the biotic resources of the Planning Area in that some of the land that currently is vacant or used for agriculture will be restored to a native plant community. This change will constitute a positive overall change in the biotic environment because the amount of native habitat will be expanded.

4.023 Mitigation Measures

The Specific Plan has provided a number of policies and implementation strategies that will mitigate the project's adverse impact on the biotic environment. As an additional mitigation measure, the Specific Plan could eliminate the low density and medium density residential units that are proposed for the west side of the Kingswood Parkway. This measure is discussed in Section 6.0, Alternatives to the Proposed Action, of this DEIR. This action would maintain most of the land on the west side of the Parkway as native open space and land on the east side of the Parkway for urban uses. This separation would maintain the open space area as a potentially more viable area for the reentry of native plants and animals. This proposed mitigation measure would reduce the project's impact on the biotic environment to a level of insignificance.

4.03 VANDALISM, TRESPASSING, AND LITTERING

4.031 Existing Conditions

The Reedley Police Department's most frequently received complaints (pertaining to activities in the Planning Area) relate to the use of recreational vehicles and other noisy activities in the river bottom. (City of Reedley, 1988). Although the Department generally does not have the authority to prohibit the use of recreational vehicles in the river bottom, and they are not equipped with the proper vehicles for patrolling the area, they do attempt to curtail the activity by enforcing city trespassing and noise ordinances on adjoining land that is within the city limits.

During the Specific Plan's public input process, problems associated with vandalism, trespassing and littering in the Planning Area were surfaced by Reedley residents and persons who lived in or near the unincorporated area of the Planning Area. The *Kings River Corridor Community Survey* confirmed these concerns when the public was asked "What problems currently exist in the Kings River area?" The public responded as follows: littering, 36 percent; damage to river habitat, 25 percent; not enough public access, 11 percent; trespassing, 8 percent; excessive noise, 7 percent; and other, 13 percent.

Eliminating the potential for vandalism, trespassing, and littering in the Planning Area is a major goal of the Specific Plan. Minimizing these activities are facilitated through the following proposed policies.

Agriculture

Property owners that are developing land for residential or commercial uses adjacent to lands in agriculture shall provide fences, walls, or buffer areas, where possible, in order to discourage trespassing and vandalism on the agricultural lands.

Public and Institutional Uses

To protect Reedley's most costly infrastructure investment, intensive urban development should be discouraged near the waste water treatment plant.

Public Facilities and Services

To minimize adverse impacts on adjacent land uses and streets, adequate parking shall be provided for persons using open space, recreational, commercial and educational facilities in the Planning Area.

To discourage vandalism, trespassing, and damage to the riparian habitat, a paved roadway, which shall also function as a bikepath, shall be provided along the river to provide access for patrol and emergency vehicles.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Open Space and Recreation

Protect identified areas of "significant natural habitat" by limiting access to these areas.

The use of motorized vehicles shall be prohibited on lands designated as open space within the Planning Area.

Safety and Management

Prohibit the use of off-road vehicles and firearms in and along the Kings River.

Protect private properties from vandalism, littering, and trespassing by prohibiting access from public properties.

Section 3.0, Specific Plan Components, of the Specific Plan proposes numerous action plans to implement the above policies. These include the construction of a 10-foot wide pedestrian pathway along the east side of the Kings River in Subarea No. 2 that can be used for patrol and emergency vehicles, and the signing, maintenance and fencing of open space along the river so that persons will be discouraged from trespassing.

4.032 Environmental Impacts

As the Planning Area develops, additional persons will live in closer proximity to the Kings River environment and private land that is still being intensively farmed. These persons and their associated activities, such as hunting, operating off-road vehicles, and walking on private property, will increase the amount of vandalism, trespassing and littering experienced by properties in the Planning Area especially in Subarea No. 2 where most of the new development is scheduled to occur.

On lands that are being farmed, the above activities can disrupt the operation of farming activities, including irrigation, harvesting, cultivating and spraying. These disruptions can be expensive to the farmer.

Although the Specific Plan provides for numerous policies and mechanisms to minimize vandalism, trespassing and littering, the fact that addition persons will be living in the Planning Area increases the probability that the above mentioned adverse impacts will occur more frequently.

4.033 Mitigation Measures

The Specific Plan proposes numerous measures that will effectively mitigate the adverse impacts of vandalism, trespassing, and littering. To further decrease the occurrence of these activities, the Reedley Police Department can increase their patrol of the Planning Area. The fiscal cost of this increased patrol can be off-set by fines and entry fees at Reedley Beach and Cricket Hallow Park both of which are areas that generate numerous calls for police especially during the summer months.

Increased patrolling by police should reduce the impact of vandalism, trespassing, and littering to a level of insignificance.

4.04 FLOODING

4.041 Existing Conditions

The annual flow in the Kings River, as measured at the Reedley Narrows gaging station located three miles upstream of Reedley, has average 1,016,730 acre-feet for the period 1963 to 1987 (Kings River Water Association, 1988). The highest average monthly flows occur during summer months, with a maximum of 3077 cubic feet per second (cfs) in June. The lowest monthly flows occur during the late fall, with a minimum of 289 cfs in November. The highest one-day flow over the past 25 years was 12,520 cfs in June of 1964; the lowest one-day flow was 12 cfs in October of 1984.

Flooding in the Reedley area occurred in 1914, 1950, 1958, 1967, 1969 and 1978. In most cases, the flooding was caused by high flows in the Kings River. However, the most damaging flood occurred in 1969 as a result of local runoff from intense rainfall.

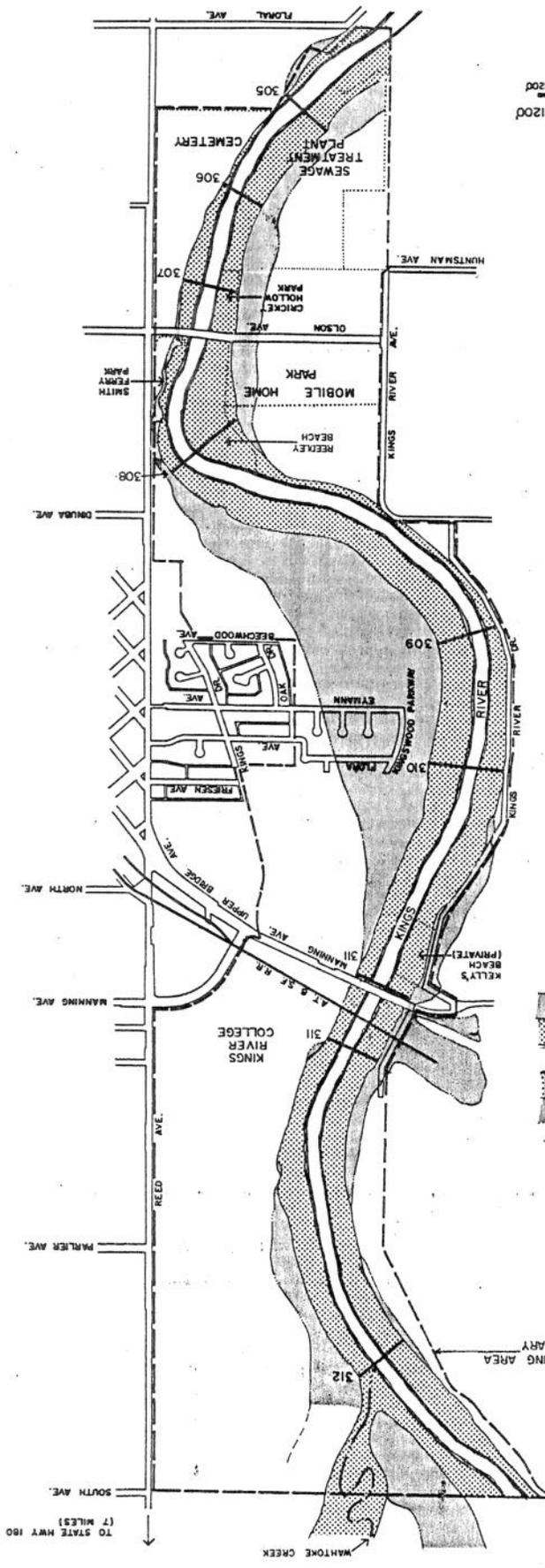
The Federal Emergency Management Agency (FEMA) has identified areas within the Planning Area that are within a 100-year floodplain. Properties within this floodplain have a one percent chance of flooding during any given year. Lands with a 500-year floodplain have a 0.2 percent chance of flooding during any given year. The estimated peak flows in the Kings River at the Tulare-Fresno County line (located approximately two miles downstream of Reedley) during the 100-year and 500-year flood events are 20,500 cfs and 49,200 cfs, respectively.

FEMA regulations require that any new structure built within the 100-year floodplain have a floor elevation above the base flood elevation. The City of Reedley requires that all new dwellings be a minimum of one foot above the base elevation (Reedley, 1988).

The boundaries of FEMA's 100-year and 500-year floodplains are illustrated in

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APPROX. SCALE: 1" = 1200'
0 300 600 1200'



SOURCE: Federal Emergency Management Agency Flood Insurance Rate Maps (Prepared for Fresno County, 1982)
Note: The 100-year Floodway elevations used by the City of Reedley are approximately 0.6 feet above the base flood elevations shown on this figure.
Vertical Datum of 1929.
Elevation in feet referenced to the National Geodetic Vertical Datum of 1929.

LEGEND

- 500 Year Floodplain Boundary
- 100 Year Floodplain Boundary
- Kings River Channel
- 100 Year Floodplain Boundary
- 500 Year Floodplain Boundary

Base 100 Year Flood Elevation: 308
KELLY'S BEACH (PRIVATE)

KINGS RIVER
FLOODPLAIN BOUNDARIES
FIGURE NO. 10

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Figure No. 10. FEMA has divided the 100-year floodplain into a floodway and a floodway fringe. The floodway is the channel of the river plus any adjacent floodplain area that must be kept free of encroachment in order that the 100-year flood may be carried without increasing the flood height by more than one foot (FEMA 1982). Through the Planning Area, the 100-year floodway is contained within the outer banks of the river (State Board of Reclamation, 1971).

FEMA regulations require that any new structure built within the 100-year floodplain have a floor elevation above the base flood elevations. The City of Reedley requires that all new buildings within the 500-year floodplain be a minimum of one foot above the 100-year floodway water elevations. This policy is also applicable to the 500-year floodway because there are localized areas between the 100-year and 500-year flood boundaries that are lower than the 100-year flood elevations. Improvements and other encroachments cannot be constructed in the 100-year floodway without a permit from the State Board of Reclamation.

4.042 Environmental Impacts

The Specific Plan does not propose any permanent development within FEMA's 100-year floodway. Development will occur in the 500-year floodway but with the condition that all building improvements will have a ground floor elevation one foot above the 100-year floodway base elevations.

Open space improvements, such as a pedestrian trail, park equipment and tree plantings, are proposed for installation within the 100-year floodway. These kinds of improvements are generally allowed within this floodway by the State Board of Reclamation.

4.043 Mitigation Measures

The Specific Plan does not propose permanent development within the 100-year floodway. This, combined with Reedley's policy of requiring permanent structures to have a floor elevation one foot above the 100-year floodway flood elevation, sufficiently mitigates the potential impact of flooding. Under the above conditions, the impact of flooding is reduced to an insignificant level and does not warrant further mitigation.

4.05 WATER QUALITY

4.051 Existing Conditions

Groundwater is the exclusive source of drinking water for the City of Reedley and a major source of irrigation water for surrounding farmland. The source of this water is an unconfined aquifer that underlies the entire San Joaquin Basin.

Surface water is primarily contained in the Kings River and irrigation diversion ditches. This water comes from runoff from the Sierra Nevada. It is used for irrigation and recreation. Water quality is good except during the late summer months when water flow is low and recreational activities are still taking place on the river.

The City of Reedley currently has nine wells capable of producing 9,600 gallons per minute (gpm). Two additional wells have recently been installed, including one within Subarea No. 2 approximately 200 feet east of the Kings River. This well will produce 1,200 gallons per minute.

Water quality of Reedley's drinking water meets State drinking water standards, however, pesticide residues were found in several City wells in 1984. Fortunately, these residue levels were low. DBCP, a soil fumigant by-product, appeared to be the major contaminant. Reedley's well No. 6, located outside the Planning Area, was taken out of service in 1986 due to high levels of DBCP (City of Reedley, 1988). Pesticide residue levels have been found to be lower in wells near the Kings River.

4.051 Environmental Impacts

The potential for degradation of water quality in the Planning Area will primarily result from urban storm water runoff entering the Kings River. This runoff will emanate from roads, buildings, and yards. Runoff can contain heavy metals, fossil fuels, sediments, fertilizers, litter and animal waste. These contaminants can cause a reduction in the river's dissolved oxygen content; increase its turbidity, bacterial and heavy metal content, and cause the river to become unsightly and foul smelling. The potential secondary results of these changes will be an adverse impact on aquatic plant and animal life and a degradation of the river's recreational qualities.

The Kings River is most vulnerable to the effects of contamination during periods of low water flow and warm air temperatures, during late summer and early fall months. The concentration of pollutants are generally highest during these periods of the year because of the lack of dilution. Also, the water during this period of the year is warmer and more susceptible to algae blooms.

The table below outlines the environmental effects of surface water contamination.

TABLE NO. 4

ENVIRONMENTAL EFFECTS OF SURFACE WATER CONTAMINATION

<u>Contaminant</u>	<u>Source</u>	<u>Environmental Effects</u>
Soil sediments	Erosion from building, road, grazing land and timber harvesting sites	Reduces dissolved oxygen; damages fish breeding gravel beds; unsightly
Heavy metals	Leaded gasoline, natural runoff	Toxic to aquatic animals
Plant nutrients	Natural runoff, landscaped yards, and domestic (home) waste	Algal blooms, eutrophication
Organic chemicals	Runoff from parking lots and roads: domestic (home) waste disposal	Reduces dissolved oxygen, toxic to aquatic life; unsightly
Litter	Public's use of water ways	Unsightly

Source: Living in the Environment, Miller, 1984

4.052 Mitigation Measures

Mitigation of water quality degradation in the Kings River can be achieved by discharging urban storm waters into detention basins that are designed to facilitate the removal of contaminants. Properly designed, these basins can be integrated into the open space landscape along the river and can actually be a valuable wildlife habitat resource.

Incorporation of these basins into Reedley's storm drainage master plan for the Planning Area will reduce water quality impacts to an insignificant level.

4.06 AIR QUALITY

4.061 Existing Conditions

The Planning Area lies within the San Joaquin Valley Air Basin. Fresno County, which is in this air basin, has been designated a non-attainment area for failing to meet National Ambient Air Quality Standards (NAAQS) for two pollutants: ozone and particulates. Accumulation of high concentrations of these pollutants has been attributed to the basin-like topography of the Southern San Joaquin Valley and the presence of a low level inversion layer for much of the year.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Ozone is the product of the reaction of nitrogen oxides and reactive organic gasses with sunlight. The major source of these gases is motor vehicle emissions. Ozone is a highly reactive oxidant which has been shown to damage vegetation and rubber products, and cause respiratory problems among humans, especially younger children and seniors who have respiratory problems. Studies have shown that crop losses due to ozone damage may be as high as 10 to 25 percent.

Particulates are fine particles of soot, dust, fumes and mist that are suspended in the air. Airborne particulates measuring less than 10 microns in diameter (PM-10) are capable of causing respiratory irritation because they enter the lungs and can become trapped. Major sources of particulate pollution in Fresno County are agricultural practices, road dust, construction activities, wood burning stoves, and forest fires.

The Fresno County Air Pollution Control District does not have an air monitoring station in Reedley, however, a station is located in Visalia, 14 miles to the southeast. Measurements generated from this station are good indicators of the air quality in Reedley.

The NAAQS for ozone is 0.12 ppm while the California standard is 0.10 ppm. In 1987, data gathered at the Visalia air quality monitoring station showed that the National standard was exceeded on eight days and the State standard was exceeded on 90 days. Particulate pollution is measured as PM-10. The NAAQS for PM-10 is an annual average level of 50 micrograms per cubic meter. The California standard is 30 micrograms. Measurements of PM-10 at the Visalia monitoring station showed an average level of 60 micrograms per cubic meter.

TABLE NO. 5

OZONE AND PM 10 CONCENTRATIONS

Year	High	OZONE				PM-10		
		>0.10 ppm Days	>0.12 ppm Hours	>0.12 ppm Days	>0.12 ppm Hours	High	Low	A.A.M.
1983	0.14	46	161	4	4	-	-	-
1984	0.14	46	133	2	2	91	22	49.7
1985	0.14	38	97	1	2	241	24	67.8
1986	0.16	95	406	12	23	149	12	59.1
1987	0.18	90	369	8	19	113	16	60.5
1988	0.15	77	263	4	5	141	90	66.9

Source: Tulare County Air Pollution Control District

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Draft Environmental Impact Report

The Specific Plan proposes to reduce air emissions resulting from the Specific Plan by promoting the use of bicycles, walking and jogging, and construction of another collector, Kingswood Parkway, on the west side of Reedley. The Kingswood Parkway will reduce traffic congestion on Reed, Manning and Upper-Bridge avenues. It will be 64 feet wide and will contain two travel lanes with parking and bike lanes on both sides.

4.062 Environmental Impacts

In the long-term, implementation of the Specific Plan will increase the number of residential dwelling units in the Planning Area by approximately 428 units. These residents will travel to shopping, employment, school and recreational sites located in other parts of the community. This increase in vehicle miles driven will add emissions to the air thereby causing a deterioration of the local air quality. Ozone would be one of the air emissions that would increase as a result of this additional travel.

The result of declining air quality is continued deterioration in the public's health, especially senior citizens and young children, a reduction in agricultural productivity, and continued obstruction of views of the Sierra Nevada.

Short-term air quality impacts will involve dust that is generated by construction activities. This impact can cause nuisance problems for adjacent residents and farming operations that require their crops to remain free of dust. This activity will increase the concentrations of PM-10 in the Planning Area. This short-term increase in PM-10 may be off-set by a decrease in particulates generated from agricultural activities, including spraying, cultivation, and harvesting.

4.063 Mitigation Measures

Mitigation of the long-term air quality impacts can not be resolved by any one city or county. It must be accomplished on a regional basis, however, each city must implement policies, strategies and programs that will reduce air emissions on a city-wide basis. Mitigation measures that are traditionally implemented within cities, although often for other reasons like traffic flow, are as follows:

1. Individual development proposals shall be required to implement a regular watering program consistent with county APCD guidelines to reduce dust generation during project construction. According to the U.S. EPA, regular watering of unpaved areas can reduce fugitive dust emissions by 50 percent. Future development proposals should be required to contain provisions specifying that all on-site construction related vehicle speeds shall be limited to 15 mph or less. Speed control, although difficult to enforce, can reduce dust emissions from unpaved roads up to 63 percent. Future developments shall be required to adhere to other dust control procedures

Kings River Corridor Specific Plan
Draft Environmental Impact Report

- during the project's construction phases to reduce short-term fugitive dust emissions. These shall include graveling of temporary roads and ceasing of grading activities during periods of high winds, direct application of water and/or covering over material being excavated and/or transported on-site, watering material stockpiles, and periodic washdowns of public streets in the vicinity of all entrances to construction sites.
2. Scheduling of construction truck trips shall be during non-peak hours to reduce peak hour emissions.
 3. Roadways that will experience LOS rating of D or F with the buildout of the Planning Area should be widened, resurfaced, provided with signalization and or left-turn lanes so that these rating are improved to A, B, or C.
 4. Signals that are located on roadways that will serve the subareas should be synchronized so that a freer traffic flow is established.
 5. The City should extend roadways into areas that do not have suitable circulation access. This will minimize the potential for circuitous trips that require greater mileage, more stops and slower speeds all of which generate additional air emissions.

Implementation of the above mitigation measures will reduce air quality impacts associated with the Specific Plan to an insignificant level.

4.07 AESTHETICS

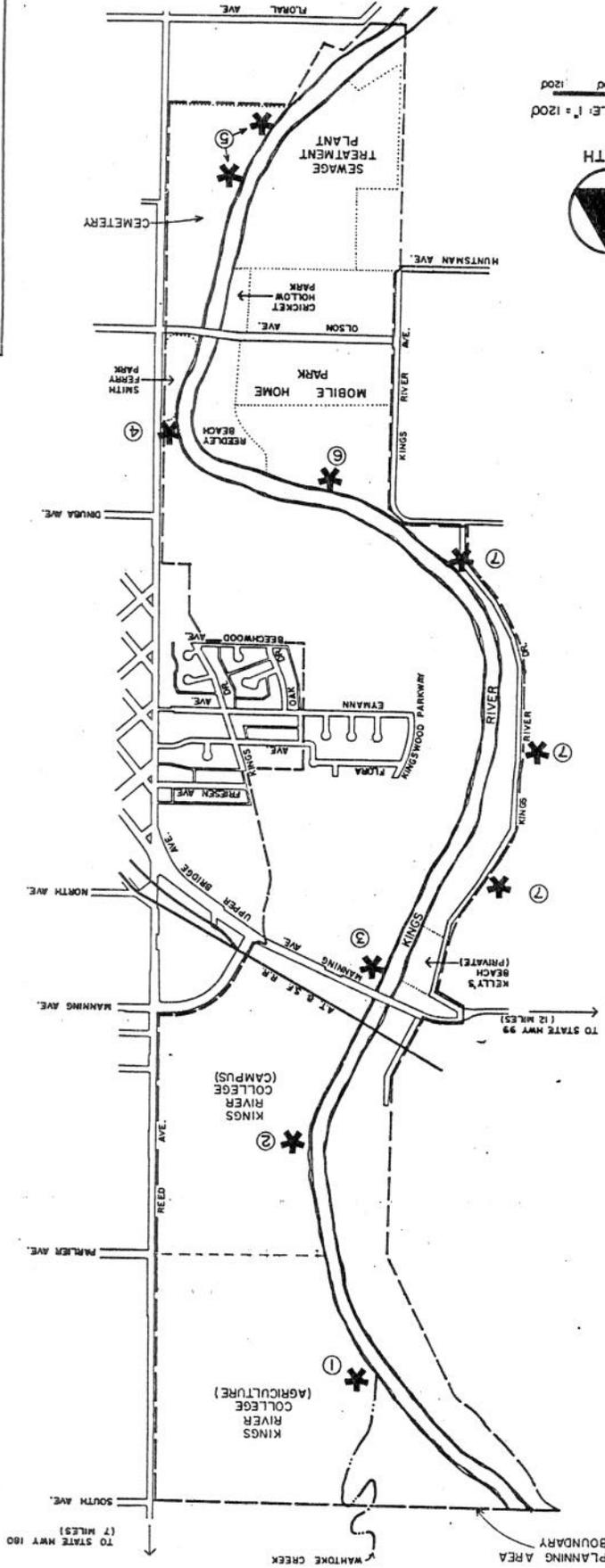
4.071 Existing Conditions

Numerous scenic resources exist within the Planning Area. The most distinctive landscape features include the meandering Kings River, river islands, riparian vegetation along the banks of the river, and agricultural lands comprised of vineyards, orchards, and field crops. The most dominant features in this landscape are the flowing water of the river and the mixture of oak, sycamore and willow which line the river. Together, these features provide a habitat for waterfowl and other types of bird life, and larger forms of wildlife like raccoon, fox and skunk.

Bluffs line much of the river, particularly on the west side of the channel in Subarea No. 2 and on the east side of the channel in Subareas 1 and 3. The height of the bluff above the river is generally about 25 feet. This difference in elevation creates distinctive views of the entire Planning Area. A visual survey of the Planning Area uncovered numerous scenic vistas (see Figure No. 12) These sites are described

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APPROX. SCALE: 1" = 1200'
0 300 600 1200'



LEGEND
* Scenic Vista
① Vista Number

KINGS RIVER
SCENIC VISTAS

FIGURE NO. 12

Kings River Corridor Specific Plan
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as follows:

No. 1: Lower River Terrace North of Kings River Community College

This terrace exists on the east side of the river at the confluence of the Kings River and Wahtoke Creek. This area is flanked on the west by Valley Oaks which line the two watercourses and the river bluff on the east.

No. 2: River Bluff along Kings River Community College Campus

Persons utilizing the campus track and playing fields have a view of the agricultural land on the west side of the river and the river bottom to the north.

No. 3: Knoll near Manning Avenue Bridge

A knoll just south of the Manning Avenue bridge on the east side of the river, provides a 180 degree southerly view of the Kings River and the adjoining agricultural fields.

No. 4: Smith Ferry and Reed Avenue

Smith Ferry Park and residences near the park on the east side of Reed Avenue are provided with a sweeping westerly view of the Kings River and the adjacent orchards.

No. 5: Cemetery Bluffs

This bluff provides a panoramic view of the river including Cricket Hollow Park.

No. 6: Bluff North of Mobile Home Park

The river bluff north of the mobile home park has an easterly view of Reedley and the oak-lined river.

No. 7: Kings River Road

This road provides numerous turnouts which furnish a view of the river below, and Reedley to the east. Because of the scenic qualities of this road it is an excellent route for bikes, runners and walkers.

The Specific Plan promotes the improvement and protection of scenic resources within the Planning Area by designating certain properties to land use categories that preserve or enhance the aesthetic beauty of the region. A significant portion of the land between the Kings River and the Kingswood Parkway and between the Manning Avenue and Olson Avenue bridges has been designated for open space

and will be "reforested" with native vegetation. Other open space uses not proposed for reforestation include an expanded Smith Ferry Park, Reedley Beach, Cricket Hallow Park, the Kings River Community College farm, Reedley Cemetery, and parcels of land that are designated for agriculture.

Land that is not designated for open space in the Planning Area includes the commercial frontage along the south side of Manning Avenue, low density residential uses on the east and west sides of Kingswood Parkway, medium density residential adjacent to the sewage treatment plant, and high density residential on property that presently contains a mobile home park.

4.072 Environmental Impacts

Urbanization within the Planning Area is going to have an adverse impact on the aesthetics of the Planning Area in that open space areas will be replaced with development and existing scenic views from surrounding homesites and roadways will be blocked with structures. Homes whose view may be impacted by new development are located along the Kingswood Parkway and Reed Avenue, near Dinuba Avenue.

As residential and commercial development occurs, man-made improvements will begin to dominate the natural landscape. Fields, terraces, and areas adjacent to the Kings River that presently are free of structures will be developed with buildings. These features, which are the visual focal point of existing residents and travelers, will be replaced, screened or damaged as a result of this development. This impact can not be measured monetarily, however, it can cause a noticeable change in the attitudes of residents and visitors from one that is appreciative of the scenic resource to one that is concerned that the scenic resource has been negatively impacted.

New sources of light and glare will also be created as new development occurs. The aggregate increase in "sky glare" that results over a minimum 20-year planning period will occur gradually and can not be fully mitigated.

4.073 Mitigation Measures

The view of the Kings River by persons living on the east side of the Kingswood Parkway would be better preserved if low density residential development did not take place on the west side of of the Kingswood Parkway as recommended by the Specific Plan. Section 6.0, Alternatives to the Proposed Action, of this DEIR provides an alternative plan that would maintain this area as open space. The City of Reedley should amend its zoning ordinance to preclude new sources of light and glare from being directly visible from properties adjacent to new development. The adoption of the above mitigation measures will reduce scenic resource impacts to an insignificant level.

4.08 LAND USE AND ACTIVITY CONFLICTS

4.081 Existing Conditions

See Section 3.0, Environmental Setting, for a description of land use and ownership patterns in the Planning Area.

Activities that are apparent in the Planning Area were identified through a recent community survey regarding recreational activities. It indicated that the most popular recreational aspect of the Planning Area was the opportunity it provided for solitude. Other recreational uses mentioned included jogging, walking, boating and floating. The results of the community survey are provided in Table No. 6.

TABLE NO. 6

RECREATIONAL USES IN THE KINGS RIVER PLANNING AREA

<u>Recreational Activity</u>	<u>Percent</u>
Solitude	33 percent
Jogging/Walking	23
Boating/Floating	23
Fishing	12
Swimming	7
Off-Road Vehicles	<u>2</u>
	100 percent

Note: Survey conducted in April, 1988.
Source: Michael Knopf & Associates, 1988

Recreational land uses within the Planning Area include four parks; numerous open space areas, including four city-owned islands in the Kings River; and the campus of the Kings River Community College. Public access to the Kings River bottom area is provided from these parks and the Kings River Community College. These access sites allow swimmers, fishermen, boaters, floaters and others entry to the river bottom. Much of the private lands along the river also provide direct access to the river bottom.

The four parks all of which are adjacent to the Kings River, offer a wide range of recreational opportunities for Reedley area residents. A description of each park and its facilities is provided below.

Kelly's Beach (4 acres)

Kelly's Beach is a private park located on the west side of the Kings River just south

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Draft Environmental Impact Report

of Manning Avenue. It contains a restaurant-general store and a shoreline play area with a bathhouse, restrooms and picnic tables. The park contains off-street parking for both the beach area and restaurant. Overnight facilities are provided for campers and RVs.

Cricket Hollow (7 acres)

Cricket Hollow is owned by the City of Reedley and managed by the Reedley Parks and Recreation Department. It is located on the west side of the river just south of the Olson Avenue bridge. It contains a boat ramp and launch; a shoreline play area with picnic tables, restrooms, and outdoor showers; and a 45-stall parking lot. A total of 30-50 people daily typically eat lunch in the park year-round, while during the summer months, the park serves 200-400 persons per day (City of Reedley, 1988).

Reedley Beach (18 acres)

Reedley Beach is owned by the City of Reedley and managed by Reedley Parks and Recreation Department. It is located on the west side of the river just north of the Olson Avenue bridge. The park is the only extensive sandy beach on the Kings River which is open to the public. It contains restrooms and outdoor showers, picnic areas, a sand volleyball court, playground equipment, and parking for 100-125 cars. Peak utilization of the park occurs in the summer when 200-400 persons use the facility daily (City of Reedley, 1988).

Smith Ferry (7 acres)

Smith Ferry is also owned by the City of Reedley and managed by the Reedley Parks and Recreation Department. The park is located at the northwest corner of Olson and Reed Avenue. The park has a lawn area which overlooks the Kings River. The park contains picnic tables and a 35-stall parking lot. Plans have been prepared by the City of Reedley to upgrade the park. Improvements will include restrooms, a barbecue picnic deck, fishing platforms, a bocce court, a horse shoe pit, and a pedestrian-bicycle path. Current use of the park primarily involves a small lunch crowd.

Eliminating the potential for land use and activity conflicts throughout the Planning Area is a goal of the Specific Plan. This goal is facilitated through the following policies.

Urban Growth Management

To the greatest extent possible, conflicts between existing agricultural uses and properties that are being developed for residential, commercial, or public uses shall be minimized through project phasing, orientation and other means which may be available.

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Draft Environmental Impact Report***

Residential

Design and review of multiple family projects shall include consideration of building masses, building height, preservation of views and vistas, and privacy to adjoining single family areas.

Agriculture

Property owners that are developing land for residential or commercial uses adjacent to lands in agriculture shall provide fences, walls, or buffer areas, where possible, in order to discourage trespassing and vandalism on the agricultural lands.

Minimize conflicts between agricultural uses and developing properties through project phasing, orientation and other means which may be available.

Public and Institutional Uses

To protect Reedley's most costly infrastructure investment, intensive urban development should be discouraged near the waste water treatment plant.

To discourage vandalism, trespassing, and damage to the riparian habitat, a decomposed granite roadway, which shall also function as a bikepath, shall be provided along the river to provide access for patrol and emergency vehicles.

Open Space and Recreation

Protect identified areas of "significant natural habitat" by limiting access to these areas.

The use of motorized vehicles shall be prohibited on lands designated as open space within the Planning Area.

The police practice firing range located adjacent to Cricket Hollow Park should be moved in the future to a site where fewer noise-related conflicts will arise and to allow for expansion of the Cricket Hollow recreation facility on City-owned land.

Public Safety and Management

Prohibit the use of off-road vehicles and firearms in and along the Kings River.

Develop a Kings River Safety Program.

Protect private properties from vandalism, littering, and trespassing by prohibiting access from public properties.

4.082 Environmental Impact

Two types of conflicts exist or potentially exist in the Planning Area: conflicts between land uses (e.g. agriculture versus residential) and activity conflicts (e.g. boaters versus floaters). Introduction of residential uses into areas that are being utilized for agriculture leads to land use conflicts which can impair the farmer from carrying out normal agricultural practices, including spraying, harvesting and cultivating. Conversely, the residents are adversely affected by farming practices that generate dust, noise, spray drift and offensive odors. This conflict will be minimized by some of the previously mentioned Specific Plan policies and through the proposed arrangement of land uses. The Specific Plan indicates that most of the land west of the Kings River will be designated for agriculture, except for properties located north of the sewage treatment plant. This arrangement of land uses will minimize the potential conflicts between agriculture and residential uses. In Subarea No. 2, the Specific Plan proposes to separate lands designated for agriculture and medium density residential with Beechwood Avenue. North of Beechwood medium density residential development will occur while south of this roadway agriculture will be allowed to continue.

Other significant land use conflicts in the Planning Area involve the interface between medium density residential and commercial uses along Manning Avenue, low density residential and open space uses along the Kingswood Parkway; and medium density residential and the sewage treatment plant in Subarea No. 3.

Conflicts between residential and commercial uses can include noise, off-site glare, traffic congestion, vandalism and litter, and aesthetics. For the resident, this can disrupt daily living conditions, depress property values, and create traffic safety problems. Conflicts between the low density area residents and persons using the open space area can involve noise, dust, vandalism and litter. In the case of residential development near the treatment plant, residents can experience offensive odors and excessive noise stemming from the plant.

Activity conflicts involve situations where persons participating in an outdoor activity are temporarily or permanently prevented from enjoying that activity by a competing activity. Examples include floaters on the Kings River that are disrupted by a passing motor boat, a person walking along the river enjoying the outdoors being disrupted by a passing off-road vehicle, or a family that is picnicking and is being disturbed by an adjacent party that is drinking and being disruptive. These examples of activity conflicts, can have a significant impact on the persons being prevented from enjoying their outdoor activity. Secondly, it can pose a major fiscal impact on the Reedley or Fresno County Sheriff's Departments when they are called out to respond to the conflict.

4.083 Mitigation Measures

Impacts associated with activity conflicts can be minimized through policies contained in the Specific Plan and increasing the staffing of the Reedley police and Fresno County Sheriff Departments. Even with increased staffing, this mitigation measure will not reduce activity impacts to an insignificant level; therefore, implementation of the Specific Plan will have an adverse impact on persons enjoying various outdoor activities along the Kings River.

Land use conflicts can be minimized by insuring that there is adequate spatial separation between certain land uses or through a design review process whereby certain potential conflicts can be resolved. The Specific Plan through its policies and Reedley's existing site plan review process can adequately mitigate the potential conflicts between commercial and residential uses. The potential land use conflicts between residential uses and the treatment plant and residential uses and the users of the open space along the Kings River can be mitigated by not proposing that residential uses be located in close proximity to these uses. This strategy will be discussed in greater detail in the Alternatives to the Proposed Action section of the DEIR. Implementation of this strategy could reduce land use conflict impacts to an insignificant level.

If lands adjacent to the treatment plant and open space corridor along the Kings River remain designated for residential uses, the Specific Plan will have an adverse irreversible land use impact.

4.09 INFRASTRUCTURE

4.091 Existing Conditions - Sewer

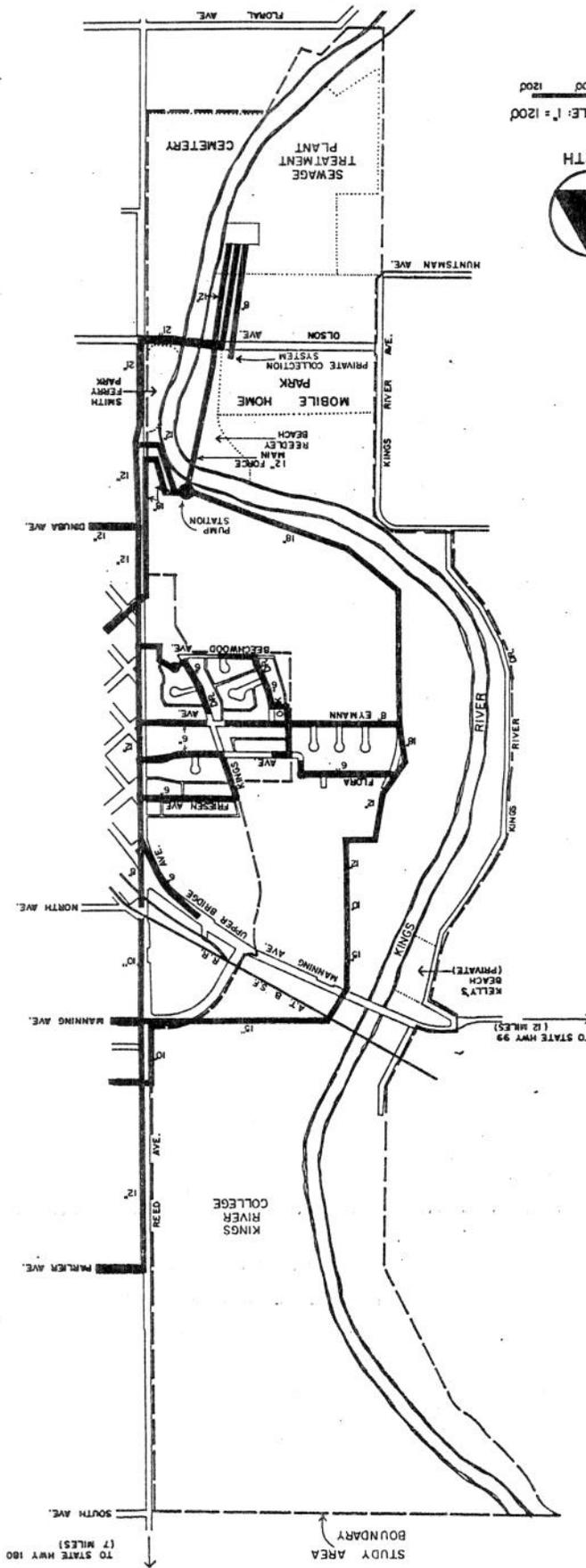
The urbanized portions of the Planning Area are served by the Reedley sewer system, which includes collection and treatment. The layout of the City's system is illustrated in Figure No. 13. The treatment plant, which provides secondary treatment, has a design capacity of 2.7 million gallons per day (mgd). The current peak flow is 1.9 mgd (City of Reedley, 1988). Residential buildout of the Planning Area would generate only .15 mgd per day.

Sewage flows in Subarea No. 1 are collected in a 15 inch line that extends west of Reed Avenue across the southern portion of Kings River Community College. This line also receives flows from a service area east of the College.

Subarea No. 2 is served by the same line that serves Subarea No. 1. The line parallels the Kings River as it extends from the Manning-Upper Bridge Avenue intersection to a pump station located near the intersection of Reed and Dinuba Avenues. The

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APPROX. SCALE: 1" = 1200'



SOURCE: City of Reedley (1988)

LEGEND
18" Line Diameter
Existing Sewer Line

EXISTING SEWER SYSTEM

FIGURE NO. 13

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Draft Environmental Impact Report

line increases in diameter to 18 inches near Flora Avenue. Currently, it is estimated that this 18 inch line has an available capacity of 1.1 cubic feet per second (cfs). This is sufficient to serve about 1830 residential units based on a per capita sewage flow of 115 gallons per day (0.00018 cfs) and a population density of 3.1 persons per residential unit. (City of Reedley, 1988).

With the exception of restrooms at Cricket Hollow Park and the Reedley Cemetery, Subarea No. 3 is not served by Reedley's sewage collection system. The mobile home park located west of the Kings River is served by a private sewer line, which conveys the effluent to Reedley's sewer treatment plant.

A limited number of rural residential units within the Planning Area are served by septic tank-leach field systems.

4.092 Environmental Impact - Sewer

Reedley's sewer collection and treatment system has the capacity to serve the growth that will be generated by the Specific Plan. The Specific Plan will not have a significant impact on either Reedley's sewage treatment or collection system. CEQA does not require mitigation measures for environmental impacts that are found to be not significant.

4.093 Existing Conditions - Water

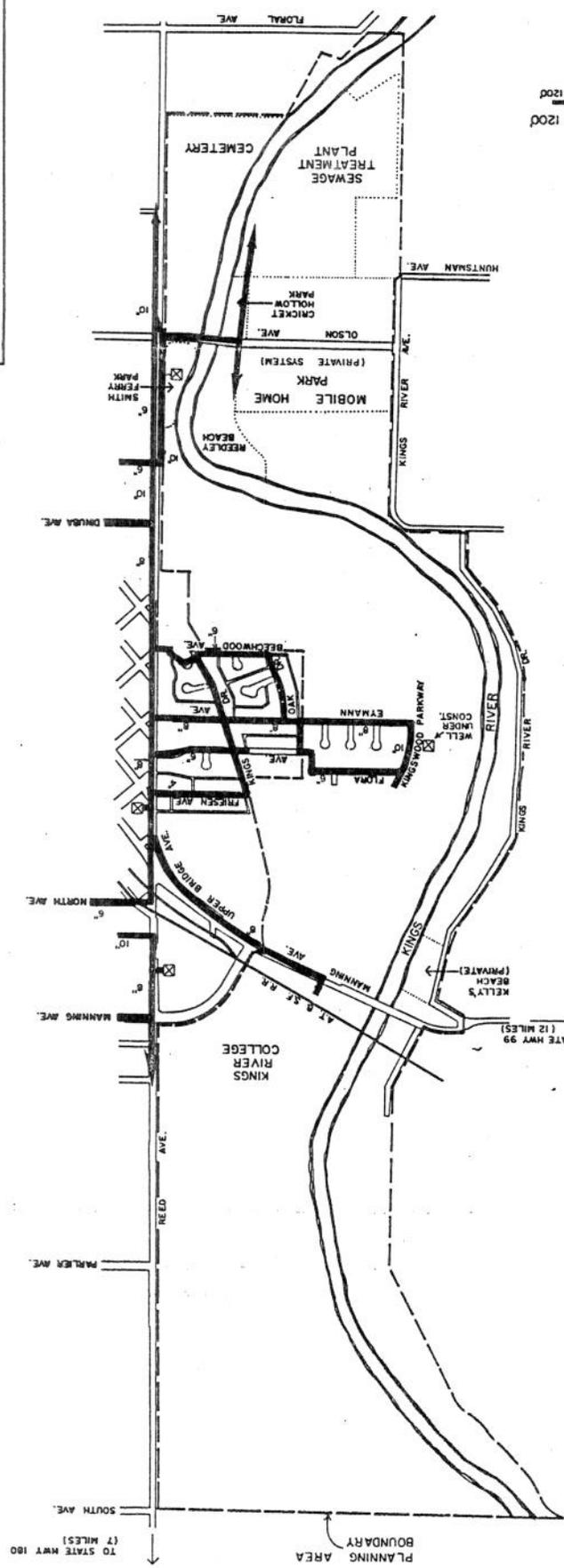
Municipal water service is provided by the City of Reedley. The City obtains water from wells that pump from an unconsolidated aquifer underlying the city. The layout of the City's system is illustrated in Figure No. 14.

Subarea No. 1 is provided with water from a line located along Reed Avenue. Subarea No. 2 is currently served by lines extending westward from Reed Avenue. A new well was recently drilled near the end of Eymann Street. This well is expected to add 1250 gallons of water per minute to the City water system. In Subarea No. 3, the City system provides water to the Reedley Cemetery, the treatment plant and Cricket Hollow Park. The mobile home park is served by an on-site private system. Rural residential home sites throughout the Planning Area are generally served by individual private wells.

The City's Water Master Plan, prepared by John Carollo Engineers, indicates that a new 10 inch water line will serve future development in Subarea No. 2. The Master Plan also indicates that the City will extend a 10 inch water line across the Olson Avenue Bridge to serve new development in Subarea 3. Additional water service is not planned for Subarea No. 1.

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SOURCE: City of Reedley (1988)

LEGEND
 Existing Water Line
 Water Line Diameter
 Well



APPROX. SCALE: 1" = 1200'
 0 300 600 1200'

EXISTING WATER SYSTEM

FIGURE NO. 14

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4.094 Environmental Impact - Water

Reedley's water system has the capacity to serve the growth that will be generated by the Specific Plan. The Specific Plan will not have a significant impact on Reedley's water system. CEQA does not require mitigation measures for environmental impacts that are found to be not significant.

4.095 Existing Conditions - Storm Drainage

Storm drainage waters from the western and central areas of Reedley are collected by the City and discharged into the Kings River. The existing drainage outfalls are shown in Figure No. 15. The City's Storm Drainage Master Plan, prepared by Blair, Church and Flynn in 1982, provides for a drainage system that will serve buildout of the Planning Area consistent with the Reedley Land Use Element. The Specific Plan proposes that the land use element be amended to reduce the amount of urban development in the Planning Area.

4.096 Environmental Impact - Storm Drainage

Reedley's storm water system has the capacity to serve the growth that will be generated by the Specific Plan. In fact, Reedley's Storm Drainage Master Plan is designed to serve an urban area larger than what is proposed by the Specific Plan. The Specific Plan will not have a significant impact on the storm drainage system. CEQA does not require mitigation measures for environmental impacts that are found to be not significant.

4.10 SERVICES

4.101 Existing Conditions - Solid Waste

The City of Reedley provides solid waste collection within the city limits. Reedley is a member of the Southeast Regional Solid Waste Commission, which owns and operates a land fill about six miles west of Reedley. Because this land fill is expected to be at capacity in mid-1990, the Regional Commission is currently in the process of siting a transfer station where refuse from its member cities will be transferred to high capacity trucks for hauling to alternative land fill sites.

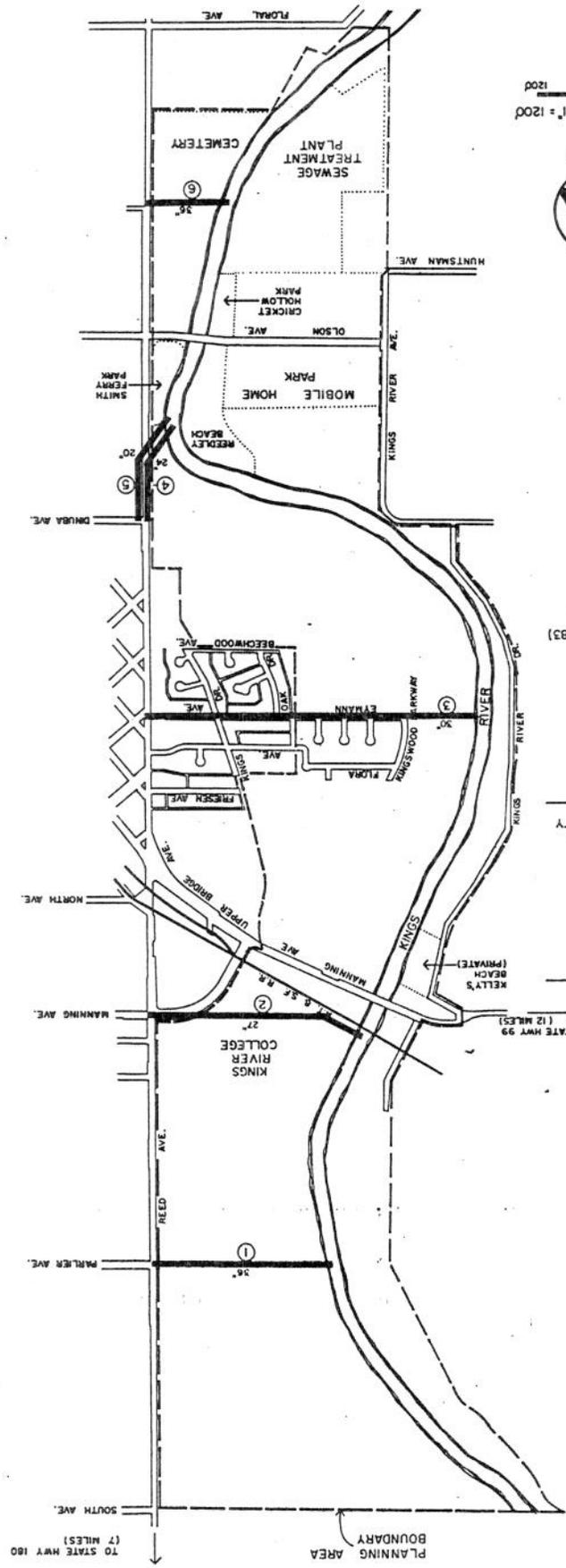
Refuse in the unincorporated areas of the Planning Area is collected by county licensed private companies that contract with individual customers.

4.102 Environmental Impact - Solid Waste

The construction of approximately 428 housing units and commercial buildings in

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APPROX. SCALE: 1" = 1200'
0 300 600 1200'



SOURCE: Jones & Stokes Associates, Inc. (1983)
Blair, Church & Flynn (1982)
City of Reedy (1988)

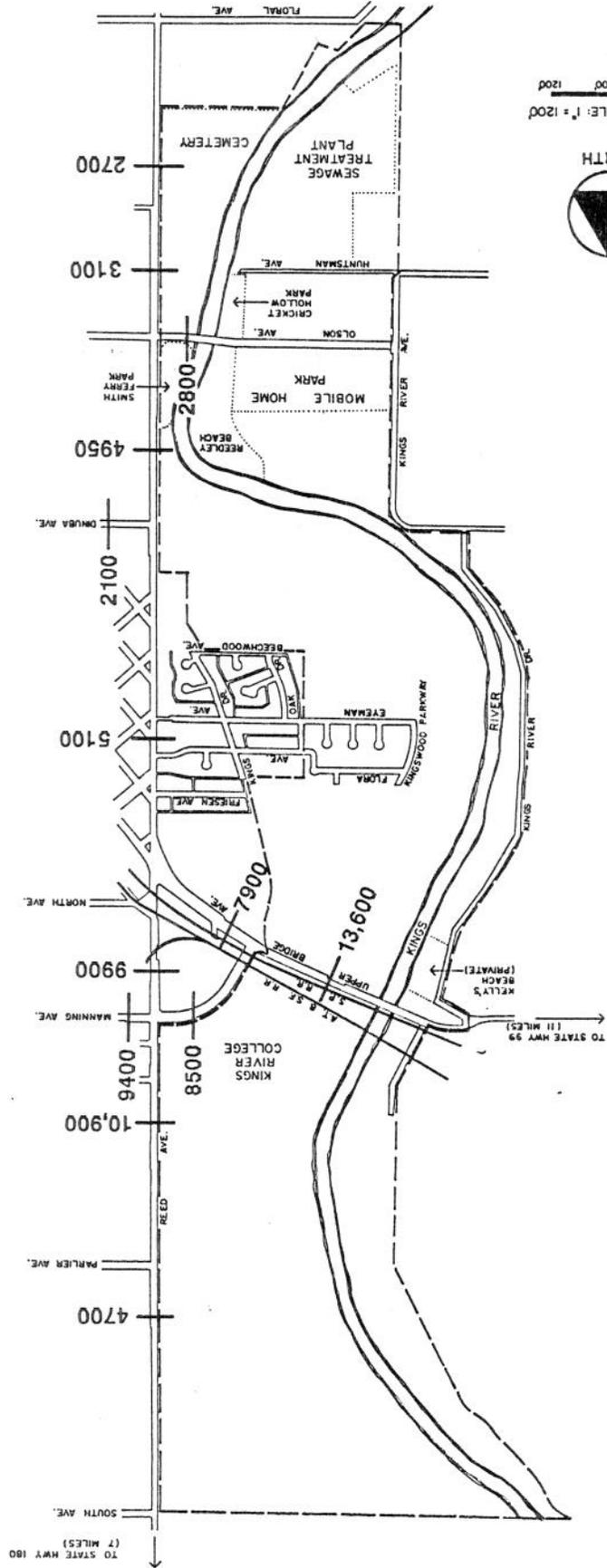
OUTFALL	DRAINAGE AREA (Acres)	DESIGN CAPACITY (cfs)
1	353	39
2	76	14
3	100	13
4	283	32
5	133	16
6	437	39

LEGEND
 ① Existing Storm Drain Outfall
 20" Outfall diameter
 Outfall number

EXISTING STORM
DRAIN OUTFALLS
FIGURE NO. 15

PLANNING AREA BOUNDARY
TO STATE HWY 160 (7 MILES)

TO STATE HWY 99 (12 MILES)



APPROX. SCALE: 1" = 1200'



EXISTING 24 HOUR TRAFFIC VOLUMES

FIGURE NO. 16

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the Planning Area will not have a significant impact on the City's collection system or land fill site, given that the City is now hauling its waste to an alternative land fill site. CEQA does not require mitigation measures for environmental impacts that are found to be not significant.

4.103 Existing Conditions - Police and Sheriff Departments

The Reedley Police Department is responsible for providing law enforcement to all areas within the city limits. The County Sheriff's Department is currently responsible for policing the river bottom as well as other unincorporated areas in the Planning Area. The police department does, however, patrol the unincorporated areas along the east side of the river when necessary.

4.104 Environmental Impacts - Police and Sheriff Departments

The combination of additional development in the Planning Area and increased usage of the open space amenities along the Kings River will increase the workload of both the police and Sheriff departments. This increased workload will require additional officers and equipment. This will have a significant fiscal impact on the City's general fund. Because of the size of the County, the increased workload and corresponding fiscal impact will be less noticeable on this agency.

4.105 Mitigation Measures - Police and Sheriff Departments

For the City of Reedley, additional fees collected at Reedley Beach and Cricket Hallow Parks could defray some of the cost of providing police services. Fines issued in these and other parks in the Planning Area could further defray the cost of this service. However, it is unlikely that these two sources of revenue will cover the total cost of increased services. Therefore, the Specific Plan will have an adverse fiscal impact on the Reedley police department.

The implementation of the Specific Plan will also have a fiscal impact on the County Sheriff's Department. Due to the size of the Department the increased workload caused by the Specific Plan can not be considered significant given that this increased demand for services will be spread over 20 years.

4.106 Existing Conditions - Fire Protection

The City of Reedley maintains a volunteer fire department that has jurisdiction over all lands within the city limits. Fire protection in the unincorporated areas of the Planning Area is provided by the Mid-Valley Fire Protection District. The City and Mid-Valley Fire Departments operate from the same fire station in Reedley. In cases where it is not clear if a reported fire is within the city limits, both departments normally respond. The most significant problem that the fire department contends with in the Planning Area is fires that occur in stands of bamboo that grow along the

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Draft Environmental Impact Report

river near Reedley Beach (City of Reedley, 1988). Because there are currently no public fire hydrants along the river, the fire department fights these fires with tanker trucks.

4.107 Environmental Impact - Fire Protection

Calls for fire services will increase in the Planning Area during the planning period. This increase will be a result of the growth normally experienced by the department from year to year in the community and not necessarily a result of the Specific Plan being implemented. CEQA does not require mitigation measures for impacts that are found to be not significant.

4.108 Existing Conditions - Schools

The Planning Area is within the Kings Canyon Unified School District (KCUSD). This District operates a high school, continuation high school, three junior high schools, three K-8 schools, five K-6 schools, and one each of 4-6 and K-3 schools. From 1980 to 1987 the District's enrollment increased from 5374 to 6198 students, which is an average annual growth rate of 2.4 percent. Since 1983, however, that annual growth rate has been 3.5 percent. Since 1980, most of the enrollment growth in the District has taken place in the K-6 grades where the number of students increased from 2808 to 3608, which is an average annual growth rate of 3.7 percent. Since 1982, this growth rate figure has been even higher, 4.8 percent (Kings Canyon Unified School District, 1987).

The School District reported in 1987 that many of the schools throughout the District are operating at capacity, based on 26 students per classroom. To mitigate this overcrowding problem, the District is collecting school impact fees. With each residential building permit, the District collects \$1.56 per square foot for residential structures and \$.25 per square foot for commercial and industrial structures. These fees are used by the District to construct new classrooms.

4.109 Environmental Impact - Schools

Based on the 428 housing units that could be constructed within the Planning Area over the 20 year planning period, approximately 642 school-aged children could be generated by these housing units, based on 1.5 students per household. Over 20 years, 32 students per year could enter various grade levels at surrounding schools. The collection of school impact fees as residential and commercial growth occurs in the Planning Area will mitigate the Specific Plan's impact on schools. Therefore, the Specific Plan will not have a significant impact on schools. CEQA does not require mitigation measures for impacts that are found to be not significant.

4.11 CIRCULATION

4.111 Existing Conditions

This section describes the existing street facilities and conditions in the Planning Area. Included in the discussion is a description of the designated functional classifications of the streets, a brief description of the existing configuration of the streets and a capacity analysis based on the existing traffic volumes.

Existing Facilities

Circulation in the Planning Area is provided by four types of roadways: major arterials, arterial, collectors and local streets. These types of streets are typically defined as follows:

Major Arterials - Provide for through traffic movement on continuous routes with no direct access to abutting property. Intersections are generally, spaced a minimum of one-half mile apart.

Arterials - Provide for through traffic movement on continuous routes, joining major traffic generators, major arterials, other arterials and collectors. Access to abutting property is limited to major traffic generators or other non-local streets. Access to abutting residential property is discouraged.

Collectors - Provide internal traffic movement within an area and connect local roads to the arterial system. Access to the abutting residential property is generally restricted.

Local - Provide internal traffic movement within an area and serve to provide direct access to abutting property.

The following table identifies the functional classification of the existing streets within the Planning Area.

TABLE NO. 7

FUNCTIONAL CLASSIFICATION

<u>Street</u>	<u>Segment</u>	<u>Classification</u>
Reed	Floral to Olson Olson to South	Collector Arterial
Manning	Kings River to Upper Bridge Upper Bridge to Reed	Major Arterial Arterial
Upper Bridge	Manning to Reed	Arterial
Olson	Kings River to Reed	Arterial
Dinuba	Reed to Frankwood	Collector

Source: City of Reedley General Plan, Circulation Element, 1977

Manning is the major access road to Reedley from the west and a regional link between the city and State Highway 99 (11 miles to the west). The street is designated as a major arterial from the Kings River to Upper Bridge and as an arterial from Upper Bridge to Reed. The street is constructed as a four lane divided roadway with limited access provided to adjacent properties. Within the Planning Area, Manning provides east-west access through Reedley and direct access to Kings River Community College, located at the intersection of Manning and Reed Avenues. It is constructed as a four lane divided street.

Upper Bridge Avenue connects Manning with Reed Avenue and "I" Street. Upper Bridge is designated as an arterial and is constructed as a 4 lane divided street with limited access provided to adjacent properties. A short frontage road exists along the south side of the street from just east of Manning to the west side of Reed.

Olson Avenue is a two lane arterial connecting the Planning Area and southwest Reedley to rural areas west of the Kings River. Olson is one of two streets which cross the Kings River. Olson also provides direct access to recreational areas (Cricket Hollow Park and Reedley Beach Park) on the west side of the river. Further, it connects with Manning west of the Kings River via Kings River Drive. This linkage creates a looped street system around the Kings River between the two river crossings.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Reed Avenue is the main north-south arterial within the Planning Area. It provides regional access to State Highway 180, north of Reedley. Reed is designated as both an arterial and a collector. From Floral to Olson, Reed is designated as a collector; from Olson to State Highway 180 it is designated as an arterial. Between Floral Avenue and the southerly city limit, Reed passes through agricultural property, and from the southerly city limit to Dinuba Avenue it passes through a newer residential area. Access to property to the west is limited, while direct access is provided to residences on the east. From Dinuba Avenue to upper Bridge, Reed passes along the western edge of the original townsite. The older residences have direct access and numerous angled intersections exist where streets from the original townsite meet Reed. From Upper Bridge to Manning Avenue, Reed is constructed to a full arterial section and access is provided to commercial properties on the east and west sides of the street.

The only signalized intersection in the Planning Area is found at the intersection of Manning and Reed. The intersection provides for 2 through lanes with left turn pockets in the east-west direction and one through lane with left and right turn lanes in the north-south direction. The section from Manning to Parlier provides limited access to the community college on the west and a residential area on the east. Pavement width along this section is restricted in order to protect a row of palm trees which line the campus. From Parlier to South Avenue, Reed crosses through agricultural lands and is a two lane street.

Dinuba Avenue east of Reed is designated as a collector and provides for east-west travel from the Planning area to southeast Reedley. A bike lane is currently striped on this street.

The Circulation Element identifies a new collector street (Kingswood Parkway) which will parallel the east side of the Kings River and connect the intersection of Upper Bridge at Manning with the intersection of Reed at Dinuba. A 700-foot section of this street has been completed as part of an adjacent subdivision.

Existing Capacity Analysis

A capacity analysis was completed for the classified street system within and adjacent to the Planning Area. The analysis was completed using daily traffic volumes provided by the City of Reedley and the County of Fresno. Figure No. 16 denotes the traffic volumes used in this analysis.

An existing "level of service" rating for each street was developed based on a volume-to-capacity (v/c) ratio. This rating system uses a letter to describe the condition of traffic flow. A "level of service" (LOS) of "A" indicates light traffic flow, while an "F" rating denotes severely congested traffic flow.

TABLE NO. 8

LEVEL OF SERVICE DESCRIPTION

<u>LOS</u>	<u>DESCRIPTION</u>	<u>V/C</u>
A	Free flow, low volume, high operating speed, high maneuverability.	0.00-0.35
B	Stable flow, moderate volume, speed somewhat restricted by traffic conditions, high maneuverability.	0.36-0.54
C	Stable flow, high volume, speed and maneuverability determined by traffic conditions.	0.55-0.77
D	Unstable flow, high volumes, tolerable but fluctuating operating speed and maneuverability.	0.78-0.93
E	Unstable flow, high volumes approaching roadway capacity, limited speed, intermittent vehicle queuing.	0.94-1.00
F	Forced low, volumes lower than capacity due to very low speeds; heavy queuing of vehicles, frequent stoppages.	above 1.0

Source: 1988 Regional Transportation Plan, Tulare County Association of Governments

Table No. 9 provides the results of the existing capacity analysis, and includes the street's facility type, existing street geometrics and theoretical capacity, the existing traffic volumes, the calculated volume-to-capacity ratio and the level of service for each street segment.

TABLE NO. 9

City of Reedley
Kings River Corridor Specific Plan
Existing Conditions Analysis

Roadway	From/To	Facility Type	Geometrics	Existing Capacity	Existing Volume	Volume/ Capacity	Level of Service
<i>Reed</i>	Floral to City Limit	Collector	2 lane	9,000	2,700	0.30	A
	City Limit to Olsen	Collector	4 In undivided	18,000	3,100	0.17	A
	Olsen to Dinuba	Arterial	2 lane	12,000	4,950	0.41	A
	Dinuba to Bridge	Arterial	2 lane	12,000	5,100	0.43	A
	Bridge to Manning	Arterial	4 In undivided	24,000	9,900	0.41	A
	Manning to Parlier	Arterial	2 lane w/lefts	15,000	10,900	0.73	C
<i>Manning</i>	Parlier to South	Arterial	2 lane	9,000	4,700	0.52	A
	Kings River to Upper Bridge	Major Arterial	4 lane divided	34,000	13,600	0.40	A
	Upper Bridge to Reed	Arterial	4 lane divided	27,000	8,500	0.31	A
<i>Upper Bridge</i>	Reed to Frankwood	Arterial	4 lane divided	27,000	9,400	0.35	A
	Manning to Reed	Arterial	4 lane divided	27,000	7,900	0.29	A
<i>Olsen</i>	Kings River to Reed	Arterial	2 lane	12,000	2,800	0.23	A
<i>Dinuba</i>	Reed to Frankwood	Collector	2 lane	9,000	2,100	0.23	A

The capacity analysis indicates that all streets within the Planning Area are currently operating at a Level of Service "C" or higher. Level of Service "C" is generally recognized as an acceptable level of service for smaller communities. However, peak hour congestion has been observed in conjunction with commute activity to and from Kings River Community College. Short duration congestion can be found in and around the college during the morning commute period. This congestion is most severe on Manning Avenue between Upper Bridge and Reed, although some congestion was observed along Reed Avenue north of Manning.

4.112 Environmental Impacts

The impacts of the Specific Plan on the existing street network were analyzed using the Council of Fresno County Governments Reedley Traffic Model. The proposed land uses contained in the Specific Plan were translated into residential and employment projections for the Planning Area. These were substituted for the information for the area from the current Land Use Element. In general, the number of trips generated by the Specific Plan are similar to the number of trips generated from the planned land uses as designated by the current Land Use Element. Therefore, impacts associated with the Kings River Specific Plan would also be identified as impacts for the current land use plan for the area.

Figure No. 17 shows projected 24-hour traffic volumes at Specific Plan build-out based on the land use proposed in the Specific Plan. Volumes have been extracted from the Reedley Traffic Model and represent projected daily traffic volumes along a specific street segment.

Table No. 10 provides the results of the capacity analysis of the Specific Plan, and again includes the street's facility type, existing street geometrics and theoretical capacity, the projected traffic volumes (from the Reedley Traffic Model), the calculated volume-to-capacity ratio and the level of service for each street segment. The analysis was initially completed on the existing network to assess the impacts of the Specific Plan.

TABLE NO. 10

City of Reedley
Kings River Corridor Specific Plan
Future Conditions Analysis

Future Conditions Analysis

Roadway	From/To	Facility Type	Geometrics	Existing Capacity	Existing Volume	Volume/Capacity	Level of Service
Reed	Floral to City Limit	Collector	2 lane	9,000	6,000	0.67	B
	City Limit to Olsen	Collector	4 In undivided	18,000	8,100	0.45	A
	Olsen to Dinuba	Arterial	2 lane	12,000	13,000	1.08	F
	Dinuba to Bridge	Arterial	2 lane	12,000	14,000	1.17	F
	Bridge to Manning	Arterial	4 In undivided	24,000	11,700	0.49	A
	Manning to Parlier	Arterial	2 lane w/lefts	15,000	20,700	1.38	F
	Parlier to South	Arterial	2 lane	9,000	11,700	1.30	F
	Kings River to Upper Bridge	Major Arterial	4 lane divided	34,000	30,000	0.88	D
Manning	Upper Bridge to Reed	Arterial	4 lane divided	27,000	23,000	0.85	D
	Reed to Frankwood	Arterial	4 lane divided	27,000	18,400	0.68	B
Upper Bridge	Manning to Reed	Arterial	4 lane divided	27,000	19,600	0.73	C
Olsen	Kings River to Reed	Arterial	2 lane	12,000	6,700	0.56	A
Dinuba	Reed to Frankwood	Collector	2 lane	9,000	9,400	1.04	F
Kings River Parkway	Manning to Kings Dr.	Collector	4 lane divided	20,000	13,500	0.68	B
	Kings Dr. to Reed	Collector	2 lane	9,000	4,800	0.53	A

The capacity analysis concludes that several streets in the Planning Area will operate below Level of Service "C" in the future. Those street segments are detailed in Table No. 11

TABLE NO. 11

STREETS OPERATING BELOW LEVEL OF SERVICE "C"

<u>Street</u>	<u>Segment</u>	<u>Level of Service</u>
Reed	Olsen to Dinuba	"F"
	Dinuba to Bridge	"F"
	Manning to Parlier	"F"
	Parlier to South	"F"
Manning	Kings River to Upper Bridge	"D"
	Upper Bridge to Reed	"D"
Dinuba	Reed to Frankwood	"F"

Source: Transportation Planning Group, 1990

The future analysis shows that Reed will need to be improved in order to provide a reasonable level of service. Much of those improvements will be completed as part of adjacent development. Manning as the major access street to the community and Kings River Community College will also see its level of service reduced. Finally, Dinuba from Reed east will experience increased traffic using this street for east-west travel from Reed to the southerly parts of the community.

The analysis shows that Kingswood Parkway from Kings Drive to Reed will adequately carry the projected traffic with the proposed two lane section. The section of the Parkway from Kings Drive to Manning will adequately carry the projected traffic with a four lane divided street section.

Specific intersection analysis for the future conditions was completed for two intersections in the study area. The intersections of Manning at Upper Bridge/Kingswood Parkway and Reed at Dinuba/Kingswood Parkway were assessed for future traffic conditions during peak hour. The results of that analysis focused on the impacts of the installation of a traffic signal at each location.

The analysis is based on revised intersection geometry at the intersections. For the Manning at Upper Bridge/Kingswood Parkway intersection, east and west

approaches were assumed to have three through lanes and dual lefts and right turn lanes. For the north-south streets, the northbound approach would have a left turn lane, a through lane and a right lane, while the southbound approach would have dual left turn lanes, a through and a right turn lane. The analysis also assumed limited access off Manning to the proposed commercial property on the south side of the street. Access would be limited to right turns in and right turns out. For the intersection of Reed at Dinuba/Kingswood Parkway the intersection geometry was assumed to include a left turn lane and a through/right lane on each approach.

Based on those intersection geometrics, Table No. 12 shows the results of that analysis.

TABLE NO. 12

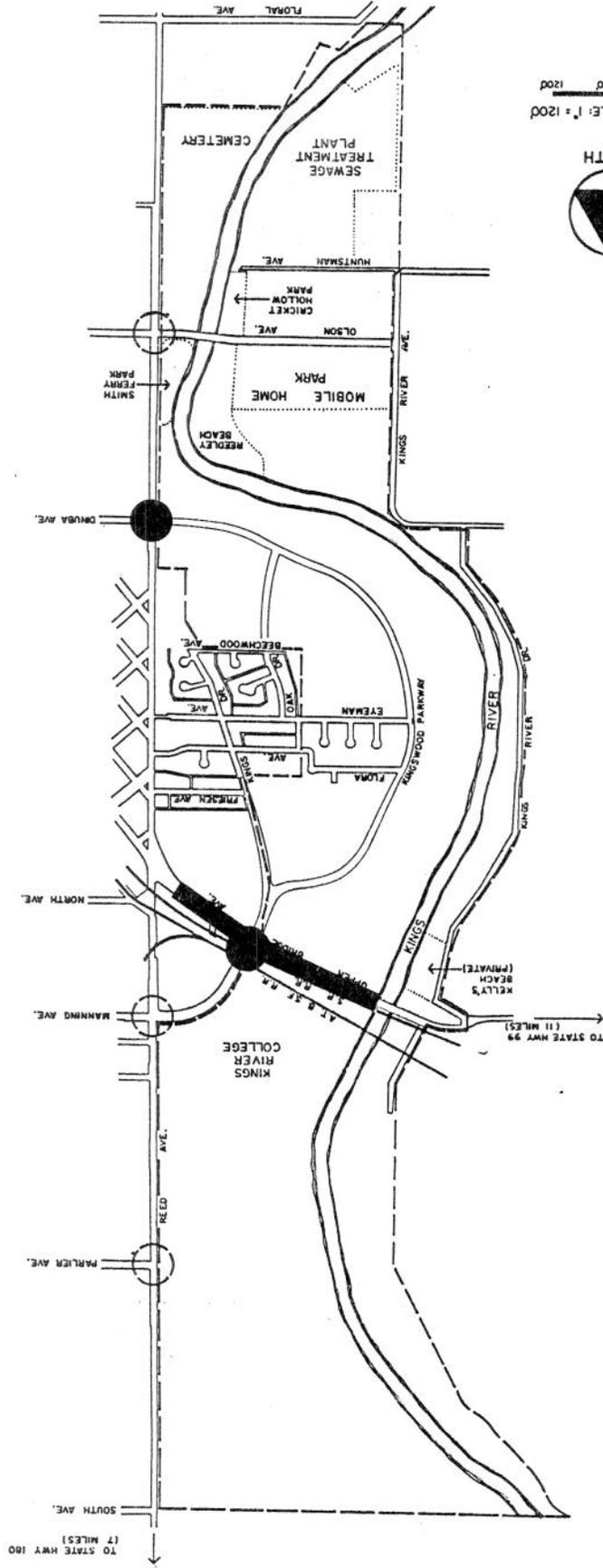
INTERSECTION ANALYSIS

<u>Intersection</u>	<u>Level of Service without signal</u>	<u>Level of Service with signal</u>
Manning at Upper Bridge/Kingswood	"F"	"C"
Reed at Dinuba/Kingswood	"F"	"B"

Source: Transportation Planning Group, 1990

Several other intersections in the Planning Area will warrant monitoring for future operational problems. These include; Reed at Olsen, Reed at Upper Bridge, and Reed at Parlier. Should operational problems develop, these intersections would warrant traffic signals. In addition the intersection of Reed at Manning should be monitored on a regular basis and the existing traffic signal should be maintained with up-to-date timing plans to meet changes in traffic demand.

Of special note is the need for a high quality design for the segment of Kingswood Parkway between Kings Drive and Manning Avenue. This short street segment will be subject to congestion from the close intersection spacing and requirement for back-to-back left turns pockets. With approximately 400' of spacing between intersections, this segment will need special consideration when proposals for development are submitted. Access to adjacent property should be restricted along this segment. The alignment of Kings Drive should be moved as far west as possible in order to lengthen the distance between intersections.



APPROX. SCALE: 1" = 1200'



- INSTALL TRAFFIC SIGNALS
- MONITOR INTERSECTION
- ▬ WIDEN TO 6 LANES

MITIGATION MEASURES

FIGURE NO. 18

TO STATE HWY 180 (7 MILES)

TO STATE HWY 99 (11 MILES)

4.113 Mitigation Measures

Based on the future capacity and intersection analysis several mitigation measures have been identified. Implementation of these measures will reduce the aforementioned circulation impacts to a level of insignificance. Figure No. 18 identifies the location of various recommended mitigation measures. These measures are as follows:

1. As development takes place along Manning and Upper Bridge between the Kings River and Reed, the street should be widened to provide for three through lanes, dual left turns and a right turn lane in each direction. Limited access should be provided for right turns into and out of the adjacent properties, but no additional median breaks should be provided.
2. As development proceeds along Reed Avenue between Olsen and Dinuba, the street should be converted to a four lane undivided arterial.
3. As development proceeds along Reed Avenue between Parlier and South, left turn lanes should be added as needed to increase capacity.
4. As the Kingswood Parkway is completed to the intersection of Reed at Dinuba, the intersection should be signalized. The intersection of Manning at Upper Bridge should be reviewed to determine if signal warrants are currently met. As development proceeds adjacent to the intersection, the ultimate intersection geometry should be installed.
5. Special treatment along Kingswood Parkway between Manning and Kings Drive is required. Kingswood shall be constructed as a four lane divided collector within an 84' right-of-way in this segment with restricted access. Care shall be taken when locating the intersection of Kingswood Parkway at Kings Drive to provide the greatest distance between intersections as possible.
6. The following intersections shall be monitored for traffic operations problems:
 - a) Reed at Olson - install traffic signal when warranted
 - b) Reed at Upper Bridge - install traffic signal when warranted
 - c) Reed at Parlier - install traffic signal when warranted
 - d) Reed at Manning - monitor and update traffic signal timing as needed

Table No. 13 shows the capacity analysis of the street segments after the mitigation measures are implemented.

TABLE NO. 13

City of Reedley
Kings River Corridor Specific Plan
Future Conditions Analysis – With Mitigations

Roadway	From/To	Facility Type	Geometrics	Existing Capacity	Existing Volume	Volume/ Capacity	Level of Service
Reed	Floral to City Limit	Collector	2 lane	9,000	6,000	0.67	B
	City Limit to Olsen	Collector	4 In undivided	18,000	8,100	0.45	A
	Olsen to Dinuba	Arterial	4 In undivided	18,000	13,000	0.72	C
	Dinuba to Bridge	Arterial	2 lane	12,000	14,000	1.17	F
	Bridge to Manning	Arterial	4 In undivided	24,000	11,700	0.49	A
	Manning to Parlier	Arterial	4 In undivided	24,000	20,700	0.86	D
	Parlier to South	Arterial	2 lane w/lefts	15,000	11,700	0.78	C
	Kings River to Upper Bridge	Major Arterial	6 lane divided	40,000	30,000	0.75	C
Manning	Upper Bridge to Reed	Arterial	4 lane divided	27,000	23,000	0.85	D
	Reed to Frankwood	Arterial	4 lane divided	27,000	18,400	0.68	B
Upper Bridge	Manning to Reed	Arterial	4 lane divided	27,000	19,600	0.73	C
	Kings River to Reed	Arterial	2 lane	12,000	6,700	0.56	A
Olsen	Reed to Frankwood	Collector	2 lane	9,000	9,400	1.04	A
	Dinuba	Collector	4 lane divided	20,000	13,500	0.68	B
Kings River Parkway	Manning to Kings Dr.	Collector	2 lane	9,000	4,800	0.53	A
	Kings Dr. to Reed	Collector	2 lane	9,000			

Kings River Corridor Specific Plan
Draft Environmental Impact Report

The analysis of the future street system shows that three street segments will continue to operate below Level of Service "C" in the future after the mitigation measures are in place. Table No. 14 show those segments:

TABLE NO. 14

**STREETS OPERATING BELOW LEVEL OF SERVICE "C"
(after mitigation)**

<u>Street</u>	<u>Segment</u>	<u>Level of Service</u>
Reed	Dinuba to Bridge Manning to Parlier	"F" "D"
Manning	Upper Bridge to Reed	"D"

Source: Transportation Planning Group

5.0 UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

The following potential adverse environmental effects appear to be unavoidable if the Kings River Corridor Specific Plan is implemented.

These impacts will occur over the life of the project - 20 years. The severity of these impacts cannot be accurately determined at this time because detailed project information is not available. However, even without specific project details, the following environmental effects are predicted to occur with the implementation of the Project.

1. Conversion of 121 acres of agricultural land to urban uses.
2. Land use conflicts between residential dwellings and agricultural operations and between residential dwellings and Reedley's sewage treatment plant.
3. Activity conflicts between persons using the outdoors for different activities (e.g. rafters versus power boats)
4. Increased circulation costs associated with Specific Plan implementation.
5. Fiscal impact on the Reedley general fund in terms of providing additional staffing and equipment for police services.

6.0 ALTERNATIVES TO THE PROPOSED ACTION

6.01 No Project

This alternative would preclude the City of Reedley from adopting the Kings River Corridor Specific Plan and the policies and development standards that would specifically guide the growth and management of the Planning Area. By precluding the adoption of the Specific Plan, lands within the Planning Area would remain under the current Reedley Land Use Element designations. Under this alternative, the City of Reedley would not have the necessary planning tools (policies, development standards, and management practices) to guide urbanization in the Planning Area or preserve many of the unique resources that exist within the area, agricultural land and the Kings River riparian woodland being two examples.

By not providing for the implementation of the Specific Plan, some environmental impacts discussed in Section 4.0, Environmental Impact Analysis, of the DEIR could become a significant problem. For example, the Specific Plan calls for the "reforestation" of lands along the east side of the Kings River. Along with this reforestation program, the Specific Plan requires protective fencing around these native areas to discourage persons from damaging this unique environment. Under Reedley's current general plan this strategy for creating and protecting this unique habitat is not available.

6.02 Plan Alternative

Some of the significant environmental impacts identified in Section 4.0, Environmental Impact Analysis, that could occur with the implementation of the Specific Plan could be reduced to an "insignificant" level by means of mitigation measures in the form of an alternative plan to the Specific Plan. Specific aspects of this alternative are outline below.

The Plan Alternative recommends that the low density residential designation proposed for the west side of the Kingswood Parkway be removed and replaced with an open space designation and that this open space become a part of the Specific Plan's reforestation program. Policies and development standards that refer to this low density residential designation would be deleted from the Specific Plan document. The Plan Alternative recommends that the medium density residential designations north of Reedley's sewage treatment plant be replaced with either a low density residential or agricultural designation. Either of these designations would mitigate the future problem of residents complaining about odors and noise emanating from the treatment plant.

The Plan Alternative is considered to be the environmentally preferred alternative in that fewer significant environmental impacts are associated with this alternative.

7.0 LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

7.01 Short-Term Use of the Environment versus its Long-Term Productivity

Implementation of the Specific Plan will commit the Planning Area to development consistent with the Land Use, Circulation and Open Space and Conservation Elements, as proposed for amendment by the Specific Plan. These elements will eventually cause the Planning Area to transition from an agricultural environment to an environment that contains agriculture, native open space and urban uses. Potentially, the Specific Plan will decrease the number of housing units that could be built within the Planning Area from 632 to 428 units, and increase the commercial acreage along Manning Avenue from 15 to 20 acres.

The long-term productivity of the environment will most likely be improved with the adoption of the Specific Plan. Numerous biotic and open space resources are planned for preservation under the Specific Plan. Under Reedley's current general plan, these protective strategies are not available.

7.02 Irreversible Environmental Changes

Irreversible environmental changes will include the development of agricultural land. Scenic resources will also be altered or degraded as development occurs.

7.03 Growth-Inducing Impacts

The Specific Plan is not considered to be growth-inducing in that the project is not encouraging additional employment, which could bring additional people to Reedley, nor is it removing barriers that might preclude growth from occurring, expanding the waste water treatment plant for example.

The Plan can have an influencing effect on growth by encouraging development in one section of the Planning Area and precluding it in others. The environmental impacts associated with growth that is contiguous and concentric are less than those associated with growth that is considered leap-frog and not concentric to Reedley's central business district. The Specific Plan encourages urban growth that is contiguous and concentric to Reedley's central business district.

7.04 Cumulative Impacts

Cumulative effects are defined as two or more separate effects which when considered together are considerable, or which compound or increase either environmental impact. Cumulative impacts can result in individually minor, but collectively significant projects taking place over time in different but spatially close related locations.

Kings River Corridor Specific Plan
Draft Environmental Impact Report

Urbanization within the Project Area will cause cumulative environmental impacts. These impacts will be combined with those same impacts caused by development in other parts of the City. The following impacts are considered to be cumulative and significant:

1. Increase in the amount of urban storm waters entering the Kings River.
2. Increased ozone emissions in a non-attainment air basin.
3. Increased groundwater withdrawal.
4. Loss of certain scenic resources/vistas and increased sky glare.
5. Increased burden on the area's solid waste management facility.
6. The conversion of prime agricultural land to urban uses.

These cumulative effects are significant and unavoidable as urbanization occurs within the Planning Area.

8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

The Initial Study prepared by the City of Reedley and discussions contained in Section 4.0, Environmental Impact Analysis, of the DEIR identified environmental effects that were deemed "insignificant" either because implementation of the Specific Plan would not have an impact on certain topics, increased consumption of energy for example, or because incorporation of mitigation measures would reduce the impact to an "insignificant" level. These insignificant impacts are as follows:

1. Potential for loss of property and life due to seismic hazards and flooding.
2. Impact on fire protection, solid waste collection, schools and other governmental services.
3. Impact on utilities.
6. Exposure of people to potential health hazards.
7. Substantial depletion of any nonrenewable resource.
8. Risk of explosions or exposure of people to hazardous substances.
9. Alteration or damage of cultural or historical resources.
10. Short-term air quality impacts (dust and exhaust emissions during construction)
11. Increased demands on sewer or water systems.
12. Increased storm water runoff resulting from urban development.

9.0 ORGANIZATIONS AND PERSONS CONSULTED

City of Reedley

Berton Wills - City Manager
Tom Butch - Former City Manager
Vi Grinsteiner - Former Planning Director
Kent Davis - Former Public Works Director
Mike Stallings - Former Parks and Recreation Director
Richard Fernbaugh - Community Services Director
Don Shinn - Police Department
Bill Jackson - Fire Chief
Joe Kelly - Planning Commission Chairman

County of Fresno

John Sutter - Chief Deputy County Counsel
Kenneth Takeuchi - Secretary to Recreation and Wildlife Commission
Katie Bearden - Air Pollution Control District
Jerry Boren - Development Services Manager

County of Tulare

Roberta MacGlashan - Countywide Planning

Kings River Community College

Richard Giese - President
Abel Sykes - Former President

State Department of Fish and Game

George D. Nokes - Regional Manager
Ron Rempel - Associated Wildlife Biologist
Gail Presley - Wildlife Biologist

State Department of Water Resources

Jim Cooper - Supervising Engineer
Bob Figuero - Hydrologist

State Lands Commission

Georgia Lipphardt - Land Agent

Kings River Corridor Specific Plan
Draft Environmental Impact Report

State Archeological Information Center - Bakersfield

Catherine Pruett - Assistant Coordinator

State Department of Health

Arlen Chance

State Air Resources Board

Bob Fletcher

State Department of Conservation

Dennis O'Bryant

State Department of Parks and Recreation

Mike Doyle

CALTRANS

Nathan Smith

U.S. Department of Interior

Don Fults - Project Supervisor

Kings River Conservation District

Jack Sinor - Assistant Manager

San Joaquin River Committee

Donn Furman

Wildlife Society - San Joaquin Valley Chapter

Jeffrey Single

APPENDIX B

A BIOTIC SURVEY OF NATURAL HABITAT RESOURCES
IN THE
KINGS RIVER CORRIDOR SPECIFIC PLAN AREA

A BIOTIC SURVEY OF NATURAL HABITAT RESOURCES
IN THE KINGS RIVER CORRIDOR SPECIFIC PLAN AREA:
THEIR CURRENT STATUS
AND RECOMMENDATIONS FOR THEIR LONG-TERM MAINTENANCE

SUBMITTED BY:

ROBERT B. HANSEN

MAY 18, 1988

SUMMARY

No Rare, Threatened, Endangered, or Candidate (RTE&C) Species were found in the Kings River Corridor (KRC) Specific Plan area.

The primary biological consideration in the Planning Area is the presence of riparian habitat along the Kings River and along the lower portion of Wahtoke Creek. The habitat, where undisturbed, supports a high proportion of native vegetation and a rich array of wildlife. Many of the species that are found here occur nowhere else in the Reedley environs.

Significant wildlife in the area include Wood Duck, Cooper's Hawk, Red-shouldered Hawk, all other birds of prey, and gray fox. Of all the animal species, Cooper's Hawk is the one which is in the greatest need of protection in the Kings River area. It is on the Third Priority (lowest rank) list of Bird Species of Special Concern as recognized by California Department of Fish and Game in 1978. Protection of its nesting habitat, groves of alder and cottonwood, is the best way of protecting this species.

For biological reasons, it is recommended that the entire reaches of the Kings River Corridor and the lower portion of Wahtoke Creek be established as continuous, unbroken riparian corridors. Flood-control, fire-control, and economic (water-saving and dollar-saving) advantages are inherent in this riparian corridor concept.

In some areas the habitat is in a disturbed (degraded) condition (see Pages 8 and 9 for sources of disturbance in riparian habitat) but native vegetation can grow well in this area when allowed to do so.

Significant Natural Habitat Areas are identified (Figure 1). It is recommended that these areas be protected and enlarged. (See Pages 22 and 26 for recommended protection measures.) It is further recommended that all areas of existing riparian vegetation (brushy areas, etc.) be protected and that natural restoration of such vegetation be encouraged.

Specific habitat protection recommendations (which, if desired, can be written in the form of policies) are offered on Pages 22-27. Levels of public use are offered which should help to focus appropriate activities in suitable areas while minimizing habitat impacts. Development-related recommendations are offered to help minimize impacts from existing and future residential and commercial developments adjacent to riparian habitat.

TABLE OF CONTENTS

TITLE PAGE.....1
SUMMARY.....2
TABLE OF CONTENTS.....3
INTRODUCTION.....4
LOCATION OF STUDY AREA.....4
HISTORY OF STUDY AREA.....5
RIPARIAN HABITAT, DEFINED.....8
PLANT COMMUNITY DESCRIPTIONS.....9
METHODS AND MATERIALS.....13
RESULTS OF SEARCHES FOR RARE, THREATENED, ENDANGERED, AND
CANDIDATE (RTE&C) SPECIES AND SPECIAL ANIMALS.....14
COMMENTS ON COMMON FLORA IN THE STUDY AREA.....19
COMMENTS ON COMMON ANIMALS IN THE STUDY AREA.....20
SIGNIFICANT NATURAL HABITAT AREAS.....22
HABITAT-RELATED PLANNING RECOMMENDATIONS.....23
RECOMMENDATIONS FOR LEVELS OF PUBLIC USE.....26
DEVELOPMENT-RELATED RECOMMENDATIONS.....27
APPENDIX A. CHECK LIST OF NATIVE AND INTRODUCED PLANTS.....29
APPENDIX B. CHECK LIST OF BIRDS SEEN DURING STUDY.....38
APPENDIX C. CHECK LIST OF VERTEBRATES (OTHER THAN BIRDS).....45
FIGURE 1. MAP OF SIGNIFICANT NATURAL HABITAT AREAS.....47
LITERATURE CITED.....48

INTRODUCTION

The purpose of this survey is:

1. To identify the biological resources of the Planning area and to determine whether any State or Federally-listed Rare, Threatened, Endangered, and Candidate (RTE&C) species may occur here.
2. To describe the natural communities (associations of characteristic plant species) that occur in the Planning area.
3. To prepare an annotated list of plant and animal (vertebrate animals) species that occur in the Planning area.
4. To identify and map significant natural habitat areas that warrant protection.
5. To provide recommendations for levels of public use that will safeguard natural features.
6. To provide specific development-related recommendations such as buffer strips, development setbacks, mitigation measures, habitat restoration and enhancement, and development of interpretive resources. The objective of these specific recommendations is to eliminate or reduce conflicts and potential negative impacts associated with proposed development in and around the study area.

NOTE: The information provided in this study is based on field surveys made by a crew of three field biologists on April 12, 1988 and by four biologists on April 24, 1988. The lack of information indicating species presence (of common species or RTE&C species) does not verify species absence. It only indicates that no sign of species presence (dens, tracks, scat, nests, identifiable plant parts, etc.) was observed during the month when this survey was made.

LOCATION OF STUDY AREA

The Kings River Corridor Specific Plan study area covers approximately 958 acres lying north of Floral Avenue, west of Reed Avenue, south of South Avenue, and east of the Kings River. About 60 percent of the Planning area is inside the city limits

of Reedley; the balance is unincorporated Fresno County land. This study focused on the two waterways in the Planning area that still support native riparian vegetation; the Kings River and the lower portion of Wahtoke Creek.

Kings River. Both banks of the Kings River were surveyed from the Floral Avenue alignment north to the South Avenue alignment. The survey also included coverage of the several islands located within the river channel. This approximately 3.75 mile stretch of the River is located in Sections 21, 22, 27, 28, 33, and 34 in Township 15 South, Range 23 East, Mount Diablo Base and Meridian in Tulare County, California.

Wahtoke Creek. Both sides of Wahtoke Creek were surveyed from the South Avenue alignment (the northern boundary of the planning area) south to its confluence with the Kings River. This approximately .33 mile stretch of Wahtoke Creek is located in Section 22, Township 15 South, Range 23 East, Mount Diablo Base and Meridian in Tulare County, California.

HISTORY OF STUDY AREA

Historical descriptions of the Planning area's natural vegetation and original hydrology provide a perspective with which to compare present conditions. As efforts are made to maintain and protect areas of high wildlife value, these historical accounts present a view of the potential for restoration and enhancement of native vegetation.

Lieutenant Gabriel Moraga left Mission San Juan Bautista on September 21, 1806 on an expedition of discovery into the little-known San Joaquin Valley. Father Pedro Munoz, served as chaplain and kept a diary of their travels. The following is a translation of his entry on October 14, 1806:

After traveling five leagues, we came to the Kings River [Rio de los Santos Reyes] already discovered in the preceding year of 1805. The country appeared to have moderately good pasturage, excellent in the river bottoms. All the meadows are well covered with oak, alder, cottonwood and willow. The river abounds with beaver and fish.

The Reedley area was originally home to the Wechikit Yokuts. Latta (1949) also mentioned the neighboring Choinumne Yokuts who lived a bit further up the Kings River:

Wahtoke Creek...was named for Wahtoke, who, at the coming of the whites, was chief of the Choinumne Yokuts on Kings River.

In "Early Crossings on the Kings", the 1985 E Clampus Vitus Proclamation provided some insight into the diverse topography and natural richness of this River area:

When Poole's Ferry was established in 1852, the Kings River was a stream requiring a crossing by all travelers. Bluffs came nearly to the river's eastern edge but the western bank had a fair amount of flat bottom land before climbing back to the arid and empty plain...Poole's Ferry had lots of neighbors. Within five miles of Reedley's later site were many Indian campsites. The tribe of Yokuts thrived in this area, living by hunting, fishing, and gathering natural foods. For the Indians, until the white man arrived, it was a paradise.

Forty-niners and other early Valley travelers must have regarded the Kings River's green band of lush riparian vegetation as an oasis after travelling many hot and dusty days across the surrounding prairies. In a 1904 article, Captain John Barker, an early Valley pioneer, ably expressed this sentiment.

In the early fifties [1850's] the plains between Kings River on the north and the Four Creeks timber on the south were the ranging ground of vast herds of antelope ...the plain, which was covered at the time I speak of, with a luxuriant growth of grass extending all the way from the Sierra Nevada low hills, a distance of almost thirty to forty miles to Tulare Lake.

The plain...was covered with a heavy growth of grass that waved in the wind like a field of grain. The ground was thickly strewn with the horns of the elk where they annually shed them and a good many entire skulls with head or horns of bull elk that had been killed by hunters. Those were all bleached white as snow.

In 1855 James Smith located his ferry near the present day Olson Avenue Bridge, a location ideally suited for year-round use:

...the bluffs crowded the river channel on each side. That permitted his ferry to be approached even in times of high water...Freighters and stages could easily be seen from [Smith's] hotel as they approached far across the treeless plain...There was then much more water in the river past the site of Smith's Ferry for more of the year than became the case after irrigationists began diverting much of the natural flow in the 1870's and 1880's.

Smith provided for teaming animals in his barn and corrals. The feed was wild grass which Smith raked on his riverbottom ranch seven miles upstream...Shifts in the river channel, grading, modern roads and the cemetery have obliterated conditions as the Smiths knew them (E Clampus Vitus, 1985).

A more recent account of the river habitat was written by some visiting naturalists in the early 1900's:

During the fall of 1916, the writer, together with Mr. Joseph Dixon and Mr. Halstead G. White, in carrying on field work for the Museum of Vertebrate Zoology...had occasion to do some bird collecting...in the Kings River section.

At this point, the valley for miles around is largely devoted to vineyards, practically all arable land being under cultivation...the bottomlands of the Kings River, in this section split up into innumerable narrow and tortuous channels, is a wilderness of tangled willows and underbrush that forms a haven of refuge for many species.

Birds were numerous, and the variety of surroundings and cover found within a relatively small area was productive of many rather striking contrasts among species observed in close proximity. We remained... ten days, October 4 to 13, and during this time seventy-seven species of birds were listed by our party.

These four accounts refer to a perennial stream system with peak flows in late spring and early summer. Frequent overflows enriched the alluvial soil that supported a diverse community of

riparian vegetation and animal life. This forest was characterized by large trees of five or six species that formed an open to closed canopy. Beneath the trees was an understory of fruit-bearing shrubs and vines and a luxuriant ground cover of tall native grasses. Even before construction of Pine Flat Dam, there were months when the Kings River's flow was quite low. It is thought to have originally supported a warm water fishery composed largely of native minnows such as roach, suckers, squawfish, and hardhead.

RIPARIAN HABITAT: A DEFINITION

Riparian vegetation, by definition, occurs along streamides where there is an abundant source of water. Unlike grassland or desert areas, riparian habitat can not thrive if supplied only with the precipitation that falls in the immediate area. Riparian habitat in the Central Valley, for example, flourishes only along stream channels that carry runoff from melting snow that has fallen many miles to the east in the high Sierra.

Riparian forest systems are dynamic systems that experience major disturbances every time flooding occurs. Tremendous volumes of high velocity snowmelt are capable of scouring vegetation off islands, sandbars, and stream levees. This is part of a natural process that creates forest openings where grasses, shrubs, and young riparian trees (willows, cottonwoods, sycamore, Valley oak, alder, ash, and buttonbush) become established on areas where their seeds fall on bare moist soil. Such annual flood events help maintain a diverse array of species with a vigorous range of age classes; a healthy, reproducing forest.

The most serious man-made disturbances in the riparian community have resulted from the following changes in the local hydrology:

- completion of Pine Flat Dam in 1953 and the subsequent changes in timing and volume of in-stream flows
- twelve decades of upstream irrigation diversion
- lowering of groundwater levels in portions of the floodplain
- stream channelization upstream from the KRC Planning area

Such changes have not eliminated Valley Oaks or other tree species from the riparian community but their growth rate has declined since the coming of irrigation to the Valley. The width of annual

growth rings on Valley Oak trees began to decline measurably after 1870 (Jepson 1910) but at least the riparian community with its associated wildlife remains.

Some of the other man-made disturbances which have brought about a decline of riparian habitat include:

- removal of trees and understory with ax, saw, fire, and dozer
- nearly 140 years of livestock grazing
- any form of recreation that removes vegetation (such as when vegetation is cleared away to create a camping or fishing area)
- damage to vegetation from ORV activity
- unnatural and unseasonal erosion (such as irrigation runoff)

As much as the local hydrology has changed, the Kings River and the lower portion of Wahtoke Creek still support riparian vegetation, vegetation that is quite rich and vigorous where it has not been greatly disturbed. The evidence suggests that even with decreased flows, reduced deposits of new flood-borne alluvial material, and the stress-inducing lack of in-stream water for months at a time, the banks of these streams are still receiving adequate water in some areas to keep this kind of habitat alive and vigorous.

PLANT COMMUNITY DESCRIPTIONS

The Nongame-Heritage Program, part of the California Department of Fish and Game, maintains a computerized inventory of the locations of populations of rare and threatened plants, animals, and natural communities in our state. A natural community is any naturally occurring assemblage of vegetation that is characterized by key dominant species. The California Natural Diversity Data Base (CNDDDB) is designed to help assure that representative samples of all the state's 375 natural communities are adequately classified, located, and protected.

The riparian habitat in the KRC Planning area can be classified into one of four natural communities. They will be described in this portion of the report. Natural Community descriptions come from "Preliminary Descriptions of the Terrestrial Natural Communities of California" (Holland 1986). Plant names used here

are the common names which appear in the Annotated Plant List (Appendix A). When characteristic plant species are listed for each plant community, common names are given.

1. GREAT VALLEY COTTONWOOD RIPARIAN FOREST. (Element Code 61410)

DESCRIPTION: A dense broadleaved, winter deciduous riparian forest dominated by Fremont's Cottonwood and Valley Willow. Understories are dense, with abundant vegetative reproduction of canopy dominants. California Wild Grape is the most conspicuous liana (climbing vine). Scattered seedlings and saplings of shade-tolerant species such as Oregon Ash may be found, but frequent flooding prevents their reaching into the canopy.

SITE FACTORS: Fine-grained alluvial soils near perennial or nearly perennial streams that provide subsurface irrigation even when the channel is dry. These sites are inundated yearly during spring, resulting in annual input of nutrients, soil, and new germination sites. Intergrades at sites higher and farther from the river with Great Valley Mixed Riparian Forest (61420) and with Great Valley Willow Scrub (63410) on sites closer to the river that are subject to more severe flooding disturbance.

CHARACTERISTIC SPECIES: Buttonbush, Creeping Wildrye, Oregon Ash, Fremont's Cottonwood, Valley Willow, Sandbar Willow, Arroyo Willow, and California Wild Grape.

DISTRIBUTION: Formerly extensive along the major low-gradient (depositional) streams throughout the Great Valley, but now reduced to scattered, isolated remnants of young stands because of flood control, water diversion, agricultural development, and urban expansion; typically below about 300 feet elevation.

2. GREAT VALLEY MIXED RIPARIAN FOREST. (Element Code: 61420)

DESCRIPTION: This is a tall, dense, winter deciduous, broadleaved riparian forest. The tree canopy usually is fairly well closed and moderately to densely stocked with several species including Western Sycamore, Fremont's Cottonwood, and Valley Willow. Understories consist of these species plus shade-tolerant shrubs like Buttonbush, and Oregon Ash. Lianas are conspicuous in both tree and shrub canopies.

SITE FACTORS: Relatively fine-textured alluvium somewhat back from active river channels. These sites experience overbank flooding (with abundant alluvial deposition and groundwater recharge) but not too severe physical battering or erosion.

Intergrades closer to the river with Great Valley Cottonwood Riparian Forest (61410) where disturbance is both more frequent and more severe; intergrades farther away from the river with Great Valley Valley Oak Riparian Forest (61430) where such disturbance is less.

CHARACTERISTIC SPECIES: Buttonbush, Western Virgin's Bower, Western Sycamore, Fremont's Cottonwood, Valley Willow, and California Wild Grape.

DISTRIBUTION: Floodplains of low-gradient, depositional streams of the Great Valley, usually below about 500 feet elevation. Formerly very extensive in the Sacramento and northern San Joaquin Valleys, this type of forest largely has been cleared for agriculture, flood control, and urban expansion.

3. GREAT VALLEY VALLEY OAK RIPARIAN FOREST: (Element Code 61430)

DESCRIPTION: A medium to tall (rarely to 100 feet) broadleaved, winter deciduous closed canopy riparian forest dominated by Valley Oak. Understories include scattered Oregon Ash, Western Sycamore, as well as young Valley Oak. Lianas often are conspicuous, quickly occupying wind-throw generated light gaps. They also are more scattered throughout the shady understory.

SITE FACTORS: Restricted to the highest parts of floodplains, most distant from or higher above active river channels and therefore less subject to physical disturbance from flooding, but still receiving annual inputs of silty alluvium and subsurface irrigation. Intergrades closer to the river with Great Valley Mixed Riparian Forest (61420).

CHARACTERISTIC SPECIES: Western Virgin's Bower, Creeping Wildrye, Oregon Ash, Western Sycamore, Valley Oak, and California Blackberry.

DISTRIBUTION: Formerly extensive on low-gradient, depositional reaches of the major streams of the Sacramento and northern San Joaquin Valleys. More scattered in the San Joaquin watershed and on the floodplains of the Kings and Kaweah Rivers. Now virtually eliminated by agriculture and fire wood harvesting.

4. GREAT VALLEY WILLOW SCRUB. (Element Code: 63410)

DESCRIPTION: An open to dense broadleaved, winter-deciduous shrubby streamside thicket dominated by any of several Willow species. Dense stands usually have little understory or

herbaceous component. More open stands have grassy understories, usually dominated by introduced species.

CHARACTERISTIC SPECIES: Ripgut Brome, Mexican-Tea, Bermudagrass, Fremont Cottonwood, Sandbar Willow, Arroyo Willow, and California Wild Grape.

DISTRIBUTION: Along the major rivers and most smaller streams throughout the Great Valley watershed, usually below 1000 feet.

Before becoming mature forest, riparian vegetation passes through several seral (successional) stages. Some of the forest in the Planning area (because it has been modified by flooding, and clearing) is characteristic of the early seral stages where shrubs and small trees are beginning to form a shady layer of foliage above the herbaceous ground cover plants.

Mature riparian forest, often described as a gallery forest, consists of vegetation in different layers; tree canopy, shrub understory, and herbaceous ground cover. Lianas (climbing vines) communicate with vegetation in every strata. When this kind of forest reaches a mature stage, the canopy may be dominated by Valley Oak, Cottonwood, Sycamore, and Alder. The shrub understory consists of Elderberry and Blackberry with Mule Fat, Buttonbush, Oregon Ash, and shrubby Willows growing nearest the streams. The herbaceous understory consists of Wild Rye, Mugwort, Ragweed, Goldenrod, Sedge, and Nettle. Lianas include Wild Grape and Virgin's Bower.

The best remaining examples of relatively undisturbed forest are on the several islands in the river channel and on steep bluffs. Streamside vegetation, not a true community per se, occurs along both banks of the river, along the edges of the islands in the river, and along some portions of lower Wahtoke Creek.

Species that characterize this narrow vegetational zone require aquatic (streamside or marsh-like) conditions. They either grow in the water or in the moist soil at the water's edge. Such species are Slender Aster, Water Cress, Western Yellow Cress, Cyperus (Nutgrass) species, Spikerush, Tule, Horsetail, Water Milfoil, all the Rush species, Clover Fern, all the Willow-herb species, Barnyardgrass, Sprangletop, Rabbitsfootgrass, Johnsongrass, Smartweed, Dock, Pondweed, Water Fern, Monkey Flower, Brooklime, and Cattail. This community provides food and cover for many aquatic animals from invertebrates (like water striders and dragonflies) to vertebrates (like fish, frogs, and ducks).

Disturbed Soil Areas support vegetation which does not represent a true natural community but areas with this kind of vegetation indicate a degraded condition; one which may require restoration or enhancement. This recognizable assemblage of plants occurs on vacant ground and similar areas where the soil surface has been altered due to clearing by bulldozing, discing, grazing or any other physical process. Unlike cutting or burning where the soil and its seed bank are not seriously altered, these forms of physical disturbance tend to create conditions where weeds can become established. In the framework of this report, the term "WEED" will refer to any invasive, species that readily colonizes such disturbed sites.

Characteristic species of disturbed soil sites are all the Amaranth species (pigweed), Star Thistle, Horseweed, Cudweed, Sunflower, Spikeweed, Telegraph Weed, Prickly Lettuce, Groundsel, Milk Thistle, Cocklebur, Fiddleneck, all the members of the Goosefoot family, all the members of the Mustard family except the Cress species, 3 species of Storksbill (Fillaree), Horehound, Spanish Clover, Bur-Clover, Sweet Clover, Vetch, Cheeseweed, Slender Oat and Wild Oat, all the Brome grasses, Bermudagrass, Hare Barley, Rattail Fescue, Knotweed, Common Mullein, Jimson Weed, Tobacco species, Nightshade, Poison Hemlock, and Puncture Vine. The ecological role of weeds is to colonize bare soil areas and so begin the process of plant succession. Given time and the absence of further disturbance, most weeds in these disturbed sites will eventually be replaced by the different layers of riparian forest vegetation. Under pristine conditions, all of these colonizing weeds were native species but now most of those listed above are introduced species.

All four of the riparian communities, streamside vegetation, and disturbed soil areas intergrade and co-occur with one another. Many species can be considered component species of at least two or even all four natural communities. For example, many of the weedy species are considered as early successional species in what will eventually become some kind of Riparian Forest.

METHODS AND MATERIALS

Within the seasonal constraints of this study, survey methodologies for Rare, Threatened, Endangered, and Candidate (RTE&C) plant and animal species follow guidelines recommended by United States Fish and Wildlife Service and the California Department of Fish and Game. Field Work was done in the area on April 12, 1988 (three biologists) and April, 24, 1988

(4 biologists), between 9 A.M. and 5:30 P.M. for a total of 51½ field hours.

Plant survey methods: A list of native and non-native flora found in the Planning area was prepared (Appendix A). A systematic, thorough search of the Study Area was made in an attempt to locate every species of identifiable vascular plant including any populations of any RTE&C plant species.

Vertebrate Survey Methods: Vertebrate field work was done on the same dates as botanical surveys. Daily check-lists of birds and other vertebrates were kept.

RESULTS OF SEARCHES FOR RTE&C SPECIES AND SPECIAL ANIMALS

No RTE&C plant species were found in the Study Area. California Natural Diversity Data Base (CNDDDB) has a record of a general element occurrence of Hoover's Spurge (Chamaesyce hooveri) on the USGS 7.5 minute Reedley Quadrangle map. This is a vernal pool species that was once fairly common in vernal pool habitats on the rolling uplands near Dinuba. It is not a riparian species and was not found during this field survey in the KRC Planning area. Riparian Forest itself is considered quite rare, but in this part of California none of the individual plant species that make up the forest are listed as RTE&C species. Most of the listed plant species in this part of the Central Valley occur in the Northern Hardpan Vernal Pool plant community. Since none of that community type is found in the study area then plants such as Hoover's Spurge and San Joaquin Valley Orcutt Grass (Orcuttia inaequalis) would not be expected and were not located in the Study Area.

CNDDDB maintains a list of Special Animals (June 1987) which includes all species that are tracked by CNDDDB regardless of their legal or protection status. The following five pages of comments pertain to those species which are of known or potential occurrence in the Study Area; species which may require attention during future planning activities in the Plan Area:

San Joaquin Pocket Mouse (Perognathus inornatus inornatus), a Category 2 Candidate for Federal listing, shows evidence of being rare but further field work will be needed to determine whether it is rare enough to warrant listed status. None were found during this study. This species may still occur on uncultivated lands in the Reedley area but extensive trapping would be required to establish its local status.

Townsend's Big-eared Bat (Plecotus townsendii) is classified as a Second Priority Mammal Species of Special Concern by California Department of Fish and Game. Once common in central California, this species is now rarely seen. It prefers mesic (more moist) sites. Its status in the Reedley area is unknown, but like many local bats, it benefits from the presence of snags (standing dead trees) and dead limbs in riparian forest. A study of local bat populations would provide useful information about this species and the San Joaquin Myotis (Myotis yumanensis oxalis). The myotis is a more common species but it is a candidate for placement on the state list of Mammal Species of Special Concern. All bats are important nocturnal insectivores and play a key role in the ecology of their respective habitats.

Ringtail (Bassariscus astutus) is another riparian resident whose declining populations have made it a candidate for the state list of Mammals of Special Concern. Hollow trees and an adequate rodent population are required by this arboreal nocturnal predator. Its status in the Reedley area is unknown but it also benefits from the presence of snags and dead limbs.

Great Blue Heron (Ardea herodias), Great Egret (Casmerodius albus), and Black-crowned Night Heron (Nycticorax nycticorax) are all included on CNDDDB's Watch list. These colonial-nesting waterbirds do not breed in the Study Area but birds from colonies elsewhere in the Reedley area do feed along local waterways. All three heron species occur along the Kings River where they feed and roost (sleep).

Cooper's Hawk (Accipiter cooperii), Sharp-shinned Hawk (Accipiter striatus), Golden Eagle (Aquila chrysaetos), Swainson's Hawk (Buteo swainsoni), Northern Harrier (Circus cyaneus), Black-shouldered Kite (Elanus caeruleus), Bald Eagle (Haliaeetus leucocephalus), Osprey (Pandion haliaetus), Merlin (Falco columbarius), Prairie Falcon (Falco mexicanus), and American Peregrine Falcon (Falco peregrinus anatum) are 10 raptor species that may occur on an annual basis in the Study Area.

Only the Sharp-shinned and Cooper's Hawks probably occur in the riparian areas with any regularity; they are frequently seen hunting in this kind of habitat in the Central Valley during winter months. Cooper's Hawk is also a rare and local breeding species in riparian habitat. A mated pair was seen in aerial courtship along the Kings River on April 12 and one bird gave territorial calls near a probable nest site on April 24. Protection of nesting habitat, groves of alder and cottonwood, is the best way of protecting this Species of Special Concern.

Golden Eagle has not been observed in the Planning area but this species may pass overhead as it forages out from its breeding territory in the nearby Sierra foothills. Prairie Falcon occupies much the same breeding range as Golden Eagle and is seen in the Planning area where it visits riparian habitat and open country to hunt for birds, its favorite prey.

Swainson's Hawk is listed as Threatened in California and is classified as a Category 2 Candidate for Federal listing. This species is now very rare as a summer breeder along the eastside of the Central Valley. Any individuals seen in the Reedley area are probably migrants; none have been observed in the area in recent years.

Northern Harrier probably once nested in open country near the river but now it is seen in the area primarily in winter months when it forages over fields and farmland. Merlin is a small falcon that visits open country in California only during winter months. It has only been observed a few times in the Planning area but even in areas with excellent habitat it is usually not a common raptor.

Black-shouldered kite is an uncommon resident in the Planning area. Most nests in this part of the Valley are in orchards but there are some indications that this species may nest in the Valley Oak Forest along Wahtoke Creek near the Kings River Community College (KRCC) agricultural fields.

One or two Osprey are usually seen in the Planning area during spring and fall migration when they fly up or down the river in search of fish.

Merlin is a small falcon that visits open country in California only during winter months. It has only been observed a few times in the Planning area but even in areas with excellent habitat it is usually not a common raptor.

CNDDB classifies most of these species as Species of Special Concern (no legal status) but the Bald Eagle and Peregrine Falcon are both State and Federally-listed Endangered. These two species are both attracted primarily to wetlands in this area during winter months.

An adult Bald Eagle was seen on the KRCC campus on March 14, 1988. This species is a winter visitor to lakes and large streams in this part of the Valley. Since this part of the Kings River is considered a warm water fishery, it is probably not as

attractive to Bald Eagles as are upstream portions of the Kings.

Since breeding populations of Peregrine Falcons are being restored to historical Sierra cliff sites in the upper Kings River canyon, it is likely that local sightings during winter and at other seasons will begin to increase. The occasional presence of Bald Eagle and Peregrine Falcon in the Planning area offers one other important reason to maintain and restore quality riparian habitat.

Western Yellow-billed Cuckoo (Coccyzus americanus occidentalis) is listed as Threatened in California and is a Category 2 Candidate for Federal listing. None were found during this study. Once a fairly common breeding species in Central Valley riparian habitat (including local stretches of the Kings River), they have not been reported in this area in decades, except as very rare migrants. The riparian habitat in the Study Area may be too narrow to support more than a small breeding population of Cuckoos, should they ever return to the area.

Long-eared Owl (Asio otus) and Yellow-breasted Chat (Icteria virens) are two Species of Special Concern which may still breed in the area. None were found during this study but the habitat is certainly suitable for both species. Field work between March and June would be required to determine whether Chat and Long-eared Owl are anything more than migrants through the riparian habitat in this area.

Willow Flycatcher (Empidonax traillii) and Yellow Warbler (Dendroica petechia brewsteri) are two Species of Special Concern. No Willow Flycatchers or Yellow Warblers were found during this study but both species are still seen in the area during migration. Both Willow Flycatcher and Yellow Warbler were common riparian breeders in this type of habitat in the early 1900's. They have both disappeared as breeding species in Central Valley riparian habitat since the increase this century of Brown-headed Cowbird (Molothrus ater) parasitism. They occur here now only as migrants. Extensive willow scrub habitat suitable for breeding is lacking in most of the Study Area but field work from May to early July would disclose the true local status of these two species.

Least Bell's Vireo (Vireo bellii pusillus) is listed as State and Federally Endangered. It was once the most abundant breeding songbird in Central Valley riparian habitat. They have not been reported as a breeding species in this area for roughly 30 years because of Cowbird parasitism and habitat loss. Ron Gerstenberg,

biology instructor at KRCC, has seen migrant Bell's Vireos on at least three occasions in recent years. These sightings are on file with Dr. Laurence Binford at the California Academy of Sciences in San Francisco. It is almost certainly still absent from this area as a breeding species but field work from April to June would disclose its true local status.

Tricolored Blackbird (Agelaius tricolor) is a Category 2 Candidate for Federal listing. None were found during this study. This is a colonial breeding blackbird that still nests in this part of the Central Valley. Tricolored Blackbirds can probably be found frequently during the non-breeding season in this area since they are a wide-ranging species that makes lengthy daily flights between nighttime roosts and daytime feeding areas. Field work from April to June would be able to detect any local breeding colonies.

Black Swift (Cypseloides niger) is a Species of Special Concern. None were seen during this study but they are often seen during summer months, usually flying upriver just above the treetops in the late afternoon. This species nests in the high Sierra in rock crevices behind waterfalls but they range widely during the day in search of aerial insects. Their summer feeding forays sometimes cover hundreds of miles and take them out over the floor of the Central Valley. Valley riparian areas, like those in the Planning area, are evidently important navigation corridors for Black Swifts as they make their way to and from their high-country breeding sites. This kind of observation provides some insight into how riparian habitat can play subtle but important roles in the daily activities of many species, even species that are not confined to the riparian strip for a whole season each year or for a full 24 hours each day.

Western Pond Turtle (Clemmys marmorata) is a Species of Special Concern and is a Category 2 Candidate for Federal listing. Turtle tracks were found during this study and reports of turtles come from the river and from Wahtoke Creek. Turtles are probably not common in the Planning area but this is one species that would benefit from development of interpretation resources (to discourage shooting and collecting).

Giant Garter Snake (Thamnophis couchi gigas) is State-listed Threatened and is a Category 2 Candidate for Federal listing. None were found during this study. In earlier times when the Kings River supported a heavier perennial flow, this large aquatic snake may have occurred in marshy habitat at the edges of the river. Without adequate permanent water, preferably a

marsh system, it is doubtful whether this species is found locally.

California Tiger Salamander (Ambystoma tigrinum californiense) is a Species of Special Concern and is a Category 2 Candidate for Federal listing. None were found during this study. This big, spotted salamander is known from some of the vernal pool/grassland habitat near Yettam and Seville in nearby Tulare County. This rare amphibian probably does not occur in the Planning Area since suitable habitat is absent.

Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus) is Federally listed Threatened. None were found during this study. The status of this subspecies along the Kings River is not firmly established. Their preferred habitat is in the Valley Oak Riparian Forest understory where the larvae burrow beneath the bark of Elderberry plants. There are many groves of robust Elderberries along the river and at a few locations along Wahtoke Creek. I looked for visible sign of larval exit holes on some plants but a more thorough search would have to be made to determine whether this species occurs locally and if so what its status is.

COMMENTS ON COMMON FLORA IN THE STUDY AREA

160 species of vascular plants representing 53 families were identified in the Planning area (Appendix A). 75 of those 160 species (46%) are introduced (non-native) species. 70 of those 160 species (43%) are native species and the remaining 15 species were not identified as to species so their status (native vs. introduced) is unknown.

One of the plant species on the list is worthy of special note. Giant Reed, best known as "Bamboo" in this area, is a tall European grass that readily colonizes stream banks. It can reproduce from seed but its main method of dispersal occurs whenever a portion of viable root breaks loose from an established clump and floats downstream to lodge in a new location. The plant is a serious fire hazard even when green but its most serious threat to riparian habitat stems from its ability to grow rapidly amid native vegetation. It can quickly overtop willows and other species and aggressively competes with them for sunlight and moisture. When conditions are allowed to get out of hand, it can completely eliminate other riparian species so that both banks of a stream channel become solid thickets of dense Giant Reed. An aggressive control and

prevention program should be encouraged along with consideration of upstream control of the source population.

COMMENTS ON COMMON ANIMALS IN THE STUDY AREA

159 bird species have been identified in the Planning area (Appendix B). 29 other vertebrate species also occur in the area (Appendix C). Songbirds come to water to bathe and drink and it also attracts herons and ducks. At least 41 of the 159 bird species breed in the area; a good indication of the richness of the Riparian habitats with their layered vegetation and abundant wild food.

A few animal species on the list are worthy of special note. They will be referred to by their Common Names and will be mentioned in the same order as they appear in Appendix B and Appendix C.

Wood Duck - Wood Duck is an indicator species of a healthy Riparian Forest. When they occur in an area and are breeding in good numbers, it usually means that there is abundant water, mature trees with nest cavities, and ample food (acorns and other seeds). This species does breed in the Planning area and is known to respond well to the installation of man-made nest boxes when they are properly built, installed, and maintained.

Red-shouldered Hawk - The range of this hawk, more than any other raptor species in the Valley, is restricted almost exclusively to riparian corridors like the Kings River. It is not a hawk of open country like a Red-tailed Hawk. The fact that they still frequent the area is another sign that the River still supports good wildlife habitat. Red-shouldered Hawks were heard and seen on both field days along the Kings River.

California Quail - This gamebird has disappeared from most of its original haunts in the Central Valley. Populations are able to survive today only in areas where there is sufficient understory to provide them with needed food and cover. Quail still inhabit nearly all of the riparian habitat in the KRC.

Woodpeckers - Four species of Woodpeckers, two known breeders and two potential breeding species) are present along the river and in the Wahtoke Creek Area. These important chiselers excavate cavities of various sizes; from the tiny opening created by Downy Woodpecker to the largest chambers fashioned by Flickers. After a single season's use by the Woodpecker, these vital nest cavities are available for use by at least nine of the other

nesting bird species that they share the forest with. Some dead limbs and snags (standing dead trees) should be allowed to remain in this habitat to encourage the activities of these bird-home developers.

Fruit-eating Birds - Western Bluebird, American Robin, Northern Mockingbird, Cedar Waxwing, Phainopepla, European Starling, and House Finch. These seven species take advantage of the crop of Elderberry and Wild Grape (and mulberry) that is available in riparian habitat in late spring and summer months. Wherever these fruit-bearing plants grow, these frugivorous birds will be present. The antics of these ravenous, noisily-feeding songbirds is the kind of natural spectacle that is easily observed along the Kings River Corridor, one that adds to the feeling of a wildlife experience in a natural setting.

Blue Grosbeak - This was described as a very abundant species in Central Valley riparian habitat of yesteryear. Blue Grosbeak has one of the most melodious songs of our local birds and the cobalt blue plumage of the male is certainly a memorable sight to behold. This bird can even help one gain an appreciation for an unpopular but vital part of the riparian forest...nettle. Many of them place their nests in these plants. They can readily tolerate the stinging hairs of these plants. Like most wildlife, they can tolerate a measure of disturbing human presence so long as the nettle (and the other vital components of riparian habitat) are preserved. No nettle, no Blue Grosbeak, no cheery song...another example of how plant and animal are so intimately intertwined with their habitat.

Towhees - Rufous-sided Towhee and Brown Towhee are two of the seed-eating species that inhabit the riparian thickets along the Kings River. In this area, Towhees are found only where there is an extensive, dense, brushy understory. They are not birds of open country; the songs of these two birds are another sign that wildlife habitat is in good condition.

California Ground Squirrel - These burrowing rodents are an indicator of disturbed habitat. Their burrowing activity is destructive to levee systems, lawns, and school playgrounds. One of the best ways to discourage their activities and to reduce their population is to encourage the growth of dense native vegetation...riparian understory. Ground Squirrels are abundant wherever levee surfaces are kept free of vegetation; they prefer open terrain where they can feed on herbaceous plants and keep watch for approaching predators. Once an area develops a dense shrub layer or a patch of thick, tall grass, squirrels are unable

to move freely and their numbers tend to decrease. Vegetation growth along levees should be encouraged so that squirrel damage can be reduced.

Domestic Cats and Dogs - These two species of feral animals have virtually replaced the Raccoons and Gray Fox that once hunted these riparian areas. Besides their impact on native predators, these strays-gone-wild are known to have a serious impact on many nesting birds and native rodents. Control of stray dogs should be encouraged on grounds of human safety; some control of stray cat numbers would be in order to help reduce wildlife losses in native habitat.

SIGNIFICANT NATURAL HABITAT AREAS

There are several sites in the Planning area that support significant natural habitat (Figure 1). These areas should be so designated to ensure that they receive proper consideration during KRC planning. These areas should be managed to maintain their vegetation in as near a natural condition as possible. This means that vehicles (mowers, for example) should be restricted from these areas and that pruning should be prohibited.

The best remaining examples of relatively undisturbed forest are on the several islands in the river channel and on steep bluffs. Because these areas consists mostly of natives, are relatively undisturbed, and are already islands (or else they are difficult to gain access to or to walk on safely) they should be protected as islands of natural habitat.

There are places in this "jungle" where the character of the vegetation matches the original historical descriptions, places where there are no introduced weeds to detract from the overall natural character of the scene. The habitat in these areas is rich in native trees, understory shrubs, herbaceous ground cover plants, and Wild Grape lianas. Along with stands of seedling Cottonwoods are spectacular mature Cottonwoods, Sycamores, and Valley Oaks. Trail access or ORV use in these areas would create an unnecessary source of disturbance in what are otherwise high-quality "islands" of native vegetation. Such significant natural habitat areas should be protected from these forms of disturbance.

HABITAT-RELATED PLANNING RECOMMENDATIONS

The best way to maintain local wildlife and native riparian habitat is to protect areas that support native vegetation and to ensure that they have an adequate long-term water supply. If that can be done, then the City of Reedley can provide its citizens with one of the most extensive, most beautiful, and most natural river parkway anywhere in the San Joaquin Valley. Specific recommendations are provided to help maintain and protect riparian habitat in the Plan Area.

Both the Kings River and the portion of Wahtoke Creek in the Planning area already support natural habitat along their entire lengths; riparian habitat. It is in better condition in some areas than others but the reason it still thrives in this Plan Area is because all the component species are adapted to the local soils, climate and water regime. As the City makes plans for the KRC, it makes sense biologically, aesthetically, and financially to establish a River Corridor that is composed of native riparian forest species.

Because much of this riparian habitat is located almost entirely on levees, planners should be sure to refer to California Reclamation Board's "Guide for Vegetation on Project Levees" (1981). This document states:

It is the intent of the Board...to encourage retention of riparian vegetation as long as such vegetation poses no threat to the flood control system in question. Furthermore, the Board recognizes that riparian vegetation is often beneficial to flood control systems in that it can protect levees and berms from erosion and aid in proper distribution of flood flows at weirs and in channels.

All recommendations for riparian habitat maintenance offered in my report are made in light of these State guidelines. In regard to routine levee maintenance, it would be to the advantage of City planners to learn whether the local levee district follows guidelines provided in the Reclamation Board's "Standards for Encroachments" and whether they adhere to the Levee Vegetation Guide. It would also be to their advantage to learn whether the levee district is bound by any sort of a Riparian Maintenance Agreement administered under California Department of Fish and Game Codes 1601 and 1603. Such agreements spell out which kind of vegetation (and of what size) can be removed and from what portion of the channel.

plans take shape for the Kings River Corridor, it would be prudent for the City to coordinate with the levee district, and California Department of Fish and Game to prepare a detailed riparian maintenance plan that outlines standards for protection of those riparian areas under the jurisdiction of City of Reedley.

The Guide for Vegetation on Levees also provides a list of plant species which are classified as desirable or undesirable for levee plantings. It states, "Maximum use of native species, instead of exotics, is encouraged." The list of desirable species includes the following natives which all occur in the Plan Area (Common Names taken from Appendix A): Valley Oak, Valley (or Black) Willow, Oregon Ash, Buttonbush, Mugwort, Arroyo Willow, Sandbar Willow, Creeping Wildrye, and Horsetail (Braun's Scouring Rush). The list of undesirable species includes the following exotics which are all present along waterways in some part of the Plan Area: any Prunus species (plum, almond, etc.), Blue Gum (Eucalyptus), English Walnut, all species of Pines, and Tree of Heaven. The Guide for Vegetation on Levees goes on to add that Ground Squirrels, whose burrowing activities are destructive to levees, can be discouraged by maintaining riparian vegetation on levees.

California Department of Forestry also recognizes that native riparian species (Valley Oak, Sycamore, Willow, and Cottonwood) are not as flammable (or explosive) as many typical "park" tree species like Pine and Eucalyptus (Marshall, Personal Communication). Part of the reason that riparian vegetation should be allowed to replace annual ground cover is that riparian forests are layered; each layer provides shade and reduces evaporation in those layers below it.

When planning for park development along these waterways, the following recommendations will help to establish and preserve wildlife habitat, accommodate recreational use, reduce fire hazard, and minimize costs:

- 1) The overriding consideration should be to establish and maintain a continuous riparian corridor (variable in width and quality) all the way from the South Avenue alignment south to the Floral Avenue alignment. Obviously, the bridges and parks at Manning and Olson Avenues will create short gaps in this riparian strip but for riparian forest to properly meet the needs of its wildlife inhabitants, it is best when unbroken.

- 2) When establishing roads, parks, and trail alignments, leave all oak trees and other areas of native riparian vegetation whenever possible.
- 3) Wherever possible, parks requiring irrigation for lawn maintenance should be located near residential areas. The objective here is to locate parks where they can provide green (fire-resistant) lawns along the part of the KRC nearest developed property.
- 4) Except for non-native grasses that will be planted as lawn cover, other park plantings should be limited to native shrubs and trees.
- 5) Leaf litter in park areas near developed property should be removed to reduce fire hazard but wherever possible, leaf litter (especially for Valley Oak) should be allowed to remain on the ground. Any leaf litter that is removed should be scattered on the soil surface of Disturbed Soil Sites elsewhere in the KRC.
- 6) Leave dead limbs and snags (standing dead trees) whenever possible so long as they are not in areas where they constitute a threat to human safety. These limbs and snags provide homes for many wildlife species.

A major planning need will be to provide for adequate future water supplies in the waterway channels. Steps should be taken to ensure that current flow rates and periods of water availability are either maintained or increased. If any measures, such as acquisition of existing private water rights can be exercised to increase the longevity or volume of in-stream flows, this would be advantageous for habitat, wildlife, recreation, and municipal groundwater recharge. Whether or not there is new dam construction upstream, any overall reduction in stream flows will have serious negative effects on an already altered riparian system.

Enforcement of existing Off-Highway Vehicle codes and litter laws should be encouraged with appropriate use of 1) Posted signs, 2) Access Barriers, and 3) Well designed fences where necessary.

RECOMMENDATIONS FOR LEVELS OF PUBLIC USE

Three levels of public use are recommended as a method of providing for maximum public use benefit while simultaneously minimizing degradation of riparian areas.

1. RESTRICTED USE AREAS. These are the Significant Natural Habitat Areas described earlier in the report. These areas are so designated to protect relatively undisturbed wildlife habitat so access here would be limited to occasional scientific and educational use. No trails, roads, parking, lawns, picnic areas, or restrooms would be established here. Pruning and other routine "park" maintenance should be prohibited in Restricted Use Areas. Any removal of vegetation or creation of new trails by the public in these areas should be discouraged although removal of non-native perennial (woody) vegetation should be considered when these areas are first established to help accelerate the natural revegetation process.

2. MODERATE USE AREAS. These areas would consist of all lands adjacent to a park, a pedestrian trail, or a bicycle trail. As an integral part of the proposed riparian corridor, these areas should contain riparian shrub and tree cover but a trail system of some kind is the understood component of Moderate Use Areas. As mentioned earlier, areas with irrigated non-native lawns should be sited so as to add a measure of fire protection to adjacent developed property. No BBQ facilities should be located here and consideration should be given to a smoking prohibition in these areas during dry months. The trails in these areas are to be for pedestrian and bicycle use. If a vehicle access road is called for, it should be for park patrol, maintenance, and emergency vehicle access only. It should be designed so that it has ample turnaround locations. California Department of Forestry requires a 10 foot wide road for fire control access; levee districts often call for a 15 foot clearance in order to move large levee maintenance equipment. These trails and suitable number of low-impact (passive recreation) parks should be designed with the idea of providing a pedestrian, jogging, and bicycle corridor at the edge of riparian habitat where these trail users can rest, picnic, and observe the river scenery and wildlife.

3. HEAVY USE AREAS. These sites would accommodate active recreation (beach access and tubing, rafting, sunbathing, picnic and child play areas etc.) but should be viewed as an integral part of the continuous riparian corridor. Parking and restroom facilities, picnic areas with BBQ facilities, and concessions

would be located in Heavy Use Areas. No stream-edge vegetation would occur along the river because of recreational activities. Recreational use should focus on activities suitable for riparian areas (not baseball diamonds or sports fields...those should be located in other parks away from the wildlife of riparian areas). As in Moderate Use Areas; the vegetation planted here should consist of native shrub and tree species. These parks should be designed to handle a high level of visitor use in such a way that habitat can be maintained while meeting recreation needs. Reedley Beach, Cricket Hollow, and Kelly's Beach approximate the appearance of a Heavy Use Area but such areas should have a greater variety of tree and shrub species than are now growing there so that they will be more attractive to wildlife.

DEVELOPMENT-RELATED RECOMMENDATIONS

The wildlife of these parkway riparian corridors will theoretically have to tolerate the daily presence and activities of varying numbers of KRC users. Development should be planned so as not to significantly add to existing levels of habitat disturbance. Recognizing that existing situations already preclude certain of these proposed measures, the following recommendations should help reduce the negative impacts of trails and private and commercial developments on riparian wildlife:

- 1) Development setbacks of 100 feet from the edge of existing riparian habitat should be established. This 100 foot minimum setback is offered where developments are proposed on land adjacent to existing habitat. The intent of this setback is to provide only a minimum setback to buffer riparian habitat from proposed trail, road, and private and commercial development. Wherever this Specific Plan calls for establishment of development setbacks greater than this 100 foot figure, the greater dimension will be more effective as a habitat protection recommendation.
- 2) The buffer area within this setback should be maintained as open space of some kind, preferably some part of a riparian-edge trail system or reforestation area. It should also be restored to native vegetation when possible (this is the preferred buffer area land use). If the buffer area is currently agricultural, then the existing agricultural use should be encouraged. Where open space is not an option, then light industry would be more acceptable than residential development because industry offers less disturbance to adjacent riparian areas than does residential development. Human activity and

noise can be restricted to daytime hours in an industrial area (and there is reduced impact from stray cats and dogs and children with BB guns, etc.).

3) Where developed property already exists immediately adjacent to riparian habitat, a 30 foot wide minimum clearance is recommended to reduce fire threat. This minimum clearance is not a development setback per se. It is offered to help raise awareness of fire threat and to offer a way of reducing that threat in areas where existing homes front directly onto existing habitat. This area need not be devoid of riparian vegetation but perhaps placement of trail alignments, irrigated lawn, or emergency vehicle access in the clearance strip would meet the needs of fire safety, public safety, and recreational access.

4) A strip of riparian shrub and tree planting should be encouraged wherever habitat is adjacent to developed property to help screen the habitat from the disruptive effect of bright lights at night. These plants will also provide nearby residents with a scenic backdrop to their property.

5) If there is any loss of riparian habitat in the Planning Area, mitigation (at the rate of 2 acres for each acre lost) should take place 5A) along the KRC and buffer strips in the Planning area (preferred location), or 5B) outside, but as near as possible to the plan area, in similar habitat.

Mitigation in the KRC would have to take the form of riparian habitat enhancement and restoration. Outside the Planning area, the preferred mitigation would be acquisition and protection of in kind (similar species composition and age structure) riparian habitat.

APPENDIX A

CHECK LIST OF NATIVE AND INTRODUCED PLANTS SEEN DURING BIOLOGICAL
SURVEY OF KINGS RIVER CORRIDOR SPECIFIC PLAN AREA

Scientific Names of Families are in alphabetical order.
Scientific Names of Species are alphabetical within Families

I = an introduced (non-native) species

SCIENTIFIC NAME OF FAMILY. Common Name of Family

Scientific Name of Species Common Name(s) of Species

AMARANTHACEAE. Amaranth Family

Amaranthus blitoides	Prostrate Pigweed
Amaranthus retroflexus	Redroot Pigweed - I

ARALIACEAE. Ginseng Family

Hedera helix	English Ivy - I
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ASTERACEAE. Sunflower Family

Achillea millefolium	Common Yarrow
Ambrosia acanthicarpa	Annual Bur-weed or Sand-Bur
Ambrosia psilostachya	Western Ragweed
Artemisia douglasiana	California Mugwort or Wormwood
Aster exilis	Slender Aster
Baccharis viminea	Mule Fat
Centaurea solstitialis	Yellow Star Thistle - I
Conyza canadensis	Horseweed
Cotula australis	Southern Brass Buttons - I
Gnaphalium palustre	Lowland Cudweed
Gnaphalium sp.	Cudweed species
Grindelia procera	Tall Gumweed
Helianthus annuus	
var. lenticularis	Common Sunflower
Heterotheca grandiflora	Telegraph Weed
Holocarpha obconica	San Joaquin Tarweed
Hypochoeris glabra	Smooth Cat's Ear - I
Lactuca serriola	Prickly Lettuce - I

ASTERACEAE. Sunflower Family (cont.)

<i>Matricaria matricarioides</i>	Pineapple Weed - I
<i>Senecio vulgaris</i>	Common Groundsel - I
<i>Silybum marianum</i>	Milk Thistle - I
<i>Solidago californica</i>	California Goldenrod
<i>Sonchus asper</i>	Spiny Sow Thistle - I
<i>Sonchus oleraceus</i>	Common Sow Thistle - I
<i>Taraxacum officinale</i>	Common Dandelion - I
<i>Xanthium strumarium</i>	Cocklebur

BETULACEAE. Birch Family

<i>Alnus rhombifolia</i>	White Alder
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BIGNONIACEAE. Bignonia Family

<i>Catalpa speciosa</i>	Western Catalpa - I
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BORAGINACEAE. Borage Family

<i>Amsinckia intermedia</i>	Common Fiddleneck
<i>Plagiobothrys</i> sp.	Popcorn Flower species

CAPRIFOLIACEAE. Honeysuckle Family

<i>Sambucus mexicana</i>	Southwestern or Desert Elderberry
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CARYOPHYLLACEAE. Pink Family

<i>Silene gallica</i>	Common Catchfly or Windmill Pink - I
<i>Stellaria media</i>	Common Chickweed - I

CASUARINACEAE. Casuarina Family

<i>Casuarina</i> sp.	Casuarina species or Ironwood - I
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CHENOPODIACEAE. Goosefoot Family

<i>Chenopodium album</i>	Pigweed or Lamb's-Quarters - I
<i>Chenopodium ambrosioides</i>	Mexican-Tea - I
<i>Salsola iberica</i>	Russian Thistle or Tumbleweed - I

CRASSULACEAE. Stonecrop Family

Tillaea erecta Pygmy Stonecrop or Sand
Pygmy Weed

CRUCIFERAE. Mustard Family

Brassica nigra Black Mustard - I
Capsella bursa-pastoris Shepherd's Purse - I
Lepidium nitidum Common Pepper-grass
Lobularia maritima Sweet Alyssum - I
Nasturtium officinale Water Cress or White Water
Cress - I
Raphanus sativus Wild Radish - I
Rorippa curvisiliqua Western Yellow Cress
Sibara virginica Sibara or Virginia Rock Cress
Sisymbrium irio London Rocket or Desert
Mustard - I
Cruciferae sp. Mustard species

CUCURBITACEAE. Gourd Family

Cucurbita foetidissima Stinking Gourd or Calabazilla
Marah sp. Wild Cucumber or Manroot sp.

CYPERACEAE. Sedge Family

Carex barbarae Santa Barbara Sedge
Carex sp. Sedge species
Cyperus alternifolius ? Umbrella-Plant - I ?
Eleocharis macrostachya Common or Creeping Spikerush
Scirpus acutus Common Tule

EQUISETACEAE. Horsetail Family

Equisetum laevigatum Braun's Scouring-Rush

FAGACEAE. Beech Family

Quercus lobata Valley Oak

GERANIACEAE. Geranium Family

Erodium botrys	Long-beaked Storksbill - I *
Erodium cicutarium	Redstem Storksbill - I
Erodium moschatum	Whitestem Storksbill - I
Geranium carolinianum	Carolina Geranium

HALORAGACEAE. Water Milfoil Family

Myriophyllum sp.	Water-milfoil species
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JUGLANDACEAE. Walnut Family

Juglans hindsii	California Black Walnut - I
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JUNACEAE. Rush Family.

Juncus balticus	Baltic Rush
Juncus sp.	Rush species

LABIATAE. Mint Family

Lamium amplexicaule	Henbit or Claspig Henbit - I
Marrubium vulgare	Horehound - I
Stachys albens	White or Whitestem Hedge Nettle

LEGUMINOSAE. Pea Family

Cercis occidentails	Western Redbud
Lotus purshianus	Spanish Clover - I
Lupinus densiflorus	Whitewhorl Lupine
Lupinus succulentis	Arroyo Lupine
Lupinus sp.	Lupine (small purple species)
Medicago polymorpha	Bur-Clover - I
Medicago sativa	Alfalfa - I
Melilotus indica	Yellow Sweet-Clover - I
Trifolium microdon	Valparaiso Clover
Trifolium repens	White Lawn Clover - I
Trifolium tridentatum	Tomcat Clover
Trifolium species	Clover species
Vicia sp.	Vetch species #1
Vicia sp.	Vetch species #2

* Filaree is another common name for both species of Erodium

LILIACEAE. Lily Family	
<i>Asparagus officinalis</i>	Garden Asparagus - I
LORANTHACEAE. Mistletoe Family	
<i>Phoradendron tomentosum</i> ssp. <i>macrophyllum</i>	Greenleaf Mistletoe
LYTHRACEAE. Loosestrife Family	
<i>Lythrum hyssopifolia</i>	Hyssop Lythrum or Grass Poly
MALVACEAE. Mallow Family	
<i>Malva parviflora</i>	Cheeseweed - I
MARSILEACEAE. Pepperwort or Marsilea Family	
<i>Marsilea vestita</i>	Clover Fern or Hairy Pepperwort
MORACEAE. Mulberry Family	
<i>Ficus carica</i>	Common Fig - I
<i>Morus alba</i>	White Mulberry - I
MYRTACEAE. Myrtle Family	
<i>Eucalyptus globulus</i>	Blue Gum - I
OLEACEAE. Olive Family	
<i>Fraxinus latifolia</i>	Oregon Ash or Swamp Ash
ONAGRACEAE. Evening-Primrose Family	
<i>Clarkia unguiculata</i>	Elegant Clarkia
<i>Epilobium paniculatum</i>	Panicled Willow-Herb or Parched Fireweed
<i>Epilobium</i> sp.	Willow-Herb species
<i>Oenothera contorta</i> var. <i>epilobioides</i>	Contorted Primrose
OXALIDACEAE. Wood Sorrel Family	
<i>Oxalis</i> sp.	Wood Sorrel species

PAPAVERACEAE. Poppy Family

Eschscholzia californica California Poppy

PLANTAGINACEAE. Plantain Family

Plantago major Broadleaf Plantain or Common
Plantain - I

PLATANACEAE. Sycamore Family

Platanus racemosa Western Sycamore or California
Plane-Tree

POACEAE. Grass Family

<i>Arundo donax</i>	Giant Reed - I
<i>Avena barbata</i>	Slender Oat - I
<i>Briza minor</i>	Little Quakinggrass - I
<i>Bromus diandrus</i>	Ripgut Brome or Ripgut Grass -I
<i>Bromus mollis</i>	Soft Chess - I
<i>Bromus willdenowii</i>	Prairie Brome - I
<i>Cynodon dactylon</i>	Bermudagrass - I
<i>Echinochloa crusgalli</i>	Barnyardgrass - I
<i>Elymus triticoides</i>	Creeping Wildrye or Alkali Rye
<i>Hordeum leporinum</i>	Hare Barley - I
<i>Hordeum vulgare</i>	Barley - I
<i>Leptochloa sp.</i>	Sprangletop species
<i>Lolium multiflorum</i>	Italian or Australian Ryegrass - I
<i>Phyllostachys sp.</i>	Bamboo species - I
<i>Poa annua</i>	Annual Bluegrass - I
<i>Poa sp.</i>	Bluegrass species
<i>Polygogon monspeliensis</i>	Rabbitsfootgrass - I
<i>Sorghum halapense</i>	Johnsongrass - I
<i>Vulpia myuros</i>	Foxtail or Rattail Fescue - I

POLYGONACEAE. Buckwheat Family

<i>Polygonum argyrocoleon</i>	Silversheath Knotweed - I
<i>Polygonum sp.</i>	Smartweed species
<i>Rumex crispus</i>	Curly Dock or Yellow Dock - I

PORTULACACEAE. Purslane Family

Calandrinia ciliata	
var. menziesii	Red Maids
Montia perfoliata	Miner's Lettuce

POTAMOGETONACEAE. Pondweed Family

Potamogeton sp.	Pondweed species
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RANUNCULACEAE. Crowfoot Family

Clematis ligusticifolia	Western Virgin's Bower
Ranunculus occidentalis	Western Buttercup

ROSACEAE. Rose Family

Potentilla sp.	Cinquefoil species
Prunus persica	Peach - I
Rubus procerus	Himalaya-Berry - I
Rubus ursinus	California Blackberry or Pacific Blackberry

RUBIACEAE. Madder Family

Cephalanthus occidentalis	
var. californicus	Buttonbush or Buttonwillow
Galium aparine	Bedstraw - I

SALICACEAE. Willow Family

Salix babylonica	Weeping Willow - I
Salix gooddingii	Valley Willow or Black Willow or Goodding's Willow
Salix hindsiana	Sandbar Willow
Salix lasiolepis	Arroyo Willow
Populus fremontii	Fremont Cottonwood

SALVINIACEAE. Salvinia Family

Azolla filiculoides	Water Fern or Fern-like Azolla or Duckweed
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SCROPHULARIACEAE. Figwort Family

Mimulus guttatus	Seep-spring Monkey Flower or Common Large Monkey Flower
Orthocarpus purpurascens	Owl's Clover or Red Owl Clover
Verbascum thapsus	Common or Woolly Mullein - I
Veronica americana	American Brooklime
Veronica serpyllifolium	Thymeleaf Speedwell

SIMARUBACEAE.. Quassia Family

Ailanthus altissima	Tree of Heaven - I
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SOLANACEAE. Nightshade Family

Datura innoxia	Jimson Weed or Tolguacha
Nicotiana glauca	Tree Tobacco or Mexican Tobacco - I
Solanum elaeagnifolium	Silverleaf Nightshade or White Horse Nettle - I
Solanum nodiflorum	Mock Black Nightshade or White Nightshade - I

TAMARICACEAE. Tamarisk Family

Tamarix sp.	Tamarisk species - I
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TYPHACEAE. Cat-Tail Family

Typha domingensis	Cattail
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UMBELLIFERAE. Carrot Family

Conium maculatum	Poison Hemlock - I
Daucus carota	Wild Carrot - I
Umbelliferae sp.	Conium-like species

URTICACEAE. Nettle Family

Urtica holosericea	Stinging Nettle or Hoary Nettle
Urtica urens	Dwarf Nettle or Small Nettle - I

VITACEAE. Grape Family

Vitis californica	California Wild Grape
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ZYGOPHYLLACEAE. Caltrop Family

Tribulus terrestris

Puncture Vine or Caltrop - I

I = Introduced (Non-native) Species

Number of Introduced Species

75

Number of Native Species

70

Total Number of Species

160*

* (15 species were not identified as to native vs. non-native)

APPENDIX B

CHECK LIST OF BIRDS OF THE KINGS RIVER CORRIDOR
SPECIFIC PLAN AREA

(includes Kings River Community College and Reedley Sewer Ponds)

I = an Introduced (non-native) species

N = a species which is known to nest in the KRC

* = a species which was seen in the Kings River Corridor by other observers (Terry Braun, Robert Cahill, Ron Gerstenberg, Jim Parkinson, and Richard and Kay Paulson) since 1970.

Families and species are listed in phylogenetic order based on American Ornithologist's Union standards.

SCIENTIFIC NAME OF FAMILY. Common Name of Family

Scientific Name of Species Common Name of Species

PODICIPEDIDAE. Grebes

* Podilymbus podiceps N Pied-billed Grebe

ARDEIDAE. Herons and Egrets

* Botaurus lentiginos American Bittern
Ardea herodias Great Blue Heron
* Casmerodius albus Great Egret
* Butorides striatus Green-backed Heron
Nycticorax nycticorax Black-crowned Night Heron

ANATIDAE. Swans, Geese, and Ducks

* Cygnus columbianus Tundra Swan
* Chen caerulescens Snow Goose
* Branta canadensis Canada Goose
Aix sponsa N Wood Duck
* Anas crecca Green-winged Teal
Anas platyrhynchos N Mallard
* Anas acuta Northern Pintail
* Anas discors Blue-winged Teal
Anas cyanoptera Cinnamon Teal
* Oxyura jamaicensis Ruddy Duck

CATHARTIDAE. American Vultures

Cathartes aura

Turkey Vulture

ACCIPITRIDAE. Kites, Hawks, and Eagles

*	Pandion haliaetus		Osprey
	Elanus caeruleus		Black-shouldered Kite
*	Haliaeetus leucocephalus		Bald Eagle
*	Circus cyaneus		Northern Harrier
*	Accipiter striatus		Sharp-shinned Hawk
	Accipiter cooperii	N	Cooper's Hawk
	Buteo lineatus	N	Red-shouldered Hawk
	Buteo jamaicensis	N	Red-tailed Hawk
*	Buteo lagopus		Rough-legged Hawk

FALCONIDAE. Falcons

	Falco sparverius	N	American Kestrel
*	Falco columbarius		Merlin
*	Falco peregrinus		Peregrine Falcon
*	Falco mexicanus		Prairie Falcon

PHASIANIDAE. Pheasants and Quail

	Phasianus colchicus	N	Ring-necked Pheasant - I
	Callipepla californica	N	California Quail

RALLIDAE. Rails, Moorhens, and Coots

*	Rallus limicola		Virginia Rail
*	Porzana carolina		Sora
*	Gallinula chloropus		Common Moorhen
	Fulica americana		American Coot

RECURVIROSTRIDAE. Avocets and Stilts

*	Himantopus mexicanus		Black-necked Stilt
*	Recurvirostra americana		American Avocet

CHARADRIIDAE. Plovers

*	Charadrius semipalmatus		Semipalmated Plover
	Charadrius vociferus	N	Killdeer

SCOLOPACIDAE. Sandpipers

	<i>Tringa melanoleuca</i>	Greater Yellowlegs
*	<i>Actitis macularia</i>	Spotted Sandpiper
	<i>Calidris mauri</i>	Western Sandpiper
	<i>Calidris minutilla</i>	Least Sandpiper
*	<i>Calidris bairdii</i>	Baird's Sandpiper
*	<i>Calidris melanotos</i>	Pectoral Sandpiper
*	<i>Limnodromus scolopaceus</i>	Long-billed Dowitcher
*	<i>Gallinago gallinago</i>	Common Snipe
*	<i>Phalaropus tricolor</i>	Wilson's Phalarope

LARIDAE. Gulls and Terns

*	<i>Larus delawarensis</i>	Ring-billed Gull
*	<i>Larus californicus</i>	California Gull

COLUMBIDAE. Pigeons and Doves

	<i>Columba livia</i>	N	Rock Dove - I
	<i>Zenaida macroura</i>	N	Mourning Dove

CUCULIDAE. Cuckoos

*	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo ¹
*	<i>Geococcyx californianus</i>	Greater Roadrunner

TYTONIDAE. Barn-Owls

*	<i>Tyto alba</i>	N	Common Barn Owl
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STRIGIDAE. Typical Owls

*	<i>Otus kennicottii</i>	Western Screech Owl
	<i>Bubo virginianus</i>	Great Horned Owl
*	<i>Athene cunicularia</i>	Burrowing Owl

APODIDAE. Swifts

*	<i>Cypseloides niger</i>	Black Swift
*	<i>Chaetura vauxi</i>	Vaux's Swift
*	<i>Aeronautes saxatalis</i>	White-throated Swift

¹ A specimen of Yellow-billed Cuckoo was collected in the area prior to 1970.

TROCHILIDAE. Hummingbirds

	Archilocus alexandri	Black-chinned Hummingbird
	Calypte anna	Anna's Hummingbird
*	Selasphorus rufus	Rufous Hummingbird

ALCEDINIDAE. Kingfishers

	Ceryle alcyon	N Belted Kingfisher
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PICIDAE. Woodpeckers

*	Melanerpes lewis	Lewis Woodpecker
	Melanerpes formicivorus	Acorn Woodpecker
*	Sphyrapicus ruber	Red-breasted Sapsucker
	Picoides nuttalli	N Nuttall's Woodpecker
	Picoides pubescens	Downy Woodpecker
*	Picoides villosus	Hairy Woodpecker
	Colaptes auratus	N Northern Flicker

TYRANNIDAE. Tyrant Flycatchers

*	Contopus borealis	Olive-sided Flycatcher
*	Contopus sordidulus	Western Wood-Pewee
*	Empidonax traillii	Willow Flycatcher
*	Empidonax difficilis	Western Flycatcher
	Sayornis nigricans	N Black Phoebe
*	Sayornis saya	Say's Phoebe
	Myiarchus cinerascens	Ash-throated Flycatcher
	Tyrannus verticalis	Western Kingbird

ALAUDIDAE. Larks

*	Eremophila alpestris	Horned Lark
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HIRUNDINIDAE. Swallows

	Tachycineta bicolor	N Tree Swallow
*	Tachycineta thalassina	Violet-green Swallow
	Stelgidopteryx serripennis	Northern rough-winged Swallow
	Hirundo pyrrhonota	N Cliff Swallow
	Hirundo rustica	N Barn Swallow

CORVIDAE. Jays and Crows

Aphelocoma coerulescens	N	Scrub Jay
Corvus brachyrhynchos		American Crow
Corvus corax		Common Raven

PARIDAE. Titmice

Parus inornatus		Plain Titmouse
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AEGITHALIDAE. Bushtit

Psaltriparus minimus	N	Bushtit
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SITTIDAE. Nuthatches

* Sitta canadensis		Red-breasted Nuthatch
* Sitta carolinensis		White-breasted Nuthatch

CERTHIIDAE. Creepers

* Certhia americana		Brown Creeper
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TROGLODYTIDAE. Wrens

* Salpinctes obsoletus		Rock Wren
Thryomanes bewickii	N	Bewick's Wren
Troglodytes aedon	N	House Wren
* Troglodytes troglodytes		Winter Wren
* Cistothorus palustris	N	Marsh Wren

MUSCICAPIDAE. Kinglets, Gnatcatchers, and Thrushes

* Regulus satrapa		Golden-crowned Kinglet
* Regulus calendula		Ruby-crowned Kinglet
* Polioptila caerulea		Blue-gray Gnatcatcher
* Sialia mexicana		Western Bluebird
* Myadestes townsendi		Townsend's Solitaire
* Catharus guttatus		Hermit Thrush
Turdus migratorius	N	American Robin
* Ixoreus naevius		Varied Thrush

MIMIDAE. Thrashers

Mimus polyglottos	N	Northern Mockingbird
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MOTACILLIDAE. Pipits	
* Anthus spinoletta	Water Pipit
BOMBYCILLIDAE. Waxwings	
* Bombycilla garrulus	Bohemian Waxwing
Bombycilla cedrorum	Cedar Waxwing
PTILOGONATIDAE. Silky Flycatchers	
* Phainopepla nitens	Phainopepla
LANIIDAE. Shrikes	
* Lanius ludovicianus	Loggerhead Shrike
STURNIDAE. Starlings	
Sturnus vulgaris	N European Starling - I
VIREONIDAE. Vireos	
* Vireo bellii	Bell's Vireo
* Vireo solitarius	Solitary Vireo
* Vireo huttoni	Hutton's Vireo
* Vireo gilvus	Warbling Vireo
EMBERIZIDAE. Wood Warblers, Tanagers, Sparrows, and Blackbirds	
Vermivora celata	Orange-crowned Warbler
Vermivora ruficapilla	Nashville Warbler
* Dendroica petechia	Yellow Warbler
Dendroica coronata	Yellow-rumped Warbler
Dendroica nigrescens	Black-throated Gray Warbler
* Dendroica townsendi	Townsend's Warbler
* Dendroica occidentalis	Hermit Warbler
* Oporornis tolmiei	MacGillivray's Warbler
Geothlypis trichas	Common Yellowthroat
* Wilsonia pusilla	Wilson's Warbler
* Piranga ludoviciana	Western Tanager
Pheucticus melanocephalus	N Black-headed Grosbeak
Guiraca caerulea	Blue Grosbeak
Passerina amoena	Lazuli Bunting
* Passerella iliaca	Fox Sparrow
Melospiza melodia	N Song Sparrow
Melospiza lincolni	Lincoln's Sparrow

EMBERIZIDAE. Wood warblers, Tanagers, Sparrows, and Blackbirds
(cont.)

*	Zonotrichia albicollis		White-throated Sparrow
	Zonotrichia atricapilla		Golden-crowned Sparrow
	Zonotrichia leucophrys		White-crowned Sparrow
*	Junco hyemalis		Dark-eyed Junco
*	Spizella passerina		Chipping Sparrow
*	Passerculus sandwichensis		Savannah Sparrow
*	Chondestes grammacus		Lark Sparrow
	Pipilo erythrophthalmus	N	Rufous-sided Towhee
	Pipilo fuscus	N	Brown Towhee
*	Icterus cucullatus	N	Hooded Oriole
	Icterus galbula	N	Northern Oriole
	Agelaius phoeniceus	N	Red-winged Blackbird
*	Sturnella neglecta	N	Western Meadowlark
	Euphagus cyanocephalus	N	Brewer's Blackbird
	Molothrus ater	N	Brown-headed Cowbird

FRINGILLIDAE. Finches

	Carduelis pinus		Pine Siskin
	Carduelis tristis		American Goldfinch
	Carduelis psaltria	N	Lesser Goldfinch
*	Carduelis lawrencei		Lawrence's Goldfinch
*	Carpodacus purpureus		Purple Finch
	Carpodacus mexicanus	N	House Finch
*	Coccothraustes vespertinus		Evening Grosbeak

PASSERIDAE. Weavers

Passer domesticus	N	House Sparrow - I
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Bird Species observed in area during survey:	69
Species recorded by other observers in area prior to survey:	90
KINGS RIVER CORRIDOR; TOTAL NUMBER OF BIRD SPECIES:	158
Number of Species known to Nest in the KRC:	41
Number of Introduced (<u>Non</u> -native) Species:	4

APPENDIX C

CHECK LIST OF VERTEBRATES (OTHER THAN BIRDS) OF THE KINGS RIVER
CORRIDOR SPECIFIC PLAN AREA

I = an Introduced (non-native) species

* = a species which was seen in the Kings River Corridor by other
observers (Terry Braun, Robert Cahill, Ron Gerstenberg, and
Jim Parkinson) since 1970.

Species are listed in phylogenetic order.

NAME OF VERTEBRATE CLASS

Scientific Name of Species Common Name of Species

AMPHIBIANS

Hyla regilla Pacific Treefrog
Rana catesbeiana Bullfrog - I

REPTILES

Clemmys marmorata Western Pond Turtle
Sceloporus occidentalis Western Fence Lizard
Eumeces gilberti * Gilbert's Skink
Gerrhonotus multicarinatus * Southern Alligator Lizard
Pituophis melanoleucus Gopher Snake
Thamnophis sirtalis * Common Garter Snake

MAMMALS

Didelphis virginiana Virginia Opossum - I
Scapanus latimanus Broad-footed Mole
Sylvilagus audubonii Desert Cottontail
Lepus californicus * Black-tailed Jack Rabbit
Otospermophilus beecheyi California Ground Squirrel
Sciurus griseus Western Gray Squirrel
Thomomys bottae Botta Pocket Gopher
Castor canadensis Beaver
Microtus californicus * California Vole
Ondatra zibethicus Muskrat - I
Rattus rattus * Black Rat - I

MAMMALS (cont.)

Canis latrans	Coyote
Canis familiaris	Domestic Dog - I
Urocyon cinereoargenteus	Gray Fox
Ursus americanus	* Black Bear
Procyon lotor	Raccoon
Spilogale gracilis	* Western Spotted Skunk
Mephitis mephitis	Striped Skunks
Felis concolor	* Mountain Lion
Felis domestica	Domestic Cat - I
Odocoileus hemionus	* Mule Deer