2. Plan Area Profile

This chapter describes the setting and boundaries of the overall plan area, population and land use trends within it, and its biological resources and existing wildlife preserves. Information concerning SKR as a species and SKR habitat is presented in Chapter 3. Summary Profile of the SKR.

A. Plan Area Setting and Boundaries

One of the most challenging aspects of preparing this HCP has been to design a strategy that conserves a resource scattered in many relatively small patches across an urbanizing area covering over 834 square miles. This section provides a context for understanding how the location, size, and characteristics of the HCP area affect the conservation planning process and conservation options available to the RCHCA.

1. State and Regional Context

Riverside County is located in southern California, east of the Los Angeles metropolitan area and, at its most westerly point, approximately fifty miles from the Pacific Ocean. It is bordered on the north by San Bernardino County, on the east by the Colorado River and the Arizona state line, on the south by San Diego and Imperial Counties, and on the west by Orange County (Figure 4). Riverside County covers over 4.7 million acres (7,310 square miles), making it California's fourth largest county and roughly equal in size to the State of Connecticut.

The HCP plan area is located in western Riverside County, generally defined as territory west of the San Jacinto Mountains. It extends south from the San Bernardino County line to the border with San Diego County (Figure 5). The Cleveland National Forest flanks much of the plan area's western boundary, and the San Bernardino National Forest roughly defines most of the eastern boundary of the HCP area.

2. Plan Area Size and Jurisdictional Boundaries

The boundaries of this HCP area encompass more than 533,954 acres, which is 11% of Riverside County's land mass and larger than the entirety of Orange County. The HCP boundaries generally correspond to the historic range of SKR in western Riverside County but currently include only those lands within the jurisdictions of RCHCA members (Figure 5). Lands within the Cities of Beaumont, Canyon Lake, Norco, and San Jacinto are not included within the plan area and are not covered by the permit and agreement the RCHCA is seeking.
Approximately 70% of the plan area is within the jurisdiction of the County of Riverside (Table 4 and Figure 6). Incorporated lands account for the remainder, with acreage per city ranging from nearly 50,000 in the City of Riverside to under 2,000 in Corona.

State and Regional Context of Riverside County

Jurisdictional Boundaries of RCHCA Member Cities and County Unincorporated Land within the HCP Fee Area

B. Population Trends

January 1993 estimates from the California Department of Finance places Riverside County's total population at 1,328,320. Of this total, approximately 75% (nearly 1 million) reside in western Riverside County. A precise estimate of the population within the plan area is not available but, based on the proportion of city and county lands encompassed by plan area boundaries and the amount of residential development, it is approximated at 750,000 persons.

The following discussion of past and forecasted population trends is based on data for the RCHCA member cities, other cities in western Riverside County, and unincorporated territories. Emphasis is placed on the cities of western Riverside County due to the fact that population in the plan area is and will continue to be concentrated within incorporated areas. In addition, annexation of lands into existing cities is likely to occur over the period of the permit and agreement sought by the RCHCA. Such changes already have occurred in the HCP area subsequent to the approval of the Short-Term HCP, and this trend is likely to continue in the future.

1. RCHCA Member Cities

The eight member cities of the RCHCA had a total population of 631,766 as of January 1993 (Table 5). Current population in the cities reflects individual increases of 24% to 323% since 1980 or dates of incorporation; average annual growth rates over those periods ranged from 3% to 25%. The Cities of Perris and Lake Elsinore showed the highest overall percentage increase and average annual rate of change. The City of Riverside grew at the slowest rate annually and over the period, but added more people (178,083) than currently reside in any other city in Riverside County. By 1985, the combined population of the RCHCA member cities exceeded that in the entire unincorporated area, and as of 1993, their combined population exceeded the unincorporated area by more than 200,000 people (Figure 7).

Forecasted population growth for RCHCA member cities is included in the projections for incorporated and unincorporated lands in western Riverside County.

2. Other Western Riverside Cities

In 1993 the five non-RCHCA member cities in western Riverside County (i.e., Beaumont, Banning, Canyon Lake, Norco, and San Jacinto) had a combined population of 90,953 (Table 5), approximately 85% less than that found in the RCHCA cities (Figure 8).

The five non-member cities generally fall into two categories: those with under 11,000 residents and those with more than 20,000. Between 1980 and 1993 population in the four cities incorporated prior to that period increased by 23% to 214%; annual growth rates were in the range of 4% to 16% (see Table 5). The City of San Jacinto recorded the highest total, percentage, and annual growth rates over the period. Excluding the newly incorporated Cities of Canyon Lake and Murrieta, the other four cities combined added only 33,000 people over the period of 1980-1993.

In 1990 the total population of the five non-RCHCA member cities was less than 72,000; by 1993 it increased by 27%, due largely to the incorporation of the City of Canyon Lake. In 1993 population in the five non-member cities was approximately one-third as great as that in unincorporated areas (Figure 9). Forecasted population growth for non-RCHCA member cities is included in the projections for incorporated and unincorporated lands under 5. Western Riverside Growth Forecast.

3. Unincorporated Lands

The total population of County unincorporated lands in 1993 was 351,760. Despite the incorporation of four new cities since 1980, population in unincorporated areas increased by 36% over that thirteen-year period. Forecasted population growth for County territories is included in the projections for incorporated and unincorporated lands in 5. Western Riverside Growth Forecast.

4. Riverside County

Since 1980 Riverside County has doubled its population, with two-thirds of the growth occurring in western Riverside County cities. The average annual rate of change over the period of 1980-1990 was 8%; this is an exceptional rate of regional growth reflecting Riverside's status as the fastest growing large County in the state, and among the fastest in the nation. Since 1990 however, worsening local economic conditions have caused annual growth rates to decline significantly. Based on 1993 population estimates RCHCA member cities contain 48% of the County population, other western Riverside cities account for 7%, east county cities comprise 17%, and unincorporated lands account for 28%.

5. Western Riverside Growth Forecast

Based on subregional forecasts prepared by the Southern California Association of Governments (SCAG), total population in western Riverside County is expected to approach 2 million by 2010 (Table 6 and Figure 10). This forecast has a base year of 1990 and covers six Regional Statistical Areas (RSA's 45-50) in western Riverside County (Figure 11). The SCAG forecast also predicts that households in the same RSA's will exceed 657,000 by 2010, a 115% increase over 1990 totals. Employment is projected to increase by more than 123% over that 20-year period.

This SCAG forecast is of special interest to this HCP in its projection of significant subregiona! differences in population, housing, and employment trends within and adjacent to the HCP area. On a regional scale it also is notable for its anticipation of tremendous population increases and significantly expanded economic opportunities over the next 16 years. However, SCAG forecasts were prepared prior to the occurrence of job losses throughout the region due to military base closures and "downsizings," drastic reduction in construction activity, and other factors. Additionally, the forecasts do not acknowledge constraints on development due to the presence of threatened and endangered species in western Riverside County.

Although the existing economic conditions in the HCP area may be temporary, the magnitude of changes in employment and housing may require SCAG to revisit the assumptions on which its forecast is based. Changes in southern California's primary employment centers (Los Angeles, Orange, and San Diego Counties) will affect the influx of households drawn to western Riverside County due to its comparatively lower price of housing. However, regardless of changes in the influx of home buyers, western Riverside County's population would still be expected to grow due to natural increases.

C. Land Use Trends

Data derived from the SCAG 1995 land use inventory for western Riverside County indicate that vacant lands cover nearly 300,000 acres of the HCP area, and agricultural and urban uses together account for another 250,000 acres (Table 7). Overall, the plan area is comprised of the following uses (Figure 12):

- 52% is undisturbed vacant land, open water, or recreation areas;
- 22% is in agricultural use;
- 26% is urban development and related uses.

1. Existing Uses and Development Potential

For purposes of describing land use patterns the HCP area can be divided into northern, central, and southern subareas. Descriptions of major existing uses and the development potential of each subarea follow. In general, urban land uses predominate the northern subarea, whereas a combination of rural, agricultural, and urbanizing areas characterizes the central and southern subareas.

a. Northern Subarea

The northern subarea consists primarily of lands within the Cities of Riverside and Moreno Valley, adjacent unincorporated communities, and March Air Force Base. This subarea includes the most urbanized portions of the County and is expected to continue to develop due to its existing employment base and proximity to those in Los Angeles, Orange, and San Bernardino Counties. The northern subarea has good rail and freeway access for commercial and industrial development and available industrial land along the Interstate 215 corridor. Its existing infrastructure and housing inventory also increase its development potential, together with relatively low land, labor, and infrastructure costs. Land use constraints include seismic faults that traverse the northeastern portion of the area, airport related land use restrictions around March Air Force Base, peak-period freeway traffic congestion, and air quality regulations.

b. Central Subarea

The central subarea includes lands around and below Lake Mathews and Lake Perris, and territory within the Cities of Hemet and Perris. With the exception of the developed portions of Hemet and Perris, this area is primarily rural in character and includes the largest public land holdings in western Riverside County.

Lands immediately around Lake Mathews are owned by MWD and managed for water resource protection and conservation of wildlife habitat values. As discussed in Chapter , these same lands also are the focus of a multi-species HCP developed by MWD and the RCHCA. Within the past decade lands to the southeast and southwest of MWD's ownership exhibited a transition from agriculture and mining to residential and commercial uses.

The development potential of adjacent lands reflects their proximity to existing urban areas of the Cities of Corona, Norco, and Riverside, and freeway access to Interstate 15. Significant amounts of additional residential development are anticipated in the County's Lake Mathews Community Plan and City of Corona General Plan. However, the potential of this area to accommodate planned development is limited by a lack of available infrastructure, steep slopes and rocky terrain, and the relatively extensive distribution of protected species (e.g., California gnatcatcher) and sensitive habitat types (e.g., sage scrub).

The area immediately surrounding Lake Perris is State owned and consists of the 8,200-acre Lake Perris State Recreation Area and the 4,669-acre San Jacinto Wildlife Area. The area below the lake is primarily unincorporated land characterized by larger lot residential development, agriculture, and open space uses. The City of Perris is the only municipality in the area, and its land uses are in transition from agriculture and open space to urban development.

The area has made a substantial commitment to agricultural uses, as evidenced by large dairies along Gilman Hot Springs Road, Ramona Expressway, and Highway 79. The development potential of the central subarea area is enhanced by the upgrading of industrial zoned land along Interstate 215. Land use constraints in this subarea include limitations on the availability and extension of sewers, circulation network deficiencies, and limitations imposed by the presence of the San Jacinto River floodplain.

The area below the San Jacinto River includes a combination of urban and rural uses. The urban portion of the area is characterized by single-family homes, some multi-family units, numerous mobile home parks, and expanding commercial development along Highway 74. The land use potential of this subarea favors continued urbanization due to the availability of developable land, lower land and housing costs, and proximity to recreation areas.

c. Southern Subarea

The southern subarea area includes urbanized lands along Interstate 15, rapidly urbanizing areas in Menifee, Murrieta, and Temecula, and predominantly rural lands surrounding Lake Skinner.

Urban and urbanizing areas include the municipalities of Lake Elsinore, Murrieta, and Temecula, together with unincorporated land in the Menifee and French Valleys. Each of those areas has experienced significant growth since 1980. Lands immediately around Lake Skinner are owned by MWD and, together with lands in the Roy E. Shipley Wildlife Reserve and conserved habitat around the planned Domenigoni Reservoir, comprise the multiple species reserve established by MWD and the RCHCA in 1992. Lands outside the existing reserve include RCHCA holdings, agricultural operations, and rural residential development.

In 1989 the Riverside County Board of Supervisors adopted the Southwest Area Community Plan (SWAP) covering 210,700 acres in the southwestern portion of the HCP area. The SWAP includes a growth management concept which defines urban, rural, and resource protection areas. Urban areas include the Cities of Murrieta and Temecula, lands along the 1-15 and 1-215 freeways and State Route 79; SWAP concentrates future development in these locations. Resource protection areas are defined on the Santa Rosa Plateau and lands surrounding Vail Lake; these locations are identified as having significant biological value, and development standards are established to conserve sensitive resources and protect sensitive species. All other land not defined as urban or resource protection is classified as rural

or outlying areas; in such locations SWAP prohibits approval of development requiring an urban level of services. Rural residential development involving minimum lot sizes of 0.5 to 5 acres is anticipated in these areas.

The land use potential of this area is influenced primarily by recent improvements to Interstates 15 and 215, improvements to the community water system in the Temecula area, proximity to employment bases in San Diego County, and relatively lower housing costs and lower priced industrial land. Development constraints include SWAP resource protection policies, slopes in excess of 25%, lack of potable water, seismic and flooding hazards, limited fire protection services, and the presence of sensitive resources and protected species. Despite the existence of these constraints, significant future growth in the area is expected due to the proposal of numerous large Specific Plan developments.

2. Development Trends

Two important indicators of future development trends in the HCP area are the pattern of building permits issued and added value of new construction over the period of 1983-1993. Over that ten year period these indicators reflected the dynamic changes experienced in the western Riverside County economy. Building activity throughout the HCP area increased dramatically between 1983 and 1989. However, in 1990 this trend reversed itself as activity declined precipitously; that economic slowdown generally continues today.

Between 1983 and 1993, the combined number of building permits issued by RCHCA member cities ranged from a low of 2,763 in 1983 to a high of 11,633 in 1988 (Table 8 and Figure 13). Over the same period, the number of building permits for all unincorporated areas ranged from a low of 6,179 in 1983 to a high of 19,021 in 1988. Following the peak of the construction boom in 1988, the number of building permits issued experienced a sharp decline from 1989-1993.

The total value of new construction (in 1990 dollars) exhibited a similar pattern of a relatively low level of activity during the recession of the early 1980's, a dramatic increase in activity beginning in 1983 and peaking in 1988-89, and a sharp drop in activity beginning in 1990 (Table 9 and Figure 14). The total value of new construction in the RCHCA cities ranged from a low of $303.2 million in 1983 to a high of $1.7 billion in 1989.

Since 1990 the number of permits issued and the value of new construction in western Riverside County has continued to decline. For example, the Riverside County Building and Safety Department reports that in 1991, the number of building permits issued for unincorporated lands decreased by 42% and the value of new construction dropped by 68% from the previous year. The Department further reports that in 1992, the number of issued permits dropped another 30%; the value of new construction also declined but not as dramatically, dropping by 4% from the previous year. Despite the current downturn, it is safe to assume that at some time in the near future the cycle will repeat itself and building activity will resume.

D. Biological Resources

Based on vegetation mapping prepared by Pacific Southwest Biological Services (PSBS), in 1994 western Riverside County contains approximately 903,192 acres of lands in their natural condition (Table 10 and Figure 15). Of this total, approximately 268,163 acres (30%) occur within the plan area, including most of the habitats most likely to support listed and sensitive species of concern.

1. Vegetation Types

The vegetation mapping prepared by PSBS identifies covers approximately 1.3 million acres in western Riverside County. Thirty-three vegetation cover types were mapped and categorized using 1993 aerial photography and spot satellite image processing. The data were entered into a geographic information system (GIS) data base. Additionally, detailed vegetation mapping of MWD lands at Lake Mathews and Lake Skinner/Shipley Reserve has been completed and will be integrated into the SKR HCP data base upon its receipt from MWD. It should be noted that the PSBS calculations and configurations do not reflect the temporary modification of vegetation types which occurred as a result of the October 1993 California Fire which burned significant portions of the Domenigoni Valley and the Lake Skinner Study Area. Based on GIS calculations using the PSBS data, three major vegetation categories cover over 781,405 acres or 87% of the 903,192 acres of natural lands in western Riverside County: chaparral; sage scrub, and; grassland (see Table 10). Within the HCP area the same three categories account for more than 252,202 acres or 94% of the vegetated lands. Sage scrub covers the largest area, followed by grassland and chaparral (Figure 16).

2. Species of Concern

SKR is known to occur in European annual grassland, mixed European annual grassland/coastal sage scrub habitats, and sparse coastal sage scrub. The species also is found in areas where such habitats have been disturbed but not completely removed, and in areas where suitable habitat conditions have been created by agricultural activities. Currently the SKR is known to occupy about 34,450 acres in Riverside County, including approximately 30,000 acres in the HCP area (see Chapters. Summary Profile of the SKR). In addition to the SKR, 122 other species of concern are associated with the habitats in the plan area, primarily coastal sage scrub, chamise chaparral, European grassland, and mixed European grassland/coastal sage scrub (Attachment E-1). These 51 plants, 3 invertebrates, 20 amphibians and reptiles, 34 birds, and 14 mammals include:

(a.) Species already listed as threatened or endangered under the State and federal ESA's;

(b.) Candidates for federal or State listing, including species that USFWS either is currently proposing to list or evaluating for potential listing;

E. Existing Reserves and Other Protected Lands

As of 1996 eight wildlife reserves had been established in the HCP area which together encompass over 48,000 acres. All of these reserves are part of the SKR Study Areas established under the Short-Term SKR HCP, and with one exception, are part of the SKR core reserve system recommended in this HCP. In addition to the existing wildlife reserves, approximately 16,000 acres in the plan area are in public ownership and have varying levels of habitat protection in place. These lands include County parklands. State parks, BLM's holdings, and properties acquired by the RCHCA and California Wildlife Conservation Board (WCB) over the past three years. As with the existing reserves, these lands were encompassed by the original SKR Study Areas; most but not all of the lands also are included in the core reserves recommended in this HCP.

1. Existing Reserves

In decreasing order of size, the seven existing wildlife reserves in the HCP area include:

The Southwestern Riverside County Multiple Species Reserve

This reserve, established in 1992 by MWD and the RCHCA, encompasses 20,000 acres of public lands and approximately 9,000 acres of sensitive habitats on properties owned by MWD, RCHCA, and the County of Riverside in the Lake Skinner and Domenigoni Valley area. SKR habitat in the reserve is specifically managed for conservation through endowments provided by the RCHCA and MWD. Management of SKR is conducted in accordance with management plans developed by the existing Multi-Species Management Committee.

The Lake Mathews Multiple Species Reserve

This area was established in December 1995 with the approval of the Lake Mathews Multiple Species HCP jointly prepared by MWD and RCHCA. The Reserve covers over 11,000 acres, and its boundaries are the same as those established for the Lake Mathews-Estelle Mountain SKR core reserve. Management for SKR and approximately 40 other wildlife species will be directed by a Management Committee comprised of MWD, RCHCA, BLM, USFWS, and CDFG. SKR management activities will be performed by BLM on RCHCA properties, and by the Center for Natural Lands Management on reserve lands in MWD ownership.

The Santa Rosa Plateau

This reserve began as a smaller area owned and managed by The Nature Conservancy. In 1991 the reserve was expanded to approximately 7,000 acres through joint acquisition efforts by Riverside County, MWD, and the State of California. The Plateau is managed for multi-species values including vernal pools, Engelmann oak and other woodlands, and native grasslands. An existing interagency committee oversees habitat management in cooperation with The Nature Conservancy.

The San Jacinto Wildlife Area

This wildlife reserve containing approximately 5,000 acres is managed by CDFG. The area is managed for multiple values including SKR, wetland habitat, and some game species. The San Jacinto Wildlife Area is located adjacent to the 8,000-acre Lake Perris State Recreation Area.

The State Ecological Reserve at Lake Mathews

This wildlife reserve covers approximately 2,565 acres on MWD properties around Lake Mathews. As previously noted, MWD and the RCHCA have proposed to expand this Reserve through implementation of the Lake Mathews MSHCP.

Sycamore Canyon Park

Sycamore Canyon Park covers approximately 1,500 acres owned and managed by the City of Riverside Park and Recreation Department. The City has executed a formal agreement through which it commits to operate and maintain the Park in a fashion which ".shall enhance the likelihood of the continued existence of the SKR in the wild."

March Air Force SKR Management Area

Pursuant to a 1991 Section 7 Biological Opinion issued by the USFWS, a 1,000 acre SKR Management Area has been established on March Air Force Base. This area is currently being managed by The Nature Conservancy, and a detailed SKR management plan is currently under preparation.

Motte Rimrock Reserve

This reserve of approximately 500 acres is owned and managed by the University of California at Riverside. Management practices seek to conserve multiple habitat values found on site, but SKR biological research has played a particularly important role in the expanding the RCHCA's understanding of SKR characteristics. An updated SKR management plan for the Motte Reserve is now being prepared by the University.

2. Other Protected Lands

The other public lands with some level of habitat protection in place include:

Lake Perris State Recreation Area

This 8,200 acre Recreation Area is managed and operated by the California Department of Parks and Recreation. Although the area is managed to facilitate water-based recreation, it also encompasses significant blocks of SKR occupied habitat. Since SKR is a species listed as threatened under the California ESA, the Department of Parks and Recreation conducts management activities designed to ensure its conservation. Thus, SKR habitat conservation is among the elements of the Recreation Area management plan.

RCHCA Properties

As previously noted, as of March 1, 1996 the RCHCA owned fee title or conservation easements over 8,804 acres of land in the HCP area. All of this acreage is specifically dedicated to the conservation of SKR and other resident species and habitats of concern. Management of RCHCA properties will be guided by provisions of this HCP and the SKR management plans developed for each of the core reserves.

BLM Lands

Section 2(c) of the ESA directs all federal agencies to seek to conserve endangered and threatened species, and to utilize their authorities in furtherance of the purposes of the ESA. Accordingly, BLM policies contained in their adopted South Coast Resource Management Plan support the exchange of BLM lands in western Riverside County to expand a SKR Area of Critical Environmental Concern (ACEC) in the Potrero Valley. Pursuant to the terms of the Implementation Agreement underlying this HCP, BLM will manage its holdings in core reserves, as well as all lands it receives from the RCHCA under the Assembled Land Exchange Agreement, ".to conserve, protect, restore, and enhance the SKR and its habitat."

County Parks

Approximately 900 acres of County park land in western Riverside County are owned and managed by the Riverside County Regional Park and Open Space District in accordance with the natural resource objectives of the County's Regional Park and Open Space Plan. These lands include significant amounts of SKR occupied habitat in Harford Springs and Lake Skinner County Parks. County properties northeast of Lake Skinner have been covered by SKR conservation easements as part of the establishment of the Roy E. Shipley Reserve.

Wildlife Conservation Board

At the request of the RCHCA the State Wildlife Conservation Board (WCB) has acquired approximately 200 acres in the vicinity of Estelle Mountain. The WCB purchased this land for the purpose of establishing the Estelle Mountain Ecological Area. It is anticipated that WCB land will be managed by CDFG under procedures established by the Lake Mathews MSHCP.

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