

APPENDIX B
BIOLOGICAL ASSESSMENT

**CITY OF CHINO SUBAREA 2
RESOURCES MANAGEMENT PLAN**

“THE PRESERVE”

Prepared for:

City of Chino
Community Development Department
13220 Central Avenue
Chino, California 91710
(909) 591-9812

Contact:

Robert Prasse, AICP

Prepared by:

Michael Brandman Associates
621 E. Carnegie Drive, Suite 100
San Bernardino, California 92408
(909) 884-2255

Contact:

Thomas J. McGill, Ph.D.
Regional Manager



January 2003

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1

1.1 Purpose of the Chino Preserve Resources Management Plan 1-1

2.0 PROJECT DESCRIPTION 2-1

2.1 Background..... 2-1

2.2 Project Location..... 2-2

2.3 Physical Characteristics 2-6

2.4 Subarea 2 Specific Plan 2-6

2.4.1 Development Concept 2-6

2.4.2 Multi-Purpose Open Space Feature 2-6

3.0 SUMMARY OF BIOLOGICAL RESOURCES 3-1

3.1 Land Cover Types and Natural Plant Communities 3-1

3.1.1 Natural Plant Communities..... 3-1

3.1.2 Relationship between Land Cover Types and Natural Plant Communities... 3-2

3.2 Sensitive Biological Resources..... 3-7

3.3 Jurisdictional Areas 3-12

4.0 MITIGATION IMPLEMENTATION Program 4-1

4.1 Summary of Anticipated Impacts 4-1

4.1.1 Impacts to Biological Resources Above the 566 foot Elevation 4-1

4.1.2 Impacts to Biological Resources Below the 566-foot Elevation 4-3

4.2 Proposed Mitigation Measures 4-4

4.3 Mitigation Measures, Implementing Actions 4-11

4.3.1 Mitigation Measure B-1. Zoning and Land Use Regulations 4-11

4.3.2 Mitigation Measure B-2. Required Biological Surveys..... 4-14

4.3.3 Mitigation Measure B-3. Resource Management Plan 4-16

4.4 Program Management..... 4-38

4.5 Mitigation Fee..... 4-40

4.5.1 300-acre Conservation Area 4-43

4.5.2 Habitat Restoration/Enhancement 4-44

5.0 REFERENCES 5-1

6.0 LIST OF PREPARERS AND PARTICIPATING BIOLOGISTS 6-1

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3-1 Land Cover Types Found Onsite	3-2
3-2 Plant Communities and Land Cover Types Found Onsite.....	3-5
3-3 Sensitive Plant Species Potentially Occurring Onsite	3-8
3-4 Sensitive Wildlife Species Potentially Occurring Onsite	3-9
4-1 Plant Communities and Land Cover Types Affected by Proposed Development.....	4-2
4-2 Zoning and Land Use Regulations Checklist	4-13
4-3 Required Biological Surveys Checklist	4-15
4-4 Conservation Area Checklist	4-19
4-5 Enhancement/Restoration Checklist.....	4-20
4-6 Burrowing Owl Mitigation Checklist	4-22
4-7 Surface Waters Checklist.....	4-33
4-8 Windrow Checklist	4-36
4-9 Biological Resources Mitigation Milestones.....	4-41
4-10 Estimated Environmental Mitigation Fees	4-43

LIST OF EXHIBITS

Exhibit 1 Regional Location Map.....	2-3
Exhibit 2 Local Vicinity Map	2-4
Exhibit 3 Project Location	2-5
Exhibit 4 Land Use Map	2-7
Exhibit 5 Land Cover Types	3-3
Exhibit 6 Natural Plant Communities	3-4
Exhibit 7 Jurisdictional Areas	3-13
Exhibit 8 Candidate Conservation Areas	4-17
Exhibit 9 Artificial Burrow Design.....	4-23
Exhibit 10 Generalized Land Ownership Patterns.....	4-27
Exhibit 11 Urban Buffer/Transition Area	4-29
Exhibit 12 Burrowing Owl Habitat Concept Plan	4-34

LIST OF APPENDICES

Appendix A	Natural Plant Communities Occurring Onsite
Appendix B	Plant and Wildlife Species Observed Onsite
Appendix C	PCR's Regional Raptor Habitat Assessment
Appendix D	LSA's Assessment of Impact and Mitigation Options: The Preserve, Chino
Appendix E	Open Space Uses
Appendix F	CDFG Burrowing Owl Relocation Protocol
Appendix G	Suggested Steps for Initiating an Active Relocation Program
Appendix H	Mitigation Fee Establishment and Included Costs

1.0 INTRODUCTION

1.1 PURPOSE OF THE CHINO PRESERVE RESOURCES MANAGEMENT PLAN

The purposes of the Resources Management Plan (RMP) are to:

- Provide a detailed methodology for implementing the biological resources mitigation measures contained in the Environmental Impact Report (EIR) “Chino Subarea 2, The Preserve Master Plan” (SCH#2000121036);
- Provide a framework to ensure compliance with the EIR’s biological resources mitigation measures; and
- Ensure that adequate reporting and monitoring of the mitigation measures in accordance with Section 21081.6 of the Public Resources Code (PRC).

Impacts were identified and mitigation measures were prepared for several biological resources within the Chino Subarea 2 Specific Plan area (Project Area)¹ including burrowing owl habitat, raptor foraging habitat, migratory bird and waterfowl habitat, federally and state listed species, Waters of the U.S., Waters of California, and other water resources available to wildlife. Through implementation of these mitigation strategies, including resource monitoring, the RMP ensures program success. Methodologies and requirements for implementing the mitigation measures have been included in the RMP for the biological resources identified in the EIR. This RMP is included as a part of the Final EIR.

Section 2 of this RMP provides a summary of the project description of the Subarea 2 Specific Plan as defined in the Draft EIR. Section 3 provides a summary of the biological resources found with the Specific Plan boundaries that were detailed in Appendix B, Biological Assessment, of the Draft EIR and further analyzed in the Recirculated Draft EIR (RDEIR). Please refer to Draft EIR and RDEIR for a complete set of these data. In addition, in order to provide further clarification, supplemental information is included in Section 3 that discusses the natural plant communities found within the

¹ The term “Project Area” means the Chino Subarea 2 Specific Plan area, which is also known as “The Preserve Specific Plan.”

various land cover types previously identified within the Project Area. Section 4 is the mitigation implementation program for those mitigation measures listed in Section 5.4.6 of the RDEIR.

2.0 PROJECT DESCRIPTION

2.1 BACKGROUND

The proposed project includes the annexation of the largest remaining portion of the Chino Valley Dairy Preserve within the City of Chino's Sphere of Influence to allow for development of approximately half of the 5,435.6 acres comprising the Project Area. The City of Chino is preparing a master plan to guide the future development and annexation of the Project Area. The master plan consists of a comprehensive specific plan as authorized by Government Code Sections 65450 through 65457, and an 'umbrella' General Plan Amendment, which will link the specific plan to the City's existing General Plan and satisfy the requirement for consistency with the General Plan. The General Plan Amendment is an Area Plan, as authorized by Government Code Sections 65301(b) and 65303.

Subarea 2 is currently located within the San Bernardino County Dairy Preserve. In 1994, the Local Agency Formation Commission (LAFCO) placed the portion of the Dairy Preserve north of Merrill Avenue within the City of Ontario's Sphere of Influence and the remaining portion south of Merrill Avenue to the San Bernardino County line in the City of Chino's Sphere of Influence. The City of Chino addressed that portion of the Dairy Preserve within their Sphere of Influence in two parts, a western and eastern part. The western part, Subarea 1, consists of 1,810 acres and was planned and annexed into the City in 1998. The eastern part, Subarea 2, consists of the remaining 5,435.6 acres of the San Bernardino County Dairy Preserve within the City of Chino's Sphere of Influence. Subarea 2 is currently under the jurisdiction of the County of San Bernardino. The County will retain authority over the land use decisions until annexation occurs. The existing San Bernardino County General Plan designates Subarea 2 as Agriculture – Agriculture Preserve (AG-AP), which allows agricultural and dairy uses, and Resources Conservation (RC), which is essentially an open space zone that supports the conservation of biological resources.

The area in and around Subarea 2 contains a number of existing uses that will either remain or transition to urban uses. In the central and western portions of the Project Area are the Co-Composting Facility operated by the IEUA, the California Institution for Women (CIW-Chino), and Prado Regional Park (including Prado Lake). The Co-Composting Facility receives animal manure and wastewater sludge for recycling from dairies within the Chino Basin Dairy Area. Adjacent to the northwest corner of the Project Area is the California Institution for Men (CIM-Chino). Further west, in Chino Subarea 1 along Kimball Avenue is Inland Empire Utility Agency's (IEUA) Regional Wastewater Treatment Plant No. 5 (RP-5).

Approximately 2,835 acres of the Project Area are within the potential high-water inundation area that will be created by the raising of the Prado Dam 28 feet and the spillway 8 feet, pursuant to the Santa Ana River Maintstem Project (SARM). Raising Prado Dam will increase the depth of the current inundation area by 10 feet, from 556 to 566 feet above sea level. The increased height of the dam was designed to accommodate a 200-year or greater flood event. This will result in an increase in size of the entire existing Prado Flood Control Basin by 1,660 additional acres. The majority of this additional land will be acquired in fee by Orange County Flood Control District and the remainder will be placed in flowage easements. Most of the land within the 556-foot inundation area is either owned by the U.S. Army Corps of Engineers (USACE) or subject to flowage easements.

The City of Chino issued a Draft Program EIR (Draft EIR) in September 2001, which analyzed and disclosed the potential environmental effects associated with the implementation of the Subarea 2 Specific Plan. A partial recirculation of the Draft EIR (RDEIR) was released in August 2002 and included revisions to Section 5.4, Biological Resources. The RMP is being released with the Final EIR.

2.2 PROJECT LOCATION

The Project Area is located in the extreme southwestern corner of San Bernardino County, approximately 37 miles east of Los Angeles and 20 miles southwest of San Bernardino (Exhibits 1 and 2). The Project Area is adjacent to the cities of Chino and Ontario, and the unincorporated community of Eastvale in Riverside County, and is in the vicinity of Chino Hills, Norco, Corona, and the Prado Flood Control Basin. The Santa Ana River is located to the south of the Project Area and Chino Hills State Park to the west. The Project Area is part of the Chino Valley, a large and generally flat sub-portion of the larger San Bernardino Valley. The lower Chino Valley transitions to the Prado Basin, a major feature of the Santa Ana River (SAR) watershed. The SAR watershed is the largest coastal river system in Southern California, flowing from the slopes of the San Bernardino Mountains to the Pacific Ocean at Huntington Beach approximately 30 miles to the southwest.

Regional access to the Project Area is provided via State Route 71 to the west, State Route 91 to the south, Interstate 15 to the east, and State Route 60 to the north. Euclid Avenue (SR 83) defines the western boundary of the Project Area. Pine Avenue runs east west through the Project Area, providing a link via Schleisman Avenue to Interstate 15. Portions of Kimball and Merrill Avenues form the northern boundary (Exhibit 3).

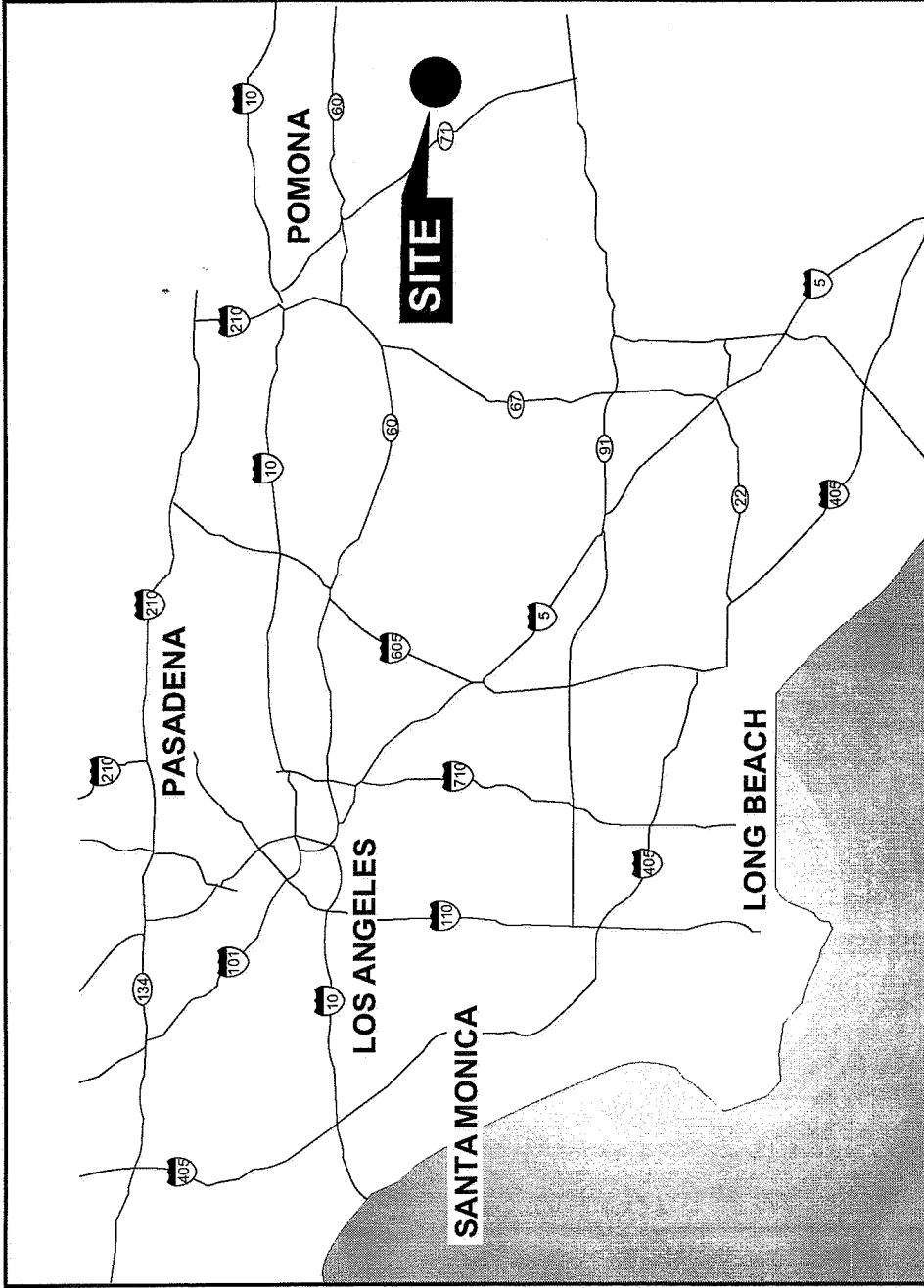
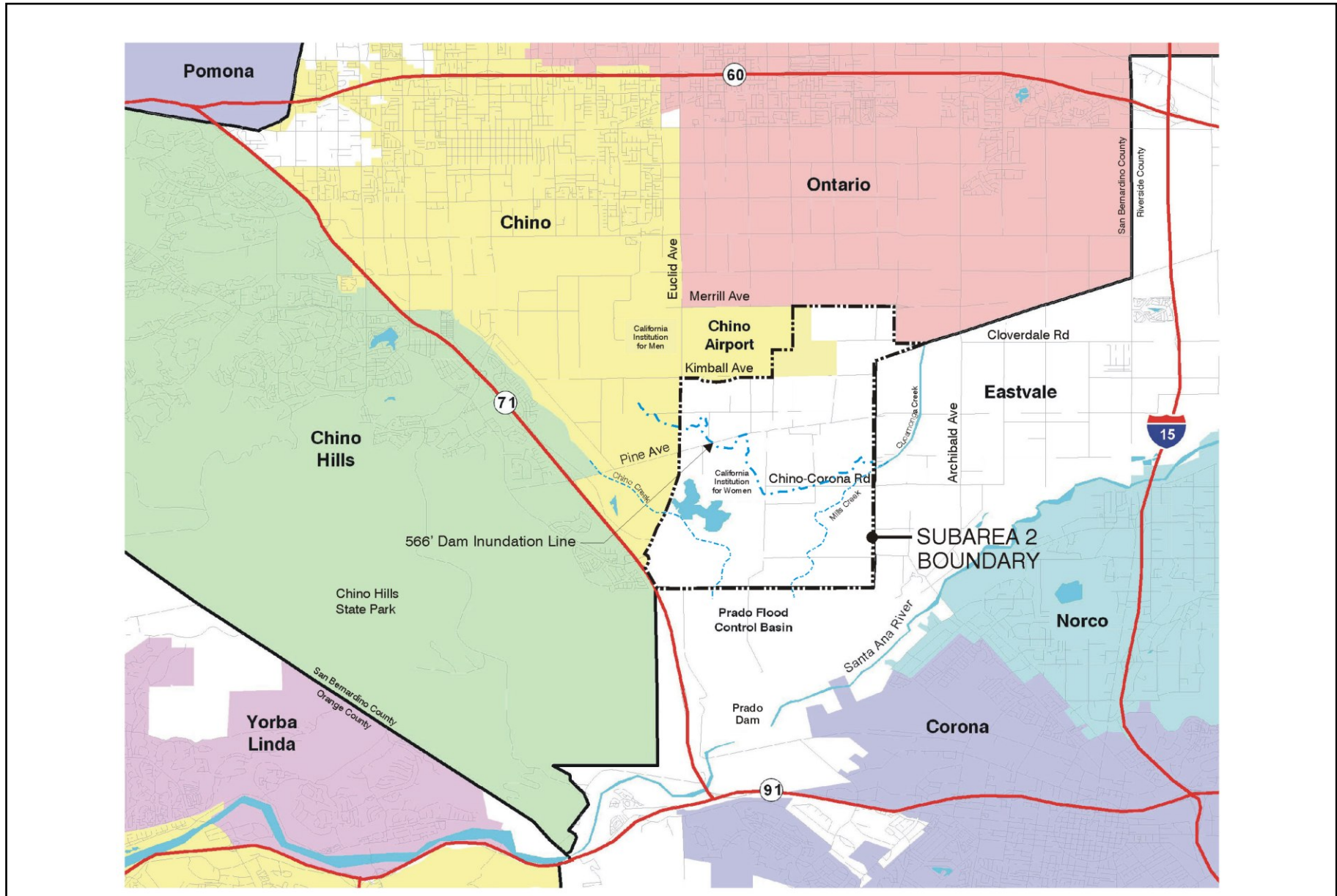


Exhibit 1
Regional Location Map

Michael Brandman Associates

05760012 • 8/2000

THE PRESERVE • CHINO SUBAREA 2



SOURCE: The Planning Center



MAP NOT TO SCALE

Michael Brandman Associates

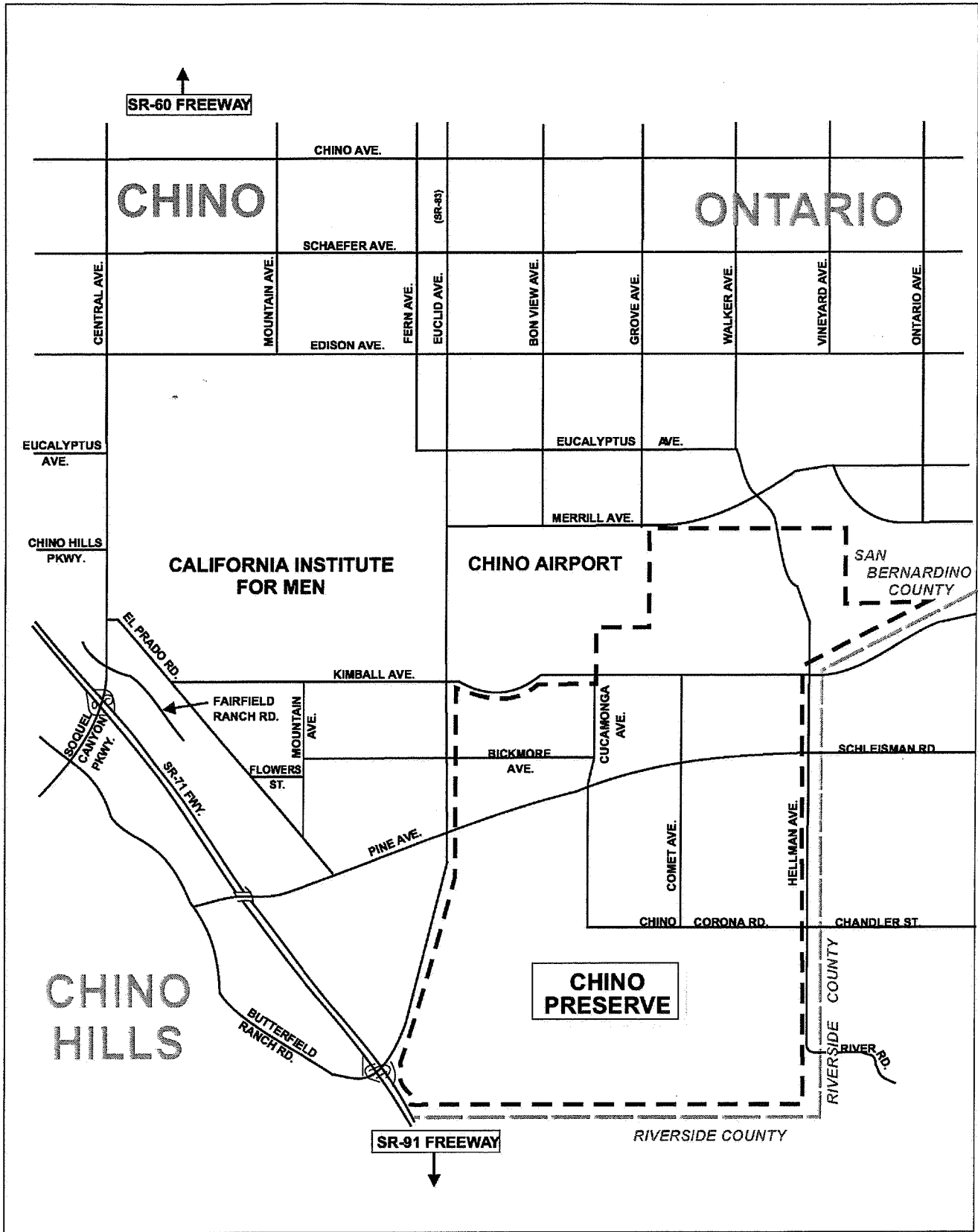
05760012 · 6/2001

Exhibit 2

Local Vicinity Map

THE PRESERVE • CHINO SUBAREA 2





Michael Brandman Associates

05760012 · 11/2000

Exhibit 3

Project Location

THE PRESERVE • CHINO SUBAREA 2

2.3 PHYSICAL CHARACTERISTICS

Elevations in the Project Area range from about 500 to 600 feet above sea level. The Project Area is characterized by a lack of drainage facilities. During major storm events, runoff is carried via sheet flow and gulleys through the Project Area in a southwesterly direction, often inundating the dairies. This runoff pattern contributes to water quality problems in downstream receiving waters. Two major creeks traverse the lower portions of the Project Area--Chino Creek, which drains southerly along the base of the Chino Hills, and Cucamonga Creek flood channel, which becomes Mill Creek before draining into the eastern portion of the Prado Basin and eventually into the Santa Ana River. Two other smaller drainages extend south from the Chino Airport through the Project Area, before joining Prado Lake within Prado Regional Park. These drainage courses generally coincide with the flood hazard areas below the 566-foot dam inundation area.

2.4 SUBAREA 2 SPECIFIC PLAN

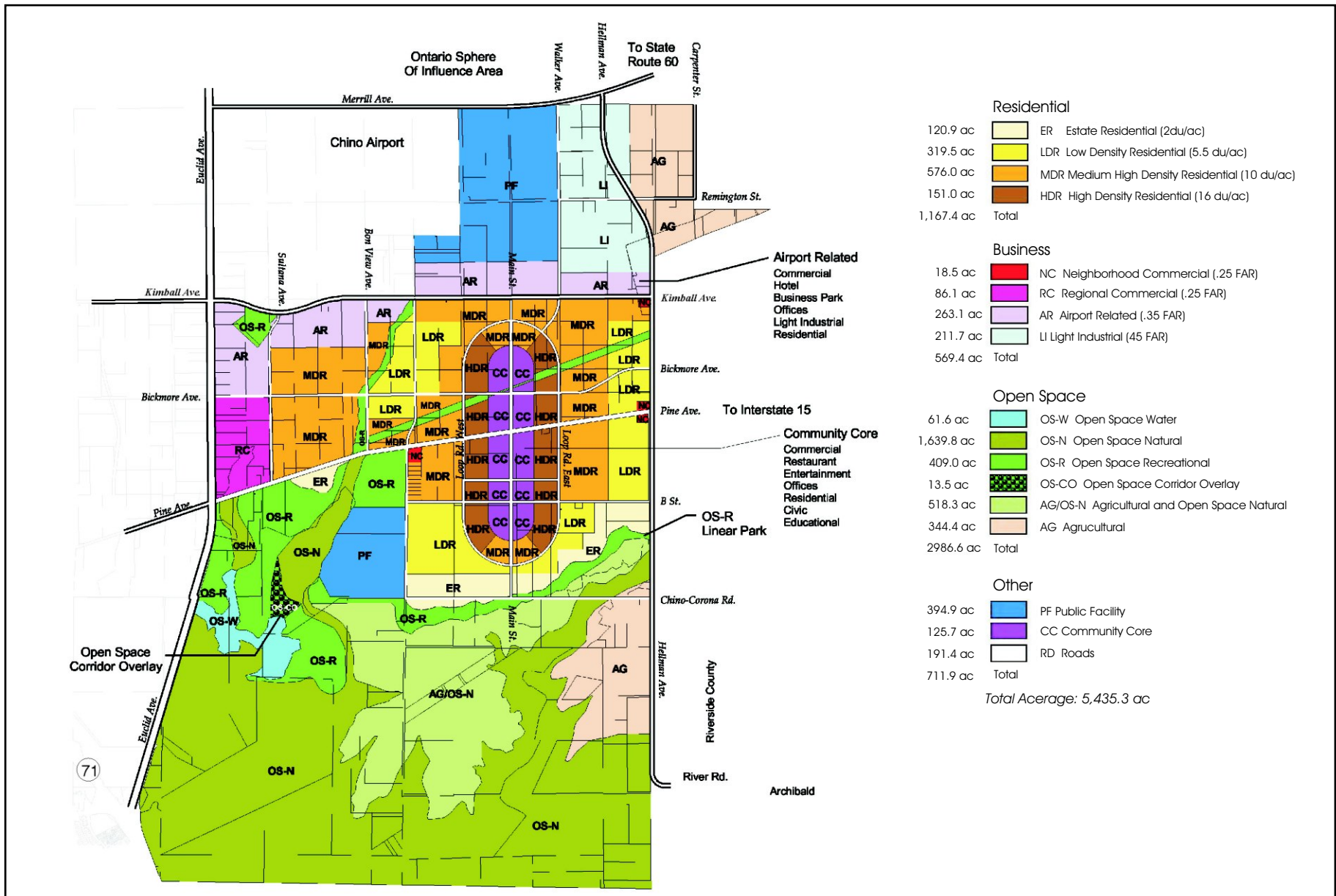
The proposed Subarea 2 Specific Plan includes a variety of land uses intended to implement the City of Chino's vision for the Project Area (Exhibit 4).

2.4.1 Development Concept

The project development includes up to 9,779 dwelling units on 1,167 acres; 696 acres of business uses (Community Core, Light Industrial, Airport Related, Regional Commercial, Neighborhood Commercial); 586 acres of Public Facilities and Rights-of-Way; and approximately 2,987 acres in Open Space (Agricultural, Agricultural/Open Space-Natural, Open Space-Recreation, Open Space-Natural, and Open Space-Water). All proposed developed uses are concentrated in the northern 2,600 acres of the Project Area, above the Prado Basin high water inundation line (elevation 566 feet), which is a significant influence on the planning area. The remaining 2,835 acres of the Project Area south of the 566-foot inundation line are planned for low-intensity Recreation, Agriculture, and Natural Open Space.

2.4.2 Multi-Purpose Open Space Feature

The area within the 566-foot dam inundation area has excellent habitat value for raptors, migratory birds and waterfowl and riparian species. The area is planned to provide a combination of natural open space conservation, passive recreation, and agricultural uses.



SOURCE: The Planning Center



Michael Brandman Associates

05760012 · 6/2001

Exhibit 4 Land Use Plan

THE PRESERVE • CHINO SUBAREA 2



3.0 SUMMARY OF BIOLOGICAL RESOURCES

Baseline biological surveys were conducted by Michael Brandman Associates (MBA) in 2000 as part of preparing the September 2001 Draft EIR and in 2002 for the August 2002 RDEIR. Sensitive habitats within the Project Area include extensive riparian woodlands along the major stream channels below the 566-foot inundation line, freshwater marshes, and open spaces associated with agricultural uses. Fallow agricultural fields, pastures, eucalyptus windrows, and detention basins within agricultural open spaces have some habitat value for raptor foraging and nesting. A variety of sensitive plant and animal species are known to occur in the Prado Basin below the 566-foot inundation line. Federal or state-listed wildlife species that occur or are expected to be present in the Project Area below the 566-foot inundation line include the least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. The burrowing owl, a State species of special concern, has been observed in the Project Area.

3.1 LAND COVER TYPES AND NATURAL PLANT COMMUNITIES

The RDEIR addressed five different land cover types within the Project Area: surface waters, agricultural lands, windrows, riparian woodlands, and developed areas. Some of these land cover types were broken down further into sub-categories as defined in the RDEIR and as presented in Table 3-1. This table provides the acreages and percentage for each land cover type within the Project Area and indicates if these land cover types occur above and/or below the 566-foot line. Exhibit 5 illustrates the location of the land cover types within the Project Area. As part of developing the RMP in order to detail vegetation characteristics, the land cover types within the Project Area were further categorized for the type of natural plant community or vegetation association they supported as projected in Table 3-2. Although provided in greater detail, the Natural Plant Communities identified are consistent with the Land Cover Types identified in the EIR.

3.1.1 Natural Plant Communities

There are nine different plant communities or vegetation associations as defined by the Holland natural plant community classification codes or by MBA. Holland uses a numbered inventory system of California's vegetation communities, known as element codes: Non-native Grassland (42200), Southern Cottonwood Willow Riparian Forest (61330), Southern Willow Scrub (63320), Mule Fat Scrub (63310), and Coastal and Valley Freshwater Marsh (52410). These numbers are referenced at the beginning of each community description. Four additional communities were defined by MBA that are not included in Holland's description (disturbed, open water, ornamental woodland, and Arundo scrub) because they do not represent natural plant communities under Holland's classification system

due to the disturbed nature of these areas. These four plant communities have become established in the area due to human influence. However, wildlife has adapted to their presence and can be found inhabiting these plant communities. Exhibit 6 shows the location of each plant community within the Project Area and Appendix A provides a more detailed description. Note that most (> 90%) of the habitat above the 566-foot inundation line is categorized as disturbed. This is due to the predominance of dairies, pastures, and other active agricultural land uses in the area. The relationship between these plant communities and associated land cover types is discussed in Section 3.1.2 below.

**TABLE 3-1
LAND COVER TYPES FOUND ONSITE**

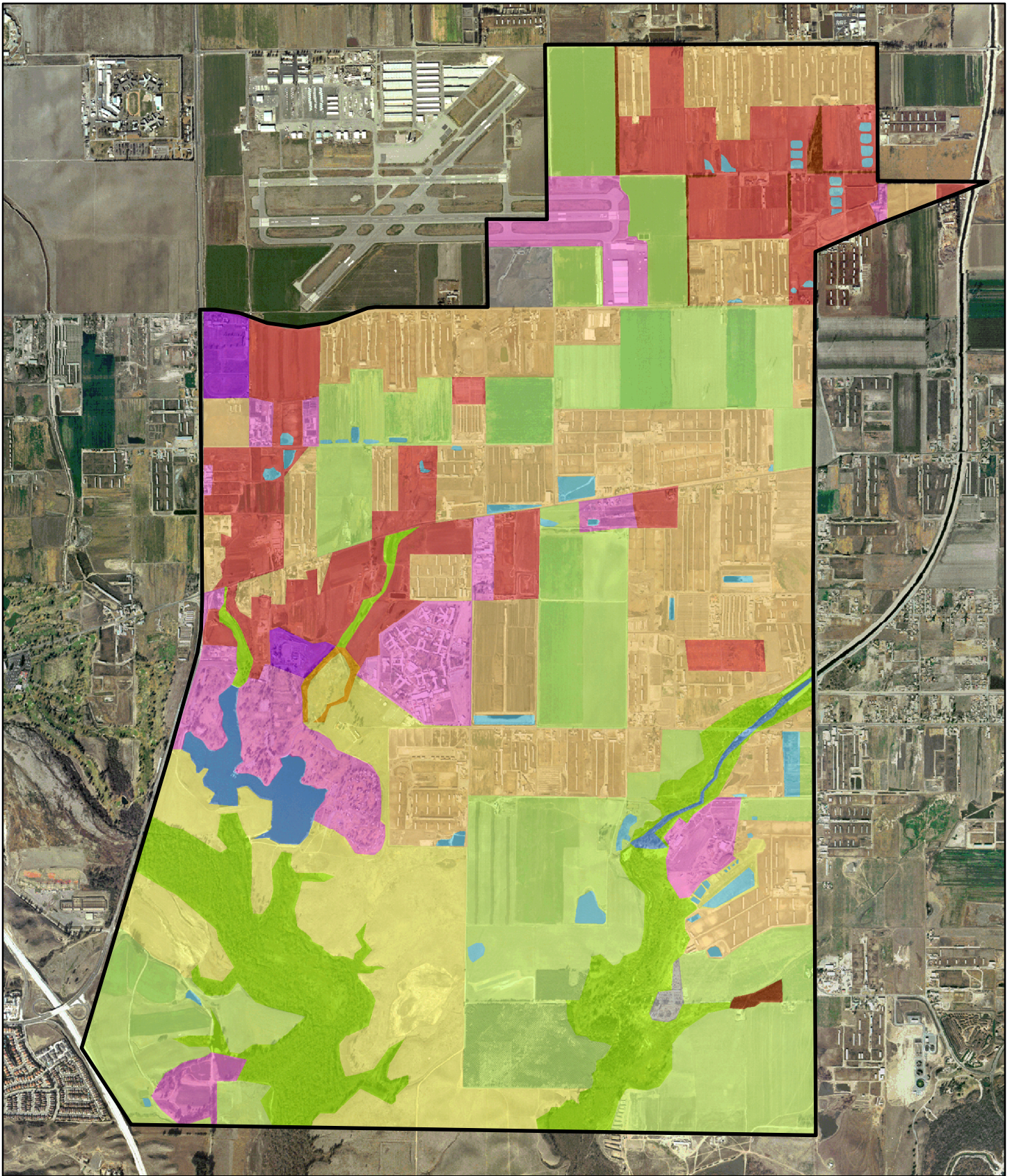
Habitat	Below 566 Line (acres)	Above 566 Line (acres)	Totals (acres)
Surface Water Areas			
▪ Detention Basin	36	38	74
▪ Marsh	9	--	9
▪ Open Water	77	--	77
Agricultural Land			
▪ Dairy	352	1,084	1,436
▪ Pasture	144	497	641
▪ Active Fields	837	703	1,540
▪ Fallow Fields	545	--	545
Windrows	7	17	24
Riparian	530	1	531
Developed Areas			
▪ Developed	272	191	463
▪ Disturbed	9	34	43
▪ Equestrian	17	35	52
Totals	2,835	2,600	5,435

3.1.2 Relationship between Land Cover Types and Natural Plant Communities

Table 3-2 provides a summary of these natural plant communities occurring within Subarea 2 and the acreages found within each of the listed land cover types. The following paragraphs briefly summarize each land cover type, as defined in the RDEIR, and discuss the natural plant communities found within each land cover type.

Surface Water Areas

There are three types of surface water within the Project Area: detention basin/drainages, marsh, and open water, totaling approximately 160 acres. Most of these surface water areas are comprised of disturbed vegetation (48 acres), non-native grasses (15 acres), or open water (84 acres). Open water



Source: City of Chino, MBA

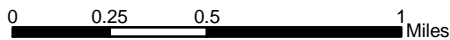
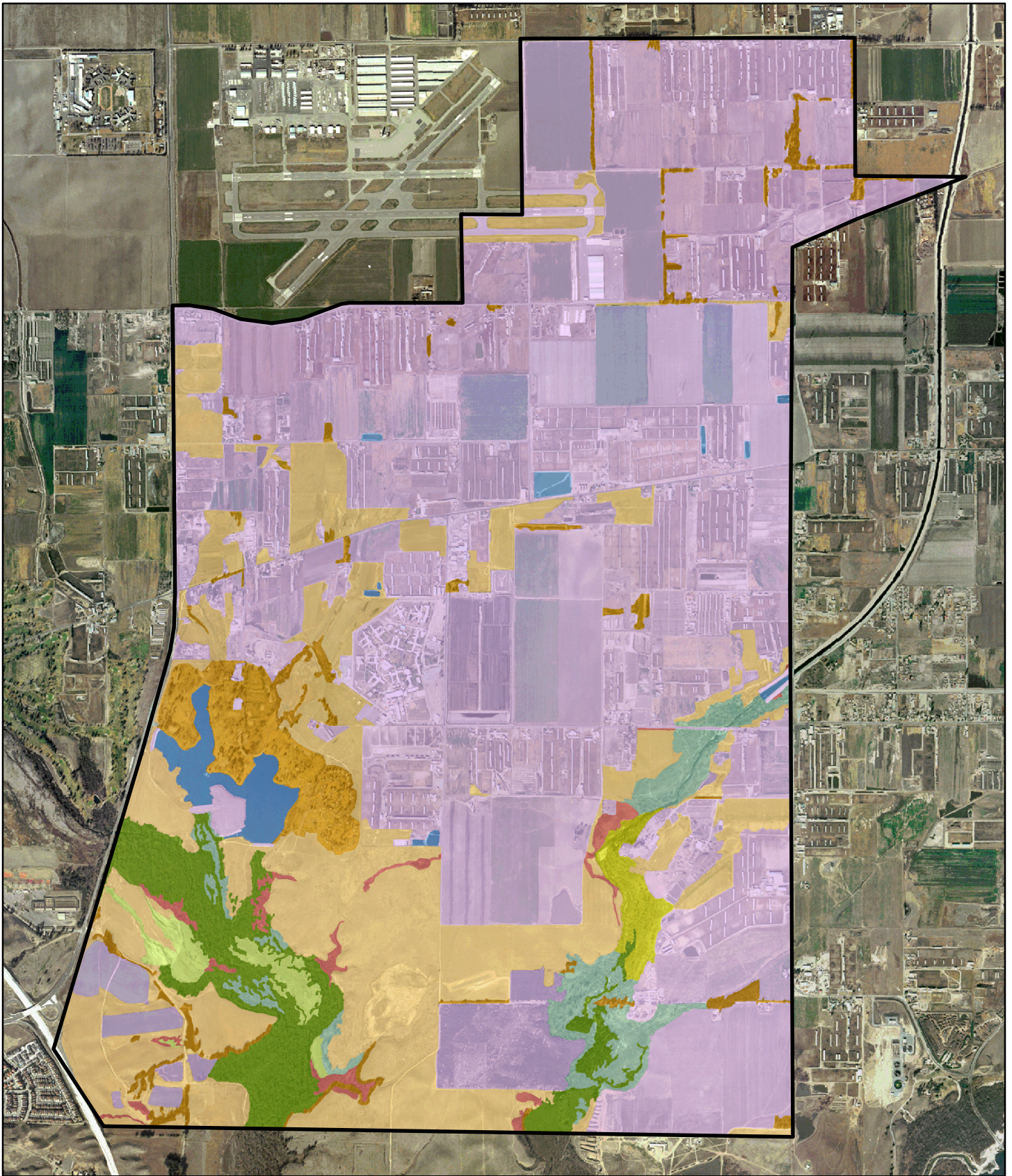


Exhibit 5

Land Cover Types





Source: City of Chino, MBA

- | | |
|-----------------------------------|-----------------------|
| Subarea 2 Boundary | Mule Fat Scrub |
| Arundo Scrub | Non-native Grassland |
| Cottonwood Willow Riparian Forest | Ornamental Woodland |
| Disturbed | Southern Willow Scrub |
| Fresh Water Marsh | Open Water |

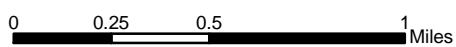


Exhibit 6

Natural Plant Communities



**TABLE 3-2
PLANT COMMUNITIES AND LAND COVER TYPES FOUND ONSITE**

Plant Community	Land Cover Type													TOTAL
	Surface Water Areas			Agricultural Land				Windrows	Riparian	Developed Areas			TOTAL	
	Detention Basins	Marsh	Open Water	Dairies	Pasture	Active Fields	Fallow Fields			Developed	Disturbed	Equestrian		
Disturbed	48			1,352	495	1,195	67		21	250	43	31	3,502	
Non-Native Grassland	11	4		69	134	321	468 ¹		40	64		21	1,127	
Southern Cottonwood-willow Riparian								234					234	
Mulefat Scrub	3					9	6		27				45	
Southern Willow Scrub								144					144	
Coastal and Valley Freshwater Marsh		5							25				30	
Open Water	12		72										84	
Ornamental Woodland				15	11	15	10			149			224	
Arundo Scrub			5					40					45	
Area Totals (Acres)	74	9	77	1,436	640	1,540	545	24	531	463	43	52	5,435	

Note: ¹Although the species composition is currently too sparse to be characterized as coastal sage scrub, approximately 108 acres of the non-native grassland below the 566-foot inundation line, if left undisturbed, could transition to coastal sage scrub. For a more detailed explanation see Appendix A.

bodies include Prado Lake and the upper portion of Mill Creek and provide foraging habitat for raptors and other wildlife species and are used by migratory waterfowl. Very few native plants and plant communities exist within these surface water areas. The majority of the detention basins were created to control dairy activity run-off. These basins accumulate surface flows containing manure and other dairy waste from the dairies after heavy rains and are not regulated by USACE as a Water of the U.S. In a few cases, a basin may have been placed in what could have historically been drainages. Some of these areas could potentially be regulated by USACE and California Department of Fish and Game (CDFG).

Agricultural Fields

There are four types of agricultural lands within the Project Area: dairy land, pastures, cultivated agriculture croplands, and fallow fields totaling approximately 4,161 acres. Remnants of native vegetation are typically very minimal or absent within all of these areas with most of the plant community structure represented as disturbed (3,109 acres), non-native grassland (992 acres), or ornamental woodland (51 acres).

The dominant vegetation within the agricultural lands is planted ornamental landscaping, cultivated crops, and fields of non-native grass and opportunistic weedy species. Weedy species found throughout the fields included wild oat, ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), soft chess (*Bromus hordeaceus*), black mustard (*Brassica nigra*), red-stemmed filaree, and cheeseweed (*Malva parviflora*).

Fallow fields occur primarily below the 566-foot inundation line. The majority of these fields were previously cultivated fields, then grazed by dairy cows after harvest and subsequently left fallow. Fallow fields also develop characteristic ruderal vegetation, composed of a number of weedy species as described above. These fields are used as foraging habitat by local raptor species but could be restored and/or enhanced to provide habitat for burrowing owls.

Windrows

Windrows are typically a result of historic agricultural activities. All 24 acres of windrows within the Project Area are comprised of ornamental woodland vegetation and are dominated by blue gum (*Eucalyptus globoratum*), although other species exist, including olive (*Fraxinus* sp.) pine (*Pinus* spp.), and cypress (*Cypressus* spp.). These communities, though comprised of non-native species, are located mostly within the agricultural fields above the 566-foot inundation line and provide nesting and foraging perches for bird species (see Exhibit 5).

Riparian Woodlands

The riparian woodlands contain dense, broad-leaved, winter-deciduous riparian thickets dominated by several willow species and is associated with seasonally flooded or saturated stream and river corridors. It typically forms thickets in riparian zones along creek channels, adjacent sandy or gravelly floodplains, and low stream terraces. The 531 acres of riparian woodlands onsite are comprised of southern cottonwood-willow riparian forest (234 acres), southern willow scrub (144 acres), mulefat scrub (27 acres), coastal and valley freshwater marsh (25 acres), non-native grassland (40 acres), disturbed (21 acres), and *Arundo* scrub (40 acres). Most of these riparian communities occur below the 556-foot elevation line along Chino and Mill Creeks. Most stands are too dense to allow much under story development. Characteristic species of this community include black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), and mule fat (*Bacharis salicifolia*).

Developed

Within the Project Area, Developed Areas include the CIW-Chino, portions of Prado Regional Park, Prado Recreational Dog Training Facility, an industrial parcel southeast of Chino Airport, the IEUA manure composting facility, commercial nurseries, and several equestrian facilities. These areas include commercial buildings, infrastructure, residential homes, and roads. They support a very limited amount of vegetation, comprised of non-native species planted for their aesthetic and utilitarian values, ornamental vegetation (149 acres), barren/disturbed ground (324 acres), non-native grassland (85 acres).

3.2 SENSITIVE BIOLOGICAL RESOURCES

Tables 3-3 and 3-4 identify those species of plants and wildlife known to occur, or have the potential to occur, on or within the vicinity of the Project Area that have been afforded special recognition by the federal government, the State of California, or the California Native Plant Society (CNPS). Recognition is given due to the species' declining or limited population sizes, resulting in most cases from habitat loss. Sources used to determine sensitivity status and occurrence of biological resources include: plants--U.S. Fish and Wildlife Service (USFWS) (1996a,b), the CDFG Natural Diversity Data Base (CNDDDB) (2000), *Federal Register* listing package; and CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California (1994); wildlife--USFWS (1996b), and the CNDDDB (2000). Appendix B provides a list of plant and wildlife species observed in the Project Area.

**TABLE 3-3
SENSITIVE PLANT SPECIES POTENTIALLY OCCURRING ONSITE**

Species	Status ⁽¹⁾	Habitat	Potential For Occurrence ⁽²⁾		
Federal Threatened and Endangered Species					
Santa Ana River Woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	FE SE CNPS List 1B	Sandy soils of river floodplains and terraced alluvial deposits	Low		
Braunton's Milk-vetch (<i>Astragalus brauntonii</i>)	FE CNPS List 1B	Carbonate soils in coniferous forest, chaparral, coastal sage scrub, and valley and foothill grassland	Very Low		
Federal and State Sensitive Species					
Many-stemmed Dudleya (<i>Dudleya multicaulis</i>)	FSC CNPS List 1B	Coastal sage scrub, chaparral and grasslands and rock outcrops	Very Low		
Smooth tarplant (<i>Centromedia pungens</i> ssp. <i>laevis</i>)	SSC CNPS List 1B	Grassland, ruderal and alkali meadows	Very Low		
CNPS Listed Species					
Intermediate Mariposa Lily (<i>Calochortus weedii intermedius</i>)	CNPS List 1B	Rocky areas in chaparral, coastal scrub, and foothill grasslands.	Low ⁽³⁾		
Coulter's Saltbush (<i>Atriplex coulteri</i>)	CNPS List 1B	Coastal dunes, coastal bluff scrub last observed in 1917.	Very Low ⁽³⁾		
Chaparral Sand Verbena (<i>Abronia villisa</i> var. <i>aurita</i>)	CNPS List 1B	Sandy areas in chaparral and coastal scrub last observed in 1934.	Very Low ⁽³⁾		
<p>Notes: ⁽¹⁾ Status Legend:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>U.S. Fish and Wildlife Service FE Federal Endangered FSC Federal Species of Concern</p> </td> <td style="width: 50%; vertical-align: top;"> <p>California Department of Fish and Game SE California Endangered California Native Plant Society CNPS List 1B</p> </td> </tr> </table> <p>⁽²⁾ Potential for Occurrence:</p> <p>Very Low = Suitable habitat no longer exists for the species in the Project Area or its immediate vicinity. No recent records exist of the species occurring in the Project Area or its vicinity.</p> <p>Low = No recent records exist of the species occurring in the Project Area or its immediate vicinity (within approximately 5 miles) and/or the diagnostic habitat requirements strongly associated with the species no longer occur in the Project Area or its immediate vicinity.</p> <p>Moderate = Either a historical record exists of the species in the Project Area or its immediate vicinity or the diagnostic habitat requirements associated with the species occur in the Project Area or its immediate vicinity.</p> <p>High = Both a historical record exists of the species in the Project Area or its immediate vicinity and the diagnostic habitat requirements strongly associated with the species occur in the Project Area or its immediate vicinity.</p> <p>Present = Species observed during 2000 baseline biological surveys.</p> <p>⁽³⁾ Modified from the Recirculated Draft EIR.</p>				<p>U.S. Fish and Wildlife Service FE Federal Endangered FSC Federal Species of Concern</p>	<p>California Department of Fish and Game SE California Endangered California Native Plant Society CNPS List 1B</p>
<p>U.S. Fish and Wildlife Service FE Federal Endangered FSC Federal Species of Concern</p>	<p>California Department of Fish and Game SE California Endangered California Native Plant Society CNPS List 1B</p>				
Source: CNDDDB 2001					

**TABLE 3-4
SENSITIVE WILDLIFE SPECIES POTENTIALLY OCCURRING ONSITE**

Species	Status ⁽¹⁾	Habitat	Potential For Occurrence ⁽²⁾
Federal Threatened and Endangered Species			
Delhi sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)	FE	Colton dunes (Delhi soils series) open sand	Very Low
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT SSC	Small to medium-sized streams	Very Low
Arroyo toad (<i>Bufo californicus</i>)	FE SSC	Washes and arroyos with open water; sand or gravel beds; for breeding, pools with sparse overstory vegetation.	Very Low
California red-legged frog (<i>Rana aurora draytonii</i>)	FT SSC	Streams with slow moving water and deep pools; dense shrubby riparian vegetation at pool edges	Very Low
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE SE	Southern cottonwood willow riparian forest	Present
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE SE	Riparian woodlands, water-filled creeks or channels and scattered overgrown clearings	Moderate
Southern bald eagle (<i>Haliaeetus leucocephalus</i>)	FT (FPD) SE	Winters locally at deep lakes and reservoirs (mainly at Lake Mathews or Big Bear Lake)	Breeding-Very Low ⁽³⁾ Foraging-Moderate ⁽³⁾
State Threatened and Endangered Species			
Western yellow-billed cuckoo (<i>Coccyzus Americanus occidentalis</i>)	SE	Riparian communities	Moderate
Peregrine falcon (<i>Falco peregrinus</i>)	SE FSC	Estuaries, wetlands, and coastal bluffs	Breeding-Low Foraging-High
Federal and State Sensitive Species			
Arroyo chub (<i>Gila orcutti</i>)	SSC	Warm streams with highly variable seasonal stream flows	Very Low
Orange-throated whiptail (<i>Cnemidophorus hyperythrus</i>)	SSC	Open sage scrub or chaparral with loose soils	Low
San Diego horned lizard (<i>Phrynosoma coronatum blainvilleri</i>)	SSC	Open areas of sandy soil with coastal sage scrub, chaparral, grassland, riparian, and washes and watercourses	Low
Silvery legless lizard (<i>Anniella pulchra pulchra</i>)	FSC SSC	Sandy or loose organic soils or with abundant leaf litter	Low
Coast patch-nosed snake (<i>Salvadora hexalepis virgulata</i>)	SSC	Variety of habitats, including chaparral and sage scrub	Low
Two-striped garter snake (<i>Thamnophis hammondi</i>)	SSC	Perennial and intermittent streams having rocky beds and bordered by willow thickets or other dense vegetation	Present
Southwestern pond turtle (<i>Clemmys moromata pallida</i>)	FSC SSC	Lakes and ponds, also pools in rivers and streams	Moderate ⁽³⁾
Golden eagle (<i>Aquila chrysaetos</i>)	SFP SSC	Forages in grasslands and other open terrain	Breeding-Low Foraging-High ⁽³⁾

**TABLE 3-4 (Cont.)
SENSITIVE WILDLIFE SPECIES POTENTIALLY OCCURRING ONSITE**

Species	Status ⁽¹⁾	Habitat	Potential For Occurrence ⁽²⁾
Long-eared Owl (<i>Asio otus</i>)	CSC	Nests in dense riparian woodlands, as well as oak woodlands; forages in open fields with adequate prey	Moderate ⁽³⁾
White-tailed kite (<i>Elanus leucurus</i>)	FSC SFP	Open woodlands and grasslands	Moderate
Ferruginous hawk (<i>Buteo regalis</i>)	FSC SSC	Grasslands and other open terrain	High
Burrowing owl (<i>Athene cunicularia hypugea</i>)	SSC	Grasslands, savannahs and sparse brushlands	Present
Cooper's hawk (<i>Accipiter cooperii</i>)	SSC	Oak and riparian woodlands	Present
Sharp-shinned hawk (<i>Accipiter striatus</i>)	SSC	Oak and riparian woodlands	Low ⁽³⁾
Northern harrier (<i>Circus cyaneus</i>)	SSC	Grasslands and other open terrain	Present
Prairie falcon (<i>Falco mexicanus</i>)	SSC	Grasslands, coastal sage scrub, and estuaries	Breeding-Low ⁽³⁾ Foraging-Moderate
Loggerhead shrike (<i>Lanius ludovicianus</i>)	FSC SSC	Grassland and open scrub	Present
Western least bittern (<i>Ixobrychus exilis hesperis</i>)	FSC SSC	Densely vegetated brackish and freshwater marshes	Moderate ⁽³⁾
California horned lark (<i>Eremophila alpestris actia</i>)	SSC	Open fields and grasslands	Present
Tricolored blackbird (<i>Agelaius tricolor</i>)	FSC SSC	Marshes and grassland communities	Present ⁽³⁾
Yellow-breasted Chat (<i>Icteria virens</i>)	SSC	Summer resident, nests in low dense riparian scrubs.	Moderate ⁽³⁾
Yellow warbler (<i>Dendroica petechia</i>)	SSC	Mature riparian woodland, especially where dominated by willows or alders	Present
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	SSC	Coastal sage scrub, slopes with sparse shrubs and open grassy areas intermixed.	Low
Townsend's big-eared bat (<i>Corynorhinus townsendii</i>)	FSC SSC	A wide variety of habitats including woodlands and arid grasslands; roosts in mines and caves	Moderate
California mastiff bat (<i>Eumops perotis californicus</i>)	FSC SSC	Open areas with high cliffs	Moderate
Small-footed myotis (<i>Myotis ciliolabrum</i>)	FSC	Forages among trees or over brush; roosts in caves, mines, and in cliff or rock openings	Moderate
Yuma myotis (<i>Myotis yumanensis</i>)	FSC SSC	Water and wooded canyon bottoms; roosts in caves and abandoned buildings	Moderate
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	SSC	Open areas, typically occurring in alluvial sage scrub and open Riversidean sage scrub	Present
Northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	SSC	Sage scrub	Low

**TABLE 3-4 (Cont.)
SENSITIVE WILDLIFE SPECIES POTENTIALLY OCCURRING ONSITE**

Species	Status ⁽¹⁾	Habitat	Potential For Occurrence ⁽²⁾
Southern grasshopper mouse (<i>Onychomys torridus ramona</i>)	SSC	Open coastal sage scrub, mixed chaparral, and riparian areas	Low
San Diego desert woodrat (<i>Neotoma lepida intermediai</i>)	SSC	Variety of habitats from sea level to 8,500 ft. elevation	High
Northern red diamond rattlesnake (<i>Crotalus ruber ruber</i>)	SSC	Sage scrub and chaparral, often in rocky areas, also in grasslands, dry washes, and woodlands	Low
Western spadefoot (<i>Scaphiopus hammondi</i>)	SSC	Arid and semi-arid regions in lowlands and foothills in washes, river floodplains, alluvial fans, playas, and Alkali flats	Moderate ⁽³⁾

Notes: ⁽¹⁾ Status Legend:

U.S. Fish and Wildlife Service

FE Federal Endangered
FT Federal Threatened
FPD Federal Proposed for Delisting
FSC Federal Species of Concern

California Department of Fish and Game

SE California Endangered
SSC Species of Special Concern
SFP Fully Protected
CSC Considered sensitive by the California Natural Diversity Data Base.

⁽²⁾ Potential for Occurrence:

Very Low = Suitable habitat no longer exists for the species in the Project Area or its immediate vicinity. No recent records exist of the species occurring in the Project Area or its vicinity.

Low = No recent records exist of the species occurring in the Project Area or its immediate vicinity (within approximately 5 miles) and/or the diagnostic habitat requirements strongly associated with the species no longer occur in the Project Area or its immediate vicinity.

Moderate = Either a historical record exists of the species in the Project Area or its immediate vicinity or the diagnostic habitat requirements associated with the species occur in the Project Area or its immediate vicinity.

High = Both a historical record exists of the species in the Project Area or its immediate vicinity and the diagnostic habitat requirements strongly associated with the species occur in the Project Area or its immediate vicinity.

Present = Species observed during 2000 baseline biological surveys.

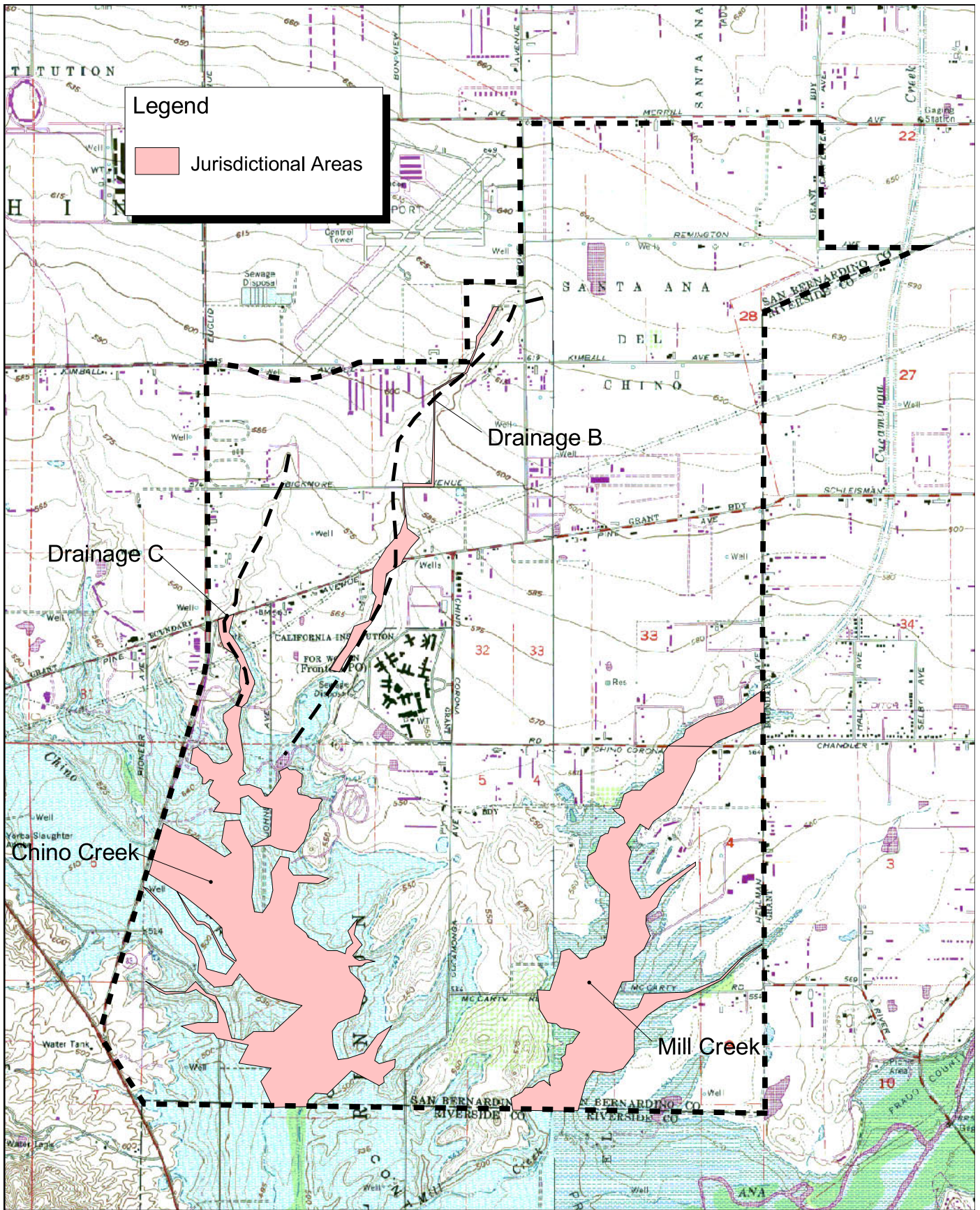
⁽³⁾ Modified from the Recirculated Draft EIR.

Source: CNDDB 2000

The take of any Federal Endangered Species (FE) or Federal Threatened Species (FT) requires a take permit under either Section 7 or 10 of the Federal Endangered Species Act. The take of any State Endangered Species (SE) or State Threatened Species (ST) requires a take permit under Section 2081 of the California Endangered Species Act. Species of Special Concern at the Federal and State level (FSC, SSC) have no special legal status and no special permits are required for the take or other impacts to such species. Further, the California Environmental Quality Act does not require any mitigation for the take of such species of special concern which is unique to such species unless "endangered, rare or threatened" under California Code of Regulations, Section 15380. None of the species of special concern listed in Table 3-4 are endangered, rare or threatened under Section 15380. "Take" is generally defined to include the harming or killing of a species, including any significant habitat modification that results in injury to the species.

3.3 JURISDICTIONAL AREAS

Although formal jurisdictional determinations were not conducted during the baseline biological surveys, general notations were made of areas potentially regulated by the USACE and CDFG. The location of water bodies or natural features within the Project Area possibly falling under the jurisdiction of the USACE and/or CDFG are shown in Exhibit 7.



Source: Michael Brandman Associates and PBS&J



4.0 MITIGATION IMPLEMENTATION PROGRAM

No State or Federally threatened or endangered species will be directly affected by implementation of the Chino Subarea 2 Specific Plan. The loss of agricultural lands above the 566-foot elevation line may adversely affect burrowing owls, foraging raptors, and migratory birds and waterfowl (sensitive wildlife species). Those mitigation measures listed in Section 5.4.6 of the RDEIR, as further detailed and implemented in the RMP, will mitigate the loss of those agricultural lands with habitat value and impacts to sensitive wildlife species by: (1) providing for open space land use designation on all 2,835 acres of Subarea 2 below the 566-foot inundation line (2) providing for the creation and perpetual maintenance of a 300-acre Conservation Area, on the project site or in nearby locations within the Prado Basin (including Chino Hills²); (3) the requirement for project-specific biological surveys; (4) the participation in enhancement and restoration programs for burrowing owl, raptor, and riparian habitats; (5) the creation of an urban buffer/transition area between planned development and wildlife habitat, and (6) the payment of mitigation fees assessed per adjusted gross acre of land that is developed.

4.1 SUMMARY OF ANTICIPATED IMPACTS

Impacts of the proposed project to biological resources are described in the Program EIR (RDEIR Section 5.4) and are briefly summarized below to provide the context for the mitigation implementation program that is detailed in this document.

4.1.1 Impacts to Biological Resources Above the 566 foot Elevation

The significant biological resource impacts of implementation of the proposed plan include direct loss of raptor foraging habitat, loss of burrowing owl habitat, loss of migratory bird and waterfowl habitat, and cumulative loss of certain agricultural lands with habitat value. These impacts are largely restricted to areas planned for development above the 566-foot inundation line, away from the most sensitive areas below the 566-foot line. Table 4-1 provides the acreage of each of the land cover types and associated plant communities located above the 566-foot inundation line affected by the proposed Specific Plan development.

² The term Prado Basin, as used herein, includes Chino Hills.

**TABLE 4-1
PLANT COMMUNITIES AND LAND COVER TYPES AFFECTED BY PROPOSED DEVELOPMENT⁽¹⁾**

Plant Community	Land Cover Type											TOTAL
	Surface Water Areas			Agricultural Land				Windrows	Riparian	Developed	TOTAL	
	Detention Basins	Marsh	Open Water	Dairies	Pasture	Active Fields	Fallow Fields					
Disturbed	38			1,058	436	639			1	224	2,396	
Non-Native Grassland				26	61	64				36	187	
Southern Cottonwood-willow Riparian											0	
Mulefat Scrub											0	
Southern Willow Scrub											0	
Coastal and Valley Freshwater Marsh											0	
Open Water											0	
Ornamental Woodland								17			17	
Arundo Scrub											0	
Coastal Sage Scrub											0	
Area Totals (Acres)	38	0	0	1,084	497	703	0	17	1	260	2,600⁽²⁾	

Notes: ⁽¹⁾ All affected lands are located above the 566-foot inundation line.

⁽²⁾ Only 1,256 acres provide any quality of habitat (see Section 4.1.1).

Most of the habitat above the 566-foot line is classified as disturbed (2,172 acres or 91%), developed (287 acres), non-native grassland (225 acres or 8%), and ornamental woodlands (17 acres, less than 1%) that are associated with agricultural activities. No significant impacts to sensitive plants and/or sensitive native plant communities are expected to occur. The loss of agricultural lands (pastures, windrows, and active and fallow fields) will result in the loss of 1,256 acres of land that provides, or may provide, varying qualities of roosting and foraging habitat for burrowing owl, other raptor species, and migration birds and waterfowl. An analysis by PCR (see Appendix C), which was included in the RDEIR, and a separate investigation by LSA (see Appendix D) concurred with the original analysis in the DEIR that this loss was not considered significant at a project level for the loss of raptor foraging habitat but could be considered a significant contribution to cumulative loss of this type of habitat on a regional basis. LSA analysis concluded that this potential cumulative loss will be mitigated to below the significant level with the proposed retention of land below the 566-foot inundation line in open space uses, combined with the creation of a 300-acre Conservation Area. LSA also corroborated the RDEIR conclusion that additional mitigation is required to reduce impacts to individual burrowing owl sites.

Dairy lands have not been included as suitable habitat for raptor species since most of the 1,084 acres occupied by dairies are principally stockyards devoid of all vegetation, heavily disturbed and covered with cow manure. Movement by wildlife is not expected to be impacted above the 566-foot line since such movement is restricted due to the intense dairy and agricultural activities, lack of viable water sources, and lack of native habitat.

4.1.2 Impacts to Biological Resources Below the 566-foot Elevation

Urban development is restricted below the 566-foot inundation line in the Project Area (with the exception of a 55-acre parcel that extends above Pine Avenue along the western boundary), so there will be no direct impacts to federal or state listed species, surface water and riparian habitats, or other sensitive species and/or habitats. The Specific Plan land use designations for all land below the 566-foot inundation line limits development likely to cause significant adverse impacts to biological resources and consist of Open Space-Recreation (OS-R), Agriculture (AG), Agriculture/Open Space-Natural (AG/OS-N) and Open Space-Natural (OS-N) uses.

The majority of the existing land uses below the 566-foot elevation consist of agricultural or recreational land use (i.e., Prado Regional Park and concessions). Areas of high biological sensitivity within the Chino Creek and Mill Creek floodways below the 543-foot elevation line have been classified by USACE as an extreme resource area. These areas include least Bell's vireo critical habitat areas and have been identified by the USACE as suitable only for extremely low-intensity use.

The proposed Specific Plan includes a 566-Foot Dam Inundation Elevation Overlay (DIO) applied to all lands below 566-foot inundation line. This overlay requires that all specific development proposals be submitted for review and comment by USACE, and further requires that allowable land uses comply with applicable provisions of any existing cooperative management plans that may apply to the Lower Chino Basin/Prado area. Finally, USACE has indicated that its master plan is being updated and will soon be released for land uses within the Prado Flood Control Basin. Under this plan, active recreation and intense agricultural uses, such as dairies, that have the potential to result in significant conflicts with sensitive biological resources will be carefully managed by USACE to avoid or minimize risks.

4.2 PROPOSED MITIGATION MEASURES

The following are the mitigation measures, verbatim, from the RDEIR. The following section (Section 4.3) details the actions that will be taken to provide for implementation of these measures.

B-1 Zoning and Land Use Regulation

1. All areas below the 566-foot dam inundation line, except such areas located north of Pine Avenue, will be retained within an open space or agricultural land use designation in order to provide protection for existing wildlife habitat values found in such areas and those to be created by the habitat enhancement activities described under mitigation B-3, below, as well as to avoid any new impacts.
2. Any new development or expansions of existing land uses within the open space designations of The Preserve Specific Plan (i.e., Agriculture, Agriculture/Open Space-Natural, Open Space-Recreation, Open space-Natural and Open Space-Water) shall comply with the requirements and provisions of the Resource Management Plan (see Mitigation No. B-3, below) in order to mitigate potential adverse project-specific impacts on biological resources.

B-2 Required Biological Studies

1. Conduct a biological assessment of each specific project site to characterize the habitat types and the potential for the site to support any sensitive species or habitat.
2. Where a sensitive species has the potential to occur, determine the level of potential for occurrence as low, moderate, or high. Provide scientific justification for this determination.
3. If the potential for occurrence is moderate or high (e.g., the required habitat elements for this species are present and/or there has been a sighting of this species in the vicinity of the project site), conduct focused surveys within suitable habitat to determine the presence or absence of the species on the project site.

4. Any surveys deemed necessary must be conducted by a biologist qualified to perform the needed survey(s). The City of Chino, or its consultant, will review and approve the personnel and methodology for any such proposed surveys.
5. If a sensitive species or habitat is found to occur on a proposed project site, or occupies habitat that may be impacted directly or indirectly by the proposed project, this must be called to the City's immediate attention and documented in the biological assessment for the project.
6. Mitigation measures to offset any potential impact to sensitive species and habitats must comply with the RMP and shall be included in the biological assessment. All lands set aside for conservation and/or other mitigation measures must be clearly documented in the final biological assessment.

B-3 Resources Management Plan

A Resources Management Plan (RMP) shall be prepared by the City of Chino to provide for the implementation of the mitigation measures described below, in order to avoid, lessen and reduce impacts on the biological resources within the Preserve Specific Plan Area. The Resources Management Plan will be approved by the Chino City Council at the time of certification of the Final EIR. The RMP will formalize the City's balanced approach to land use and resource management, and provides the framework for coordinating the City's actions with other agencies, such as County of San Bernardino, CDFG, USFWS, USACE, OCFWD, and OCWD with regard to specific conservation measures and resource management initiatives within The Preserve. The RMP will focus on establishing a Conservation Area and the development and implementation of wildlife habitat enhancement and restoration activities, primarily funded by a mitigation fee imposed on all urban development within the Project Area. The RMP will specifically address the following mitigation measures:

1. 300-acre Conservation Area

Provision will be made for the creation, enhancement, expansion and perpetuation of high quality wildlife habitat in a 300-acre Conservation Area to be located generally below the 566-foot inundation line and within the boundaries of the Project Area. The more specific location of the Conservation Area will be determined through the preparation of the RMP and will depend on availability of such lands for mitigation purposes, and the suitability of land for the enhancements envisioned. Such habitat will be designed to address the impacts that will occur as the result of development of The Preserve (i.e., raptor, waterfowl and burrowing owl habitat). Key enhancements that will be provided comprise the following:

- a) A weed removal program and replanting of native vegetation within the 300-acre Conservation Area shall be implemented to create high quality raptor and burrowing owl foraging habitat.
- b) Installation and maintenance of twenty (20) artificial burrowing owl nesting sites to mitigate for the loss of burrowing owl habitat. Artificial nests will be located and designed to facilitate use by burrowing owls.

Stands of trees shall be planted at a minimum of five (5) locations within the 300-acre Conservation Area to mitigate for the loss of raptor nesting/foraging habitat. Specifics regarding enhancements (i.e., location of tree stands, placement of artificial owl burrows, plant and tree species, long-term maintenance and management, etc.) will be detailed in the RMP.

- c) The City shall obtain agreements with the landowners in the 300-acre Conservation Area in the form of an irrevocable license, conservation easement, right of entry, or other legally enforceable instrument to install and maintain the above habitat enhancements and to provide the City with a perpetual right to control uses which would conflict with the land's use as wildlife habitat.
2. Alternate Location for the 300-acre Conservation Area

If the City is unable, or it is infeasible, to obtain the onsite mitigation agreements from property owners for all or a portion of the 300-acre Conservation Area, the City may acquire and enhance, or make other arrangements securing the right to permanently protect/preserve and enhance, land off-site within the Prado Basin (including Chino Hills). Such land must have similar biological value to land on-site within the areas planned for urban development (generally above the 566-foot elevation line). In addition, provisions shall be made to provide enhancements/restoration similar to the measure described in Section B-3(1), above.

3. Burrowing Owls

- a) If burrowing owls are found on an individual development site, development, including the expansion of existing land uses or other land use activities that could disrupt the owls, will be required to follow the CDFG burrowing owl relocation protocols, including the creation of artificial burrows. Key components of this protocol presently include:
 - i. Occupied burrows should not be disturbed during the nesting season, from February 1 through August 31.
 - ii. If owls must be moved away from the disturbance area, passive relocation is preferable to trapping.

- iii. A time period of at least one week is recommended to allow owls to move and acclimate to the alternate burrows.
 - iv. Passive relocation involves encouraging owls to move from occupied burrows to alternate natural or artificial burrows that are at least 50 meters from the impact zone with a minimum of 6.5 acres of suitable foraging habitat for each pair of relocated owls.
 - v. Owls should be excluded from burrows in the immediate impact zone and within a 50-meter buffer zone by installing one-way doors in burrow entrances.
 - vi. One-way door should be left in place for at least 48 hours to insure that owls have left the burrow before excavating the burrow.
 - vii. One alternate burrow (natural or artificial) should be provided for each burrow that will be excavating in the project impact zone.
 - viii. The Project Areas should be monitored daily for at least one week to confirm no owl use before excavating burrows in the immediate impact zone.
 - ix. When excavating burrows, hand tools should be used and the burrows should be refilled to prevent reoccupation.
 - x. Sections of flexible plastic pipe or burlap bags should be inserted into the tunnels during excavation to maintain an escape route for any animals that may still be located inside the burrow.
- b) In order to provide supplemental mitigation beyond the standard CDFG protocol requirements for relocation of owls, the 300-acre Conservation Area will be made available for the relocation of burrowing owls that would be displaced by development, including the creation of 20 artificial burrows. The feasibility of relocating owls from development sites to the Conservation Area will be reviewed on a case-by-case basis for individual development projects, subject to the evaluation and recommendations of the biological survey prepared for a given site.

4. Urban Buffer/Transition Area

In order to limit urban intrusion into areas with habitat value that are below the 566-foot dam inundation line, a buffer area will be provided along the southern edge of urban development within The Preserve Specific Plan Project Area. The buffer will be designed to provide for limited access to habitat areas and will include provisions for the logical transition between urban structures/uses and habitat areas. Such provisions may address without limit measures regarding: location and type of land uses, lighting, vegetation, and tree plantings. Specific features regarding the design, conceptual location, buffer width and/or setback requirements,

timing and other features of the buffer shall be included as part of the Resources Management Plan.

While every reasonable effort will be made to seek such a buffer, this mitigation measure does not require land acquisition or obtaining any agreements with landowners in the form of an irrevocable license, conservation easement, right of entry, or other legally enforceable instrument for the purposes of providing the buffer, or for purposes of providing any of enhancements or features described under Mitigation Measure B-3(1).

5. Surface Water and Riparian Habitat

- a) All development will be required to satisfy any applicable requirements of USACE, Regional Water Quality Control Board and CDFG for Section 404 Clean Water Act permits and streambed alteration agreements.
- b) Drainage Area B (see Exhibit 7) will be designed as a naturalized drainage course and enhanced to provide riparian habitat values, including plantings of appropriate native species of plants and trees. It is anticipated that these enhancements will be provided in conjunction with drainage facilities and constructed "Natural Treatment Systems" (NTS) designed to improve water quality. Specific features related to habitat values will be addressed as part of the RMP.
- c) A minimum of 10 acres of marsh and or riparian habitats shall be constructed in conjunction with drainage facilities and/or Natural Treatment Systems for water quality purposes, in order to provide mitigation for loss of the low-quality habitat values of the agricultural detention basins, as well as other surface water areas that support waterfowl.

6. Existing Windrows

Existing windrows that provide viable raptor habitat shall be retained and incorporated into the design of individual development projects where practical. If retention is not practical, the developer shall provide for the replacement of the windrow trees in a manner supportive of raptor habitat. The biological survey prepared for the development project shall include an analysis by an ornithologist specializing in raptor biology. Such analysis shall include recommendations on the number of trees, tree specifications and location of replacement areas for windrows or stands of trees. The recommendations shall be based on biological values, as determined by the ornithologist, and in consultation with the City and the wildlife agencies. Replacement trees may be located within the 300-acre Conservation Area or other suitable areas located outside of the project site if consistent with the recommendations of the ornithologist.

7. Agricultural Easements

Under Mitigation Measure AG-1 (see Section 5.2 in the Draft EIR), which addresses mitigation for the loss of prime agricultural land, the City has committed to actively pursue establishment of agricultural easements within The Preserve, pursuant to SB 831 and the Williamson Act Easement Exchange Program (WAEPP). These easements will also provide mitigation for identified impacts on biological resources in that they will preserve areas in agriculture and prevent the future development of recreational or other non-agricultural uses that could be detrimental to biological resources.

8. Mitigation Fee

A mitigation fee shall be imposed on new development for the purpose of implementing the Biological Resource mitigation measures as described in the Resources Management Plan. The fee shall be adopted by the City Council prior to the issuance of grading permits for new residential, commercial, office, industrial development, or public facilities; provided grading permits may be issued prior to final adoption of the fee upon developer's deposit with the City of adequate cash or other form of security in excess of the proposed fee, as approved by the City Council for the City. The fee shall be structured to cover the estimated cost of the identified mitigation measures, including:

- a) Costs associated with obtaining agreements for the 300-acre Conservation Area with landowners in the form of conservation easements or other legally enforceable instruments as described under mitigation measures B-3-1 and B-3-2, above;
- b) Costs associated with the design, installation, and maintenance of the various enhancements and improvements described above, including such appropriate refinements/adjustments as may be identified by the RMP.
- c) Administration, management and monitoring of the 300-acre Conservation Area and other mitigation measures as appropriate, including adaptive management.

Costs that form the basis for the mitigation fee may, at the discretion of the City, be defrayed through the use of grants or other government or private funding sources as such sources become available in the future.

Costs for wetlands/riparian enhancements shall be structured in conjunction with costs for such improvements that also serve water quality and drainage purposes, which may be funded by project drainage and/or water quality fees.

9. Participation in Regional Conservation Efforts

The City has had ongoing involvement with various regional conservation-related efforts. The City will continue to be involved in and coordinate with such efforts within The Preserve. These efforts include, without limitation:

- a) USACE and Orange County Water District's Prado Basin Master Plan;
- b) IEUA's Chino Creek Habitat Restoration Program;
- c) Orange County Water District's Santa Ana River Watershed program;
- d) USACE's Santa Ana River Mainstem Project;
- e) Lower Chino Basin Working Group (Santa Ana River Working Group MOU) Resources Management Planning;
- f) Chino Basin Center for Organic Materials (Santa Ana River Working Group MOU); Wildlife, Wetlands and Recreation Resource Conservation Program (Santa Ana River Working Group MOU);
- g) Urban Transition Planning Smart Growth Program (Santa Ana River Working Group MOU);
- h) Conjunctive Groundwater Management, Replenishment and Conservation Program (Santa Ana River Working Group MOU).
- i) Chino Hills State Park General Plan (February 1999).

10. Administration and Monitoring

The City shall use a conservancy or land trust, or other similar, qualified entity to oversee and implement the Resources Management Plan and principally manage the 300-acre Conservation Area. Such an entity shall have expertise in the management of land and biological resources. The chosen entity may also jointly provide a similar function to adjacent jurisdictions, provided that effective implementation of the mitigation measures described herein can be achieved. The City Council shall use its best efforts to select and enter in to necessary agreements with the chosen entity prior to acquisition of any property through an irrevocable license, conservation easement, right of entry, or other legally enforceable instrument.

4.3 MITIGATION MEASURES, IMPLEMENTING ACTIONS

The following actions will be undertaken to implement the biological resources mitigation measures contained in the EIR for the Project Area.

4.3.1 Mitigation Measure B-1. Zoning and Land Use Regulations

A significant portion of Subarea 2 below the 566-foot line lies within the inundation area created by the raising of the Prado Dam. No new habitable structures will be allowed within this area to protect public health and safety from flood-related hazards. The majority of land is in OS-N (Open Space-Natural) or AG (Agricultural) and AG/OS-N (Agricultural/Open Space-Natural) areas that are protective of existing habitats and sensitive species (see Exhibit 4). Appendix E provides detailed descriptions of allowable uses under each of these designations. Creation of the urban buffer/transition area and implementation of the other RMP mitigation measures will provide further assurance that wildlife habitats associated with the agricultural and open space uses below the 566-foot inundation line will be adequately protected. The following paragraphs describe each of these proposed open space land use designations, land use designation enforcement responsibilities, and requirements for proposed changes in open space land use designation.

Agriculture Designation

Within the Project Area, total of 344 acres will be maintained in two separately designated Agricultural (AG) areas that will be available for most agricultural uses, including farming, stables, pastures, and grazing (see Exhibit 4). These two areas will also preserve a large block of open agricultural fields that will provide habitat for burrowing owls, raptors, and migratory birds and waterfowl above and below the 566-foot inundation line.

Agriculture/Open Space-Natural Designation

Another 518 acres have been designated as agricultural/open space-natural in the central portion of the Project Area just below the 566-foot line and will be available for migratory bird, agricultural, and open space uses, including passive recreation, equestrian uses, and conservation. Conservation values include potential habitat for burrowing owls, raptors, and migratory birds and waterfowl.

Open Space-Natural Designation

Riparian areas below the 543-foot elevation line have been designated Critical Habitat for the least Bell's vireo by USFWS. These areas along both Chino Creek and Mill Creek support known

populations of least Bell's vireo. In recognition of these underlying land use restrictions and the conservation value of these lands for federally listed biological species, 1,640 acres in the Project Area have been designated Open Space-Natural (OS-N). Natural drainages have also been included in the OS-N designations in recognition of critical biological resources within these areas. These areas will provide permanent natural open space and connect with the Santa Ana River system and provide connectivity for wildlife movement in the Prado Basin.

Open Space-Recreational Designation

Open space areas between Prado Lake and Pine Avenue and a narrow corridor running along the 566-foot inundation line have been designated Open Space-Recreational (OS-R). This designation is intended to establish open space areas for active and passive recreation as well as to provide open space for protection against environmental hazards such as flooding.

Zoning Enforcement Responsibility

Review of allowable uses and enforcement of land use designation provisions within the AG, AG/OS-N, OS-R, and OS-N designated areas of the Specific Plan is the responsibility of the Director of Community Development, or his/her designee. All proposed uses within these designated areas shall be evaluated by the City on a case-by-case basis for significant environmental impacts in accordance with California Code of Regulations (CEQA Guidelines) Sections 15162 and 15168.

Retention of Open Space Land Use Designations

Through the implementation of Mitigation Measure B-1, Zoning and Land Use Regulation, as detailed in this RMP, the City will retain all areas below the 566-foot inundation line (except such areas located above Pine Avenue) within an open space designation. This will provide for the protection of existing wildlife habitat values or those created by habitat enhancement activities, as well as to avoid any new impacts. However, if a change in land use designation is requested in the future, it would require a Specific Plan amendment and review for conformance with provisions of the RMP. Moreover, any future proposal to change a land use designation would require review of environmental impacts in compliance with CEQA.

Proposed Use Notification to U.S. Army Corps of Engineers

Land below the 566-foot line is within the Specific Plan Dam Inundation Elevation Overlay (DIO). This overlay requires all specific development proposals be submitted for USACE review, and that allowable land uses comply with provisions of any existing cooperative management plans developed