

3.0 Conservation Planning Process/ Description And Area Plan Criteria of the MSHCP Conservation Area



**Rural
Mountainous
Designation:**

This category represents the Rural/Mountainous land use designation incorporated in the County General Plan. In general these lands are characterized by steep slopes that represent constraints to Development. For example, of the approximately 54,900 acres depicted on the MSCHP Plan map outside the Criteria Area but within the Rural Mountainous designation, approximately 42,500 acres (77 percent) are characterized by slopes with gradients greater than 30 percent. While Reserve Assembly activities are not expected to occur in Rural Mountainous designation areas outside the Criteria Area, existing and future land use practices in these areas may provide an edge for the MSHCP Conservation Area that would minimize Edge Effects when compared with more urban land uses.

**American Indian
Lands:**

American Indian Lands are depicted on the MSHCP Plan map for reference purposes. No Conservation is assumed on these lands and no activities on these lands would be permitted under the MSHCP. The American Indian Lands are not a part of the MSHCP.

The MSHCP Conservation Area will be comprised of Conservation on existing Public/Quasi-Public Lands and new Conservation on approximately 153,000 acres of land within the Criteria Area. While the precise configuration for new Conservation within the Criteria Area has not been defined or mapped, a Conceptual Reserve Design was developed for analysis purposes as described in *Sections 3.1.9 and 3.3.1* of this document. While certainly not the only possible configuration to emerge from application of Criteria within the Criteria Area, the Conceptual Reserve Design was a useful tool in establishing conservation targets as part of the MSHCP planning process. The conservation targets developed as part of that process, along with anticipated Conservation on Public/Quasi-Public Lands, form the basis for the description of the MSHCP Conservation Area presented in this section. Achievement of the conservation targets as part of the overall Reserve Assembly process will be an important measuring and monitoring tool for the MSHCP.

3.2.2 The MSHCP Conservation Area

In addition to the features incorporated in the MSHCP Plan map, as described above, the MSHCP Conservation Area may be described in terms of several specific analysis factors considered during the conservation planning process. These include Bioregions, vegetation, soils, patch size, and edge

3.0 Conservation Planning Process/ Description And Area Plan Criteria of the MSHCP Conservation Area



affected lands. This section provides a summary description of the MSHCP Conservation Area based on those analysis factors. A more detailed description is provided in *Section A* of the MSHCP Reference Document - *Volume II of the MSHCP Plan*. The MSHCP Conservation Area may also be described in terms of Cores and Linkages. The description of Cores and Linkages is provided in *Section 3.2.3* of this document.

➤ **Bioregions**

Within the MSHCP Plan Area, large percentages of the Agua Tibia mountains (80.3 percent, 10,130 ac.), San Jacinto Mountains (71.7 percent, 134,000 ac.), San Jacinto Foothills (64.6 percent, 72,240 ac.) and the Santa Ana Mountains (61.3 percent, 85,810 ac.) Bioregions are conserved. Significant amounts of the Conservation in these Bioregions occur within existing Public/Quasi-Public Lands. Smaller portions of the Desert Transition (37.7 percent, 33,460 ac.), San Bernardino Mountains (34.5 percent, 9,990 ac.) and Riverside Lowlands (24.2 percent, 166,820 ac.) are conserved within the MSHCP Plan Area. Much of the central portion of the Desert Transition Bioregion will not be conserved. Six percent of the Desert Transition Bioregion currently supports urban or agricultural development. About ten percent of the San Bernardino Mountains Bioregion currently has urban or agricultural land uses. The remaining non-conserved lands are either American Indian Lands (5.7 percent), Rural Mountainous (15.7 percent), or undeveloped private land. The Riverside Lowlands is the largest Bioregion and will have the lowest proportion of its acreage in Conservation, with 24.2 percent (166,820 acres) within the MSHCP Conservation Area. Approximately 50.4 percent (about 347,800 acres) of the land in this Bioregion is currently supporting urban or agricultural land uses. Very little of this Bioregion is within American Indian Lands or is considered Rural Mountainous.

➤ **Vegetation**

Table 3-1 presents a summary of Vegetation Communities conserved within the MSHCP Conservation Area. Playas/vernal pools and water vegetation types had the highest percentages of Conservation within the MSHCP Conservation Area, with 85 percent of the total acreages of both these Vegetation Communities conserved. Riparian scrub/woodland forest, Riversidean alluvial fan sage scrub, woodlands/forests, chaparral, montane coniferous forest, coastal sage scrub and meadows/marshes also are conserved at high levels, with 50 percent to 75 percent of each of these Vegetation Communities conserved. Desert scrubs, grassland, Agriculture, and cismontane alkali marsh are conserved at the lowest levels, with percentages of Conservation at 34 percent, 28 percent, 12 percent, and 3 percent, respectively.

3.0 Conservation Planning Process/ Description And Area Plan Criteria of the MSHCP Conservation Area

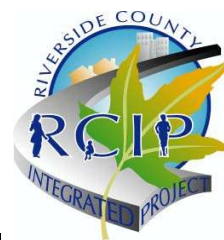


TABLE 3-1
ESTIMATE OF CONSERVATION BY VEGETATION COMMUNITY

Vegetation	Total Acres in Plan Area	Total Acres in Existing Public/Quasi-Public Lands	Total Acres of Additional Reserve Lands	Total Acres Conserved	Percent of Total Vegetation Community Acres Conserved in Plan Area
Agriculture	169,480	11,480	8,540	20,020	12%
Chaparral	434,950	207,380	64,900	272,280	63%
Cismontane Alkali Marsh	1,260	<5	40	40	3%
Coastal Sage Scrub	156,450	34,560	47,160	81,720	52%
Desert Scrubs	14,570	1,310	3,680	4,990	34%
Grassland	154,140	22,810	20,010	42,820	28%
Meadows and Marshes	1,020	330	180	510	50%
Montane Coniferous Forest	29,910	20,480	20	20,500	69%
Playas and Vernal Pools	7,910	2,920	3,830	6,750	85%
Riparian Scrub, Woodland, Forest	15,030	7,270	3,920	11,190	74%
Riversidean Alluvial Fan Sage Scrub	7,940	2,060	3,170	5,230	66%
Unknown	1,350	1,230	10	1,240	92%
Water	12,210	9,150	1,190	10,340	85%
Woodlands and Forests	34,300	20,770	2,730	23,500	69%
Developed or Disturbed Land	218,260	4,780	–	4,780	2%
TOTALS	1,258,780	346,530	159,380	505,910	

➤ Soils

Clay soils within the Plan Area include Bosanko, Auld, Altamont, and Porterville. In addition, areas from which clay had been mined (known as “claypit”) were digitized. Within the Plan Area, clay soils support several sensitive plant species, including listed species such as Munz’s onion (state threatened, federally endangered), thread-leaved brodiaea (state endangered, federally threatened), and San Diego button celery (state and federally endangered); and sensitive species such as Orcutt’s brodiaea, long-spined spine flower, small-flowered morning glory, many-stemmed dudleya, Palmer’s grapplinghook, graceful tarplant, and small-flowered microseris. The Domino-Traver-Willows soil

3.0 Conservation Planning Process/ Description And Area Plan Criteria of the MSHCP Conservation Area



association includes saline-alkali soils largely located along floodplain areas within the Plan Area. Sensitive plants supported by the Domino-Traver-Willows soil association include two listed species, the San Jacinto Valley crowscale (federally endangered) and the spreading navarretia (federally threatened); and sensitive plant species, including Parish's brittlescale, Davidson's saltscale, Coulter's goldfields, and vernal barley.

Within the clay soils areas, 31 percent of the total is conserved, including 12 percent within Additional Reserve Lands and 19 percent on existing Public/Quasi-Public Lands. Of these clay soils, 18 percent of Auld, 23 percent of Bosanko, 37 percent of Porterville, 10 percent of claypit, and 12 percent of Altamont are conserved either on Public/Quasi-Public Lands or captured within the Additional Reserve Lands. Within Domino-Traver-Willows soils, 36 percent of the total is conserved, including 21 percent within the MSHCP Conservation Area and 15 percent on existing public lands. Within this soil association, 17 percent of Domino, 32 percent of Traver, and 74 percent of Willows soils are conserved either on Public/Quasi-Public Lands or within Additional Reserve Lands.

► Patch Size

The individual sizes of patches comprising the MSHCP Conservation Area are important elements to the functioning of the conserved lands. It is generally agreed that large-sized patches encompass a greater portion of the landscape and allow for a greater inclusion of ecological niches, and that larger Core Areas offer greater resistance to catastrophic changes. However, while larger-sized Core Areas are usually considered better-functioning, widespread smaller satellite Core Areas can incorporate higher species diversity by efficiently preserving nodes of species of limited distribution. The MSHCP Conservation Area has both small and large areas in order to balance the need to conserve narrowly-distributed species and preserve the greatest number of species and protect Habitat function with the least management effort.

The MSHCP Conservation Area is composed of approximately 575 patches. The spatial character of the MSHCP Conservation Area is complex with large numbers of small, spatially disjunct patches and small numbers of large connected patches. Sixty-five percent of these patches are less than ten acres in area and make up less than 0.25 percent of the areas to be conserved under the MSHCP. The vast majority of these small patches occur within areas heavily fragmented by urbanization in the Riverside Lowlands Bioregion and are represented by small patches of existing Public/Quasi-Public Lands. By contrast only 28 of the patches (5 percent) are greater than 1,000 acres but these make up 94 percent of the areas to be conserved under the MSHCP. A single connected block makes up

3.0 Conservation Planning Process/ Description And Area Plan Criteria of the MSHCP Conservation Area



the largest portion of the MSHCP Conservation Area at approximately 238,000 acres (50 percent of the acreage).

➤ Edge Affected Land After Completion of Reserve Assembly

Increases in fragmentation of the landscape lead to increases in the area where urban/agricultural landscapes and native Habitats interface. These areas of high fragmentation are subjected to Edge Effects, which are generally unfavorable and are ultimately due to nearby human activity. Some examples of Edge Effects include introduction/colonization of non-native species, increased predation, increased fire frequency, and small-scale environmental changes in temperature, light, and wind (Primack, 1993).

The MSHCP Conservation Area will be subjected to these Edge Effects due to urbanization within the Plan Area. For the purposes of estimating Edge Effects on Habitat patches at completion of Reserve Assembly, each acre within the MSHCP Conservation Area (excluding urban and agricultural land) was placed into one of three categories based on proximity to urban/agricultural lands: strongly affected (1 to 250 feet from urban or agricultural land), somewhat affected (251 to 600 feet from urban or agricultural land), and not affected (more than 600 feet from urban or agricultural land).

From this analysis, it was found that 14 percent of the MSHCP Conservation Area will be strongly affected, 15 percent will be somewhat affected, and 71 percent will not be affected by Edge Effects. This large percentage of lands not likely to be exposed to Edge Effects is due to the effect of a small number of large Habitat blocks. The strongly urban/agricultural areas of the Riverside Lowlands Bioregion and San Bernardino Mountains Bioregion have the greatest proportion of land that may be subject to Edge Effects.