

A. MSHCP Conservation Area Description



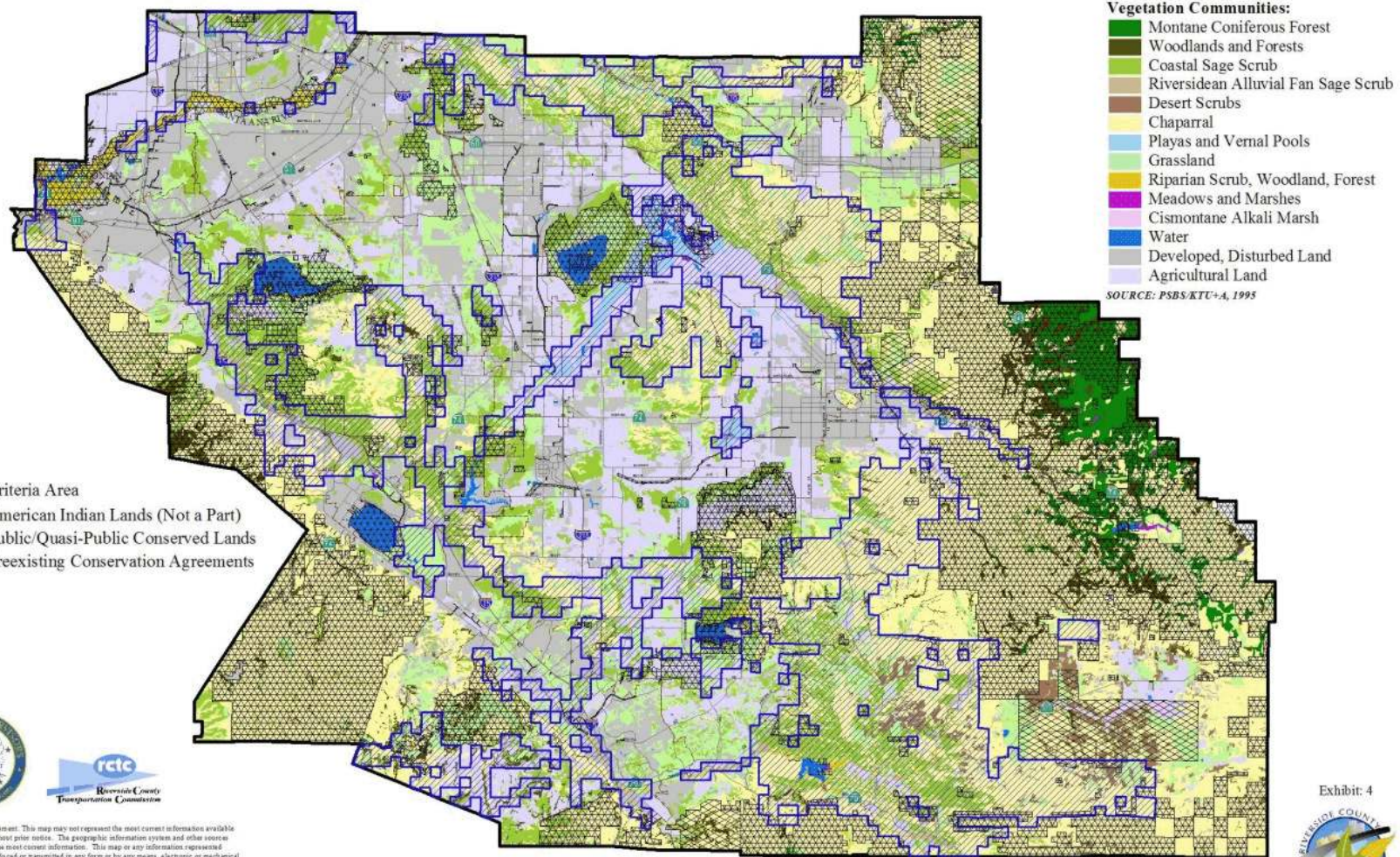
Although the coastal sage scrub and adjacent vegetation polygons were field-verified by PSBS, the remainder of the vegetation polygons were not systematically field-verified. PSBS conducted a subjective accuracy assessment using a variety of existing vegetation maps (*e.g.*, the Weislander VTM, CNDDDB, and UCR-Minnich maps) and found an acceptable correspondence to the other maps. Although the accuracy of the vegetation data has not been quantitatively tested, it has been qualitatively evaluated at an appropriate level of accuracy for this landscape-level analysis.

The focus for the vegetation mapping by PSBS was largely for coastal sage scrub conservation planning. Thus, it is likely the mapping scale and consistency in classification are adequate for this Vegetation Community. Because the minimum mapping unit of this mapping effort was between approximately one and five acres, it is unlikely that other vegetation type polygons were consistently mapped below one acre. Furthermore, generalizations in vegetation classification and polygon size appear to have been made in areas with widespread vegetation types and smaller units were difficult to determine by aerial photography. For example, large tracts of chaparral in the Plan Area are known to support several different chaparral subassociations, as described by Holland (1986) (*e.g.*, chamise chaparral, scrub oak chaparral, *Ceanothus crassifolius* chaparral, and interior live oak chaparral), but large areas of chaparral were lumped in a general undifferentiated chaparral category. In contrast, coastal sage scrub was mapped as several different associations: Diegan coastal sage scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, and disturbed alluvial scrub. As a result of different precision and scales of mapping, there likely is some variation in the representation of species turnover or diversity at the boundaries of different polygons within and between Vegetation Community types. For the purpose of the MSHCP Conservation Area description, the Vegetation Communities are generalized to broader physiognomic formations, resulting in less specific information about the different associations, but yielding a more valid landscape-level analysis.

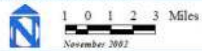
3.1.2 MSHCP Conservation Area Vegetation Description

Table 1 shows, in order from highest to lowest, the acreages of Vegetation Communities and land covers that would be conserved in the MSHCP Conservation Area (including existing Public/Quasi-Public Lands). *Exhibit 4* shows the distribution of Vegetation Communities in the Plan Area and MSHCP Conservation Area. Approximately 90% of the MSHCP Conservation Area consists of five generalized vegetation types: chaparral, coastal sage scrub, grassland, woodlands and forests, and montane coniferous forests. Among these, chaparral occupies the largest area, covering approximately 54% of the MSHCP Conservation Area. Agricultural lands make up about 4% of the area, and the remaining generalized vegetation types comprise less than 8% of the MSHCP Conservation Area.

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Vegetation Map With Criteria Area

Exhibit: 4



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**TABLE 1
ACREAGE OF GENERALIZED VEGETATION COMMUNITIES
TO BE CONSERVED WITHIN THE MSHCP CONSERVATION AREA**

Vegetation Community	MSHCP Conservation Area Acres	Percentage Conserved	Cumulative Percentage
Chaparral	272,280	54.5	54.5
Coastal Sage Scrub	81,720	16.3	70.8
Grassland	42,820	8.6	79.4
Woodlands and Forests	23,500	4.7	84.1
Montane Coniferous Forest	20,500	4.1	88.2
Agricultural Land	20,020	4.0	92.2
Riparian Scrub, Woodland, Forest	11,190	2.2	94.4
Playas and Vernal Pools	6,750	1.3	95.7
Water	10,340	2.1	97.8
Riversidean Alluvial Fan Sage Scrub	5,230	1.0	98.8
Desert Scrubs	4,990	1.0	99.8
Meadows and Marshes	510	0.1	99.9
Cismontane Alkali Marsh	40	<0.1	100.0
TOTAL¹	499,890	100.0	

¹ Approximately 1,240 acres in the MSHCP Conservation Area are mapped as “unknown.” This acreage is omitted from this analysis. Developed also is omitted from the table because it does not contribute to the MSHCP Conservation Area.

Although most of the MSHCP Conservation Area is comprised of relatively few generalized vegetation types, it does represent the distribution of generalized vegetation types within the entire Plan Area, as illustrated by the comparison in *Table 2* of the relative percent distribution in the MSHCP Conservation Area and the relative percent distribution in the Plan Area. For example, the relative distribution of chaparral in the MSHCP Conservation Area is 55% of the total acreage in the

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area, whereas it comprises only 42% of the Plan Area. On the other hand, grassland comprises 15% of the Plan Area, but only 9% of the MSHCP Conservation Area. Thus, if a conservation goal is to provide a typical representation of a vegetation type in the MSHCP Conservation Area (*i.e.*, representativeness) as an index of diversity, chaparral is “over-represented” by approximately 12% and grassland is under-represented by more than 6%. It is important to understand that the relative percentages are arithmetically dependent. That is, purposely omitting large areas of Agriculture from the MSHCP Conservation Area will tend to cause the other relative percentages to increase. Generally, it is desirable to have neutral to positive changes in the relative percentages of the natural Vegetation Communities. Negative changes indicate that proportionally less of a community would be conserved.

TABLE 2. VARIATION IN RELATIVE DISTRIBUTION OF VEGETATION COMMUNITIES BETWEEN AREAS TO BE CONSERVED UNDER THE MSHCP AND THE PLAN AREA

Vegetation Community	MSHCP Conservation Area		Plan Area		Percent Conserved under MSHCP	Change in Relative % Distribution
	Acres	Relative % Distribution	Acres	Relative % Distribution		
Chaparral	272,280	54.5	434,930	41.9	62.6	12.6
Coastal Sage Scrub	81,720	16.3	156,440	15.1	52.2	1.2
Grassland	42,820	8.6	154,140	14.8	27.8	-6.2
Woodlands and Forests	23,500	4.7	34,320	3.3	68.5	1.4
Montane Coniferous Forest	20,500	4.1	29,910	2.9	68.5	1.2
Agricultural Land	20,020	4.0	169,460	16.3	11.8	-12.3
Riparian Scrub, Woodland, Forest	11,190	2.2	15,030	1.4	74.5	0.8
Playas and Vernal Pools	6,750	1.4	7,920	0.8	85.2	0.6
Water	10,340	2.1	12,210	1.2	84.7	0.9
Riversidean Alluvial Fan Sage Scrub	5,230	1.0	7,940	0.8	65.9	0.2
Desert Scrubs	4,990	1.0	14,560	1.4	34.3	-0.4
Meadows and Marshes	510	0.1	1,020	0.1	23.7	0.0
Cismontane Alkali Marsh	40	< 0.1	1,260	0.1	3.2	0.0

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The over-representation of chaparral, coastal sage scrub, and montane coniferous forest occurs because high absolute percentages of these communities are conserved and because relatively low percentages of grasslands and agricultural lands are conserved. Most of the vegetation types show a slight over-representation. The only Vegetation Community that shows substantial under-representation is grassland. Desert scrubs show a slight under-representation. Because agricultural lands have lower conservation value, under-representation is not important. A more fine-scaled analysis of under-represented vegetation types is provided at the end of this section.

3.2 Uncollapsed Vegetation

Although the vegetation classifications in the uncollapsed vegetation data base contain some inconsistencies, they are the best available resource to describe the representation of the largest variety of vegetation associations (including rare types). Approximate acreages for the uncollapsed vegetation types mapped within the Plan Area and the MSHCP Conservation Area are presented in *Table 3*.

**TABLE 3
CONSERVATION OF UNCOLLAPSED VEGETATION TYPES**

Vegetation Community	Plan Area (Acres)	MSHCP Conservation Area (Acres)	Percent Conserved
Lodgepole Pine	578	578	100.0
Montane Riparian Scrub	6	6	100.0
Subalpine Coniferous	27	27	100.0
Tamarisk Scrub	272	272	100.0
Southern Interior Basalt Vernal Pool	55	55	100.0
Black Oak Forest	8	8	100.0
Arundo/Riparian Forest	493	491	99.6
Semi-desert Succulent Scrub	2,430	2,356	97.0
Unknown Woodland	199	193	97.0
Broadleaved Upland Forest	2,375	2,280	96.0
Valley and Foothill Grassland	2,736	2,626	96.0
Sonoran Wash Scrub	21	20	95.2
Coastal and Valley Freshwater Marsh	391	366	93.6
Vernal Pool	19	17	89.5
Southern Cottonwood/Willow Riparian	6,759	5,943	87.9
Mixed Evergreen Forest	4,467	3,915	87.7