

**Classification of Vegetation for Western San Diego County
Stand Data**

AECOM

California Department of Fish and Game
Vegetation Classification and Mapping Program

Conservation Biology Institute

February 2011

TREE DESCRIPTIONS

Callitropsis forbesii Provisional Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	66.6	45-87	-
Herb	8.6	1-22	0-1
Shrub	30.1	9-52	1-5
Hardwood	0.7	0-5	5-10
Conifer	37.1	0-60	1-5
Non-native plant presence	10.1	2-23	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (3), Flat (2), W (1), NE (1)

Macrotopography: Bottom (2), Lower 1/3 of slope (2), Upper 1/3 of slope (2), Ridge top (1)

Microtopography: flat (4), convex (2), concave (1)

Parent Material: Metamorphic (6), Sedimentary (1)

Soil Texture: silt or silt loam (3), loam or sandy loam (2), clay or clay loam (1), unknown (1)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	410 ft.	76-711 ft.
Slope	8°	0-25°
Large rock cover	15.1%	2-45%
Small rock cover	26.6%	10-60%
Bare ground cover	16.3%	7-25%
Litter cover	36.1%	0-67%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 1361LS02, 1401MB01, 1600LS01, 1834MB01, 1834MB02, 1834MB04, 1839MB01

Relevé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Callitropsis forbesii</i>	7 of 7	1B.1	S1.1	G2	
<i>Ceanothus otayensis</i>	2 of 7	1B.2	S1.2	G1	
<i>Chamaebatia australis</i>	3 of 7	4.2	S3.2	G4	
<i>Iva hayesiana</i>	2 of 7	2.2	S2.2?	G3?	
<i>Lepechinia ganderi</i>	1 of 7	1B.3	S2.2	G2	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	1 of 7	4.3	S2S4.3	G5T2T4	

STAND TABLE

Callitropsis forbesii Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	CUFO2	<i>Callitropsis forbesii</i>	100	38.3	8.0	60	X
Shrub	MALA6	<i>Malosma laurina</i>	86	3.9	0.2	12	X
	ADFA	<i>Adenostoma fasciculatum</i>	71	11.0	0.2	20	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	71	1.5	0.2	4	
	CETO	<i>Ceanothus tomentosus</i>	43	16.3	15.0	17	
	ARGLG3	<i>Arctostaphylos glandulosa</i> ssp. <i>glandulosa</i>	43	8.7	7.0	12	
	CHAU2	<i>Chamaebatia australis</i>	43	1.1	0.2	2	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	43	0.5	0.2	1	
	BASA4	<i>Baccharis salicifolia</i>	29	10.5	2.0	19	
	XYBI	<i>Xylococcus bicolor</i>	29	6.1	0.2	12	
	CEOT	<i>Ceanothus xotayensis</i> [<i>crassifolus</i> × <i>greggii</i>]	29	4.5	4.0	5	
	HEAR5	<i>Heteromeles arbutifolia</i>	29	2.0	2.0	2	
	DERI	<i>Dendromecon rigida</i>	29	1.5	1.0	2	
	SALA6	<i>Salix lasiolepis</i>	29	0.6	0.2	1	
	CEGRP	<i>Ceanothus greggii</i> var. <i>perplexans</i>	29	0.2	0.2	0.20	
	ERTR7	<i>Eriodictyon trichocalyx</i>	29	0.2	0.2	0.20	
Herb	BRRU2	* <i>Bromus rubens</i>	86	3.2	0.2	12	X
	VUMY	* <i>Vulpia myuros</i>	86	2.0	1.0	4	X
	CEME2	* <i>Centaurea melitensis</i>	57	2.3	0.2	6	
	HIIN3	* <i>Hirschfeldia incana</i>	43	0.7	0.2	1	
	AVBA	* <i>Avena barbata</i>	43	0.2	0.2	0.20	
	GAPOP	<i>Galium porrigens</i> var. <i>porrigens</i>	43	0.2	0.2	0.20	
	IVHA	<i>Iva hayesiana</i>	29	3.0	1.0	5	
	LOGA2	* <i>Logfia gallica</i>	29	1.1	0.2	2	
	LOUNU	<i>Lotus unifoliolatus</i> var.	29	1.0	1.0	1	

	<i>unifoliolatus</i>				
TRLA3	<i>Trichostema lanatum</i>	29	0.2	0.2	0.20

***Pinus torreyana* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	40.6	20-70	-
Herb	2.0	0-7	0-2
Shrub	30.2	4-58	1-5
Hardwood	0.0	0-0	-
Conifer	11.8	6-27	5-20
Non-native plant presence	6.6	0-29	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (4), W (2), Variable (1), SW (1), NE (1), N (1), E (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Upper 1/3 of slope (4), Upper 1/3 of slope to Ridgetop (1), Ridge top (2)

Microtopography: undulating (6), convex (3), concave (1), flat (1)

Parent Material: Sandstone (9), Sedimentary (2)

Soil Texture: sand (10), loam or sandy loam (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	81 ft.	58-112 ft.
Slope	14°	1-35°
Large rock cover	1.4%	0-10%
Small rock cover	0.1%	0-0%
Bare ground cover	16.8%	0-68%
Litter cover	79.2%	30-98%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=11)

Rapid Assessment(s): 0707DH06, 1807JD01, 1807KH01, SDG0091, SDG0095, SDG0096, SDG0097, SDG0100, SDG0101, SDRP0253, SDRP0257

Relevé(s): none

CONSERVATION STATUS RANK G1 S1.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	1 of 11	1B.1	S1.1	G5T1	
<i>Ceanothus verrucosus</i>	5 of 11	2.2	S2.2	G3	
<i>Coreopsis maritima</i>	4 of 11	2.2	S2.2	G3	
<i>Erysimum ammophilum</i>	1 of 11	1B.2	S2.2	G2	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	11 of 11	1B.2	S1.2	G1T1	
<i>Quercus dumosa</i>	3 of 11	1B.1	S1.1	G1G2	

STAND TABLE

Pinus torreyana Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	PITOT2	<i>Pinus torreyana</i> var. <i>torreyana</i>	100	14.0	6.0	33	X
Shrub	RHIN2	<i>Rhus integrifolia</i>	100	3.2	0.2	6	X
	ERFA2	<i>Eriogonum fasciculatum</i>	64	5.2	0.2	12	
	ADFA	<i>Adenostoma fasciculatum</i>	55	5.7	2.0	12	
	ARCA11	<i>Artemisia californica</i>	55	2.9	0.2	8	
	LOSC2	<i>Lotus scoparius</i>	55	1.9	0.2	6	
	RHCR	<i>Rhamnus crocea</i>	55	1.3	0.2	4	
	CEVE2	<i>Ceanothus verrucosus</i>	45	2.4	0.2	9	
	HEAR5	<i>Heteromeles arbutifolia</i>	45	1.8	0.2	4	
	CNDU	<i>Cneoridium dumosum</i>	45	1.8	0.2	8	
	MALA6	<i>Malosma laurina</i>	45	1.7	0.2	5	
	SAME3	<i>Salvia mellifera</i>	45	1.4	0.2	3	
	YUSC2	<i>Yucca schidigera</i>	36	0.7	0.2	2	
	OPLI3	<i>Opuntia littoralis</i>	36	0.2	0.2	0.20	
	QU DU	<i>Quercus dumosa</i>	27	17.7	5.0	40	
	XYBI	<i>Xylococcus bicolor</i>	27	2.7	0.2	7	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	27	2.1	0.2	6	
Herb	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	55	0.2	0.2	0.20	
	COMA10	<i>Coreopsis maritima</i>	36	0.9	0.2	2	
	SANU6	<i>Sairocarpus nuttallianus</i>	27	0.5	0.2	1	
	VUMY	* <i>Vulpia myuros</i>	27	0.5	0.2	1	

***Platanus racemosa* Alliance**
California Sycamore Woodlands

ALLIANCE STAND TABLE

***Platanus racemosa*
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	PLRA	<i>Platanus racemosa</i>	98	10.2	1.0	63	X
	QUAG	<i>Quercus agrifolia</i>	60	20.8	0.2	58	
	SALA3	<i>Salix laevigata</i>	40	9.6	1.0	35	
	SAGO	<i>Salix gooddingii</i>	21	3.1	0.2	15	
Shrub	TODI	<i>Toxicodendron diversilobum</i>	77	14.2	0.2	55	
	SALA6	<i>Salix lasiolepis</i>	63	9.5	0.2	53	
	BASA4	<i>Baccharis salicifolia</i>	51	4.3	0.2	12	
	RUUR	<i>Rubus ursinus</i>	35	4.4	0.2	14	
	VIGI2	<i>Vitis girdiana</i>	30	14.4	0.2	55	
	ROCA2	<i>Rosa californica</i>	28	2.9	0.2	23	
	SANIC5	<i>Sambucus nigra ssp. cerulea</i>	21	1.8	0.2	7	
Herb	ARDO3	<i>Artemisia douglasiana</i>	56	5.5	0.2	40	
	BRDI3	* <i>Bromus diandrus</i>	42	13.6	0.2	45	
	AMPS	<i>Ambrosia psilostachya</i>	37	3.6	0.2	16	
	CASP6	<i>Carex spissa</i>	23	2.6	0.2	10	
	PIMI3	* <i>Piptatherum miliaceum</i>	23	1.5	0.2	4	

***Platanus racemosa*/Baccharis salicifolia Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Santa Margarita (MA)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.0	54-65	-
Herb	32.7	18-50	0-2
Shrub	26.0	20-38	1-5
Hardwood	24.7	9-50	5-15
Conifer	0.0	0-0	-
Non-native plant presence	29.7	7-76	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), S (1), N (1)

Macrotopography: Bottom (3)

Microtopography: flat (2), convex (1)

Parent Material: Sandy alluvium (2), Sedimentary (1)

Soil Texture: sand (2), loam or sandy loam (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	294 ft.	99-466 ft.
Slope	1°	1-2°
Large rock cover	9.5%	0-19%
Small rock cover	2.0%	2-2%
Bare ground cover	11.0%	1-21%
Litter cover	72.0%	69-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0506RB05, 0610TK02, SDRP0199

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

STAND TABLE

Platanus racemosa/Baccharis salicifolia

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	PLRA	<i>Platanus racemosa</i>	100	12.0	9.0	15	X
	EUGL	* <i>Eucalyptus globulus</i>	33	40.0	40.0	40	
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	100	8.0	5.0	12	X
	ROCA2	<i>Rosa californica</i>	67	2.0	1.0	3	
	KECO	<i>Keckiella cordifolia</i>	33	10.0	10.0	10	
	SALA6	<i>Salix lasiolepis</i>	33	10.0	10.0	10	
	TAMAR2	* <i>Tamarix</i>	33	9.0	9.0	9	
	CESP	<i>Ceanothus spinosus</i>	33	8.0	8.0	8	
	FRCA12	<i>Frangula californica</i>	33	6.0	6.0	6	
	HEAR5	<i>Heteromeles arbutifolia</i>	33	4.0	4.0	4	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	2.0	2.0	2	
	PRIL	<i>Prunus ilicifolia</i>	33	2.0	2.0	2	
Herb							
	ARDO3	<i>Artemisia douglasiana</i>	67	23.5	7.0	40	
	BRDI3	* <i>Bromus diandrus</i>	67	15.0	5.0	25	
	BRHO2	* <i>Bromus hordeaceus</i>	33	5.0	5.0	5	
	DAGL	* <i>Dactylis glomerata</i>	33	5.0	5.0	5	
	AMPS	<i>Ambrosia psilostachya</i>	33	3.0	3.0	3	
	THFE	<i>Thalictrum fendleri</i>	33	3.0	3.0	3	
	JURU	<i>Juncus rugulosus</i>	33	2.0	2.0	2	

ASFA	<i>Asclepias fascicularis</i>	33	1.0	1.0	1
DATUR	<i>Datura</i>	33	1.0	1.0	1
ELGL	<i>Elymus glaucus</i>	33	1.0	1.0	1
LECO12	<i>Leymus condensatus</i>	33	1.0	1.0	1
STACH	<i>Stachys</i>	33	1.0	1.0	1
JUTE2	<i>Juncus textilis</i>	33	0.2	0.2	0.20
MIGU	<i>Mimulus guttatus</i>	33	0.2	0.2	0.20
POGL9	<i>Potentilla glandulosa</i>	33	0.2	0.2	0.20

***Platanus racemosa*-*Populus fremontii*/*Salix lasiolepis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Valley (NV), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	57.7	39-87	-
Herb	22.0	10-40	0-2
Shrub	31.6	10-58	1-5
Hardwood	24.3	8-55	5-15
Conifer	0.0	0-0	-
Non-native plant presence	9.6	0-35	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (2), Flat (2), W (1), NW (1), N (1)

Macrotopography: Bottom (6), Bottom to Lower 1/3 of slope (1)

Microtopography: flat (4), concave (2), undulating (1)

Parent Material: Granitic (2), Sandy alluvium (2), Metamorphic (1), Mixed alluvium (1)

Soil Texture: sand (3), silt or silt loam (3), loam or sandy loam (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	99 ft.	-19-214 ft.
Slope	1°	0-3°
Large rock cover	12.2%	0-52%
Small rock cover	7.0%	0-20%
Bare ground cover	10.4%	4-24%
Litter cover	65.0%	2-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 0520TK02, 0623AK01, 0709JS01, 1531EB01, 1541MB02, SDRP0141, SDRP0437

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

STAND TABLE

Platanus racemosa-*Populus fremontii*/*Salix lasiolepis* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	POFRF3	<i>Populus fremontii</i> ssp. <i>fremontii</i>	100	11.9	0.2	35	X
	PLRA	<i>Platanus racemosa</i>	100	6.6	2.0	17	X
	SALA3	<i>Salix laevigata</i>	71	8.8	1.0	20	
	SAGO	<i>Salix gooddingii</i>	43	1.3	1.0	2	
Shrub	SALA6	<i>Salix lasiolepis</i>	100	15.2	0.2	53	X
	BASA4	<i>Baccharis salicifolia</i>	86	5.5	1.0	12	X
	TODI	<i>Toxicodendron</i>	71	3.0	0.2	7	
	RUUR	<i>Rubus ursinus</i>	57	3.1	0.2	6	
	VIGI2	<i>Vitis girdiana</i>	43	12.7	2.0	26	
	ROCA2	<i>Rosa californica</i>	43	7.8	0.2	23	
	SAEX	<i>Salix exigua</i>	29	3.6	0.2	7	
	AMFR	<i>Amorpha fruticosa</i>	29	3.5	3.0	4	
Herb	AMPS	<i>Ambrosia psilostachya</i>	86	5.2	0.2	16	X
	ARDO3	<i>Artemisia douglasiana</i>	71	3.0	2.0	5	
	BRDI3	* <i>Bromus diandrus</i>	29	8.5	2.0	15	
	TYDO	<i>Typha domingensis</i>	29	7.1	0.2	14	
	EUOC4	<i>Euthamia occidentalis</i>	29	4.5	1.0	8	
	JUTE2	<i>Juncus textilis</i>	29	4.5	1.0	8	
	CYDA	* <i>Cynodon dactylon</i>	29	4.1	0.2	8	
	CASP6	<i>Carex spissa</i>	29	2.5	1.0	4	
	MEPO3	* <i>Medicago polymorpha</i>	29	1.6	0.2	3	
	ANCA10	<i>Anemopsis californica</i>	29	1.5	1.0	2	
	ARDO4	* <i>Arundo donax</i>	29	1.5	1.0	2	
	TYLA	<i>Typha latifolia</i>	29	1.1	0.2	2	
	RUCR	* <i>Rumex crispus</i>	29	0.6	0.2	1	
	CYER	<i>Cyperus eragrostis</i>	29	0.2	0.2	0.20	
	HIIN3	* <i>Hirschfeldia incana</i>	29	0.2	0.2	0.20	
	PIMI3	* <i>Piptatherum miliaceum</i>	29	0.2	0.2	0.20	

***Platanus racemosa-Quercus agrifolia* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	68.3	24-97	-
Herb	18.9	2-60	0-2
Shrub	27.2	0-80	1-10
Hardwood	29.4	4-75	2-20
Conifer	0.0	0-0	-
Non-native plant presence	12.9	0-60	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (8), Flat (6), S (5), SW (4), NE (3), N (3), NW (2), SE (1), E (1)

Macrotopography: Bottom (25), Bottom to Lower 1/3 of slope (6), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (1)

Microtopography: concave (17), flat (11), undulating (3), convex (2)

Parent Material: Granitic (9), Sandy alluvium (8), Metamorphic (6), Sedimentary (4), Mixed alluvium (2), Gravelly alluvium (1), no data (1), Silty alluvium (1)

Soil Texture: sand (14), loam or sandy loam (12), silt or silt loam (4), clay or clay loam (2), unknown (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	243 ft.	15-628 ft.
Slope	3°	0-28°
Large rock cover	7.0%	0-74%
Small rock cover	10.3%	0-63%
Bare ground cover	15.1%	0-86%
Litter cover	62.5%	0-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=33)

Rapid Assessment(s): 0309AK21, 0310DH26, 0311TK23, 0324TKF3, 0504TK24, 0505AK03, 0505MG02, 0507TK04, 0603JS02, 0610DH01, 0610DH04, 0611RB01, 0GPSMB03, 1041MB01, 1067MB01, 1068MB02, 1123MB01, 1126MB01, 1136MB01, 1350EB02, 1550MB02, 1576LS01, 1708JD01, 1708JD02, 1710JD08, 1710KH04, 1800FS01, SDRP0191, SDRP0194, SDRP0196, SDRP0323, SDRP0433, SDRP0476

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ambrosia monogyra</i>	1 of 33	2.2	S2.2	G5	
<i>Artemisia palmeri</i>	5 of 33	4.2	S3.2	G3	
<i>Juglans californica</i>	1 of 33	4.2	S3.2	G3	
<i>Juncus acutus ssp. leopoldii</i>	1 of 33	4.2	S3.2	G5T5	
<i>Quercus engelmannii</i>	1 of 33	4.2	S3.2	G3	

STAND TABLE

Platanus racemosa-*Quercus agrifolia* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	PLRA	<i>Platanus racemosa</i>	97	10.8	1.0	63	X
	QUAG	<i>Quercus agrifolia</i>	76	21.6	0.2	58	
	SALA3	<i>Salix laevigata</i>	36	10.0	1.0	35	
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	24	26.5	4.0	60	
Shrub	TODI	<i>Toxicodendron</i>	85	16.2	0.2	55	X
	SALA6	<i>Salix lasiolepis</i>	58	7.5	0.2	25	
	BASA4	<i>Baccharis salicifolia</i>	39	2.9	0.2	10	
	RUUR	<i>Rubus ursinus</i>	33	4.9	0.2	14	
	VIGI2	<i>Vitis girdiana</i>	30	14.9	0.2	55	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	27	1.8	0.2	7	
	ROCA2	<i>Rosa californica</i>	21	1.1	0.2	3	
Herb	ARDO3	<i>Artemisia douglasiana</i>	52	4.1	0.2	12	
	BRDI3	* <i>Bromus diandrus</i>	42	14.2	0.2	45	
	AMPS	<i>Ambrosia psilostachya</i>	27	2.6	0.2	7	
	CASP6	<i>Carex spissa</i>	24	2.6	0.2	10	
	PIMI3	* <i>Piptatherum miliaceum</i>	24	1.8	0.2	4	
	NAOF	<i>Nasturtium officinale</i>	24	0.8	0.2	2	

***Populus fremontii* Alliance**
Fremont Cottonwood Forest

ALLIANCE STAND TABLE

***Populus fremontii* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	POFRF3	<i>Populus fremontii</i> ssp. <i>fremontii</i>	50	20.3	5.2	50	
	SAGO	<i>Salix gooddingii</i>	31	12.0	2.0	35	
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	44	5.0	0.2	10	
	SALA6	<i>Salix lasiolepis</i>	31	8.2	4.0	23	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	25	1.3	0.2	2	
Herb							
	BRDI3	* <i>Bromus diandrus</i>	25	13.6	0.2	45	
	RUCR	* <i>Rumex crispus</i>	25	0.9	0.2	2	

***Populus fremontii*/Baccharis salicifolia Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	37.5	23-52	-
Herb	17.0	14-20	0-0.5
Shrub	11.5	6-17	2-5
Hardwood	12.0	7-17	5-10
Conifer	0.0	0-0	-
Non-native plant presence	9.4	1-18	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (1), N (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1)

Microtopography: concave (1), flat (1)

Parent Material: Sandy alluvium (1), Sedimentary (1)

Soil Texture: clay or clay loam (1), sand (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	133 ft.	88-178 ft.
Slope	1°	1-1°
Large rock cover	12.5%	0-25%
Small rock cover	31.0%	2-60%
Bare ground cover	51.0%	10-92%
Litter cover	3.5%	3-4%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=4)

Rapid Assessment(s): 0504TK25, 1707EB02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

Scientific Name	# of	CNPS List	Global	State Rank	Fed Status
<i>Juncus acutus ssp. leopoldii</i>	1 of 4	4.2	S3.2	G5T5	

STAND TABLE

Populus fremontii/*Baccharis salicifolia* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	POFRF3	<i>Populus fremontii ssp. fremontii</i>	50	12.0	7.0	17	
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	50	5.1	0.2	10	
	SALA6	<i>Salix lasiolepis</i>	50	4.5	4.0	5	
	ISME5	<i>Isocoma menziesii</i>	50	0.6	0.2	1	
	SAEX	<i>Salix exigua</i>	25	2.0	2.0	2	
	SANIC5	<i>Sambucus nigra ssp. cerulea</i>	25	1.0	1.0	1	
	BASA2	<i>Baccharis sarothroides</i>	25	0.2	0.2	0.20	
Herb							
	DISP	<i>Distichlis spicata</i>	50	8.5	4.0	13	
	AMPS	<i>Ambrosia psilostachya</i>	25	4.0	4.0	4	
	BRDI3	* <i>Bromus diandrus</i>	25	4.0	4.0	4	
	CIOC	<i>Cirsium occidentale</i>	25	3.0	3.0	3	
	ANCA10	<i>Anemopsis californica</i>	25	2.0	2.0	2	
	ERBO	* <i>Erodium botrys</i>	25	2.0	2.0	2	
	HIIN3	* <i>Hirschfeldia incana</i>	25	2.0	2.0	2	
	RASA2	* <i>Raphanus sativus</i>	25	1.0	1.0	1	
	RUCR	* <i>Rumex crispus</i>	25	1.0	1.0	1	
	APGR2	* <i>Apium graveolens</i>	25	0.2	0.2	0.20	
	JUACL	<i>Juncus acutus ssp.</i>	25	0.2	0.2	0.20	

SCAM6	<i>Schoenoplectus americanus</i>	25	0.2	0.2	0.20
TYDO	<i>Typha domingensis</i>	25	0.2	0.2	0.20

***Populus fremontii*-*Salix gooddingii*/*Baccharis salicifolia* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Northern Valley (NV), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	63.6	40-90	-
Herb	17.0	3-47	0-2
Shrub	18.8	8-35	1-10
Hardwood	37.4	5-70	5-20
Conifer	0.2	0-1	-
Non-native plant presence	29.3	4-52	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Variable (2), W (1), SW (1), NE (1)

Macrotopography: Bottom (4), Bottom to Lower 1/3 of slope (1)

Microtopography: concave (4), flat (1)

Parent Material: Granitic (1), Metamorphic (1), Mixed alluvium (1), Sandy alluvium (1), Sedimentary (1)

Soil Texture: loam or sandy loam (2), sand (2), silt or silt loam (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	87 ft.	19-122 ft.
Slope	1°	0-2°
Large rock cover	10.0%	0-30%
Small rock cover	4.0%	0-10%
Bare ground cover	22.8%	5-35%
Litter cover	51.3%	1-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0520TK04, 0709MG02, 1336EB02, 1542LS01, SDRP0072

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Iva hayesiana</i>	1 of 10	2.2	S2.2?	G3?	

STAND TABLE

Populus fremontii-*Salix gooddingii*/*Baccharis salicifolia* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	POFRF3	<i>Populus fremontii</i> ssp. <i>fremontii</i>	50	17.6	5.2	40	
	SAGO	<i>Salix gooddingii</i>	50	12.0	2.0	35	
	PLRA	<i>Platanus racemosa</i>	20	0.2	0.2	0.20	
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	50	5.0	1.0	10	
	SALA6	<i>Salix lasiolepis</i>	30	10.7	4.0	23	
	TODI	<i>Toxicodendron</i>	30	8.4	0.2	15	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	30	1.4	0.2	2	
	TARA	* <i>Tamarix ramosissima</i>	20	6.0	5.0	7	
	BASA2	<i>Baccharis sarothroides</i>	20	1.1	0.2	2	
	SAEX	<i>Salix exigua</i>	20	0.2	0.2	0.20	
Herb							
	BRDI3	* <i>Bromus diandrus</i>	30	16.7	0.2	45	
	RUCR	* <i>Rumex crispus</i>	30	0.8	0.2	2	
	ARDO4	* <i>Arundo donax</i>	20	2.1	0.2	4	
	FOVU	* <i>Foeniculum vulgare</i>	20	1.5	1.0	2	
	MEOF	* <i>Melilotus officinalis</i>	20	0.6	0.2	1	
	RASA2	* <i>Raphanus sativus</i>	20	0.6	0.2	1	
	LASE	* <i>Lactuca serriola</i>	20	0.3	0.2	0.40	
	HECU3	<i>Heliotropium curassavicum</i>	20	0.2	0.2	0.20	
	MEIN2	* <i>Melilotus indicus</i>	20	0.2	0.2	0.20	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	20	0.2	0.2	0.20	
	TYDO	<i>Typha domingensis</i>	20	0.2	0.2	0.20	

***Quercus agrifolia* Alliance**
Coast Live Oak Woodland

ALLIANCE STAND TABLE

***Quercus agrifolia* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	79	26.2	4.0	64	
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	21	46.2	15.	75	
Shrub	TODI	<i>Toxicodendron diversilobum</i>	86	9.8	0.2	35	X
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	44	1.0	0.2	5	
	MALA6	<i>Malosma laurina</i>	40	2.9	0.2	7	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	37	0.7	0.2	4	
	RHIL	<i>Rhamnus ilicifolia</i>	30	4.3	0.2	38	
	ARCA11	<i>Artemisia californica</i>	28	3.0	0.2	20	
	ERFA2	<i>Eriogonum fasciculatum</i>	28	1.4	0.2	7	
	HEAR5	<i>Heteromeles arbutifolia</i>	26	4.2	0.2	13	
Herb	BRDI3	* <i>Bromus diandrus</i>	74	19.0	0.2	60	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	40	0.6	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	23	7.3	0.2	23	
	BRHO2	* <i>Bromus hordeaceus</i>	23	3.3	0.2	10	
	CAPY2	* <i>Carduus pycnocephalus</i>	23	2.8	0.2	15	
	HIIN3	* <i>Hirschfeldia incana</i>	23	0.9	0.2	3	
	PIMI3	* <i>Piptatherum miliaceum</i>	21	1.6	0.2	5	

***Quercus agrifolia*/Artemisia californica Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	73.4	64-85	-
Herb	32.4	2-50	0-1
Shrub	27.2	9-50	1-2
Hardwood	26.5	10-44	0.5-20
Conifer	0.0	0-0	-
Non-native plant presence	32.2	12-64	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (3), S (1), N (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1)

Microtopography: undulating (2), concave (2), flat (1)

Parent Material: Granitic (3), Metamorphic (2)

Soil Texture: loam or sandy loam (5)

General slope steepness: gentle to steep

	Mean	Range
Elevation	123 ft.	91-178 ft.
Slope	17°	1-33°
Large rock cover	9.5%	4-15%
Small rock cover	1.5%	0-3%
Bare ground cover	4.5%	4-5%
Litter cover	82.5%	80-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 1550MB01, SDRP0085, SDRP0189, SDRP0268, SDRP0482

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

STAND TABLE

Quercus agrifolia/*Artemisia californica* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	QUAG	<i>Quercus agrifolia</i>	100	22.4	4.0	46.2	X
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	20	45.0	45.0	45	
Shrub							
	ARCA11	<i>Artemisia californica</i>	100	6.8	0.2	20	X
	ERFA2	<i>Eriogonum fasciculatum</i>	80	3.8	1.0	7	X
	MALA6	<i>Malosma laurina</i>	80	3.6	0.2	5	X
	SAAP2	<i>Salvia apiana</i>	60	3.7	1.0	7	
	RHCR	<i>Rhamnus crocea</i>	60	1.0	1.0	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	60	0.7	0.2	1	
	RHIL	<i>Rhamnus ilicifolia</i>	40	19.5	1.0	38	
	TODI	<i>Toxicodendron</i>	40	5.1	0.2	10	
	KEAN	<i>Keckiella antirrhinoides</i>	40	1.5	1.0	2	
	HEAR5	<i>Heteromeles arbutifolia</i>	20	12.0	12.0	12	
	SAME3	<i>Salvia mellifera</i>	20	6.0	6.0	6	
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	20	4.0	4.0	4	
	RHIN2	<i>Rhus integrifolia</i>	20	4.0	4.0	4	
	LOSC2	<i>Lotus scoparius</i>	20	2.0	2.0	2	

Herb	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	20	2.0	2.0	2	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	20	1.0	1.0	1	
	VIGI2	<i>Vitis girdiana</i>	20	1.0	1.0	1	
	BASA2	<i>Baccharis sarothroides</i>	20	0.2	0.2	0.20	
	ISME5	<i>Isocoma menziesii</i>	20	0.2	0.2	0.20	
	BRMA3	* <i>Bromus madritensis</i>	100	10.6	2.0	23	X
	BRDI3	* <i>Bromus diandrus</i>	100	9.4	0.2	25	X
	BRHO2	* <i>Bromus hordeaceus</i>	60	6.0	1.0	10	
	HIIN3	* <i>Hirschfeldia incana</i>	60	2.1	0.2	3	
	CEME2	* <i>Centaurea melitensis</i>	40	3.0	2.0	4	
	HORDE	* <i>Hordeum</i>	20	24.0	24.0	24	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	20	7.0	7.0	7	
	NAPU4	<i>Nassella pulchra</i>	20	4.0	4.0	4	
	DAPU3	<i>Daucus pusillus</i>	20	3.0	3.0	3	
	PLAGI	<i>Plagiobothrys</i>	20	3.0	3.0	3	
	ERODI	* <i>Erodium</i>	20	2.0	2.0	2	
	BLCRC	<i>Bloomeria crocea</i> var. <i>crocea</i>	20	0.2	0.2	0.20	
	BOCAC	<i>Bombycilaena californica</i> var. <i>californica</i>	20	0.2	0.2	0.20	
	CASP	<i>Calochortus splendens</i>	20	0.2	0.2	0.20	
	CLPU2	<i>Clarkia purpurea</i>	20	0.2	0.2	0.20	
	COFI2	<i>Corethrogyne filaginifolia</i>	20	0.2	0.2	0.20	
	DATUR	<i>Datura</i>	20	0.2	0.2	0.20	
	HEFA	<i>Deinandra fasciculata</i>	20	0.2	0.2	0.20	
	DEPA	<i>Delphinium parishii</i>	20	0.2	0.2	0.20	
	GRHI	<i>Grindelia hirsutula</i>	20	0.2	0.2	0.20	
	HECR2	* <i>Hedypnois cretica</i>	20	0.2	0.2	0.20	
	LOGA2	* <i>Logfia gallica</i>	20	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	20	0.2	0.2	0.20	
	MURI2	<i>Muhlenbergia rigens</i>	20	0.2	0.2	0.20	
	PHDI	<i>Phacelia distans</i>	20	0.2	0.2	0.20	
	PLER3	<i>Plantago erecta</i>	20	0.2	0.2	0.20	
	SIMAS	<i>Sidalcea malviflora</i> var. <i>sparsifolia</i>	20	0.2	0.2	0.20	
	SIBE	<i>Sisyrinchium bellum</i>	20	0.2	0.2	0.20	
	VUMY	* <i>Vulpia myuros</i>	20	0.2	0.2	0.20	

***Quercus agrifolia*/*Quercus (berberidifolia, xacutidens)* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	46.3	38-66	-
Herb	21.5	0-50	0-1
Shrub	18.3	5-38	1-5
Hardwood	27.0	8-45	1-15
Conifer	0.0	0-0	-
Non-native plant presence	26.7	0-76	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (2), SE (1), NW (1), N (1), Flat (1), E (1)

Macrotopography: Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (1), Upper 1/3 of slope (1)

Microtopography: concave (3), undulating (3), flat (1)

Parent Material: Granitic (3), Metamorphic (3), Mixed alluvium (1)

Soil Texture: clay or clay loam (3), loam or sandy loam (3), sand (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	503 ft.	204-773 ft.
Slope	17°	2-34°
Large rock cover	17.5%	0-58%
Small rock cover	5.9%	1-14%
Bare ground cover	15.0%	1-49%
Litter cover	59.7%	10-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 0423RB01, 0506RB24, 0520DH04, 0609AK01, 0609JJ01, 1362JD02, 1693FS02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

Scientific Name	# of	CNPS List	Global	State Rank	Fed Status
<i>Callitropsis forbesii</i>	1 of 7	1B.1	S1.1	G2	
<i>Polygala cornuta</i> var. <i>fishiae</i>	2 of 7	4.3	S3.3	G5T4	
<i>Quercus engelmannii</i>	1 of 7	4.2	S3.2	G3	

STAND TABLE

Quercus agrifolia/*Quercus (berberidifolia, xacutidens)* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	100	25.4	8.0	46	X
Shrub	TODI	<i>Toxicodendron</i>	71	6.8	2.0	12	
	QUBE5	<i>Quercus berberidifolia</i>	57	6.5	1.0	9	
	LOSU2	<i>Lonicera subspicata</i>	57	2.6	0.2	8	
	QUAC3	<i>Quercus xacutidens</i> [<i>cornelius-mulleri</i> x <i>engelmannii</i>]	43	7.0	3.0	13	
	HEAR5	<i>Heteromeles arbutifolia</i>	43	3.1	0.2	5	
	MALA6	<i>Malosma laurina</i>	43	2.0	1.0	4	
	ERFA2	<i>Eriogonum fasciculatum</i>	43	0.2	0.2	0.20	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	43	0.2	0.2	0.20	
	CETO	<i>Ceanothus tomentosus</i>	29	7.6	0.2	15	
	FRCA12	<i>Frangula californica</i>	29	4.5	4.0	5	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	29	1.1	0.2	2	
	ARGL3	<i>Arctostaphylos glandulosa</i>	29	0.6	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	29	0.6	0.2	1	
	RHOV	<i>Rhus ovata</i>	29	0.6	0.2	1	
	ADFA	<i>Adenostoma fasciculatum</i>	29	0.2	0.2	0.20	
	ARCA11	<i>Artemisia californica</i>	29	0.2	0.2	0.20	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	29	0.2	0.2	0.20	
	KECO	<i>Keckiella cordifolia</i>	29	0.2	0.2	0.20	
Herb	BRDI3	* <i>Bromus diandrus</i>	57	21.3	4.0	38	
	ERBO	* <i>Erodium botrys</i>	29	14.0	3.0	25	
	BRMA3	* <i>Bromus madritensis</i>	29	7.6	0.2	15	
	BRHO2	* <i>Bromus hordeaceus</i>	29	3.0	2.0	4	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	29	1.1	0.2	2	
	POCOF	<i>Polygala cornuta</i> var. <i>fishiae</i>	29	1.1	0.2	2	
	GAAN2	<i>Galium angustifolium</i>	29	0.2	0.2	0.20	

***Quercus agrifolia*/*Salix lasiolepis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	66.7	48-77	-
Herb	9.3	5-15	0-0.5
Shrub	37.0	30-45	1-10
Hardwood	12.5	6-19	0.5-15
Conifer	0.0	0-0	-
Non-native plant presence	13.6	4-28	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), N (1), Flat (1)

Macrotopography: Bottom (3)

Microtopography: flat (3)

Parent Material: Metamorphic (1), Sandy alluvium (1)

Soil Texture: sand (2), clay or clay loam (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	105 ft.	33-247 ft.
Slope	1°	0-2°
Large rock cover	0.3%	0-1%
Small rock cover	2.7%	0-8%
Bare ground cover	17.3%	4-30%
Litter cover	78.3%	60-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0308TK21, 1355MB02, 1710JD02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	2 of 3	4.2	S3.2	G3	

STAND TABLE

Quercus agrifolia/*Salix lasiolepis* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	67	34.0	16.0	52	
	PHCA13	* <i>Phoenix canariensis</i>	67	1.1	0.2	2	
	SAGO	<i>Salix gooddingii</i>	67	0.2	0.2	0.20	
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	33	60.0	60.0	60	
	SALA3	<i>Salix laevigata</i>	33	17.0	17.0	17	
	WARO	* <i>Washingtonia robusta</i>	33	1.0	1.0	1	
	TODI	<i>Toxicodendron</i>	100	21.0	15.0	30	X
	SALA6	<i>Salix lasiolepis</i>	100	11.7	7.0	14	X
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	67	0.6	0.2	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	67	0.2	0.2	0.20	
Shrub	VIGI2	<i>Vitis girdiana</i>	33	10.0	10.0	10	
	BAPI	<i>Baccharis pilularis</i>	33	3.0	3.0	3	
	BASA4	<i>Baccharis salicifolia</i>	33	0.2	0.2	0.20	
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	33	0.2	0.2	0.20	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	0.2	0.2	0.20	
	NIGL	* <i>Nicotiana glauca</i>	33	0.2	0.2	0.20	
	BRDI3	* <i>Bromus diandrus</i>	67	3.5	2.0	5	
	BRHO2	* <i>Bromus hordeaceus</i>	67	2.5	2.0	3	
	AMPS	<i>Ambrosia psilostachya</i>	67	1.1	0.2	2	
	BRNI	* <i>Brassica nigra</i>	67	0.6	0.2	1	
Herb	HYGL2	* <i>Hypochaeris glabra</i>	67	0.6	0.2	1	
	ARPA15	<i>Artemisia palmeri</i>	67	0.2	0.2	0.20	
	MAVU	* <i>Marrubium vulgare</i>	67	0.2	0.2	0.20	
	CAPY2	* <i>Carduus pycnocephalus</i>	33	8.0	8.0	8	
	ANCA10	<i>Anemopsis californica</i>	33	2.0	2.0	2	
	AVFA	* <i>Avena fatua</i>	33	2.0	2.0	2	
	CAED3	* <i>Carpobrotus edulis</i>	33	2.0	2.0	2	
	GAAP2	<i>Galium aparine</i>	33	1.0	1.0	1	
	GEDI	* <i>Geranium dissectum</i>	33	1.0	1.0	1	
	RUCR	* <i>Rumex crispus</i>	33	1.0	1.0	1	
	BRDI2	* <i>Brachypodium distachyon</i>	33	0.2	0.2	0.20	
	CATR9	<i>Carex triquetra</i>	33	0.2	0.2	0.20	
	COSE4	* <i>Cortaderia selloana</i>	33	0.2	0.2	0.20	
	DIPSA	* <i>Dipsacus</i>	33	0.2	0.2	0.20	
	DISP	<i>Distichlis spicata</i>	33	0.2	0.2	0.20	
	EPBR3	<i>Epilobium brachycarpum</i>	33	0.2	0.2	0.20	
	FOVU	* <i>Foeniculum vulgare</i>	33	0.2	0.2	0.20	
	HIIN3	* <i>Hirschfeldia incana</i>	33	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	33	0.2	0.2	0.20	

MEIM	<i>Melica imperfecta</i>	33	0.2	0.2	0.20
MEIN2	* <i>Melilotus indicus</i>	33	0.2	0.2	0.20
PIMI3	* <i>Piptatherum miliaceum</i>	33	0.2	0.2	0.20

***Quercus agrifolia*/Toxicodendron diversilobum/Grass Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Palomar - Cuyamaca Peak (M262Bo), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Northern Mountains (NM), Northern Valley (NV), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	57.3	29-88	-
Herb	26.4	2-85	0-1
Shrub	15.9	0-45	1-5
Hardwood	28.9	5-75	2-20
Conifer	0.0	0-0	-
Non-native plant presence	26.6	0-80	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (5), W (4), S (4), NE (4), SW (3), NW (3), Flat (2), E (2), Variable (1)

Macrotopography: Bottom (9), Bottom to Lower 1/3 of slope (3), Lower 1/3 of slope (4), Bottom to Mid 1/3 of slope (1), Lower to Middle 1/3 of slope (3), Middle 1/3 of slope (6), Middle to Upper 1/3 of slope (1)

Microtopography: concave (12), undulating (9), flat (6)

Parent Material: Granitic (10), Sandy alluvium (6), Metamorphic (4), Gravelly alluvium (2), Sedimentary (2), Diorite (1), Gabbro (1), Mixed alluvium (1), no data (1)

Soil Texture: loam or sandy loam (18), sand (5), clay or clay loam (2), silt or silt loam (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	288 ft.	41-780 ft.
Slope	13°	0-36°
Large rock cover	10.5%	0-56%
Small rock cover	7.8%	0-25%
Bare ground cover	16.9%	1-46%
Litter cover	62.6%	17-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=28)

Rapid Assessment(s): 0324DHF6, 0421RB02, 0421TK02, 0422DH03, 0422TK03, 0423AK03, 0423TK01, 0504DH22, 0504TK01, 0505TK01, 0507DH03, 0521DH02, 0603RB03, 0604JJ01, 0625JJ02, 0GPSMB02, 1030MB01, 1075FS01, 1202KH01, 1202KH02, 1350JD01, 1708MM02, 1782MB02, 1811TK01, SDG0110, SDRP0069, SDRP0071, SDRP0134

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 28	4.2	S3.2	G3	
<i>Ambrosia monogyra</i>	1 of 28	2.2	S2.2	G5	
<i>Artemisia palmeri</i>	1 of 28	4.2	S3.2	G3	
<i>Clarkia delicata</i>	1 of 28	1B.2	S2.2	G2	
<i>Quercus engelmannii</i>	3 of 28	4.2	S3.2	G3	

STAND TABLE

Quercus agrifolia/Toxicodendron diversilobum/Grass Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	71	26.7	8.0	64	
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	25	44.4	15.0	75	
Shrub	PLRA	<i>Platanus racemosa</i>	21	0.2	0.2	0.20	
	TODI	<i>Toxicodendron</i>	96	9.5	0.2	35	X
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	50	1.1	0.2	5	
	RHIL	<i>Rhamnus ilicifolia</i>	39	1.6	0.2	5	
	MALA6	<i>Malosma laurina</i>	36	2.9	0.2	7	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	36	0.8	0.2	4	
	HASQ2	<i>Hazardia squarrosa</i>	21	1.9	0.2	5	
Herb	BRDI3	* <i>Bromus diandrus</i>	75	22.4	1.0	60	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	46	0.5	0.2	2	
	CAPY2	* <i>Carduus pycnocephalus</i>	29	2.5	0.2	15	
	CLPE	<i>Claytonia perfoliata</i>	29	0.6	0.2	2	
	PIMI3	* <i>Piptatherum miliaceum</i>	25	1.6	0.2	5	
	MEIM	<i>Melica imperfecta</i>	21	1.3	0.2	5	
	SIMA2	<i>Sidalcea malviflora</i>	21	0.5	0.2	2	

***Quercus engelmannii* Alliance**
Canyon Live Oak Forest

ALLIANCE STAND TABLE

***Quercus engelmannii*
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic		
Tree	QUEN	<i>Quercus engelmannii</i>	100	12.8	3.0	30	X		
	QUAG	<i>Quercus agrifolia</i>	50	17.5	2.0	40			
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	25	14.0	5.0	25			
Shrub	TODI	<i>Toxicodendron diversilobum</i>	67	7.3	0.2	20			
	ARCA11	<i>Artemisia californica</i>	58	5.1	0.2	20			
	MALA6	<i>Malosma laurina</i>	58	2.2	0.2	5			
	SAAP2	<i>Salvia apiana</i>	42	3.5	0.4	10			
	ERFA2	<i>Eriogonum fasciculatum</i>	42	2.4	0.2	5			
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	42	1.3	0.2	5			
	SAME3	<i>Salvia mellifera</i>	33	5.8	0.2	10			
	KECO	<i>Keckiella cordifolia</i>	33	2.0	1.0	4			
	HEAR5	<i>Heteromeles arbutifolia</i>	33	1.0	1.0	1			
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	33	0.4	0.2	1			
	Herb	BRDI3	* <i>Bromus diandrus</i>	100	19.8	2.0		94	X
		ERBO	* <i>Erodium botrys</i>	42	8.6	1.0		20	
AVFA		* <i>Avena fatua</i>	33	7.8	2.0	15			
BRDI2		* <i>Brachypodium distachyon</i>	25	9.3	3.0	15			
CAPY2		* <i>Carduus pycnocephalus</i>	25	3.0	2.0	5			
HIIN3		* <i>Hirschfeldia incana</i>	25	2.3	1.0	5			
AMPS		<i>Ambrosia psilostachya</i>	25	1.7	0.2	3			
CLPU2		<i>Clarkia purpurea</i>	25	1.4	0.2	3			
HYGL2		* <i>Hypochaeris glabra</i>	25	1.4	0.2	3			
CASP		<i>Calochortus splendens</i>	25	0.2	0.2	0.2			
MAMAM4		<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	25	0.2	0.2	0.2			
NAPU4		<i>Nassella pulchra</i>	25	0.2	0.2	0.2			

***Quercus engelmannii*/Salvia apiana Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Northern Foothills (NF)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	56.0	40-72	-
Herb	20.0	10-30	0-1
Shrub	33.5	30-37	1-2
Hardwood	20.0	10-30	5-10
Conifer	0.0	0-0	-
Non-native plant presence	25.7	7-44	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1), NE (1)

Macrotopography: Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (1)

Microtopography: concave (1), undulating (1)

Parent Material: Granitic (2)

Soil Texture: loam or sandy loam (1), silt or silt loam (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	424 ft.	399-449 ft.
Slope	15°	4-25°
Large rock cover	11.0%	7-15%
Small rock cover	10.0%	4-16%
Bare ground cover	25.5%	14-37%
Litter cover	52.5%	30-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 1126FS03, 1139MB01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Quercus engelmannii</i>	2 of 2	4.2	S3.2	G3	

STAND TABLE

***Quercus engelmannii*/Salvia apiana**
Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUEN	<i>Quercus engelmannii</i>	100	20.0	10.0	30	X
Shrub	ARCA11	<i>Artemisia californica</i>	100	12.5	5.0	20	X
	SAME3	<i>Salvia mellifera</i>	100	9.0	8.0	10	X
	SAAP2	<i>Salvia apiana</i>	100	5.5	1.0	10	X
	ERFA2	<i>Eriogonum fasciculatum</i>	100	3.0	1.0	5	X
	MALA6	<i>Malosma laurina</i>	100	3.0	1.0	5	X
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	100	0.6	0.2	1	X
	ADSP	<i>Adenostoma sparsifolium</i>	50	2.0	2.0	2	
	CELE2	<i>Ceanothus leucodermis</i>	50	2.0	2.0	2	
	KECO	<i>Keckiella cordifolia</i>	50	2.0	2.0	2	
	TODI	<i>Toxicodendron</i>	50	2.0	2.0	2	
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	50	1.0	1.0	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	50	1.0	1.0	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	0.2	0.2	0.20	
	HASQG2	<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	50	0.2	0.2	0.20	
Herb	BRDI3	* <i>Bromus diandrus</i>	100	7.0	2.0	12	X
	HYGL2	* <i>Hypochaeris glabra</i>	100	0.6	0.2	1	X
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	100	0.2	0.2	0.20	X
	NAPU4	<i>Nassella pulchra</i>	100	0.2	0.2	0.20	X
	BRDI2	* <i>Brachypodium distachyon</i>	50	10.0	10.0	10	
	BRMA3	* <i>Bromus madritensis</i>	50	7.0	7.0	7	
	ERODI	* <i>Erodium</i>	50	6.0	6.0	6	
	AVFA	* <i>Avena fatua</i>	50	2.0	2.0	2	
	BRRU2	* <i>Bromus rubens</i>	50	2.0	2.0	2	
	CAPY2	* <i>Carduus pycnocephalus</i>	50	2.0	2.0	2	
	CEME2	* <i>Centaurea melitensis</i>	50	2.0	2.0	2	
	ERBO	* <i>Erodium botrys</i>	50	2.0	2.0	2	
	HIIN3	* <i>Hirschfeldia incana</i>	50	1.0	1.0	1	
	LECO12	<i>Leymus condensatus</i>	50	1.0	1.0	1	
	BLCRC	<i>Bloomeria crocea</i> var. <i>crocea</i>	50	0.2	0.2	0.20	
	CIOC	<i>Cirsium occidentale</i>	50	0.2	0.2	0.20	
	CUCA	<i>Cuscuta californica</i>	50	0.2	0.2	0.20	
	DICAC5	<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	50	0.2	0.2	0.20	
	ERFO2	<i>Erigeron foliosus</i>	50	0.2	0.2	0.20	
	MEIM	<i>Melica imperfecta</i>	50	0.2	0.2	0.20	
	NACE	<i>Nassella cernua</i>	50	0.2	0.2	0.20	
	PSCA13	<i>Pseudognaphalium californicum</i>	50	0.2	0.2	0.20	

SIMA2	<i>Sidalcea malviflora</i>	50	0.2	0.2	0.20
VUMY	* <i>Vulpia myuros</i>	50	0.2	0.2	0.20

***Quercus engelmannii*-*Quercus agrifolia*/*Toxicodendron diversilobum*/Grass Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Foothills (NF), Santa Margarita (MA)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	69.0	42-98	-
Herb	41.0	7-98	0-2
Shrub	13.5	0-35	1-2
Hardwood	24.9	5-55	1-15
Conifer	0.0	0-0	-
Non-native plant presence	45.6	9-86	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (3), NW (2), NE (2), N (2), SE (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (2), Bottom to Upper 1/3 of slope (2), Middle 1/3 of slope (3), Middle to Upper 1/3 of slope (1), Ridge top (1)

Microtopography: flat (5), undulating (2), concave (2), convex (1)

Parent Material: Granitic (5), Metamorphic (3), Sedimentary (1), Shale (1)

Soil Texture: loam or sandy loam (7), clay or clay loam (1), sand (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	493 ft.	210-817 ft.
Slope	12°	1-25°
Large rock cover	8.5%	0-27%
Small rock cover	5.9%	0-15%
Bare ground cover	24.7%	5-65%
Litter cover	57.6%	25-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0609AK02, 1125KH01, 1125PG02, 1130FS01, 1162FS01, 1672FS01, 1676FS01, SDRP0474, SDRP0478

Relevé(s): SDG0057

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

<i>Quercus engelmannii</i>	10 of 10	4.2	S3.2	G3
<i>Saltugilia caruifolia</i>	1 of 10	4.3	S3.3	G4?

STAND TABLE

Quercus engelmannii-*Quercus agrifolia*/*Toxicodendron diversilobum*/Grass Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	QUEN	<i>Quercus engelmannii</i>	100	11.4	3.0	25	X
	QUAG	<i>Quercus agrifolia</i>	60	17.5	2.0	40	
	QUAGA	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	30	14.0	5.0	25	
Shrub							
	TODI	<i>Toxicodendron</i>	70	8.0	0.2	20	
	ARCA11	<i>Artemisia californica</i>	50	2.1	0.2	5	
	MALA6	<i>Malosma laurina</i>	50	1.8	0.2	3	
	SAAP2	<i>Salvia apiana</i>	30	2.1	0.4	3	
	ERFA2	<i>Eriogonum fasciculatum</i>	30	2.1	0.2	5	
	KECO	<i>Keckiella cordifolia</i>	30	2.0	1.0	4	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	30	1.8	0.2	5	
	HEAR5	<i>Heteromeles arbutifolia</i>	30	1.0	1.0	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	30	0.5	0.2	1	
	SAME3	<i>Salvia mellifera</i>	20	2.6	0.2	5	
	RHIL	<i>Rhamnus ilicifolia</i>	20	1.1	0.2	2	
	LOSC2	<i>Lotus scoparius</i>	20	1.0	1.0	1	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	20	0.6	0.2	1	
	HASQ2	<i>Hazardia squarrosa</i>	20	0.2	0.2	0.20	
	RHOV	<i>Rhus ovata</i>	20	0.2	0.2	0.20	
Herb							
	BRDI3	* <i>Bromus diandrus</i>	100	22.4	2.0	94	X
	ERBO	* <i>Erodium botrys</i>	40	10.3	1.0	20	
	AVFA	* <i>Avena fatua</i>	30	9.7	3.0	15	
	AMPS	<i>Ambrosia psilostachya</i>	30	1.7	0.2	3	
	CLPU2	<i>Clarkia purpurea</i>	30	1.4	0.2	3	
	CASP	<i>Calochortus splendens</i>	30	0.2	0.2	0.20	
	BRDI2	* <i>Brachypodium distachyon</i>	20	9.0	3.0	15	
	CAPY2	* <i>Carduus pycnocephalus</i>	20	3.5	2.0	5	
	HIIN3	* <i>Hirschfeldia incana</i>	20	3.0	1.0	5	
	DICA14	<i>Dichelostemma capitatum</i>	20	0.2	0.2	0.20	
	GAAN2	<i>Galium angustifolium</i>	20	0.2	0.2	0.20	

***Salix gooddingii* Alliance**
Black Willow Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Salix gooddingii* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Valley (NV), Southern Coast (SC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	61.6	32-95	-
Herb	17.8	0-54	0-5
Shrub	23.7	0-65	1-10
Hardwood	30.5	7-80	2-35
Conifer	0.0	0-0	-
Non-native plant presence	13.2	0-65	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (4), SW (3), S (3), NW (3), W (2), NE (1), (0)

Macrotopography: Bottom (12), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Middle 1/3 of slope (1)

Microtopography: concave (7), flat (6), undulating (3)

Parent Material: Sandy alluvium (4), Mixed alluvium (3), Silty alluvium (3), Clayey alluvium (1), Granitic (1), Gravelly alluvium (1), Metamorphic (1), Mixed sedimentary (1)

Soil Texture: loam or sandy loam (5), sand (4), clay or clay loam (3), silt or silt loam (3)

General slope steepness: flat to gentle

	Mean	Range
Elevation	83 ft.	-41-286 ft.
Slope	1°	0-5°
Large rock cover	1.9%	0-8%
Small rock cover	0.5%	0-2%
Bare ground cover	33.1%	3-85%
Litter cover	61.7%	12-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=34)

Rapid Assessment(s): 0503RB22, 0506MJ21, 0623DH02, 0708TK02, 0709MG01, 1186KH01, 1531EB02, 1633FS01, 1744MM01, SDRP0077, SDRP0086, SDRP0238, SDRP0239, SDRP0240, SDRP0245, SDRP0317, SDRP0322

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ambrosia monogyra</i>	1 of 34	2.2	S2.2	G5	
<i>Iva hayesiana</i>	1 of 34	2.2	S2.2?	G3?	
<i>Juncus acutus ssp. leopoldii</i>	1 of 34	4.2	S3.2	G5T5	
<i>Rupertia rigida</i>	1 of 34	4.3	S3.3	G3	

STAND TABLE

Salix gooddingii Association

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree						
SAGO	<i>Salix gooddingii</i>	50	28.5	7.0	85	
Shrub						
BASA4	<i>Baccharis salicifolia</i>	38	5.0	0.2	18	
TAMAR2	* <i>Tamarix</i>	21	7.7	0.2	30	
Herb						
HIIN3	* <i>Hirschfeldia incana</i>	21	1.7	0.2	5	

Salix laevigata Alliance Red Willow Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Salix laevigata* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Northern Valley (NV), Santa Margarita (MA), Southern Coast (SC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	57.7	23-80	-
Herb	14.1	3-45	0-5
Shrub	22.2	12-48	1-10
Hardwood	22.5	5-48	2-15
Conifer	0.0	0-0	-
Non-native plant presence	20.2	5-60	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (5), W (3), N (2), NE (1), E (1)

Macrotopography: Bottom (9), Bottom to Lower 1/3 of slope (3)

Microtopography: concave (7), flat (3), undulating (2)

Parent Material: Sandy alluvium (6), Granitic (2), Gravelly alluvium (1), Mixed alluvium (1), Sedimentary (1)

Soil Texture: sand (10), clay or clay loam (1), loam or sandy loam (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	80 ft.	17-160 ft.
Slope	1°	0-3°
Large rock cover	4.1%	0-21%
Small rock cover	13.6%	0-65%
Bare ground cover	29.6%	0-95%
Litter cover	46.2%	2-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=12)

Rapid Assessment(s): 0603JJ01, 1177KH01, 1187KH01, 1339EB01, 1705KH01, 1705MM01, 1710KH02, 1737KH03, 1737KH04, 1744MB01, 1782MB01

Relevé(s): SDG0072

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

<i>Artemisia palmeri</i>	5 of 12	4.2	S3.2	G3
<i>Iva hayesiana</i>	1 of 12	2.2	S2.2?	G3?

STAND TABLE

Salix laevigata Association

LifeforM	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SALA3	<i>Salix laevigata</i>	100	23.2	5.0	55	X
	SAGO	<i>Salix gooddingii</i>	42	1.4	0.2	4	
Shrub							
	SALA6	<i>Salix lasiolepis</i>	58	12.3	2.0	20	
	BASA4	<i>Baccharis salicifolia</i>	50	13.2	0.2	40	
	BAPI	<i>Baccharis pilularis</i>	42	2.4	0.2	6	
	RHIN2	<i>Rhus integrifolia</i>	33	6.1	0.2	12	
	TODI	<i>Toxicodendron</i>	25	3.3	2.0	5	
	SAEX	<i>Salix exigua</i>	25	1.7	1.0	2	
Herb							
	ARPA15	<i>Artemisia palmeri</i>	42	3.0	0.2	7	
	PIEC	* <i>Picris echioides</i>	42	1.5	0.2	5	
	HIIN3	* <i>Hirschfeldia incana</i>	33	2.6	0.2	5	
	ARDO3	<i>Artemisia douglasiana</i>	33	2.1	0.2	4	
	RASA2	* <i>Raphanus sativus</i>	33	1.6	0.2	4	
	AMPS	<i>Ambrosia psilostachya</i>	33	0.6	0.2	1	
	CAPY2	* <i>Carduus pycnocephalus</i>	25	2.1	0.2	5	
	COMA2	* <i>Conium maculatum</i>	25	1.7	0.2	4	
	MEOF	* <i>Melilotus officinalis</i>	25	0.7	0.2	1	
	XAST	<i>Xanthium strumarium</i>	25	0.7	0.2	1	
	FOVU	* <i>Foeniculum vulgare</i>	25	0.5	0.2	1	
	TYDO	<i>Typha domingensis</i>	25	0.5	0.2	1	
	ANAR	* <i>Anagallis arvensis</i>	25	0.2	0.2	0.20	
	MEIN2	* <i>Melilotus indicus</i>	25	0.2	0.2	0.20	
	SOOL	* <i>Sonchus oleraceus</i>	25	0.2	0.2	0.20	

Salix lucida Alliance Shining Willow Groves

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Salix lucida* ssp. *lasiandra* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): North Coast (NC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	62.5	53-72	-
Herb	19.5	18-21	0.5-1
Shrub	22.5	18-27	2-10
Hardwood	29.0	16-42	5-15
Conifer	0.0	0-0	-
Non-native plant presence	9.9	2-18	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (2)

Macrotopography: Bottom (2)

Microtopography: flat (2)

Parent Material: Sandy alluvium (2)

Soil Texture: sand (1), silt or silt loam (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	84 ft.	-22-190 ft.
Slope	1°	1-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	15.0%	12-18%
Litter cover	49.5%	19-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0309RB22, 0504TK23

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	1 of 2	4.2	S3.2	G5T5	

STAND TABLE

Salix lucida* ssp. *lasiandra

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	SALUL	<i>Salix lucida</i> ssp. <i>lasiandra</i>	100	19.5	15.0	24	X
	SAGO	<i>Salix gooddingii</i>	50	16.0	16.0	16	
	POFRF3	<i>Populus fremontii</i> ssp. <i>fremontii</i>	50	5.0	5.0	5	
	EUCA2	* <i>Eucalyptus camaldulensis</i>	50	1.0	1.0	1	
	POBAT	<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	50	0.2	0.2	0.20	
	SCTE	* <i>Schinus terebinthifolius</i>	50	0.2	0.2	0.20	
Shrub	SALA6	<i>Salix lasiolepis</i>	100	15.0	12.0	18	X
	SAEX	<i>Salix exigua</i>	100	8.0	8.0	8	X
	BASA4	<i>Baccharis salicifolia</i>	50	2.0	2.0	2	
	RUAR9	* <i>Rubus armeniacus</i>	50	1.0	1.0	1	
	PRUNU	<i>Prunus</i>	50	0.2	0.2	0.20	
Herb	ANCA10	<i>Anemopsis californica</i>	100	10.5	7.0	14	X
	RUCR	* <i>Rumex crispus</i>	100	4.6	0.2	9	X
	SCAM6	<i>Schoenoplectus americanus</i>	100	1.6	0.2	3	X
	APGR2	* <i>Apium graveolens</i>	100	0.6	0.2	1	X
	NAOF	<i>Nasturtium officinale</i>	100	0.6	0.2	1	X
	URDIH	<i>Urtica dioica</i> ssp. <i>holosericea</i>	100	0.6	0.2	1	X
	TYDO	<i>Typha domingensis</i>	100	0.2	0.2	0.20	X
	AMPS	<i>Ambrosia psilostachya</i>	50	4.0	4.0	4	
	JUACL	<i>Juncus acutus</i> ssp.	50	1.0	1.0	1	
	SCCA11	<i>Schoenoplectus californicus</i>	50	1.0	1.0	1	
	CAPY2	* <i>Carduus pycnocephalus</i>	50	0.2	0.2	0.20	
	EUOC4	<i>Euthamia occidentalis</i>	50	0.2	0.2	0.20	
	JUAR2	<i>Juncus arcticus</i>	50	0.2	0.2	0.20	
	JUXI	<i>Juncus xiphioides</i>	50	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	50	0.2	0.2	0.20	

SHRUB DESCRIPTIONS

Adenostoma fasciculatum Alliance

Chamise Chaparral

ALLIANCE STAND TABLE

Adenostoma fasciculatum Alliance

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ADFA	<i>Adenostoma fasciculatum</i>	100	24.7	3.0	67	X
	MALA6	<i>Malosma laurina</i>	69	2.9	0.2	20	
	ERFA2	<i>Eriogonum fasciculatum</i>	51	2.9	0.2	15	
	HEWH	<i>Hesperoyucca whipplei</i>	51	0.6	0.2	2	
	SAME3	<i>Salvia mellifera</i>	45	3.1	0.2	20	
	LOSC2	<i>Lotus scoparius</i>	44	3.7	0.2	19	
	XYBI	<i>Xylococcus bicolor</i>	42	1.1	0.2	3	
	ARCA11	<i>Artemisia californica</i>	37	3.4	0.2	20	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	37	1.0	0.2	5	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	31	1.5	0.2	5	
	RHIN2	<i>Rhus integrifolia</i>	28	1.3	0.2	6	
	HESC2	<i>Helianthemum scoparium</i>	23	4.9	0.2	16	
	HASQ2	<i>Hazardia squarrosa</i>	21	0.7	0.2	4	
	RHIL	<i>Rhamnus ilicifolia</i>	21	0.6	0.2	3	
	Herb	BRMA3	* <i>Bromus madritensis</i>	41	4.2	0.2	
VUMY		* <i>Vulpia myuros</i>	31	2.8	0.2	19	
CEME2		* <i>Centaurea melitensis</i>	27	1.8	0.2	15	
HYGL2		* <i>Hypochaeris glabra</i>	21	1.5	0.2	13	

Adenostoma fasciculatum Southern Maritime Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.2	16-70	-
Herb	5.4	0-36	0-1
Shrub	39.3	16-70	1-5
Hardwood	0.0	0-0	-

Conifer	0.2	0-4	5-10
Non-native plant presence	3.4	0-24	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (5), Variable (4), S (4), W (3), SE (1), NW (1), NE (1), N (1), Flat (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope (4), Middle to Upper 1/3 of slope (2), Middle 1/3 of slope to Ridgetop (3), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3), Ridge top (2)

Microtopography: undulating (9), convex (8), flat (4)

Parent Material: Sandstone (6), Sedimentary (5), Conglomerate (4), Granitic (2), Metamorphic (2), Volcanic (1)

Soil Texture: loam or sandy loam (9), sand (7), clay or clay loam (4)

General slope steepness: flat to steep

	Mean	Range
Elevation	103 ft.	52-193 ft.
Slope	12°	0-28°
Large rock cover	2.7%	0-21%
Small rock cover	22.6%	0-60%
Bare ground cover	35.9%	5-88%
Litter cover	37.1%	8-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=19)

Rapid Assessment(s): 0309AK24, 0310DH23, 0519RB05, 0622AK01, 0623AK02, 0706JS01, 0706RB01, 0706TK02, 0707TK06, 0708AK04, 0708RB03, 1299JD01, 1312JD01, 1396JD01, 1737JD03, SDRP0058, SDRP0127, SDRP0157, SDRP0232, SDRP0279

Relevé(s): SDG0102

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	1 of 19	2.1	S3.1	G3G4	
<i>Arctostaphylos glandulosa ssp. crassifolia</i>	2 of 19	1B.1	S1.1	G5T1	
<i>Ceanothus verrucosus</i>	9 of 19	2.2	S2.2	G3	
<i>Dichondra occidentalis</i>	1 of 19	4.2	S3.2	G4?	
<i>Ferocactus viridescens</i>	2 of 19	2.1	S3.1	G4	
<i>Pinus torreyana ssp. torreyana</i>	2 of 19	1B.2	S1.2	G1T1	
<i>Pogogyne abramsii</i>	1 of 19	1B.1	S2.1	G2	Endangered
<i>Quercus dumosa</i>	8 of 19	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	3 of 19	4.1	S3S4	G3G4	

STAND TABLE

Adenostoma fasciculatum Southern Maritime Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ADFA	<i>Adenostoma fasciculatum</i>	100	32.6	12.0	55	X
	SAME3	<i>Salvia mellifera</i>	84	1.4	0.2	5	X
	RHIN2	<i>Rhus integrifolia</i>	79	1.1	0.2	6	
	XYBI	<i>Xylococcus bicolor</i>	68	0.9	0.2	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	58	0.5	0.2	1	
	CEVE2	<i>Ceanothus verrucosus</i>	47	3.6	0.2	13	
	MALA6	<i>Malosma laurina</i>	47	1.0	0.2	4	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	42	1.6	0.2	5	
	QUDU	<i>Quercus dumosa</i>	42	1.2	0.2	4	
	CNDU	<i>Cneoridium dumosum</i>	32	0.9	0.2	3	
	HEAR5	<i>Heteromeles arbutifolia</i>	32	0.8	0.2	3	
	ARCA11	<i>Artemisia californica</i>	26	0.5	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	26	0.2	0.2	0.20	
	YUSC2	<i>Yucca schidigera</i>	21	0.2	0.2	0.20	
Herb	BRMA3	* <i>Bromus madritensis</i>	32	3.6	0.2	12	
	HEFA	<i>Deinandra fasciculata</i>	32	1.4	0.2	5	
	VUMY	* <i>Vulpia myuros</i>	21	2.6	0.2	8	
Cryptogam	2MOSS	<i>Moss</i>	42	11.5	2.0	28	
	2LICHN	<i>Lichen</i>	37	6.6	0.2	12	

Adenostoma fasciculatum-(*Eriogonum fasciculatum*, *Artemisia californica*, *Salvia mellifera*) Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	51.6	30-75	-
Herb	6.9	0-27	0-1
Shrub	46.9	20-75	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	9.3	0-42	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (4), SE (3), W (2), SW (2), NW (1), NE (1), N (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (3), Middle to Upper 1/3 of slope (4), Upper 1/3 of slope to Ridgetop (1)

Microtopography: undulating (8), flat (3), convex (2), concave (1)

Parent Material: Metamorphic (6), Granitic (4), Sandstone (2), Mixed metamorphic (1)

Soil Texture: loam or sandy loam (6), clay or clay loam (3), sand (2)

General slope steepness: moderate to steep

	Mean	Range
Elevation	298 ft.	64-677 ft.
Slope	16°	6-30°
Large rock cover	12.4%	0-30%
Small rock cover	17.6%	0-50%
Bare ground cover	31.4%	3-51%
Litter cover	37.3%	4-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0609RB02, 1067MB02, 1211JD01, 1346EB02, 1347LS01, 1408MB01, 1480LS01, 1799JD01, SDG0011, SDRP0158, SDRP0160, SDRP0254, SDRP0274, SDRP0333

Reliévé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus verrucosus</i>	1 of 14	2.2	S2.2	G3	
<i>Ferocactus viridescens</i>	2 of 14	2.1	S3.1	G4	
<i>Holocarpha virgata ssp. elongata</i>	1 of 14	4.2	S3.2	G5T3	
<i>Selaginella cinerascens</i>	1 of 14	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	2 of 14	4.2	S3.2	G4	

STAND TABLE

***Adenostoma fasciculatum*-(*Eriogonum fasciculatum*, *Artemisia californica*, *Salvia mellifera*)**

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	27.8	5.0	60	X
	MALA6	<i>Malosma laurina</i>	79	2.4	0.2	5	
	ARCA11	<i>Artemisia californica</i>	64	8.1	2.0	20	
	ERFA2	<i>Eriogonum fasciculatum</i>	57	7.0	0.2	15	
	HEWH	<i>Hesperoyucca whipplei</i>	57	0.7	0.2	2	

	SAME3	<i>Salvia mellifera</i>	50	8.5	0.2	20
	XYBI	<i>Xylococcus bicolor</i>	50	1.5	0.2	3
	LOSC2	<i>Lotus scoparius</i>	29	1.6	0.2	5
	QUAC3	<i>Quercus xacutidens</i> [cornelius-mulleri x engelmannii]	21	4.4	0.2	12
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	21	3.4	0.2	5
	CNDU	<i>Cneoridium dumosum</i>	21	3.1	0.2	6
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	21	2.4	0.2	5
	RHCR	<i>Rhamnus crocea</i>	21	2.4	0.2	5
	RHIN2	<i>Rhus integrifolia</i>	21	2.3	1.0	3
	RHOV	<i>Rhus ovata</i>	21	2.0	2.0	2
	GUCA	<i>Gutierrezia californica</i>	21	0.2	0.2	0.20
	HASQ2	<i>Hazardia squarrosa</i>	21	0.2	0.2	0.20
Herb						
	BRMA3	* <i>Bromus madritensis</i>	43	5.0	0.2	10
	HIIN3	* <i>Hirschfeldia incana</i>	43	1.1	0.2	4
	AVBA	* <i>Avena barbata</i>	21	2.1	0.2	5
	CEME2	* <i>Centaurea melitensis</i>	21	1.1	0.2	2
	MAMAM4	<i>Marah macrocarpus</i> var.	21	0.2	0.2	0.20

***Adenostoma fasciculatum*-*Ceanothus crassifolius* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Santa Margarita (MA)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	55.0	50-65	-
Herb	10.2	0-52	0-0.5
Shrub	47.0	5-65	1-5
Hardwood	0.0	0-0	10-15
Conifer	0.0	0-0	-
Non-native plant presence	0.3	0-2	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (2), W (1), SW (1), S (1), NW (1)

Macrotopography: Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (1), Ridge top (1)

Microtopography: undulating (4), convex (2)

Parent Material: Metamorphic (4), Granitic (2)

Soil Texture: loam or sandy loam (4), clay or clay loam (1), silt or silt loam (1)

General slope steepness: moderate to steep

	Mean	Range
Elevation	699 ft.	583-809 ft.
Slope	20°	8-38°
Large rock cover	10.6%	1-26%
Small rock cover	12.9%	8-19%
Bare ground cover	16.2%	6-29%
Litter cover	58.5%	34-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0506AK21, 0609RB04, 0609TK02, 0610AK03, 0610DH02, 0610RB02

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

STAND TABLE

Adenostoma fasciculatum-*Ceanothus crassifolius* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ADFA	<i>Adenostoma fasciculatum</i>	100	32.8	25.0	52	X
	CECR	<i>Ceanothus crassifolius</i>	100	11.9	0.2	25	X
	QUBE5	<i>Quercus berberidifolia</i>	100	3.1	0.2	8	X
	RHIL	<i>Rhamnus ilicifolia</i>	100	1.0	0.2	3	X
	HEWH	<i>Hesperoyucca whipplei</i>	100	0.8	0.2	2	X
	HEAR5	<i>Heteromeles arbutifolia</i>	83	1.1	0.2	2	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	83	1.0	0.2	3	X
	ARGL3	<i>Arctostaphylos glandulosa</i>	67	1.7	0.2	6	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	67	1.2	0.2	4	
	SAME3	<i>Salvia mellifera</i>	33	4.0	3.0	5	
	LOSC2	<i>Lotus scoparius</i>	33	2.6	0.2	5	
	ARCA11	<i>Artemisia californica</i>	33	0.6	0.2	1	
	MALA6	<i>Malosma laurina</i>	33	0.6	0.2	1	
	CELE2	<i>Ceanothus leucodermis</i>	33	0.2	0.2	0.20	
	HASQ2	<i>Hazardia squarrosa</i>	33	0.2	0.2	0.20	
	LOSU2	<i>Lonicera subspicata</i>	33	0.2	0.2	0.20	
	RHOV	<i>Rhus ovata</i>	33	0.2	0.2	0.20	
Herb	HEGR3	<i>Helianthus gracilentus</i>	33	0.6	0.2	1	
	CASP	<i>Calochortus splendens</i>	33	0.2	0.2	0.20	
	CORIS2	<i>Cordylanthus rigidus</i> ssp. <i>setigerus</i>	33	0.2	0.2	0.20	
	MEIM	<i>Melica imperfecta</i>	33	0.2	0.2	0.20	
	NALE2	<i>Nassella lepida</i>	33	0.2	0.2	0.20	
	NAHA2	<i>Navarretia hamata</i>	33	0.2	0.2	0.20	
	PSCA13	<i>Pseudognaphalium</i> <i>californicum</i>	33	0.2	0.2	0.20	

TAAR2

Tauschia arguta

33

0.2

0.2

0.20

Adenostoma fasciculatum*-*Ceanothus tomentosus* Association*DISTRIBUTION IN STUDY AREA**

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	62.2	46-85	-
Herb	10.8	6-16	0-1
Shrub	52.7	40-80	1-5
Hardwood	0.0	0-0	2-5
Conifer	0.0	0-0	-
Non-native plant presence	13.3	7-26	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (3), W (1), Variable (1), S (1)

Macrotopography: Lower 1/3 of slope to Ridgetop (1), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope to Ridgetop (1)

Microtopography: undulating (3), convex (2), flat (1)

Parent Material: Granitic (4), Metamorphic (2)

Soil Texture: loam or sandy loam (3), sand (3)

General slope steepness: somewhat steep to steep

	Mean	Range
Elevation	487 ft.	395-638 ft.
Slope	29°	22-40°
Large rock cover	26.7%	1-45%
Small rock cover	11.5%	4-26%
Bare ground cover	22.7%	7-57%
Litter cover	37.7%	20-77%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0520DH01, 1125KH02, 1127MB01, 1155FS01, 1164FS01, 1164MB01

Relevé(s): none

CONSERVATION STATUS RANK G4 S4**NOTEWORTHY SPECIES**

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Quercus engelmannii</i>	2 of 6	4.2	S3.2	G3	

STAND TABLE

Adenostoma fasciculatum-*Ceanothus tomentosus* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUEN	<i>Quercus engelmannii</i>	33	0.2	0.2	0.20	
Shrub	ADFA	<i>Adenostoma fasciculatum</i>	100	31.7	15.0	67	X
	CETO	<i>Ceanothus tomentosus</i>	100	10.5	4.0	27	X
	MALA6	<i>Malosma laurina</i>	100	9.2	2.0	20	X
	HEWH	<i>Hesperoyucca whipplei</i>	100	0.9	0.2	2	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	1.1	0.2	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	6.0	2.0	10	
	LOSC2	<i>Lotus scoparius</i>	33	5.5	1.0	10	
	SAME3	<i>Salvia mellifera</i>	33	2.0	2.0	2	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	1.6	0.2	3	
	MAFA	<i>Malacothamnus</i> <i>fasciculatus</i>	33	0.6	0.2	1	
	RHIL	<i>Rhamnus ilicifolia</i>	33	0.2	0.2	0.20	
Herb	HYGL2	* <i>Hypochaeris glabra</i>	67	0.9	0.2	2	
	BRRU2	* <i>Bromus rubens</i>	50	7.3	2.0	14	
	BRMA3	* <i>Bromus madritensis</i>	50	5.3	2.0	10	
	VUMY	* <i>Vulpia myuros</i>	50	1.1	0.2	2	
	SCCA2	<i>Scrophularia californica</i>	50	0.5	0.2	1	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	50	0.2	0.2	0.20	
	CEME2	* <i>Centaurea melitensis</i>	33	0.6	0.2	1	
	CHAR	<i>Chaenactis artemisiifolia</i>	33	0.2	0.2	0.20	
	GAAN2	<i>Galium angustifolium</i>	33	0.2	0.2	0.20	
	NAHA2	<i>Navarretia hamata</i>	33	0.2	0.2	0.20	

***Adenostoma fasciculatum*-*Lotus scoparius* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Palomar - Cuyamaca Peak (M262Bo), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), North Coast (NC), Northern Foothills (NF), Northern Mountains (NM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	33.3	15-49	-
Herb	14.5	2-38	0-2
Shrub	23.5	6-37	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	26.2	0-76	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (4), Variable (3), SW (3), S (3), NE (3), N (3), SE (1), NW (1), Flat (1)

Macrotopography: Lower 1/3 of slope to Ridge top (1), Entire slope (1), Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (4), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (2), Middle 1/3 of slope to Ridge top (2), Upper 1/3 of slope (1), Upper 1/3 of slope to Ridge top (4), Ridge top (1), Lower 1/3 of slope to Ridge top (1)

Microtopography: undulating (12), convex (6), concave (3), flat (1)

Parent Material: Granitic (14), Metamorphic (6), Gabbro (1), Sandstone (1)

Soil Texture: loam or sandy loam (12), sand (6), clay or clay loam (2), silt or silt loam (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	460 ft.	68-770 ft.
Slope	16°	0-35°
Large rock cover	13.9%	0-48%
Small rock cover	29.0%	2-67%
Bare ground cover	36.7%	12-65%
Litter cover	18.7%	1-71%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=22)

Rapid Assessment(s): 0310TK22, 0421TK04, 0423DH01, 0423DH03, 0504RB01, 0505DH01, 0505JJ02, 0506AK22, 0506TK01, 0603DH04, 0604JS01, 0608DH02, 0608JJ01, 1163MB01, 1277TK01, 1333EB01, 1393KG01, 1484TK01, 1607MB02, SDG0004, SDRP0423

Relevé(s): SDG0124

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Clarkia delicata</i>	1 of 22	1B.2	S2.2	G2	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	1 of 22	4.3	S2S4.3	G5T2T4	
<i>Quercus dumosa</i>	1 of 22	1B.1	S1.1	G1G2	
<i>Viguiera laciniata</i>	1 of 22	4.2	S3.2	G4	

STAND TABLE

Adenostoma fasciculatum-*Lotus scoparius* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	10.7	3.0	24	X
	MALA6	<i>Malosma laurina</i>	86	2.5	0.2	12	X
	LOSC2	<i>Lotus scoparius</i>	82	5.1	0.2	19	X
	ERFA2	<i>Eriogonum fasciculatum</i>	59	2.1	0.2	9	
	HESC2	<i>Helianthemum scoparium</i>	50	6.3	0.2	16	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	0.9	0.2	2	
	HEWH	<i>Hesperoyucca whipplei</i>	50	0.3	0.2	1	
	SAAP2	<i>Salvia apiana</i>	45	0.7	0.2	3	
	XYBI	<i>Xylococcus bicolor</i>	41	1.3	0.2	3	
	ARCA11	<i>Artemisia californica</i>	36	0.9	0.2	6	
	HASQ2	<i>Hazardia squarrosa</i>	27	1.0	0.2	4	
	RHCR	<i>Rhamnus crocea</i>	23	0.6	0.2	2	
	RHIL	<i>Rhamnus ilicifolia</i>	23	0.6	0.2	2	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	23	0.4	0.2	1	
Herb							
	VUMY	* <i>Vulpia myuros</i>	59	3.6	0.2	19	
	BRMA3	* <i>Bromus madritensis</i>	59	3.3	0.2	8	
	CEME2	* <i>Centaurea melitensis</i>	45	2.7	0.2	15	
	HYGL2	* <i>Hypochaeris glabra</i>	41	2.1	0.2	13	
	HIIN3	* <i>Hirschfeldia incana</i>	27	1.8	0.2	5	
	AVBA	* <i>Avena barbata</i>	27	0.3	0.2	1	
	BRDI3	* <i>Bromus diandrus</i>	23	6.0	0.2	18	
	CRIN8	<i>Cryptantha intermedia</i>	23	0.7	0.2	2	
	BRHO2	* <i>Bromus hordeaceus</i>	23	0.6	0.2	2	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	23	0.4	0.2	1	
	NALE2	<i>Nassella lepida</i>	23	0.2	0.2	0.20	

***Adenostoma fasciculatum*-*Xylococcus bicolor* Alliance**
Chamise-Mission Manzanita Chaparral

ALLIANCE STAND TABLE

***Adenostoma fasciculatum*-*Xylococcus bicolor* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	XYBI	<i>Xylococcus bicolor</i>	100	10.7	0.2	46	X
	ADFA	<i>Adenostoma fasciculatum</i>	94	16.2	0.2	60	X
	MALA6	<i>Malosma laurina</i>	75	3.6	0.2	20	
	SAME3	<i>Salvia mellifera</i>	52	4.6	0.2	23	
	CETO	<i>Ceanothus tomentosus</i>	47	9.8	0.2	40	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	36	1.3	0.2	7	
	LOSC2	<i>Lotus scoparius</i>	32	1.9	0.2	13	
	HESC2	<i>Helianthemum scoparium</i>	31	1.8	0.2	7	
	HEWH	<i>Hesperoyucca whipplei</i>	31	0.5	0.2	5	
	CNDU	<i>Cneoridium dumosum</i>	30	2.4	0.2	10	
	ERFA2	<i>Eriogonum fasciculatum</i>	30	1.8	0.2	10	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	30	1.5	0.2	7	
	ARCA11	<i>Artemisia californica</i>	24	1.9	0.2	10	
	RHOV	<i>Rhus ovata</i>	20	1.1	0.2	5	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	47	4.6	0.2	20	
	VUMY	* <i>Vulpia myuros</i>	30	5.5	0.2	35	
	LOGA2	* <i>Logfia gallica</i>	22	1.4	0.2	7	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	21	1.1	0.2	4	
	HIIN3	* <i>Hirschfeldia incana</i>	20	1.9	0.2	11	
	CEME2	* <i>Centaurea melitensis</i>	20	1.5	0.2	12	

***Adenostoma fasciculatum*-*Xylococcus bicolor* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.9	17-83	-
Herb	12.8	0-50	0-1
Shrub	41.8	13-80	1-5

Hardwood	0.2	0-3	2-10
Conifer	0.1	0-3	10-15
Non-native plant presence	13.0	0-58	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (13), NE (8), W (7), Variable (4), NW (4), SW (3), SE (2), E (2), S (1)

Macrotopography: Lower 1/3 of slope to Ridge top (1), Bottom (1), Lower 1/3 of slope (4), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (7), Middle 1/3 of slope (9), Middle to Upper 1/3 of slope (8), Middle 1/3 of slope to Ridge top (3), Upper 1/3 of slope (4), Upper 1/3 of slope to Ridge top (4), Ridge top (1)

Microtopography: undulating (26), convex (8), concave (6), flat (3)

Parent Material: Granitic (16), Metamorphic (16), Gabbro (4), Sandstone (2), Sedimentary (2), Clayey alluvium (1), Sandy alluvium (1), Volcanic (1)

Soil Texture: loam or sandy loam (25), clay or clay loam (6), silt or silt loam (5), sand (3)

General slope steepness: flat to steep

	Mean	Range
Elevation	272 ft.	58-547 ft.
Slope	20°	0-32°
Large rock cover	12.5%	0-61%
Small rock cover	16.6%	0-48%
Bare ground cover	35.4%	7-85%
Litter cover	33.0%	0-78%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=44)

Rapid Assessment(s): 0309AK23, 0310DH25, 0311TK22, 0506MG02, 0507TK03, 0520RB02, 0521DH01, 0521RB02, 0623JS02, 0625DH02, 0708DH01, 0708RB01, 0GPSMB04, 1021FS01, 1279MM01, 1329EB01, 1347MB01, 1355MB01, 1538JD02, 1543MM01, 1595JD01, 1596LW01, 1653MM01, SDG0017, SDG0051, SDG0082, SDG0085, SDG0121, SDRP0159, SDRP0255, SDRP0262, SDRP0264, SDRP0266, SDRP0325, SDRP0326, SDRP0327, SDRP0328, SDRP0401, SDRP0420, SDRP0439, SDRP0469, SDRP0472, SDRP0481

Relevé(s): SDG0105

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Dichondra occidentalis</i>	1 of 44	4.2	S3.2	G4?	
<i>Nolina interrata</i>	1 of 44	1B.1	S1.2	G1	Endangered
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	1 of 44	1B.2	S1.2	G1T1	
<i>Quercus dumosa</i>	4 of 44	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	2 of 44	4.2	S3.2	G3	
<i>Selaginella cinerascens</i>	3 of 44	4.1	S3S4	G3G4	
<i>Tetracoccus dioicus</i>	2 of 44	1B.2	S2.2	G3	

STAND TABLE***Adenostoma fasciculatum*-*Xylococcus bicolor*
Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	XYBI	<i>Xylococcus bicolor</i>	100	14.3	1.0	45	X
	ADFA	<i>Adenostoma fasciculatum</i>	89	17.7	0.2	60	X
	MALA6	<i>Malosma laurina</i>	73	5.2	0.2	20	
	SAME3	<i>Salvia mellifera</i>	55	5.7	0.2	23	
	ERFA2	<i>Eriogonum fasciculatum</i>	45	2.2	0.2	10	
	HEWH	<i>Hesperoyucca whipplei</i>	43	0.6	0.2	4	
	ARCA11	<i>Artemisia californica</i>	34	1.9	0.2	6	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	32	0.8	0.2	3	
	RHCR	<i>Rhamnus crocea</i>	30	3.2	0.2	20	
	LOSC2	<i>Lotus scoparius</i>	30	3.0	0.2	13	
	CNDU	<i>Cneoridium dumosum</i>	30	2.5	0.2	7	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	30	1.1	0.2	5	
	KEAN	<i>Keckiella antirrhinoides</i>	20	1.7	0.2	4	
	HESC2	<i>Helianthemum scoparium</i>	20	0.6	0.2	1	
Herb	BRMA3	* <i>Bromus madritensis</i>	48	5.2	0.2	20	
	VUMY	* <i>Vulpia myuros</i>	27	6.4	0.2	35	
	HIIN3	* <i>Hirschfeldia incana</i>	25	3.4	0.2	11	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	23	0.8	0.2	2	
	CEME2	* <i>Centaurea melitensis</i>	20	1.9	0.2	12	
	LOGA2	* <i>Logfia gallica</i>	20	1.6	0.2	7	

Adenostoma fasciculatum*-*Xylococcus bicolor*-*Ceanothus crassifolius* Association*DISTRIBUTION IN STUDY AREA**

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.8	25-92	-
Herb	13.4	0-65	0-0.5
Shrub	39.8	20-77	1-5
Hardwood	0.1	0-2	2-10
Conifer	0.0	0-0	-

Non-native plant presence 13.1 0-45 -
 *Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (8), NE (6), W (5), Variable (2), NW (2), N (2), SW (1)

Macrotopography: Lower 1/3 of slope (5), Lower to Middle 1/3 of slope (7), Lower to Upper 1/3 of slope (6), Middle 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (1), Ridge top (1)

Microtopography: undulating (17), convex (7), concave (1), flat (1)

Parent Material: Granitic (23), Diorite (2), Metamorphic (1)

Soil Texture: loam or sandy loam (20), sand (4), clay or clay loam (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	444 ft.	245-724 ft.
Slope	17°	2-40°
Large rock cover	10.1%	0-40%
Small rock cover	11.8%	2-43%
Bare ground cover	44.3%	5-80%
Litter cover	31.4%	7-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=26)

Rapid Assessment(s): 0506RB22, 0507MG02, 1120FS01, 1120MB01, 1121MB01, 1123FS01, 1162MB01, 1343MB01, 1433JD01, 1436MB01, SDG0112, SDRP0054, SDRP0143, SDRP0147, SDRP0422, SDRP0424, SDRP0426, SDRP0428, SDRP0430, SDRP0431, SDRP0432, SDRP0434, SDRP0435, SDRP0468, SDRP0470, SDRP0473

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus cyaneus</i>	1 of 26	1B.2	S2.2	G2	
<i>Quercus dumosa</i>	1 of 26	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	2 of 26	4.2	S3.2	G3	
<i>Selaginella cinerascens</i>	1 of 26	4.1	S3S4	G3G4	

STAND TABLE

Adenostoma fasciculatum-*Xylococcus bicolor*-*Ceanothus crassifolius* Association

Lifform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						
XYBI	<i>Xylococcus bicolor</i>	100	8.3	0.2	35	X

CECR	<i>Ceanothus crassifolius</i>	100	5.4	0.2	16	X
ADFA	<i>Adenostoma fasciculatum</i>	96	11.6	3.0	30	X
SAME3	<i>Salvia mellifera</i>	77	6.0	0.2	15	
MALA6	<i>Malosma laurina</i>	77	2.5	0.2	10	
CETO	<i>Ceanothus tomentosus</i>	65	11.6	1.0	35	
RHOV	<i>Rhus ovata</i>	54	1.1	0.2	2	
ERFA2	<i>Eriogonum fasciculatum</i>	50	1.4	0.2	5	
CNDU	<i>Cneoridium dumosum</i>	46	1.4	0.2	5	
HESC2	<i>Helianthemum scoparium</i>	31	1.8	0.2	6	
KEAN	<i>Keckiella antirrhinoides</i>	31	1.3	0.2	3	
ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	27	1.1	0.2	2	

Herb

HIIN3	* <i>Hirschfeldia incana</i>	65	1.4	0.2	4	
LOGA2	* <i>Logfia gallica</i>	46	2.1	0.2	6	
BRMA3	* <i>Bromus madritensis</i>	42	4.7	2.0	12	
MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	35	1.8	0.2	4	
PTDR	<i>Pterostegia drymarioides</i>	27	12.1	2.0	60	
CRMI2	<i>Cryptantha micromeres</i>	27	1.2	0.2	3	
CEME2	* <i>Centaurea melitensis</i>	27	0.9	0.2	2	
BRRU2	* <i>Bromus rubens</i>	23	5.5	1.0	15	
VUMY	* <i>Vulpia myuros</i>	23	4.4	0.2	20	

***Adenostoma fasciculatum*-*Xylococcus bicolor*-*Ceanothus tomentosus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.9	20-89	-
Herb	12.9	1-35	0-2
Shrub	42.5	16-87	1-5
Hardwood	0.0	0-0	2-10
Conifer	0.0	0-0	-
Non-native plant presence	16.8	0-51	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (8), N (6), W (3), SE (3), S (3), NW (3), Variable (2), SW (2), E (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (7), Middle 1/3 of slope (4), Middle to Upper 1/3 of slope (8), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (3), Upper 1/3 of slope to Ridgetop (2), Ridge top (1), Lower 1/3 of slope to Ridgetop (1)

Microtopography: convex (12), undulating (11), flat (5), concave (3)

Parent Material: Metamorphic (14), Granitic (11), Sedimentary (3), Conglomerate (2), Gabbro (1)

Soil Texture: loam or sandy loam (18), clay or clay loam (5), silt or silt loam (4), sand (3)
General slope steepness: moderate to very steep

	Mean	Range
Elevation	324 ft.	78-648 ft.
Slope	23°	6-61°
Large rock cover	22.0%	0-75%
Small rock cover	24.0%	0-48%
Bare ground cover	26.9%	4-61%
Litter cover	25.5%	1-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=31)

Rapid Assessment(s): 0311DH21, 0311RB21, 0422TK01, 0505RB01, 0506DH01, 0506MG01, 0507AK01, 0507TK01, 0519AK03, 0602DH01, 0602JJ02, 0602RB03, 0622RB01, 0624DH04, 1127MB02, 1130MB01, 1219TK02, 1326EB04, 1327PJ01, 1353MB02, 1388MB01, 1527EB01, 1530MM02, 1535EB01, 1537EB01, 1606LW01, 1652MM01, SDRP0126, SDRP0265, SDRP0419
Relevé(s): SDG0054

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus cyaneus</i>	2 of 31	1B.2	S2.2	G2	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	1 of 31	1B.2	S2.2	G3T2	
<i>Quercus dumosa</i>	1 of 31	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	2 of 31	4.2	S3.2	G3	
<i>Viguiera laciniata</i>	1 of 31	4.2	S3.2	G4	

STAND TABLE

Adenostoma fasciculatum-*Xylococcus bicolor*-*Ceanothus tomentosus* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	XYBI	<i>Xylococcus bicolor</i>	100	10.2	0.2	35	X
	CETO	<i>Ceanothus tomentosus</i>	100	9.0	0.2	40	X
	ADFA	<i>Adenostoma fasciculatum</i>	94	15.9	0.2	55	X
	MALA6	<i>Malosma laurina</i>	87	3.4	0.2	11	X
	HESC2	<i>Helianthemum scoparium</i>	45	3.4	0.2	7	
	LOSC2	<i>Lotus scoparius</i>	42	2.4	0.2	12	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	39	1.6	0.2	5	
	SAME3	<i>Salvia mellifera</i>	35	2.4	0.2	8	

	HEWH	<i>Hesperoyucca whipplei</i>	32	0.8	0.2	5
	CNDU	<i>Cneoridium dumosum</i>	29	2.7	0.2	10
	RHCR	<i>Rhamnus crocea</i>	26	1.4	0.2	5
	HASQ2	<i>Hazardia squarrosa</i>	23	0.3	0.2	1
Herb						
	BRMA3	* <i>Bromus madritensis</i>	58	4.8	0.2	10
	VUMY	* <i>Vulpia myuros</i>	55	5.2	0.2	20
	BRRU2	* <i>Bromus rubens</i>	29	4.2	0.2	8
	HYGL2	* <i>Hypochaeris glabra</i>	29	0.7	0.2	2
	AVBA	* <i>Avena barbata</i>	26	0.8	0.2	2
	CAMA24	<i>Calystegia macrostegia</i>	26	0.5	0.2	1
	CEME2	* <i>Centaurea melitensis</i>	23	2.6	0.2	9

***Adenostoma fasciculatum*-*Xylococcus bicolor*-*Ceanothus verrucosus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	51.9	29-84	-
Herb	3.1	0-10	0-1
Shrub	49.7	28-84	1-5
Hardwood	0.0	0-0	5-10
Conifer	0.2	0-2	5-20
Non-native plant presence	2.1	0-17	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (7), NW (5), Variable (3), W (2), N (1), Flat (1), E (1)

Macrotopography: Bottom to Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope (4), Middle to Upper 1/3 of slope (3), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (2), Ridge top (2)

Microtopography: undulating (14), concave (3), flat (3)

Parent Material: Sandstone (8), Granitic (3), Conglomerate (1), Metamorphic (1), Sedimentary (1), Volcanic (1)

Soil Texture: sand (9), loam or sandy loam (7), silt or silt loam (2), clay or clay loam (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	132 ft.	24-478 ft.
Slope	20°	0-44°
Large rock cover	5.3%	0-23%
Small rock cover	14.4%	3-45%
Bare ground cover	36.8%	2-71%
Litter cover	41.3%	0-74%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=20)

Rapid Assessment(s): 0623JJ02, 0706TK03, 0706TK04, 0708RB02, 0708TK03, 0709DH03, 1173JD01, 1211KH01, 1491KH01, 1505KH01, 1708MM01, 1730KG01, SDRP0057, SDRP0156, SDRP0234, SDRP0249, SDRP0281, SDRP0285, SDRP0330, SDRP0335

Relevé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 20	4.2	S3.2	G3	
<i>Agave shawii</i>	1 of 20	2.1	S1.2	G2G3	
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	3 of 20	1B.1	S1.1	G5T1	
<i>Calochortus dunnii</i>	1 of 20	1B.2	S2.1	G2	Rare
<i>Ceanothus verrucosus</i>	20 of 20	2.2	S2.2	G3	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	1 of 20	1B.2	S2.2	G3T2	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	4 of 20	1B.2	S1.2	G1T1	
<i>Quercus dumosa</i>	10 of 20	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	3 of 20	4.1	S3S4	G3G4	

STAND TABLE

Adenostoma fasciculatum-*Xylococcus bicolor*-*Ceanothus verrucosus* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	PITOT2	<i>Pinus torreyana</i> var. <i>torreyana</i>	20	0.9	0.2	2	
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	18.3	1.0	50	X
	XYBI	<i>Xylococcus bicolor</i>	100	11.2	2.0	46	X
	CEVE2	<i>Ceanothus verrucosus</i>	100	5.2	0.2	27	X
	SAME3	<i>Salvia mellifera</i>	85	3.4	0.2	10	X
	RHIN2	<i>Rhus integrifolia</i>	65	4.2	0.2	16	
	MALA6	<i>Malosma laurina</i>	60	3.5	0.2	12	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	60	2.5	0.2	6	
	QUDU	<i>Quercus dumosa</i>	50	4.6	0.2	18	
	CNDU	<i>Cneoridium dumosum</i>	40	1.7	0.2	5	

	ERFA2	<i>Eriogonum fasciculatum</i>	40	0.8	0.2	3
	HEAR5	<i>Heteromeles arbutifolia</i>	35	1.8	0.2	9
	ARCA11	<i>Artemisia californica</i>	30	1.9	0.2	6
	HESC2	<i>Helianthemum scoparium</i>	25	0.7	0.2	2
	YUSC2	<i>Yucca schidigera</i>	25	0.7	0.2	2
	LOSC2	<i>Lotus scoparius</i>	25	0.6	0.2	2
	OPLI3	<i>Opuntia littoralis</i>	25	0.2	0.2	0.20
	HEWH	<i>Hesperoyucca whipplei</i>	20	0.2	0.2	0.20
Herb						
	BRMA3	* <i>Bromus madritensis</i>	35	2.2	0.2	10
	PSCA13	<i>Pseudognaphalium californicum</i>	35	0.2	0.2	0.20
	HEFA	<i>Deinandra fasciculata</i>	25	1.3	0.2	4
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	25	0.7	0.2	1
Cryptogam						
	2MOSS	<i>Moss</i>	20	4.0	1.0	8
	2LICHN	<i>Lichen</i>	20	1.3	0.2	2

***Adenostoma fasciculatum*-*Xylococcus bicolor*-*Pickeringia montana* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.1	25-55	-
Herb	13.3	4-20	0-1
Shrub	31.8	15-48	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	0.5-1
Non-native plant presence	19.9	0-37	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (6), S (2), SW (1), SE (1), NW (1), N (1)

Macrotopography: Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (2)

Microtopography: convex (5), flat (3), undulating (3), concave (1)

Parent Material: Metamorphic (6), Gabbro (5), Granitic (1)

Soil Texture: loam or sandy loam (4), silt or silt loam (4), clay or clay loam (1), sand (1)

General slope steepness: moderate to steep

Mean

Range

Elevation	415 ft.	309-560 ft.
Slope	26°	10-40°
Large rock cover	18.3%	2-44%
Small rock cover	32.5%	17-55%
Bare ground cover	34.4%	10-55%
Litter cover	13.0%	0-35%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=12)

Rapid Assessment(s): 0504DH21, 0504RB22, 0519DH03, 0519RB02, 1361JD04, 1361KH02, 1606MB01, 1607JD01, 1838JD01, 1838LW01, SDG0003, SDG0005

Relevé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Arctostaphylos otayensis</i>	1 of 12	1B.2	S2.1	G2	
<i>Callitropsis forbesii</i>	2 of 12	1B.1	S1.1	G2	
<i>Chamaebatia australis</i>	3 of 12	4.2	S3.2	G4	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	1 of 12	1B.2	S2.2	G3T2	
<i>Lepechinia ganderi</i>	6 of 12	1B.3	S2.2	G2	
<i>Lotus crassifolius</i> var. <i>otayensis</i>	1 of 12	1B.1	S1.1	G5T1	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	1 of 12	4.3	S2S4.3	G5T2T4	
<i>Quercus cedrosensis</i>	1 of 12	2.2	S1.2	G2?	
<i>Romneya coulteri</i>	1 of 12	4.2	S3.2	G3	

STAND TABLE

Adenostoma fasciculatum-*Xylococcus bicolor*-*Pickeringia montana* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	7.4	0.2	40	X
	XYBI	<i>Xylococcus bicolor</i>	100	7.4	0.2	37	X
	MALA6	<i>Malosma laurina</i>	92	1.1	0.2	5	X
	CETO	<i>Ceanothus tomentosus</i>	75	3.0	0.2	8	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	75	2.9	0.2	7	
	PIMO5	<i>Pickeringia montana</i>	67	5.8	2.0	10	
	LEGA	<i>Lepechinia ganderi</i>	50	2.4	0.2	6	

	LOSC2	<i>Lotus scoparius</i>	50	0.6	0.2	1
	HESC2	<i>Helianthemum scoparium</i>	42	1.5	0.2	3
	ROTR2	<i>Romneya trichocalyx</i>	33	1.8	1.0	3
	HEWH	<i>Hesperoyucca whipplei</i>	33	0.2	0.2	0.20
	CHAU2	<i>Chamaebatia australis</i>	25	5.0	2.0	9
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	25	0.2	0.2	0.20
Herb	HASQ2	<i>Hazardia squarrosa</i>	25	0.2	0.2	0.20
	VUMY	* <i>Vulpia myuros</i>	67	7.3	2.0	18
	BRMA3	* <i>Bromus madritensis</i>	58	3.8	0.2	14
	GAPH2	* <i>Gastidium phleoides</i>	42	0.6	0.2	2
	CAMA24	<i>Calystegia macrostegia</i>	33	1.6	0.2	4
	CEME2	* <i>Centaurea melitensis</i>	33	1.4	0.2	5
	AVBA	* <i>Avena barbata</i>	33	0.9	0.2	3
	HYGL2	* <i>Hypochaeris glabra</i>	25	0.8	0.2	2
	HEGR3	<i>Helianthus gracilentus</i>	25	0.2	0.2	0.20

Adenostoma fasciculatum*-*Xylococcus bicolor*-*Quercus (berberidifolia, xacutidens)
Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	55.4	30-89	-
Herb	8.3	0-46	0-1
Shrub	52.6	30-89	1-5
Hardwood	0.4	0-6	2-15
Conifer	0.0	0-0	-
Non-native plant presence	6.1	0-35	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (7), N (7), S (4), W (3), NW (2), Variable (1), SW (1), E (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Bottom to Upper 1/3 of slope (1), Lower to Upper 1/3 of slope (7), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (3), Upper 1/3 of slope to Ridgetop (3), Lower 1/3 of slope to Ridgetop (2)

Microtopography: undulating (19), convex (4), flat (2), concave (1)

Parent Material: Granitic (14), Metamorphic (5), Sedimentary (3), Diorite (1), Gabbro (1), Mixed rock (1)

Soil Texture: loam or sandy loam (17), sand (4), clay or clay loam (3), silt or silt loam (2)

General slope steepness: moderate to steep

	Mean	Range
Elevation	353 ft.	44-652 ft.
Slope	19°	6-35°
Large rock cover	20.8%	0-65%
Small rock cover	18.7%	4-50%
Bare ground cover	27.7%	5-75%
Litter cover	31.2%	3-71%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=26)

Rapid Assessment(s): 0311TK21, 0421TK01, 0422TK02, 0505JJ01, 0519RB03, 0520DH03, 0608DH01, 1034MB01, 1039MB01, 1069FS01, 1075FS02, 1122JD01, 1129PG01, 1131KH01, 1149FS01, 1212FS01, 1274TK01, 1274TK02, 1304JD01, 1326EB03, 1486MM01, 1568MM01, 1710JD06, 1730JD01, SDRP0250, SDRP0267

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i>	1 of 26	1B.1	S1.1	G5T1	
<i>Arctostaphylos rainbowensis</i>	3 of 26	1B.1	S2.1	G2	
<i>Ceanothus cyaneus</i>	1 of 26	1B.2	S2.2	G2	
<i>Lepechinia ganderi</i>	1 of 26	1B.3	S2.2	G2	
<i>Quercus dumosa</i>	1 of 26	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	2 of 26	4.2	S3.2	G3	
<i>Selaginella cinerascens</i>	2 of 26	4.1	S3S4	G3G4	

STAND TABLE

Adenostoma fasciculatum-*Xylococcus bicolor*-*Quercus* (*berberidifolia*, *xacutidens*) Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	XYBI	<i>Xylococcus bicolor</i>	100	8.5	1.0	20	X
	ADFA	<i>Adenostoma fasciculatum</i>	96	20.4	1.0	50	X
	MALA6	<i>Malosma laurina</i>	65	2.8	0.2	8	
	CETO	<i>Ceanothus tomentosus</i>	58	13.8	1.0	30	
	QUAC3	<i>Quercus xacutidens</i> [<i>cornelius-mulleri</i> x <i>engelmannii</i>]	58	9.8	4.0	30	

	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	58	0.7	0.2	3
	SAME3	<i>Salvia mellifera</i>	42	3.0	0.2	10
	QUBE5	<i>Quercus berberidifolia</i>	38	5.9	1.0	15
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	38	1.7	0.2	5
	LOSC2	<i>Lotus scoparius</i>	35	1.8	0.2	5
	HESC2	<i>Helianthemum scoparium</i>	35	1.2	0.2	5
	HEAR5	<i>Heteromeles arbutifolia</i>	31	2.3	0.2	5
	HASQ2	<i>Hazardia squarrosa</i>	31	1.2	0.2	5
	RHIL	<i>Rhamnus ilicifolia</i>	31	0.4	0.2	2
	HEWH	<i>Hesperoyucca whipplei</i>	31	0.2	0.2	0.20
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	27	5.9	0.2	15
	ARCA11	<i>Artemisia californica</i>	27	1.3	0.2	5
	CNDU	<i>Cneoridium dumosum</i>	23	4.4	0.2	10
	KECO	<i>Keckiella cordifolia</i>	23	2.4	0.2	10
	RHOV	<i>Rhus ovata</i>	23	1.0	0.2	5
	SAAP2	<i>Salvia apiana</i>	23	0.8	0.2	3
Herb						
	BRMA3	* <i>Bromus madritensis</i>	42	4.6	0.2	20
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	27	0.7	0.2	3
	LOGA2	* <i>Logfia gallica</i>	23	0.3	0.2	1
	PSCA13	<i>Pseudognaphalium</i>	23	0.3	0.2	1

***Ambrosia monogyra* Provisional Alliance**
Singlewhorl Burrobush Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ambrosia monogyra* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Coast (SC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	36.0	25-54	-
Herb	28.3	15-47	0-1
Shrub	16.3	9-24	1-2
Hardwood	0.1	0-0	15-20
Conifer	0.0	0-0	-
Non-native plant presence	59.2	44-72	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1), N (1), Flat (1)

Macrotopography: Bottom (2), Lower 1/3 of slope (1)

Microtopography: flat (3)

Parent Material: Mixed alluvium (1), Sandy alluvium (1), Silty alluvium (1)

Soil Texture: loam or sandy loam (2), clay or clay loam (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	116 ft.	-27-213 ft.
Slope	1°	0-2°
Large rock cover	0.0%	0-0%
Small rock cover	24.5%	0-68%
Bare ground cover	18.7%	5-28%
Litter cover	55.7%	7-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0312AK21, 0519DH04, 0603RB02

Relevé(s): none

CONSERVATION STATUS RANK

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ambrosia monogyra</i>	3 of 3	2.2	S2.2	G5	
<i>Iva hayesiana</i>	1 of 3	2.2	S2.2?	G3?	

STAND TABLE

Ambrosia monogyra Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	33	0.2	0.2	0.20	
Shrub							
	HYMO	<i>Ambrosia monogyra</i>	100	15.3	8.0	24	X
	BASA4	<i>Baccharis salicifolia</i>	67	0.2	0.2	0.20	
	BASA2	<i>Baccharis sarothroides</i>	33	2.0	2.0	2	
	ARCA11	<i>Artemisia californica</i>	33	1.0	1.0	1	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	0.2	0.2	0.20	
	NIGL	* <i>Nicotiana glauca</i>	33	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	67	15.5	6.0	25	
	BRDI3	* <i>Bromus diandrus</i>	67	8.5	2.0	15	
	ERCI6	* <i>Erodium cicutarium</i>	67	6.1	0.2	12	
	ERBO	* <i>Erodium botrys</i>	67	1.5	1.0	2	
	HIIN3	* <i>Hirschfeldia incana</i>	67	1.0	1.0	1	
	BRHO2	* <i>Bromus hordeaceus</i>	33	15.0	15.0	15	
	BRNI	* <i>Brassica nigra</i>	33	7.0	7.0	7	
	VUMY	* <i>Vulpia myuros</i>	33	6.0	6.0	6	
	EUPE6	* <i>Euphorbia peplus</i>	33	5.0	5.0	5	
	ARDR4	<i>Artemisia dracunculus</i>	33	3.0	3.0	3	
	CEME2	* <i>Centaurea melitensis</i>	33	2.0	2.0	2	
	AVBA	* <i>Avena barbata</i>	33	1.0	1.0	1	
	GLCO6	* <i>Glebionis coronarium</i>	33	1.0	1.0	1	
	HEGR7	<i>Heterotheca grandiflora</i>	33	1.0	1.0	1	
	MEIN2	* <i>Melilotus indicus</i>	33	1.0	1.0	1	
	AGPA8	<i>Agrostis pallens</i>	33	0.2	0.2	0.20	
	AMPS	<i>Ambrosia psilostachya</i>	33	0.2	0.2	0.20	
	ASAS4	* <i>Asparagus asparagoides</i>	33	0.2	0.2	0.20	
	BRDI2	* <i>Brachypodium distachyon</i>	33	0.2	0.2	0.20	
	CRYPT	<i>Cryptantha</i>	33	0.2	0.2	0.20	
	DAWR2	<i>Datura wrightii</i>	33	0.2	0.2	0.20	
	HOMU	* <i>Hordeum murinum</i>	33	0.2	0.2	0.20	
	IVHA	<i>Iva hayesiana</i>	33	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	33	0.2	0.2	0.20	
	MAVU	* <i>Marrubium vulgare</i>	33	0.2	0.2	0.20	
	PESP3	<i>Penstemon spectabilis</i>	33	0.2	0.2	0.20	
	RASA2	* <i>Raphanus sativus</i>	33	0.2	0.2	0.20	
	SODO	<i>Solanum douglasii</i>	33	0.2	0.2	0.20	
	STME2	* <i>Stellaria media</i>	33	0.2	0.2	0.20	
	VELA	<i>Verbena lasiostachys</i>	33	0.2	0.2	0.20	
Cryptogam							
	2MOSS	<i>Moss</i>	33	5.0	5.0	5	

***Arctostaphylos glandulosa* Alliance**

Eastwood Manzanita Chaparral

ALLIANCE STAND TABLE

***Arctostaphylos glandulosa*
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	93	12.4	0.2	55	X
	HESC2	<i>Helianthemum scoparium</i>	78	5.0	0.2	20	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	73	0.8	0.2	4	
	ARGL3	<i>Arctostaphylos glandulosa</i>	60	14.5	1.0	40	
	CHAU2	<i>Chamaebatia australis</i>	53	16.8	1.0	55	
	HEWH	<i>Hesperoyucca whipplei</i>	45	0.5	0.2	3	
	ARGLG3	<i>Arctostaphylos glandulosa</i> ssp. <i>glandulosa</i>	38	19.2	0.2	60	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	38	1.3	0.2	10	
	HASQ2	<i>Hazardia squarrosa</i>	38	0.5	0.2	2	
	MALA6	<i>Malosma laurina</i>	38	0.4	0.2	3	
	CETO	<i>Ceanothus tomentosus</i>	33	4.6	0.2	30	
	QUAC3	<i>Quercus xacutidens</i> [cornelius-mulleri x engelmannii]	33	1.7	0.2	8	
	LOSC2	<i>Lotus scoparius</i>	33	1.4	0.2	6	
	PIMOT2	<i>Pickeringia montana</i> var. <i>tomentosa</i>	30	1.4	0.2	8	
	DERI	<i>Dendromecon rigida</i>	28	6.3	0.2	20	
	LEGA	<i>Lepechinia ganderi</i>	28	1.0	0.2	4	
	CEOT	<i>Ceanothus xotayensis</i> [crassifolus x greggii]	25	4.5	0.2	20	
	XYBI	<i>Xylococcus bicolor</i>	25	0.6	0.2	2	
	ERTRT4	<i>Eriodictyon trichocalyx</i> var. <i>trichocalyx</i>	23	2.3	0.2	10	
Herb							
	GAAN2	<i>Galium angustifolium</i>	33	0.5	0.2	4	
	VUMY	* <i>Vulpia myuros</i>	25	0.5	0.2	1	
	LOGA2	* <i>Logfia gallica</i>	23	0.2	0.2	0.2	
	BRMA3	* <i>Bromus madritensis</i>	20	0.4	0.2	1	
	GAPH2	* <i>Gastridium phleoides</i>	20	0.3	0.2	1	

***Arctostaphylos glandulosa*-*Adenostoma fasciculatum* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Palomar - Cuyamaca Peak (M262Bo), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Foothills (NF), Northern Mountains (NM), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.4	25-65	-
Herb	3.2	0-8	0-0.5
Shrub	41.6	25-64	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.7	0-3	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (6), N (4), W (1), S (1), NW (1), E (1)

Macrotopography: Bottom to Upper 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (4), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (2), Ridge top (1)

Microtopography: undulating (8), concave (2), convex (2), flat (2)

Parent Material: Granitic (6), Metamorphic (5), Gabbro (2), Mixed metamorphic (1)

Soil Texture: loam or sandy loam (7), sand (4), clay or clay loam (2)

General slope steepness: gentle to steep

	Mean	Range
Elevation	723 ft.	517-1107 ft.
Slope	18°	3-30°
Large rock cover	16.2%	0-35%
Small rock cover	29.9%	5-62%
Bare ground cover	25.1%	6-56%
Litter cover	27.1%	1-51%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0506RB21, 0520TK01, 0604DH02, 0604RB03, 0609RB03, 0609TK01, 0609TK03, 1274TK04, 1276TK01, 1326EB01, 1326EB02, 1342MB01, 1350EB01, 1350JD02

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Carex obispoensis</i>	2 of 14	1B.2	S2.2	G2	
<i>Ceanothus cyaneus</i>	1 of 14	1B.2	S2.2	G2	
<i>Horkelia truncata</i>	2 of 14	1B.3	S2.3	G3	
<i>Monardella hypoleuca ssp. lanata</i>	1 of 14	1B.2	S2.2	G4T2	
<i>Nolina interrata</i>	2 of 14	1B.1	S1.2	G1	Endangered
<i>Packera ganderi</i>	1 of 14	1B.2	S2.2	G2	Rare
<i>Quercus cedrosensis</i>	1 of 14	2.2	S1.2	G2?	
<i>Saltugilia caruifolia</i>	1 of 14	4.3	S3.3	G4?	
<i>Tetracoccus dioicus</i>	1 of 14	1B.2	S2.2	G3	

STAND TABLE

Arctostaphylos glandulosa-*Adenostoma fasciculatum* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	13.0	1.0	26	X
	ARGL3	<i>Arctostaphylos glandulosa</i>	93	15.3	3.0	31	X
	HEWH	<i>Hesperoyucca whipplei</i>	71	0.7	0.2	3	
	HASQ2	<i>Hazardia squarrosa</i>	64	0.6	0.2	2	
	DIAUA	<i>Diplacus aurantiacus ssp. aurantiacus</i>	57	2.2	0.2	10	
	ERCOC12	<i>Eriophyllum confertiflorum var. confertiflorum</i>	50	0.7	0.2	2	
	HESC2	<i>Helianthemum scoparium</i>	43	5.4	0.2	12	
	QUBE5	<i>Quercus berberidifolia</i>	43	2.2	0.2	5	
	HEAR5	<i>Heteromeles arbutifolia</i>	43	0.7	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	36	2.5	0.2	6	
	CELE2	<i>Ceanothus leucodermis</i>	36	0.6	0.2	2	
	LOSU2	<i>Lonicera subspicata</i>	36	0.2	0.2	0.20	
	RHOV	<i>Rhus ovata</i>	36	0.2	0.2	0.20	
	CETO	<i>Ceanothus tomentosus</i>	29	4.8	1.0	12	
	QUAC3	<i>Quercus xacutidens [cornelius-mulleri x engelmannii]</i>	29	3.3	0.2	8	
	CECR	<i>Ceanothus crassifolius</i>	29	1.8	1.0	3	
	RHIL	<i>Rhamnus ilicifolia</i>	29	1.1	0.2	3	
	STRE4	<i>Styrax redivivus</i>	29	0.9	0.2	2	
	XYBI	<i>Xylococcus bicolor</i>	29	0.6	0.2	1	
	CNDU	<i>Cneoridium dumosum</i>	21	3.4	0.2	7	
	ARGL4	<i>Arctostaphylos glauca</i>	21	1.8	0.2	5	
	RHCR	<i>Rhamnus crocea</i>	21	1.7	1.0	3	
	MALA6	<i>Malosma laurina</i>	21	0.2	0.2	0.20	
Herb							

PEDE	<i>Pedicularis densiflora</i>	36	0.2	0.2	0.20
DICA14	<i>Dichelostemma capitatum</i>	21	0.2	0.2	0.20
GAAN2	<i>Galium angustifolium</i>	21	0.2	0.2	0.20

***Arctostaphylos glandulosa*-*Adenostoma fasciculatum*-*Chamaebatia australis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.9	15-70	-
Herb	2.0	0-10	0-0.5
Shrub	47.0	14-70	1-5
Hardwood	0.0	0-0	-
Conifer	0.3	0-5	0.5-2
Non-native plant presence	1.8	0-10	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (8), S (4), NE (4), NW (3), SW (2), W (1), SE (1), no data (1), E (1)

Macrotopography: Entire slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (5), Upper 1/3 of slope (5), Upper 1/3 of slope to Ridgetop (3), Ridge top (1), Lower 1/3 of slope to Ridgetop (2), no data (1)

Microtopography: undulating (13), flat (6), convex (4), concave (1)

Parent Material: Gabbro (14), Metamorphic (11)

Soil Texture: silt or silt loam (10), loam or sandy loam (7), clay or clay loam (4), sand (4)

General slope steepness: moderate to steep

	Mean	Range
Elevation	783 ft.	410-1052 ft.
Slope	23°	14-30°
Large rock cover	29.0%	2-50%
Small rock cover	39.3%	10-75%
Bare ground cover	14.0%	0-40%
Litter cover	16.5%	1-65%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=25)

Rapid Assessment(s): 0602DH02, 0602JJ03, 1219TK01, 1376MB01, 1376MB02, 1376MM01, 1376MM02, 1384LS01, 1384LS02, 1401MB02, 1607MB01, 1607MB03, 1607MM02, 1827JD01, 1827MB01, 1827TK01, 1829JD01, 1833JD01, 1833MB01, 1833MB02, 1833MM01, 1834MB03
Relevé(s): SDG0122, SDG0126, SDG0127

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	2 of 25	4.2	S3.2	G3	
<i>Callitropsis forbesii</i>	3 of 25	1B.1	S1.1	G2	
<i>Calochortus dunnii</i>	2 of 25	1B.2	S2.1	G2	Rare
<i>Ceanothus otayensis</i>	10 of 25	1B.2	S1.2	G1	
<i>Chamaebatia australis</i>	21 of 25	4.2	S3.2	G4	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	1 of 25	1B.2	S2.2	G3T2	
<i>Lepechinia ganderi</i>	11 of 25	1B.3	S2.2	G2	
<i>Mimulus clevelandii</i>	6 of 25	4.2	S3.2	G3G4	
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	1 of 25	1B.2	S2.2	G4T2	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	12 of 25	4.3	S2S4.3	G5T2T4	
<i>Satureja chandleri</i>	1 of 25	1B.2	S3.2?	G4	

STAND TABLE

Arctostaphylos glandulosa-*Adenostoma fasciculatum*-*Chamaebatia australis* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	HESC2	<i>Helianthemum scoparium</i>	96	5.2	0.2	20	X
	ADFA	<i>Adenostoma fasciculatum</i>	92	12.0	0.2	55	X
	CHAU2	<i>Chamaebatia australis</i>	84	16.8	1.0	55	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	84	0.9	0.2	4	X
	ARGLG3	<i>Arctostaphylos glandulosa</i> ssp. <i>glandulosa</i>	56	19.2	0.2	60	
	PIMOT2	<i>Pickeringia montana</i> var. <i>tomentosa</i>	48	1.4	0.2	8	
	MALA6	<i>Malosma laurina</i>	48	0.5	0.2	3	
	ARGL3	<i>Arctostaphylos glandulosa</i>	44	13.5	1.0	40	
	LEGA	<i>Lepechinia ganderi</i>	44	1.0	0.2	4	
	DERI	<i>Dendromecon rigida</i>	40	6.9	0.2	20	
	CEOT	<i>Ceanothus xotayensis</i> [<i>crassifolus</i> x <i>greggii</i>]	40	4.5	0.2	20	
	ERTRT4	<i>Eriodictyon trichocalyx</i> var. <i>trichocalyx</i>	36	2.3	0.2	10	
	QUAC3	<i>Quercus xacutidens</i> [<i>cornelius-mulleri</i> x <i>engelmannii</i>]	36	1.0	0.2	3	
	CETO	<i>Ceanothus tomentosus</i>	32	1.4	0.2	4	

	LOSC2	<i>Lotus scoparius</i>	32	0.7	0.2	3
	HEWH	<i>Hesperoyucca whipplei</i>	32	0.3	0.2	1
	PIMO5	<i>Pickeringia montana</i>	28	1.8	0.2	4
	XYBI	<i>Xylococcus bicolor</i>	24	0.6	0.2	2
	CEGRP	<i>Ceanothus greggii</i> var. <i>perplexans</i>	24	0.5	0.2	1
	HASQ2	<i>Hazardia squarrosa</i>	24	0.3	0.2	1
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	24	0.2	0.2	0.20
	ERTR7	<i>Eriodictyon trichocalyx</i>	20	0.4	0.2	1
Herb	GAAN2	<i>Galium angustifolium</i>	36	0.6	0.2	4
	VUMY	* <i>Vulpia myuros</i>	32	0.5	0.2	1
	GAPH2	* <i>Gastroidium phleoides</i>	32	0.3	0.2	1
	LOGA2	* <i>Logfia gallica</i>	28	0.2	0.2	0.20
	BRRU2	* <i>Bromus rubens</i>	24	2.7	0.2	7
	DICL2	<i>Diplacus clevelandii</i>	24	0.6	0.2	2
	BRMA3	* <i>Bromus madritensis</i>	24	0.3	0.2	1

***Arctostaphylos glauca* Alliance**

Bigberry Manzanita Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below

***Arctostaphylos glauca*-*Adenostoma fasciculatum* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	43.0	36-50	-
Herb	4.0	2-6	0-1
Shrub	42.5	35-50	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	7.2	0-14	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Variable (1), NW (1)

Macrotopography: Middle to Upper 1/3 of slope (2)

Microtopography: convex (1), undulating (1)
Parent Material: Granitic (1), Metamorphic (1)
Soil Texture: loam or sandy loam (2)
General slope steepness: somewhat steep to somewhat steep

	Mean	Range
Elevation	577 ft.	560-594 ft.
Slope	18°	16-20°
Large rock cover	5.3%	1-10%
Small rock cover	23.6%	10-37%
Bare ground cover	20.0%	10-30%
Litter cover	49.5%	30-69%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0520DH02, 1347LS02
Relevé(s): none

CONSERVATION STATUS RANK G4 S4

STAND TABLE

Arctostaphylos glauca-*Adenostoma fasciculatum* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	100	15.5	15.0	16	X
	ARGL4	<i>Arctostaphylos glauca</i>	100	10.0	10.0	10	X
	XYBI	<i>Xylococcus bicolor</i>	100	7.0	2.0	12	X
	QUAC3	<i>Quercus xacutidens</i> [<i>cornelius-mulleri</i> x <i>engelmannii</i>]	100	3.5	2.0	5	X
	GUCA	<i>Gutierrezia californica</i>	100	2.1	0.2	4	X
	MALA6	<i>Malosma laurina</i>	100	1.5	1.0	2	X
	HEWH	<i>Hesperoyucca whipplei</i>	100	0.6	0.2	1	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	100	0.2	0.2	0.20	X
	CETO	<i>Ceanothus tomentosus</i>	50	3.0	3.0	3	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	50	3.0	3.0	3	
	ERFA2	<i>Eriogonum fasciculatum</i>	50	0.2	0.2	0.20	
	KECO	<i>Keckiella cordifolia</i>	50	0.2	0.2	0.20	
	LOSUD	<i>Lonicera subspicata</i> var. <i>denudata</i>	50	0.2	0.2	0.20	
	RHCR	<i>Rhamnus crocea</i>	50	0.2	0.2	0.20	
	SAAP2	<i>Salvia apiana</i>	50	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	50	5.0	5.0	5	
	VUMY	* <i>Vulpia myuros</i>	50	1.0	1.0	1	
	CEME2	* <i>Centaurea melitensis</i>	50	0.2	0.2	0.20	
	CHPO12	<i>Chamaesyce polycarpa</i>	50	0.2	0.2	0.20	

CHF12	<i>Chorizanthe fimbriata</i>	50	0.2	0.2	0.20
DICA14	<i>Dichelostemma capitatum</i>	50	0.2	0.2	0.20
GAPOP	<i>Galium porrigens</i> var. <i>porrigens</i>	50	0.2	0.2	0.20
LOGA2	* <i>Logfia gallica</i>	50	0.2	0.2	0.20
MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	50	0.2	0.2	0.20
NEST2	<i>Neogaerrhinum strictum</i>	50	0.2	0.2	0.20
PLAGI	<i>Plagiobothrys</i>	50	0.2	0.2	0.20
POGR5	<i>Porophyllum gracile</i>	50	0.2	0.2	0.20
PTDR	<i>Pterostegia drymarioides</i>	50	0.2	0.2	0.20
STGN	<i>Stylocline gnaphalioides</i>	50	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	50	0.2	0.2	0.20

***Artemisia californica* Alliance**
California Sagebrush Scrub

ALLIANCE STAND TABLE

***Artemisia californica*
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	96	25.6	4.0	42	X
	ERFA2	<i>Eriogonum fasciculatum</i>	67	2.1	0.2	12	
	MALA6	<i>Malosma laurina</i>	63	4.0	0.2	11	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	54	15.5	0.2	50	
	RHIN2	<i>Rhus integrifolia</i>	42	7.1	0.2	36	
	LOSC2	<i>Lotus scoparius</i>	38	0.5	0.2	2	
	BAPI	<i>Baccharis pilularis</i>	33	2.8	0.2	11	
	SAME3	<i>Salvia mellifera</i>	33	2.5	0.2	10	
	SAAP2	<i>Salvia apiana</i>	33	1.8	0.2	6	
	ISME5	<i>Isocoma menziesii</i>	21	2.5	0.2	9	
	OPLI3	<i>Opuntia littoralis</i>	21	1.9	0.2	5	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	58	8.5	0.2	35	
	PSCA13	<i>Pseudognaphalium californicum</i>	33	0.3	0.2	1	
	CEME2	* <i>Centaurea melitensis</i>	29	2.9	0.2	7	
	VUMY	* <i>Vulpia myuros</i>	29	2.3	0.2	12	
	HIIN3	* <i>Hirschfeldia incana</i>	25	2.6	0.2	10	
	HEFA	<i>Deinandra fasciculata</i>	25	1.5	0.2	5	
	AVBA	* <i>Avena barbata</i>	21	1.1	0.2	2	
Cryptogam							
	2MOSS	<i>Moss</i>	21	2.4	1.0	5	

***Artemisia californica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CV), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	44.7	25-70	-
Herb	12.2	0-44	0-2
Shrub	35.4	13-64	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	17.2	0-75	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (3), W (2), SW (2), S (2), NE (2), N (2), SE (1)

Macrotopography: Entire slope (1), Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (3), Middle 1/3 of slope to Ridgetop (3), Upper 1/3 of slope (1), Ridge top (1)

Microtopography: undulating (6), flat (4), convex (2), concave (2)

Parent Material: Sedimentary (4), Granitic (3), Sandstone (3), Metamorphic (2)

Soil Texture: loam or sandy loam (7), clay or clay loam (3), sand (2), silt or silt loam (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	119 ft.	-19-290 ft.
Slope	14°	2-30°
Large rock cover	1.9%	0-9%
Small rock cover	17.6%	1-49%
Bare ground cover	47.3%	13-74%
Litter cover	31.6%	12-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0625DH01, 0707RB03, 0708AK02, 0709DH01, 0709MG03, 1627MB02, 1634JD02, 1701JD01, 1705JD02, SDRP0087, SDRP0138, SDRP0139, SDRP0236, SDRP0280

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 14	4.2	S3.2	G3	
<i>Quercus dumosa</i>	1 of 14	1B.1	S1.1	G1G2	

<i>Selaginella cinerascens</i>	1 of 14	4.1	S3S4	G3G4
<i>Suaeda taxifolia</i>	1 of 14	4.2	S2S3	G3?

STAND TABLE

Artemisia californica Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic	
Shrub	ARCA11	<i>Artemisia californica</i>	100	27.2	10.0	40	X	
	ERFA2	<i>Eriogonum fasciculatum</i>	71	1.6	0.2	5		
	RHIN2	<i>Rhus integrifolia</i>	50	4.1	0.2	17		
	MALA6	<i>Malosma laurina</i>	50	3.5	0.2	10		
	BAPI	<i>Baccharis pilularis</i>	36	3.4	0.2	11		
	LOSC2	<i>Lotus scoparius</i>	36	0.2	0.2	0.20		
	ISME5	<i>Isocoma menziesii</i>	29	3.1	0.2	9		
	SAAP2	<i>Salvia apiana</i>	29	2.4	0.2	6		
	SAME3	<i>Salvia mellifera</i>	29	0.9	0.2	2		
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	29	0.4	0.2	1		
	OPLI3	<i>Opuntia littoralis</i>	21	1.5	0.2	4		
	CLIS	<i>Cleome isomeris</i>	21	0.8	0.2	2		
Herb	BRMA3	* <i>Bromus madritensis</i>	50	6.3	0.2	35		
	PSCA13	<i>Pseudognaphalium californicum</i>	36	0.2	0.2	0.20		
	HIIN3	* <i>Hirschfeldia incana</i>	29	3.6	0.2	10		
	HEFA	<i>Deinandra fasciculata</i>	29	2.1	0.2	5		
	AVBA	* <i>Avena barbata</i>	29	0.9	0.2	2		
	VUMY	* <i>Vulpia myuros</i>	21	4.1	0.2	12		
	CEME2	* <i>Centaurea melitensis</i>	21	3.7	1.0	7		
	COFI2	<i>Corethrogyne filaginifolia</i>	21	0.5	0.2	1		
	Cryptogam							
	2MOSS	<i>Moss</i>	21	3.0	2.0	5		

***Artemisia californica*-*Diplacus aurantiacus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	62.5	38-95	-
Herb	13.4	1-37	0-1
Shrub	54.1	35-80	1-5
Hardwood	0.0	0-0	2-5
Conifer	0.0	0-0	-
Non-native plant presence	14.2	0-46	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (4), NE (2), W (1), SW (1), N (1), E (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (4), Lower 1/3 of slope to Ridgetop (2)

Microtopography: concave (3), flat (3), convex (2), undulating (2)

Parent Material: Granitic (3), Metamorphic (2), Sandstone (2), Mixed alluvium (1), Sedimentary (1)

Soil Texture: loam or sandy loam (5), clay or clay loam (3), sand (2)

General slope steepness: moderate to steep

	Mean	Range
Elevation	152 ft.	32-324 ft.
Slope	17°	7-28°
Large rock cover	4.2%	0-12%
Small rock cover	10.9%	0-31%
Bare ground cover	30.5%	7-73%
Litter cover	52.5%	25-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0324TKF1, 0521AK01, 1513KH03, 1541JD02, 1698LS01, 1737JD01, SDRP0065, SDRP0233, SDRP0358, SDRP0404

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

STAND TABLE

**Artemisia californica-Diplacus aurantiacus
Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ARCA11	<i>Artemisia californica</i>	90	23.1	4.0	42	X
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	90	22.2	5.0	50	X
	MALA6	<i>Malosma laurina</i>	80	4.5	0.2	11	X
	ERFA2	<i>Eriogonum fasciculatum</i>	60	2.9	0.2	12	
	SAME3	<i>Salvia mellifera</i>	40	4.1	0.4	10	
	SAAP2	<i>Salvia apiana</i>	40	1.3	0.2	2	
	LOSC2	<i>Lotus scoparius</i>	40	0.9	0.2	2	
	RHIN2	<i>Rhus integrifolia</i>	30	14.3	3.0	36	
	HEAR5	<i>Heteromeles arbutifolia</i>	30	4.7	0.2	12	
	BAPI	<i>Baccharis pilularis</i>	30	1.8	0.4	4	
	RHCR	<i>Rhamnus crocea</i>	30	1.8	0.2	5	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	30	1.1	0.2	2	
	HASQ2	<i>Hazardia squarrosa</i>	30	0.2	0.2	0.20	
	ADFA	<i>Adenostoma fasciculatum</i>	20	3.5	1.0	6	
	OPLI3	<i>Opuntia littoralis</i>	20	2.6	0.2	5	
	TODI	<i>Toxicodendron</i>	20	0.2	0.2	0.20	
Herb	BRMA3	* <i>Bromus madritensis</i>	70	10.7	2.0	30	
	CEME2	* <i>Centaurea melitensis</i>	40	2.4	0.2	5	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	40	1.4	0.2	5	
	VUMY	* <i>Vulpia myuros</i>	40	0.9	0.2	2	
	BRDI3	* <i>Bromus diandrus</i>	30	1.1	0.2	2	
	PSCA13	<i>Pseudognaphalium californicum</i>	30	0.5	0.2	1	
	BRHO2	* <i>Bromus hordeaceus</i>	20	1.1	0.2	2	
	ACMI3	<i>Acourtia microcephala</i>	20	0.6	0.2	1	
	AVFA	* <i>Avena fatua</i>	20	0.6	0.2	1	
	HIIN3	* <i>Hirschfeldia incana</i>	20	0.6	0.2	1	
	MILA6	<i>Mirabilis laevis</i>	20	0.6	0.2	1	
	HEFA	<i>Deinandra fasciculata</i>	20	0.3	0.2	0.40	
	NALE2	<i>Nassella lepida</i>	20	0.2	0.2	0.20	
	SCCA2	<i>Scrophularia californica</i>	20	0.2	0.2	0.20	
Cryptogam	2MOSS	<i>Moss</i>	20	1.5	1.0	2	
	2LICHN	<i>Lichen</i>	20	0.2	0.2	0.20	

***Artemisia californica*-*Eriogonum fasciculatum* Alliance**
California Sagebrush-California Buckwheat Scrub

ALLIANCE STAND TABLE

***Artemisia californica*-*Eriogonum fasciculatum* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	97	14.4	0.2	35	X
	ERFA2	<i>Eriogonum fasciculatum</i>	84	9.1	0.2	25	X
	MALA6	<i>Malosma laurina</i>	61	5.5	0.2	35	
	OPLI3	<i>Opuntia littoralis</i>	45	1.4	0.2	15	
	RHIN2	<i>Rhus integrifolia</i>	34	5.6	0.2	27	
	VILA3	<i>Viguiera laciniata</i>	34	2.3	0.2	8	
	SAAP2	<i>Salvia apiana</i>	30	1.1	0.2	5	
	CYPR19	<i>Cylindropuntia prolifera</i>	24	1.9	0.2	20	
	LOSC2	<i>Lotus scoparius</i>	23	0.9	0.2	4	
	FEVI2	<i>Ferocactus viridescens</i>	23	0.2	0.2	1	
	RHCR	<i>Rhamnus crocea</i>	22	1.7	0.2	13	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	22	1.2	0.2	12	
	BASA2	<i>Baccharis sarothroides</i>	20	1.1	0.2	5	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	64	7.4	0.2	50	
	CEME2	* <i>Centaurea melitensis</i>	50	3.2	0.2	25	
	HIIN3	* <i>Hirschfeldia incana</i>	30	2.0	0.2	25	
	VUMY	* <i>Vulpia myuros</i>	27	4.4	0.2	12	
	AVBA	* <i>Avena barbata</i>	27	2.5	0.2	12	
	HEFA	<i>Deinandra fasciculata</i>	27	1.7	0.2	6	
	NALE2	<i>Nassella lepida</i>	26	1.8	0.2	8	
	ERODI	* <i>Erodium</i>	20	9.1	0.2	40	
	DUPU	<i>Dudleya pulverulenta</i>	20	0.3	0.2	1	
Cryptogam							
	SECI	<i>Selaginella cinerascens</i>	20	2.4	0.2	8	

***Artemisia californica*-*Eriogonum fasciculatum*-*Malosma laurina* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.8	15-75	-
Herb	20.0	0-50	0-1
Shrub	34.6	2-75	1-5
Hardwood	0.0	0-0	5-10
Conifer	0.0	0-0	-
Non-native plant presence	28.7	0-74	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (11), SE (5), NW (5), E (5), SW (4), Flat (3), W (2), Variable (2), NE (1), (0)

Macrotopography: Bottom (3), Lower 1/3 of slope (9), Lower to Middle 1/3 of slope (6), Lower to Upper 1/3 of slope (5), Middle 1/3 of slope (8), Middle to Upper 1/3 of slope (5), Upper 1/3 of slope (2), Ridge top (1)

Microtopography: undulating (21), convex (9), flat (4), concave (4)

Parent Material: Metamorphic (21), Granitic (15), Gabbro (1), Sedimentary (1)

Soil Texture: loam or sandy loam (22), clay or clay loam (2), sand (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	223 ft.	96-508 ft.
Slope	13°	0-40°
Large rock cover	4.5%	0-33%
Small rock cover	13.0%	0-30%
Bare ground cover	38.4%	13-80%
Litter cover	42.3%	10-78%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=39)

Rapid Assessment(s): 0505RB03, 0519TK01, 0520RB03, 0521RB03, 0521TK01, 0603DH01, 0610AK01, 1035MB01, 1353MB01, 1437KH01, 1548MB01, 1549KH01, 1617MB01, 1700PG02, SDG0007, SDG0010, SDG0012, SDG0016, SDG0019, SDG0022, SDG0026, SDG0029, SDG0036, SDG0037, SDG0038, SDG0046, SDG0065, SDG0066, SDG0115, SDRP0090, SDRP0125, SDRP0130, SDRP0132, SDRP0190, SDRP0261, SDRP0319, SDRP0320, SDRP0467

Relevé(s): SDG0070

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Arctostaphylos rainbowensis</i>	1 of 39	1B.1	S2.1	G2	
<i>Lotus nuttallianus</i>	1 of 39	1B.1	S1.1	G1	
<i>Quercus dumosa</i>	1 of 39	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	1 of 39	4.2	S3.2	G3	
<i>Selaginella cinerascens</i>	1 of 39	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	16 of 39	4.2	S3.2	G4	

STAND TABLE

Artemisia californica-*Eriogonum fasciculatum*-*Malosma laurina* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ARCA11	<i>Artemisia californica</i>	100	15.0	0.2	35	X
	ERFA2	<i>Eriogonum fasciculatum</i>	92	9.4	0.2	25	X
	MALA6	<i>Malosma laurina</i>	77	6.9	0.2	35	
	SAAP2	<i>Salvia apiana</i>	44	1.2	0.2	5	
	VILA3	<i>Viguiera laciniata</i>	41	1.9	0.2	7	
	RHCR	<i>Rhamnus crocea</i>	31	2.3	0.2	13	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	28	1.6	0.2	12	
	BASA2	<i>Baccharis sarothroides</i>	23	1.4	0.2	5	
	LOSC2	<i>Lotus scoparius</i>	23	0.5	0.2	1	
	GUCA	<i>Gutierrezia californica</i>	21	1.7	0.2	5	
Herb	BRMA3	* <i>Bromus madritensis</i>	64	7.7	0.2	50	
	CEME2	* <i>Centaurea melitensis</i>	56	4.0	0.2	25	
	ERODI	* <i>Erodium</i>	36	9.5	0.2	40	
	HIIN3	* <i>Hirschfeldia incana</i>	33	3.0	0.2	25	
	BRHO2	* <i>Bromus hordeaceus</i>	23	6.4	0.2	18	
	VUMY	* <i>Vulpia myuros</i>	23	6.0	0.2	12	
	MILA6	<i>Mirabilis laevis</i>	21	0.3	0.2	1	

Artemisia californica-Eriogonum fasciculatum-Opuntia littoralis/Dudleya (edulis)
Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Southern Coast (SC), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	45.6	21-71	-
Herb	15.3	0-35	0-2
Shrub	32.8	12-68	1-5
Hardwood	0.0	0-1	-
Conifer	0.0	0-0	-
Non-native plant presence	21.5	0-57	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (13), SW (7), SE (4), E (4), N (2), W (1), Variable (1), NW (1), NE (1)

Macrotopography: Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (8), Middle 1/3 of slope (6), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (2), Ridge top (3), Lower 1/3 of slope to Ridgetop (2)

Microtopography: undulating (19), convex (7), flat (5), concave (3)

Parent Material: Sedimentary (12), Conglomerate (2), Granitic (2), Metamorphic (2), Sand dunes (1), Sandstone (1), Sandy alluvium (1), Volcanic (1)

Soil Texture: loam or sandy loam (16), sand (10), clay or clay loam (2), silt or silt loam (2), unknown (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	86 ft.	-27-215 ft.
Slope	19°	3-45°
Large rock cover	3.2%	0-34%
Small rock cover	19.4%	0-43%
Bare ground cover	43.9%	7-85%
Litter cover	29.9%	5-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=34)

Rapid Assessment(s): 0324TKF2, 0521TK03, 0623AK03, 0623JS01, 0623RB04, 0706MG01, 0706TK06, 0707JS01, 0707TK01, 0708DH02, 1192JD01, 1339JD01, 1339JD03, 1339LS01, 1502JD01, 1502KH01, 1520KH01, 1546JD03, 1599JD01, 1599JD02, 1599KH02, 1620KH01, 1629KH01, 1637JD01, 1637MB02, 1700JD01, 1705JD01, 1710JD03, 1766MB01, 1769KG01, SDRP0093, SDRP0246, SDRP0324

Relevé(s): SDG0071

CONSERVATION STATUS RANK G3 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	3 of 34	4.2	S3.2	G3	
<i>Adolphia californica</i>	3 of 34	2.1	S3.1	G3G4	
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1 of 34	1B.1	S2.1	G5T3	
<i>Coreopsis maritima</i>	3 of 34	2.2	S2.2	G3	
<i>Erysimum ammophilum</i>	1 of 34	1B.2	S2.2	G2	
<i>Euphorbia misera</i>	2 of 34	2.2	S3.2	G5	
<i>Ferocactus viridescens</i>	17 of 34	2.1	S3.1	G4	
<i>Lycium californicum</i>	1 of 34	4.2	S3.2	G4	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	1 of 34	1B.2	S1.2	G1T1	
<i>Selaginella cinerascens</i>	13 of 34	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	9 of 34	4.2	S3.2	G4	

STAND TABLE

Artemisia californica-*Eriogonum fasciculatum*-*Opuntia littoralis*/*Dudleya (edulis)* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ARCA11	<i>Artemisia californica</i>	94	13.5	2.0	33	X
	OPLI3	<i>Opuntia littoralis</i>	76	1.7	0.2	15	
	ERFA2	<i>Eriogonum fasciculatum</i>	74	8.9	0.2	21	
	RHIN2	<i>Rhus integrifolia</i>	68	4.4	0.2	14	
	CYPR19	<i>Cylindropuntia prolifera</i>	53	1.9	0.2	20	
	FEVI2	<i>Ferocactus viridescens</i>	50	0.2	0.2	1	
	MALA6	<i>Malosma laurina</i>	44	2.9	0.2	15	
	ENCA	<i>Encelia californica</i>	38	3.3	0.2	9	
	VILA3	<i>Viguiera laciniata</i>	26	2.9	0.2	8	
	CLIS	<i>Cleome isomeris</i>	26	0.8	0.2	3	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	24	7.6	1.0	14	
	SAME3	<i>Salvia mellifera</i>	24	3.1	0.2	12	
	LOSC2	<i>Lotus scoparius</i>	24	1.5	0.2	4	
Herb	BRMA3	* <i>Bromus madritensis</i>	62	6.7	0.2	20	
	HEFA	<i>Deinandra fasciculata</i>	47	1.6	0.2	6	
	CEME2	* <i>Centaurea melitensis</i>	44	2.1	0.2	8	

NALE2	<i>Nassella lepida</i>	38	1.6	0.2	7
AVBA	* <i>Avena barbata</i>	35	1.3	0.2	10
VUMY	* <i>Vulpia myuros</i>	29	2.8	0.2	7
DUED	<i>Dudleya edulis</i>	26	1.2	0.2	3
HIIN3	* <i>Hirschfeldia incana</i>	26	0.6	0.2	2
DUPU	<i>Dudleya pulverulenta</i>	26	0.2	0.2	0.20
BRRU2	* <i>Bromus rubens</i>	24	7.0	3.0	15
BRDI3	* <i>Bromus diandrus</i>	21	0.7	0.2	2
Cryptogam					
SECI	<i>Selaginella cinerascens</i>	38	2.6	0.2	8

***Artemisia californica*-*Salvia mellifera* Alliance**
California Sagebrush-Black Sage Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below

***Artemisia californica*-*Salvia mellifera* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (), North Coast (NC), Northern Valley (NV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	51.7	15-92	-
Herb	10.3	0-40	0-2
Shrub	43.8	13-90	1-5
Hardwood	0.1	0-4	5-10
Conifer	0.0	0-0	-
Non-native plant presence	13.4	0-63	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (8), NE (8), E (7), NW (6), S (4), N (3), SW (2), SE (2)

Macrotopography: Entire slope (1), Bottom (1), Lower 1/3 of slope (8), Lower to Middle 1/3 of slope (6), Lower to Upper 1/3 of slope (6), Middle 1/3 of slope (6), Middle to Upper 1/3 of slope (5), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (1), Ridge top (1), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (21), convex (9), flat (6), concave (4)

Parent Material: Sandstone (11), Sedimentary (7), Metamorphic (4), Mixed alluvium (4), Granitic (3), Sandy alluvium (2), Diorite (1), Mixed sedimentary (1), no data (1)

Soil Texture: loam or sandy loam (17), sand (7), silt or silt loam (5), clay or clay loam (4)

General slope steepness: gentle to steep

	Mean	Range
Elevation	83 ft.	-36-370 ft.
Slope	19°	2-35°
Large rock cover	2.6%	0-29%
Small rock cover	14.2%	0-80%
Bare ground cover	40.6%	6-83%
Litter cover	40.3%	5-88%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=40)

Rapid Assessment(s): 0623RB02, 0623RB05, 0624AK01, 0625JJ01, 0625RB03, 0706AK01, 0707DH04, 0708DH04, 0708JS02, 0709DH02, 0709RB03, 1202JD01, 1336FS01, 1470JD01, 1513KH01, 1698FS01, 1710JD05, 1710JD11, 1710KH01, 1710KH03, 1710KH05, 1737JD02, 1737JD06, 1737KH02, 1769JD01, 1769KH01, SDG0113, SDRP0062, SDRP0075, SDRP0142, SDRP0271, SDRP0272, SDRP0275, SDRP0276, SDRP0277, SDRP0278, SDRP0353, SDRP0354, SDRP0402, SDRP0403

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	2 of 40	4.2	S3.2	G3	
<i>Adolphia californica</i>	6 of 40	2.1	S3.1	G3G4	
<i>Artemisia palmeri</i>	1 of 40	4.2	S3.2	G3	
<i>Ceanothus verrucosus</i>	3 of 40	2.2	S2.2	G3	
<i>Coreopsis maritima</i>	1 of 40	2.2	S2.2	G3	
<i>Ferocactus viridescens</i>	3 of 40	2.1	S3.1	G4	
<i>Lycium californicum</i>	1 of 40	4.2	S3.2	G4	
<i>Quercus dumosa</i>	2 of 40	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	8 of 40	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	3 of 40	4.2	S3.2	G4	

STAND TABLE

Artemisia californica-*Salvia mellifera* Association

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						
ARCA11	<i>Artemisia californica</i>	100	13.0	2.0	40	X

	SAME3	<i>Salvia mellifera</i>	100	12.8	2.0	35	X
	RHIN2	<i>Rhus integrifolia</i>	75	8.9	0.2	31	
	MALA6	<i>Malosma laurina</i>	55	3.9	0.2	10	
	ERFA2	<i>Eriogonum fasciculatum</i>	55	2.9	0.2	9	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	50	3.8	0.2	20	
	OPLI3	<i>Opuntia littoralis</i>	40	1.2	0.2	4	
	LOSC2	<i>Lotus scoparius</i>	35	0.7	0.2	4	
	BASA2	<i>Baccharis sarothroides</i>	30	4.6	0.2	20	
	ENCA	<i>Encelia californica</i>	25	4.6	0.2	28	
	HEAR5	<i>Heteromeles arbutifolia</i>	20	2.3	0.2	8	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	53	4.5	0.2	15	
	CEME2	* <i>Centaurea melitensis</i>	43	1.9	0.2	8	
	VUMY	* <i>Vulpia myuros</i>	23	4.8	0.2	18	
	HEFA	<i>Deinandra fasciculata</i>	23	1.3	0.2	3	
	BRNI	* <i>Brassica nigra</i>	20	2.6	0.2	9	
	NALE2	<i>Nassella lepida</i>	20	2.1	0.2	5	
	PSCA13	<i>Pseudognaphalium</i> <i>californicum</i>	20	0.2	0.2	0.20	
Cryptogam							
	2MOSS	<i>Moss</i>	23	3.3	1.0	10	
	SECI	<i>Selaginella cinerascens</i>	20	2.6	0.2	6	

***Baccharis pilularis* Alliance**

Coyote Brush Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below

***Baccharis pilularis*/Herbaceous Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), North Coast (NC), Northern Valley (NV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	37.0	30-43	-
Herb	24.3	20-30	0-5
Shrub	19.5	8-35	1-2
Hardwood	0.1	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	54.1	34-75	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2), NW (1), N (1)

Macrotopography: Bottom (3), Lower 1/3 of slope (1)

Microtopography: flat (3), concave (1)

Parent Material: Metamorphic (2), Clayey alluvium (1), Granitic (1)

Soil Texture: sand (2), clay or clay loam (1)

General slope steepness: flat to moderate

	Mean	Range
Elevation	111 ft.	-18-182 ft.
Slope	2°	0-6°
Large rock cover	0.0%	0-0%
Small rock cover	5.7%	3-9%
Bare ground cover	53.7%	45-65%
Litter cover	38.7%	28-50%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=4)

Rapid Assessment(s): 0625AK03, 1177JD01, 1186JD01, SDRP0129

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

STAND TABLE

Baccharis pilularis/Herbaceous

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SCMO	* <i>Schinus molle</i>	25	0.2	0.2	0.20	
Shrub							
	BAPI	<i>Baccharis pilularis</i>	100	19.5	8.0	35	X
	ERFA2	<i>Eriogonum fasciculatum</i>	50	2.1	0.2	4	
	ISME5	<i>Isocoma menziesii</i>	50	1.0	1.0	1	
	BASA4	<i>Baccharis salicifolia</i>	25	1.0	1.0	1	
	ARCA11	<i>Artemisia californica</i>	25	0.2	0.2	0.20	
Herb							
	FOVU	* <i>Foeniculum vulgare</i>	75	9.0	3.0	20	
	BRHO2	* <i>Bromus hordeaceus</i>	75	3.7	0.2	10	
	HIIN3	* <i>Hirschfeldia incana</i>	75	0.8	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	50	7.5	3.0	12	
	CEME2	* <i>Centaurea melitensis</i>	50	1.5	1.0	2	
	AMPS	<i>Ambrosia psilostachya</i>	50	0.6	0.2	1	
	PIEC	* <i>Picris echioides</i>	50	0.2	0.2	0.20	
	CAED3	* <i>Carpobrotus edulis</i>	25	10.0	10.0	10	
	ERBR14	* <i>Erodium brachycarpum</i>	25	10.0	10.0	10	
	BRNI	* <i>Brassica nigra</i>	25	8.0	8.0	8	
	BRDI3	* <i>Bromus diandrus</i>	25	5.0	5.0	5	

BRNA	* <i>Brassica napus</i>	25	3.0	3.0	3
PSCA13	<i>Pseudognaphalium californicum</i>	25	3.0	3.0	3
MURI2	<i>Muhlenbergia rigens</i>	25	2.0	2.0	2
ANAR	* <i>Anagallis arvensis</i>	25	1.0	1.0	1
HEFA	<i>Deinandra fasciculata</i>	25	1.0	1.0	1
JUDU	<i>Juncus dubius</i>	25	1.0	1.0	1
LECO12	<i>Leymus condensatus</i>	25	1.0	1.0	1
AVBA	* <i>Avena barbata</i>	25	0.2	0.2	0.20
BRRU2	* <i>Bromus rubens</i>	25	0.2	0.2	0.20
COFI2	<i>Corethrogyne filaginifolia</i>	25	0.2	0.2	0.20
CYDA	* <i>Cynodon dactylon</i>	25	0.2	0.2	0.20
DISP	<i>Distichlis spicata</i>	25	0.2	0.2	0.20
ERBO	* <i>Erodium botrys</i>	25	0.2	0.2	0.20
HOMU	* <i>Hordeum murinum</i>	25	0.2	0.2	0.20
JUPHP	<i>Juncus phaeocephalus</i> var. <i>paniculatus</i>	25	0.2	0.2	0.20
MEPO3	* <i>Medicago polymorpha</i>	25	0.2	0.2	0.20
NAPU4	<i>Nassella pulchra</i>	25	0.2	0.2	0.20
POLYG4	<i>Polygonum</i>	25	0.2	0.2	0.20
POMO5	* <i>Polypogon monspeliensis</i>	25	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	25	1.0	1.0	1

***Baccharis salicifolia* Alliance**

Mulefat Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Baccharis salicifolia* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CV), Northern Foothills (NF), Northern Valley (NV), Southern Coast (SC), Southern Foothills (SM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	51.5	15-90	-
Herb	21.9	1-72	0-2
Shrub	32.1	10-72	1-10
Hardwood	1.0	0-8	2-15
Conifer	0.0	0-0	-
Non-native plant presence	21.1	0-67	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (8), Variable (2), SW (2), S (2), NW (2), NE (2), W (1), N (1)

Macrotopography: Bottom (15), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Bottom to Mid 1/3 of slope (1), Middle 1/3 of slope (1)

Microtopography: flat (11), concave (5), undulating (4)

Parent Material: Sandy alluvium (6), Mixed alluvium (5), Metamorphic (3), Silty alluvium (3), Clayey alluvium (1), Gravelly alluvium (1), Sedimentary (1)

Soil Texture: sand (7), loam or sandy loam (5), clay or clay loam (2), silt or silt loam (2)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	147 ft.	-13-385 ft.
Slope	2°	0-15°
Large rock cover	14.4%	0-60%
Small rock cover	16.3%	0-78%
Bare ground cover	17.4%	0-70%
Litter cover	49.1%	0-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=20)

Rapid Assessment(s): 0504MJ23, 0506AK05, 0506RB04, 0520DH06, 0709AK01, 1019DH01, 1163FS01, 1361JD02, 1545EB01, 1604LS02, 1626KH01, 1766KH02, 1784FS01, SDRP0067, SDRP0078, SDRP0081, SDRP0150, SDRP0200, SDRP0316

Relevé(s): SDG0106

CONSERVATION STATUS RANK G5 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Callitropsis forbesii</i>	2 of 20	1B.1	S1.1	G2	
<i>Iva hayesiana</i>	4 of 20	2.2	S2.2?	G3?	
<i>Juncus acutus ssp. leopoldii</i>	1 of 20	4.2	S3.2	G5T5	

STAND TABLE

Baccharis salicifolia

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	SAGO	<i>Salix gooddingii</i>	30	1.3	0.2	4	
Shrub	BASA4	<i>Baccharis salicifolia</i>	100	26.6	8.0	72	X
	SALA6	<i>Salix lasiolepis</i>	35	1.5	0.2	3	
	TAMAR2	* <i>Tamarix</i>	30	0.5	0.2	1	
	BASA2	<i>Baccharis sarothroides</i>	25	4.3	0.2	11	
	SANIC5	<i>Sambucus nigra ssp. cerulea</i>	25	1.9	0.2	6	
	BAPI	<i>Baccharis pilularis</i>	20	3.1	0.2	7	
	TARA	* <i>Tamarix ramosissima</i>	20	1.8	1.0	3	
	ARCA11	<i>Artemisia californica</i>	20	0.6	0.2	1	
Herb	HIIN3	* <i>Hirschfeldia incana</i>	45	1.1	0.2	3	
	AMPS	<i>Ambrosia psilostachya</i>	35	1.3	0.2	4	
	CEME2	* <i>Centaurea melitensis</i>	30	0.9	0.2	2	
	LASE	* <i>Lactuca serriola</i>	30	0.2	0.2	0.20	
	AVBA	* <i>Avena barbata</i>	25	7.6	0.2	31	
	XAST	<i>Xanthium strumarium</i>	25	0.2	0.2	0.20	
	IVHA	<i>Iva hayesiana</i>	20	5.8	0.2	12	
	BRHO2	* <i>Bromus hordeaceus</i>	20	4.5	1.0	11	
	COMA2	* <i>Conium maculatum</i>	20	4.5	1.0	8	
	BRDI3	* <i>Bromus diandrus</i>	20	4.3	0.2	8	
	BRRU2	* <i>Bromus rubens</i>	20	4.3	0.2	9	
	MIGU	<i>Mimulus guttatus</i>	20	1.8	0.2	4	
	ARDO4	* <i>Arundo donax</i>	20	1.1	0.2	2	

Baccharis sarothroides Provisional Alliance

Broom Baccharis Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Baccharis sarothroides* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Southern Coast (SC), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.9	22-75	-
Herb	17.4	1-50	0-2
Shrub	29.6	18-51	1-5
Hardwood	0.1	0-1	-
Conifer	0.0	0-0	-
Non-native plant presence	27.7	0-69	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (3), SE (2), N (2), Variable (1), S (1), NW (1), NE (1)

Macrotopography: Bottom (7), Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (2)

Microtopography: concave (4), undulating (3), convex (2), flat (2)

Parent Material: Metamorphic (2), Sandstone (2), Sedimentary (2), Clayey alluvium (1), Granitic (1), Mixed alluvium (1), Sandy alluvium (1)

Soil Texture: loam or sandy loam (4), sand (3), clay or clay loam (2)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	144 ft.	-27-426 ft.
Slope	4°	0-25°
Large rock cover	1.3%	0-9%
Small rock cover	21.4%	3-70%
Bare ground cover	30.4%	7-62%
Litter cover	45.1%	10-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=11)

Rapid Assessment(s): 0312DH21, 0520RB04, 0605DH01, 0623RB06, 0624RB04, 1339JD02, 1540FS01, 1541MB03, 1546JD04, SDG0034, SDRP0273

Relevé(s): none

CONSERVATION STATUS RANK G3? S3.3?

STAND TABLE

Baccharis sarothroides**Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	BASA2	<i>Baccharis sarothroides</i>	100	17.5	10.0	27	X
	ARCA11	<i>Artemisia californica</i>	55	4.4	0.2	16	
	ERFA2	<i>Eriogonum fasciculatum</i>	55	3.3	0.2	12	
	MALA6	<i>Malosma laurina</i>	45	0.5	0.2	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	36	5.5	1.0	15	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	36	1.8	0.2	4	
	SAME3	<i>Salvia mellifera</i>	27	3.7	0.2	7	
	RHIN2	<i>Rhus integrifolia</i>	27	2.4	0.2	6	
	BASA4	<i>Baccharis salicifolia</i>	27	1.7	1.0	2	
	OPLI3	<i>Opuntia littoralis</i>	27	0.8	0.2	2	
	SAAP2	<i>Salvia apiana</i>	27	0.2	0.2	0.20	
Herb	MAVU	* <i>Marrubium vulgare</i>	45	1.1	0.2	4	
	PSCA13	<i>Pseudognaphalium</i> <i>californicum</i>	45	0.7	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	36	9.1	0.2	18	
	BRNI	* <i>Brassica nigra</i>	36	5.4	0.2	16	
	CEME2	* <i>Centaurea melitensis</i>	36	4.6	0.2	10	
	HIIN3	* <i>Hirschfeldia incana</i>	36	1.6	0.2	5	
	SCCA2	<i>Scrophularia californica</i>	36	1.1	0.2	2	
	FOVU	* <i>Foeniculum vulgare</i>	27	1.8	0.2	5	
	BRDI3	* <i>Bromus diandrus</i>	27	0.8	0.2	2	

Ceanothus crassifolius* Alliance*Hoaryleaf Ceanothus Chaparral****ALLIANCE STAND TABLE**

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ceanothus crassifolius* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	65.2	34-95	-
Herb	20.8	4-65	0-0.5
Shrub	55.8	29-70	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	12.4	2-20	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (2), W (1), NW (1), E (1)

Macrotopography: Lower to Upper 1/3 of slope (4), Middle 1/3 of slope (1)

Microtopography: undulating (4), flat (1)

Parent Material: Granitic (5)

Soil Texture: loam or sandy loam (5)

General slope steepness: moderate to steep

	Mean	Range
Elevation	305 ft.	210-443 ft.
Slope	21°	7-28°
Large rock cover	6.2%	2-10%
Small rock cover	6.8%	3-13%
Bare ground cover	19.8%	5-39%
Litter cover	64.0%	45-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0506AK01, 0605DH02, SDRP0438, SDRP0465, SDRP0479

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

STAND TABLE

***Ceanothus crassifolius*
Association**

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						

	CECR	<i>Ceanothus crassifolius</i>	100	40.2	16.0	60	X
	XYBI	<i>Xylococcus bicolor</i>	100	3.3	0.2	8	X
	MALA6	<i>Malosma laurina</i>	80	3.3	1.0	5	X
	SAME3	<i>Salvia mellifera</i>	60	5.7	0.2	12	
	ADFA	<i>Adenostoma fasciculatum</i>	60	5.3	1.0	10	
	HASQ2	<i>Hazardia squarrosa</i>	60	1.1	0.2	2	
	QUBE5	<i>Quercus berberidifolia</i>	40	5.5	3.0	8	
	CETO	<i>Ceanothus tomentosus</i>	40	4.5	2.0	7	
	CNDU	<i>Cneoridium dumosum</i>	40	2.6	0.2	5	
	RHOV	<i>Rhus ovata</i>	40	2.0	1.0	3	
	ERFA2	<i>Eriogonum fasciculatum</i>	40	1.6	0.2	3	
	ARCA11	<i>Artemisia californica</i>	40	0.6	0.2	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	40	0.6	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	40	0.6	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	40	0.2	0.2	0.20	
	KEAN	<i>Keckiella antirrhinoides</i>	20	12.0	12.0	12	
	MAFA	<i>Malacothamnus</i> <i>fasciculatus</i>	20	5.0	5.0	5	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	20	0.2	0.2	0.20	
Herb							
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	100	3.4	0.2	6	X
	BRMA3	* <i>Bromus madritensis</i>	60	8.0	1.0	15	
	BRDI3	* <i>Bromus diandrus</i>	40	6.5	3.0	10	
	CRYPT	<i>Cryptantha</i>	40	0.6	0.2	1	
	BRTE	* <i>Bromus tectorum</i>	20	8.0	8.0	8	
	AVFA	* <i>Avena fatua</i>	20	7.0	7.0	7	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	20	4.0	4.0	4	
	CLSI	<i>Clarkia similis</i>	20	2.0	2.0	2	
	GALIU	<i>Galium</i>	20	2.0	2.0	2	
	HIIN3	* <i>Hirschfeldia incana</i>	20	2.0	2.0	2	
	PTDR	<i>Pterostegia drymarioides</i>	20	2.0	2.0	2	
	VUMY	* <i>Vulpia myuros</i>	20	2.0	2.0	2	
	CLEP	<i>Clarkia epilobioides</i>	20	1.0	1.0	1	
	CRMI2	<i>Cryptantha micromeres</i>	20	1.0	1.0	1	
	GAAN2	<i>Galium angustifolium</i>	20	1.0	1.0	1	
	PLAGI	<i>Plagiobothrys</i>	20	1.0	1.0	1	
	ANAR	* <i>Anagallis arvensis</i>	20	0.2	0.2	0.20	
	CAMA24	<i>Calystegia macrostegia</i>	20	0.2	0.2	0.20	
	CHAR	<i>Chaenactis artemisiifolia</i>	20	0.2	0.2	0.20	
	CHPA7	<i>Chlorogalum parviflorum</i>	20	0.2	0.2	0.20	
	CLPE	<i>Claytonia perfoliata</i>	20	0.2	0.2	0.20	
	COHE	<i>Collinsia heterophylla</i>	20	0.2	0.2	0.20	
	CRIN8	<i>Cryptantha intermedia</i>	20	0.2	0.2	0.20	
	DICA14	<i>Dichelostemma capitatum</i>	20	0.2	0.2	0.20	
	HEGR3	<i>Helianthus gracilentus</i>	20	0.2	0.2	0.20	
	HYGL2	* <i>Hypochaeris glabra</i>	20	0.2	0.2	0.20	

LUTR2	<i>Lupinus truncatus</i>	20	0.2	0.2	0.20
MILI5	<i>Microseris lindleyi</i>	20	0.2	0.2	0.20
PACA2	<i>Paeonia californica</i>	20	0.2	0.2	0.20
PHPA3	<i>Phacelia parryi</i>	20	0.2	0.2	0.20
PSCA13	<i>Pseudognaphalium californicum</i>	20	0.2	0.2	0.20
ZIFR	<i>Zigadenus fremontii</i>	20	0.2	0.2	0.20

***Ceanothus cyaneus* Special Stands**

Lakeside Ceanothus Chaparral

***Ceanothus cyaneus* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	37.0	29-45	-
Herb	6.0	5-7	0-0.5
Shrub	32.0	24-40	1-10
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	12.8	5-21	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), S (1)

Macrotopography: Lower to Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1)

Microtopography: flat (2)

Parent Material: Granitic (2)

Soil Texture: loam or sandy loam (1), sand (1)

General slope steepness: somewhat steep to somewhat steep

	Mean	Range
Elevation	433 ft.	404-461 ft.
Slope	19°	18-20°
Large rock cover	43.0%	33-53%
Small rock cover	9.5%	4-15%
Bare ground cover	25.0%	25-25%
Litter cover	20.0%	15-25%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0605RB03, 1327PG01

Relevé(s): none

CONSERVATION STATUS RANK G1 S1.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus cyaneus</i>	2 of 2	1B.2	S2.2	G2	

STAND TABLE

Ceanothus cyaneus

Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	CECY	<i>Ceanothus cyaneus</i>	100	17.5	16.0	19	X
	CETO	<i>Ceanothus tomentosus</i>	100	5.0	1.0	9	X
	ADFA	<i>Adenostoma fasciculatum</i>	100	3.5	2.0	5	X
	MALA6	<i>Malosma laurina</i>	100	1.1	0.2	2	X
	LOSC2	<i>Lotus scoparius</i>	100	0.6	0.2	1	X
	HEWH	<i>Hesperoyucca whipplei</i>	100	0.2	0.2	0.20	X
	HESC2	<i>Helianthemum scoparium</i>	50	2.0	2.0	2	
	CECR	<i>Ceanothus crassifolius</i>	50	0.2	0.2	0.20	
	CNDU	<i>Cneoridium dumosum</i>	50	0.2	0.2	0.20	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	50	0.2	0.2	0.20	
	ERFA2	<i>Eriogonum fasciculatum</i>	50	0.2	0.2	0.20	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	0.2	0.2	0.20	
	HASQ2	<i>Hazardia squarrosa</i>	50	0.2	0.2	0.20	
	MAFA	<i>Malacothamnus</i> <i>fasciculatus</i>	50	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	100	3.0	2.0	4	X
	HEGR3	<i>Helianthus gracilentus</i>	100	0.6	0.2	1	X
	VUMY	* <i>Vulpia myuros</i>	50	3.0	3.0	3	
	CAMA24	<i>Calystegia macrostegia</i>	50	1.0	1.0	1	
	HYGL2	* <i>Hypochaeris glabra</i>	50	1.0	1.0	1	
	MILI5	<i>Microseris lindleyi</i>	50	1.0	1.0	1	
	CAWE	<i>Calochortus weedii</i>	50	0.2	0.2	0.20	
	CEME2	* <i>Centaurea melitensis</i>	50	0.2	0.2	0.20	
	CHAR	<i>Chaenactis artemisiifolia</i>	50	0.2	0.2	0.20	
	CHPA7	<i>Chlorogalum parviflorum</i>	50	0.2	0.2	0.20	
	CRYPT	<i>Cryptantha</i>	50	0.2	0.2	0.20	
	CRIN8	<i>Cryptantha intermedia</i>	50	0.2	0.2	0.20	
	CUSCU	<i>Cuscuta</i>	50	0.2	0.2	0.20	

LAAU	* <i>Lamarckia aurea</i>	50	0.2	0.2	0.20
STEPH	<i>Stephanomeria</i>	50	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	50	10.0	10.0	10

***Ceanothus leucodermis* Alliance**
Chaparral Whitethorn Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ceanothus leucodermis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Palomar - Cuyamaca Peak (M262Bo), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Mountains (NM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	45.5	34-56	-
Herb	10.7	4-18	0-1
Shrub	38.2	30-48	1-2
Hardwood	0.6	0-3	1-2
Conifer	0.0	0-0	-
Non-native plant presence	13.4	0-26	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (2), SW (1), SE (1), NW (1), N (1)

Macrotopography: Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (4)

Microtopography: convex (2), undulating (2), concave (1), flat (1)

Parent Material: Granitic (5), Metamorphic (1)

Soil Texture: loam or sandy loam (5)

General slope steepness: moderate to steep

	Mean	Range
Elevation	529 ft.	328-1070 ft.
Slope	21°	10-40°
Large rock cover	27.7%	2-47%
Small rock cover	22.9%	8-57%
Bare ground cover	26.8%	14-40%
Litter cover	20.5%	7-30%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0422AK03, 0423AK02, 0504DH01, 0604RB02, 1334PG01, 1538JD03

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	1 of 6	4.2	S3.2	G3	
<i>Clarkia delicata</i>	1 of 6	1B.2	S2.2	G2	
<i>Quercus engelmannii</i>	1 of 6	4.2	S3.2	G3	

STAND TABLE

Ceanothus leucodermis

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	CELE2	<i>Ceanothus leucodermis</i>	100	22.3	10.0	32	X
	MALA6	<i>Malosma laurina</i>	83	4.6	0.2	8	X
	LOSC2	<i>Lotus scoparius</i>	83	4.5	0.2	16	X
	MAFA	<i>Malacothamnus fasciculatus</i>	50	6.7	3.0	10	
	ADFA	<i>Adenostoma fasciculatum</i>	50	2.7	1.0	4	
	SAAP2	<i>Salvia apiana</i>	50	0.2	0.2	0.20	
	CETO	<i>Ceanothus tomentosus</i>	33	6.0	2.0	10	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	3.6	0.2	7	
	HESC2	<i>Helianthemum scoparium</i>	33	2.5	1.0	4	
	TODI	<i>Toxicodendron</i>	33	2.5	1.0	4	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	33	0.2	0.2	0.20	
	HASQ2	<i>Hazardia squarrosa</i>	33	0.2	0.2	0.20	
	XYBI	<i>Xylococcus bicolor</i>	33	0.2	0.2	0.20	
Herb	BRMA3	* <i>Bromus madritensis</i>	67	4.5	2.0	9	
	BRDI3	* <i>Bromus diandrus</i>	50	3.0	2.0	4	
	CRIN8	<i>Cryptantha intermedia</i>	50	1.1	0.2	2	
	SCCA2	<i>Scrophularia californica</i>	50	0.5	0.2	1	
	PTDR	<i>Pterostegia drymarioides</i>	33	3.6	0.2	7	
	VUMY	* <i>Vulpia myuros</i>	33	2.0	1.0	3	
	AVBA	* <i>Avena barbata</i>	33	1.5	1.0	2	
	CLEP	<i>Clarkia epilobioides</i>	33	1.1	0.2	2	
	LOGA2	* <i>Logfia gallica</i>	33	1.1	0.2	2	
	PHCIH2	<i>Phacelia cicutaria</i> var.	33	0.6	0.2	1	

	<i>hispidula</i>				
CLPE	<i>Claytonia perfoliata</i>	33	0.2	0.2	0.20
CUSCU	<i>Cuscuta</i>	33	0.2	0.2	0.20
PACA2	<i>Paeonia californica</i>	33	0.2	0.2	0.20

***Ceanothus spinosus* Alliance**

Greenbark Ceanothus Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ceanothus spinosus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Santa Margarita (MA)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	59.5	56-63	-
Herb	6.0	5-7	0-0.5
Shrub	57.0	52-62	2-5
Hardwood	0.2	0-0	2-10
Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1), N (1)

Macrotopography: Lower to Upper 1/3 of slope (2)

Microtopography: flat (1), undulating (1)

Parent Material: Metamorphic (2)

Soil Texture: clay or clay loam (2)

General slope steepness: somewhat steep to steep

	Mean	Range
Elevation	565 ft.	538-592 ft.
Slope	33°	26-40°
Large rock cover	13.6%	2-25%
Small rock cover	10.0%	10-10%
Bare ground cover	12.5%	10-15%
Litter cover	61.5%	53-70%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0610AK02, 0610RB01
Relevé(s): none

CONSERVATION STATUS RANK G4 S4

STAND TABLE

Ceanothus spinosus Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	100	0.2	0.2	0.20	X
Shrub	CESP	<i>Ceanothus spinosus</i>	100	33.0	28.0	38	X
	HEAR5	<i>Heteromeles arbutifolia</i>	100	5.0	3.0	7	X
	RHIL	<i>Rhamnus ilicifolia</i>	100	5.0	5.0	5	X
	KECO	<i>Keckiella cordifolia</i>	100	3.0	3.0	3	X
	CLLA3	<i>Clematis lasiantha</i>	100	1.5	1.0	2	X
	CECR	<i>Ceanothus crassifolius</i>	100	0.6	0.2	1	X
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	100	0.6	0.2	1	X
	QUBE5	<i>Quercus berberidifolia</i>	50	20.0	20.0	20	
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	50	8.0	8.0	8	
	PRIL	<i>Prunus ilicifolia</i>	50	5.0	5.0	5	
	TODI	<i>Toxicodendron</i>	50	4.0	4.0	4	
	LOSU2	<i>Lonicera subspicata</i>	50	1.0	1.0	1	
	RHOV	<i>Rhus ovata</i>	50	1.0	1.0	1	
	RISP	<i>Ribes speciosum</i>	50	0.2	0.2	0.20	
Herb	DRAR3	<i>Dryopteris arguta</i>	100	1.1	0.2	2	X
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	100	1.0	1.0	1	X
	THFE	<i>Thalictrum fendleri</i>	100	0.6	0.2	1	X
	ADJO	<i>Adiantum jordanii</i>	100	0.2	0.2	0.20	X
	PTDR	<i>Pterostegia drymarioides</i>	50	5.0	5.0	5	
	PAHE5	<i>Parietaria hespera</i>	50	3.0	3.0	3	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	50	1.0	1.0	1	
	AGPA8	<i>Agrostis pallens</i>	50	0.2	0.2	0.20	
	ASCA5	<i>Aspidotis californica</i>	50	0.2	0.2	0.20	
	DECA2	<i>Delphinium cardinale</i>	50	0.2	0.2	0.20	
	PETR7	<i>Pentagramma triangularis</i>	50	0.2	0.2	0.20	
	POCA12	<i>Polypodium californicum</i>	50	0.2	0.2	0.20	
	STVI2	<i>Stephanomeria virgata</i>	50	0.2	0.2	0.20	
Cryptogam	2MOSS	<i>Moss</i>	50	15.0	15.0	15	

***Ceanothus tomentosus* Alliance**

Woolyleaf Ceanothus

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ceanothus tomentosus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.0	25-85	-
Herb	13.1	0-30	0-1
Shrub	50.0	5-95	1-5
Hardwood	0.6	0-8	2-5
Conifer	0.6	0-12	1-2
Non-native plant presence	13.7	0-38	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (7), W (5), N (5), NE (3), E (3), SW (2), SE (1)

Macrotopography: Bottom to Lower 1/3 of slope (2), Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (1), Bottom to Upper 1/3 of slope (1), Lower to Upper 1/3 of slope (6), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (6), Middle 1/3 of slope to Ridgetop (1)

Microtopography: convex (10), undulating (8), flat (6), concave (2)

Parent Material: Metamorphic (12), Granitic (8), Gabbro (3), Diorite (1), Mixed metamorphic (1), Volcanic (1)

Soil Texture: loam or sandy loam (16), clay or clay loam (4), sand (2), silt or silt loam (2), muck (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	420 ft.	53-818 ft.
Slope	24°	2-42°
Large rock cover	14.8%	0-65%
Small rock cover	20.0%	2-62%
Bare ground cover	25.0%	1-84%
Litter cover	37.0%	1-70%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=26)

Rapid Assessment(s): 0311DH22, 0422AK01, 0422DH01, 0504RB23, 0505MG01, 0506AK02, 0519AK02, 0519DH02, 0602DH03, 0605RB02, 0609DH01, 0624AK04, 0708TK01, 1146JD01, 1155JD01, 1249TK01, 1329EB02, 1361JD01, 1361JD03, 1362MB01, 1381JD01, 1486MM02, 1604EB03, 1607JD02, 1827MM01, SDRP0425

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Callitropsis forbesii</i>	6 of 26	1B.1	S1.1	G2	
<i>Ceanothus otayensis</i>	1 of 26	1B.2	S1.2	G1	
<i>Chamaebatia australis</i>	1 of 26	4.2	S3.2	G4	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	2 of 26	1B.2	S2.2	G3T2	
<i>Fremontodendron mexicanum</i>	2 of 26	1B.1	S2.1	G2	Rare
<i>Lepechinia ganderi</i>	2 of 26	1B.3	S2.2	G2	
<i>Mimulus clevelandii</i>	1 of 26	4.2	S3.2	G3G4	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	2 of 26	4.3	S2S4.3	G5T2T4	
<i>Quercus engelmannii</i>	1 of 26	4.2	S3.2	G3	
<i>Romneya coulteri</i>	1 of 26	4.2	S3.2	G3	

STAND TABLE

***Ceanothus tomentosus* Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	CUFO2	<i>Callitropsis forbesii</i>	23	5.3	1.0	12	
Shrub	CETO	<i>Ceanothus tomentosus</i>	100	32.1	7.0	60	X
	MALA6	<i>Malosma laurina</i>	73	3.9	0.2	15	
	ADFA	<i>Adenostoma fasciculatum</i>	50	3.8	0.2	10	
	XYBI	<i>Xylococcus bicolor</i>	46	2.7	0.2	8	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	46	0.8	0.2	3	
	HASQ2	<i>Hazardia squarrosa</i>	38	0.5	0.2	2	
	LOSC2	<i>Lotus scoparius</i>	31	3.2	0.2	10	
	ERFA2	<i>Eriogonum fasciculatum</i>	31	0.5	0.2	1	
	RHOV	<i>Rhus ovata</i>	27	3.3	0.2	15	

	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	27	1.1	0.2	5
	RHCR	<i>Rhamnus crocea</i>	27	1.0	0.2	3
	MAFA	<i>Malacothamnus fasciculatus</i>	23	1.7	0.2	4
	CELE2	<i>Ceanothus leucodermis</i>	23	1.6	0.2	5
	HEAR5	<i>Heteromeles arbutifolia</i>	23	1.1	0.2	3
	KECO	<i>Keckiella cordifolia</i>	23	0.2	0.2	0.20
Herb						
	BRMA3	* <i>Bromus madritensis</i>	46	6.4	0.2	20
	GAPH2	* <i>Gastidium phleoides</i>	35	0.4	0.2	2
	CAMA24	<i>Calystegia macrostegia</i>	31	1.0	0.2	3
	VUMY	* <i>Vulpia myuros</i>	27	7.9	2.0	18
	CEME2	* <i>Centaurea melitensis</i>	27	3.2	0.2	10
	HYGL2	* <i>Hypochaeris glabra</i>	23	4.4	0.2	11
Cryptogam						
	2MOSS	<i>Moss</i>	23	10.5	0.2	25

***Ceanothus verrucosus* Alliance**

Wart-stemmed Ceanothus Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Ceanothus verrucosus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Northern Valley (NV), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	61.0	36-86	-
Herb	10.0	0-20	0-1
Shrub	53.8	24-86	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	13.4	0-33	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (4), SW (2), SE (1), S (1), NW (1), NE (1), E (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (3), Ridge top (1)

Microtopography: convex (4), undulating (3), flat (2), concave (2)

Parent Material: Metamorphic (3), Granitic (2), Sandstone (2), Sedimentary (1)

Soil Texture: loam or sandy loam (8), sand (2)

General slope steepness: gentle to steep

	Mean	Range
Elevation	114 ft.	-28-251 ft.
Slope	19°	3-28°
Large rock cover	2.9%	0-15%
Small rock cover	8.3%	1-20%
Bare ground cover	28.0%	1-46%
Litter cover	59.0%	35-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=11)

Rapid Assessment(s): 0708RB04, 0709RB02, 0709RB04, 1176FS01, 1202KG01, 1505JD01, 1638MB01, SDG0059, SDRP0056, SDRP0128, SDRP0332

Relevé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus verrucosus</i>	11 of 11	2.2	S2.2	G3	
<i>Ornithostaphylos oppositifolia</i>	2 of 11	2.1	S1.1	G4	Endangered

STAND TABLE

Ceanothus verrucosus

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	CEVE2	<i>Ceanothus verrucosus</i>	100	38.4	8.0	65	X
	SAME3	<i>Salvia mellifera</i>	100	3.4	0.2	25	X
	MALA6	<i>Malosma laurina</i>	91	5.0	1.0	10	X
	XYBI	<i>Xylococcus bicolor</i>	64	5.5	0.2	17	
	ADFA	<i>Adenostoma fasciculatum</i>	64	2.9	1.0	10	
	ERFA2	<i>Eriogonum fasciculatum</i>	55	2.2	0.2	5	
	RHIN2	<i>Rhus integrifolia</i>	36	3.6	0.2	12	
	CNDU	<i>Cneoridium dumosum</i>	36	1.1	0.2	3	
	OPLI3	<i>Opuntia littoralis</i>	27	0.2	0.2	0.20	
Herb							

BRMA3	* <i>Bromus madritensis</i>	64	6.7	0.2	18
Cryptogam					
2MOSS	<i>Moss</i>	27	4.3	3.0	6

***Cercocarpus montanus* Alliance**
Birchleaf Mountain-mahogany Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Cercocarpus montanus* var. *minutiflorus* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	56.8	35-85	-
Herb	11.4	0-33	0-1
Shrub	48.0	12-85	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	17.5	0-73	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (2), N (2), NE (1), E (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (1)

Microtopography: concave (4), flat (1), undulating (1)

Parent Material: Metamorphic (2), Conglomerate (1), Granitic (1), Sandstone (1), Volcanic (1)

Soil Texture: loam or sandy loam (4), sand (1), silt or silt loam (1)

General slope steepness: gentle to abrupt

	Mean	Range
Elevation	260 ft.	42-584 ft.
Slope	29°	2-75°
Large rock cover	18.3%	0-33%
Small rock cover	12.3%	0-25%
Bare ground cover	27.8%	7-56%
Litter cover	40.0%	5-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0309TK22, 0311AK24, 0610TK01, 1346EB01, 1719FS02, SDRP0247

Relevé(s): none

CONSERVATION STATUS RANK G3 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus verrucosus</i>	1 of 6	2.2	S2.2	G3	
<i>Quercus dumosa</i>	1 of 6	1B.1	S1.1	G1G2	
<i>Tetracoccus dioicus</i>	1 of 6	1B.2	S2.2	G3	
<i>Viguiera laciniata</i>	1 of 6	4.2	S3.2	G4	

STAND TABLE

Cercocarpus montanus var. *minutiflorus* Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	100	29.7	8.0	79	X
	MALA6	<i>Malosma laurina</i>	67	2.3	0.2	6	
	ARCA11	<i>Artemisia californica</i>	50	2.7	0.2	5	
	XYBI	<i>Xylococcus bicolor</i>	50	2.3	1.0	4	
	PRIL	<i>Prunus ilicifolia</i>	50	1.1	0.2	3	
	RHCR	<i>Rhamnus crocea</i>	33	7.0	4.0	10	
	ADFA	<i>Adenostoma fasciculatum</i>	33	6.0	2.0	10	
	CLLA3	<i>Clematis lasiantha</i>	33	4.1	0.2	8	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	3.5	2.0	5	
	KECO	<i>Keckiella cordifolia</i>	33	3.5	1.0	6	
	HEWH	<i>Hesperoyucca whipplei</i>	33	2.6	0.2	5	
	HEAR5	<i>Heteromeles arbutifolia</i>	33	2.5	1.0	4	
	SAME3	<i>Salvia mellifera</i>	33	2.1	0.2	4	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	33	2.0	1.0	3	
	CNDU	<i>Cneoridium dumosum</i>	33	1.6	0.2	3	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	1.6	0.2	3	
	SAAP2	<i>Salvia apiana</i>	33	1.6	0.2	3	
	HASQ2	<i>Hazardia squarrosa</i>	33	1.1	1.0	1.20	
	BRCA3	<i>Brickellia californica</i>	33	0.2	0.2	0.20	
Herb	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	67	1.1	0.2	2	

BRMA3	* <i>Bromus madritensis</i>	33	2.0	1.0	3
POCA12	<i>Polypodium californicum</i>	33	0.6	0.2	1

***Dendromecon rigida* Alliance**

Bush Poppy Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Dendromecon rigida* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.0	42-42	-
Herb	10.5	6-15	0-0.5
Shrub	35.5	30-41	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	5.1	4-6	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (2)

Macrotopography: Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (1)

Microtopography: convex (1), flat (1)

Parent Material: Gabbro (1), Mixed metamorphic (1)

Soil Texture: clay or clay loam (1), loam or sandy loam (1)

General slope steepness: moderate to somewhat steep

	Mean	Range
Elevation	554 ft.	396-711 ft.
Slope	18°	10-25°
Large rock cover	9.5%	2-17%
Small rock cover	56.0%	52-60%
Bare ground cover	19.0%	18-20%
Litter cover	13.5%	10-17%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0609DH02, 1362MB02

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Horkelia truncata</i>	1 of 2	1B.3	S2.3	G3	
<i>Lepechinia ganderi</i>	1 of 2	1B.3	S2.2	G2	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	1 of 2	4.3	S2S4.3	G5T2T4	

STAND TABLE

Dendromecon rigida Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	DERI	<i>Dendromecon rigida</i>	100	20.0	19.0	21	X
	LOSC2	<i>Lotus scoparius</i>	100	11.5	6.0	17	X
	HESC2	<i>Helianthemum scoparium</i>	100	2.6	0.2	5	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	100	2.5	1.0	4	X
	CETO	<i>Ceanothus tomentosus</i>	100	0.2	0.2	0.20	X
	PIMOT2	<i>Pickeringia montana</i> var. <i>tomentosa</i>	50	6.0	6.0	6	
	LEGA	<i>Lepechinia ganderi</i>	50	5.0	5.0	5	
	HASQ2	<i>Hazardia squarrosa</i>	50	3.0	3.0	3	
	XYBI	<i>Xylococcus bicolor</i>	50	3.0	3.0	3	
	SAME3	<i>Salvia mellifera</i>	50	2.0	2.0	2	
	ADFA	<i>Adenostoma fasciculatum</i>	50	1.0	1.0	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	50	1.0	1.0	1	
	ARGL3	<i>Arctostaphylos glandulosa</i>	50	0.2	0.2	0.20	
	EHCH	<i>Ehrendorferia chrysantha</i>	50	0.2	0.2	0.20	
	QUBE5	<i>Quercus berberidifolia</i>	50	0.2	0.2	0.20	
Herb							
	CORIS2	<i>Cordylanthus rigidus</i> ssp. <i>setigerus</i>	50	5.0	5.0	5	
	GAPH2	* <i>Gastroidium phleoides</i>	50	4.0	4.0	4	
	HEGR3	<i>Helianthus gracilentus</i>	50	2.0	2.0	2	
	HOTR2	<i>Horkelia truncata</i>	50	2.0	2.0	2	
	NAHA2	<i>Navarretia hamata</i>	50	2.0	2.0	2	
	VUMY	* <i>Vulpia myuros</i>	50	2.0	2.0	2	
	CAMA24	<i>Calystegia macrostegia</i>	50	1.0	1.0	1	
	CRIN8	<i>Cryptantha intermedia</i>	50	1.0	1.0	1	
	PSST7	<i>Pseudognaphalium</i> <i>stramineum</i>	50	1.0	1.0	1	
	ALLIU	<i>Allium</i>	50	0.2	0.2	0.20	
	BRMA3	* <i>Bromus madritensis</i>	50	0.2	0.2	0.20	

CEVE3	<i>Centaurium venustum</i>	50	0.2	0.2	0.20
GAAN2	<i>Galium angustifolium</i>	50	0.2	0.2	0.20
HYGL2	* <i>Hypochaeris glabra</i>	50	0.2	0.2	0.20
PSCA13	<i>Pseudognaphalium californicum</i>	50	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	50	6.0	6.0	6

***Encelia californica* Alliance**
California Brittle Bush Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Encelia californica*-*Artemisia californica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	43.8	25-66	-
Herb	11.9	0-27	0-2
Shrub	34.8	11-60	1-2
Hardwood	0.2	0-2	10-15
Conifer	0.0	0-0	-
Non-native plant presence	22.1	0-71	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SE (3), S (3), SW (2), NW (1)

Macrotopography: Entire slope (1), Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (3), Upper 1/3 of slope (2), Ridge top (1)

Microtopography: convex (7), flat (1), concave (1)

Parent Material: Sedimentary (4), Sandstone (2), Granitic (1), Mixed sedimentary (1), Volcanic (1)

Soil Texture: sand (4), loam or sandy loam (3), clay or clay loam (2)

General slope steepness: gentle to steep

	Mean	Range
Elevation	38 ft.	-41-219 ft.
Slope	20°	5-31°
Large rock cover	2.0%	0-10%

Small rock cover	8.9%	0-55%
Bare ground cover	38.7%	4-74%
Litter cover	48.7%	16-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 0309RB24, 0309RB25, 0310RB24, 0707MG01, 0708MG01, 1520JD01, 1737KH01, SDG0083, SDG0087

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1 of 9	1B.1	S2.1	G5T3	
<i>Lycium californicum</i>	3 of 9	4.2	S3.2	G4	
<i>Selaginella cinerascens</i>	1 of 9	4.1	S3S4	G3G4	

STAND TABLE

Encelia californica-*Artemisia californica* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ENCA	<i>Encelia californica</i>	100	21.1	2.0	48	X
	ARCA11	<i>Artemisia californica</i>	89	7.2	0.2	23	X
	ERFA2	<i>Eriogonum fasciculatum</i>	56	2.5	0.2	8	
	RHIN2	<i>Rhus integrifolia</i>	56	1.8	1.0	2	
	CYPR19	<i>Cylindropuntia prolifera</i>	44	0.6	0.2	1	
	LYCA	<i>Lycium californicum</i>	33	3.1	0.2	9	
	LOSC2	<i>Lotus scoparius</i>	33	0.5	0.2	1	
	CLIS	<i>Cleome isomeris</i>	22	3.6	0.2	7	
	ISME5	<i>Isocoma menziesii</i>	22	3.5	3.0	4	
	BASA2	<i>Baccharis sarothroides</i>	22	0.2	0.2	0.20	
	MADI3	<i>Mammillaria dioica</i>	22	0.2	0.2	0.20	
	OPLI3	<i>Opuntia littoralis</i>	22	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	67	5.1	0.2	18	
	BRNI	* <i>Brassica nigra</i>	44	6.5	3.0	17	
	CEME2	* <i>Centaurea melitensis</i>	33	2.0	1.0	3	
	FOVU	* <i>Foeniculum vulgare</i>	33	0.8	0.2	2	
	AVFA	* <i>Avena fatua</i>	33	0.5	0.2	1	
	RASA2	* <i>Raphanus sativus</i>	33	0.5	0.2	1	
	ASTRL	<i>Astragalus trichopodus</i>	33	0.2	0.2	0.20	

	<i>var. lonchus</i>				
PTDR	<i>Pterostegia drymarioides</i>	22	4.5	2.0	7
TETE3	<i>Tetragonia tetragonioides</i>	22	2.1	0.2	4
MILA6	<i>Mirabilis laevis</i>	22	1.5	1.0	2
AMPS	<i>Ambrosia psilostachya</i>	22	1.1	0.2	2
MAMAM4	<i>Marah macrocarpus var. macrocarpus</i>	22	1.1	0.2	2
BRDI3	* <i>Bromus diandrus</i>	22	0.6	0.2	1
MECR3	* <i>Mesembryanthemum crystallinum</i>	22	0.6	0.2	1
DISP	<i>Distichlis spicata</i>	22	0.2	0.2	0.20

***Eriogonum fasciculatum* Alliance**

California Buckwheat Scrub

ALLIANCE STAND TABLE

***Eriogonum fasciculatum* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ERFA2	<i>Eriogonum fasciculatum</i>	89	11.7	1.0	30	X
	ARCA11	<i>Artemisia californica</i>	79	1.1	0.2	7	
	MALA6	<i>Malosma laurina</i>	43	4.0	0.2	15	
	LOSC2	<i>Lotus scoparius</i>	36	2.3	0.2	8	
	OPLI3	<i>Opuntia littoralis</i>	29	2.3	0.2	15	
	SAME3	<i>Salvia mellifera</i>	29	1.9	0.2	8	
	BASA2	<i>Baccharis sarothroides</i>	25	1.0	0.2	5	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	54	7.3	2.0	23	
	CEME2	* <i>Centaurea melitensis</i>	46	2.5	0.2	8	
	HIIN3	* <i>Hirschfeldia incana</i>	43	2.3	0.2	8	
	AVFA	* <i>Avena fatua</i>	29	13.8	1.0	20	
	AVBA	* <i>Avena barbata</i>	29	3.6	0.2	15	
	BRHO2	* <i>Bromus hordeaceus</i>	21	5.4	0.2	15	
	BRDI3	* <i>Bromus diandrus</i>	21	4.8	1.0	10	
	DUPU	<i>Dudleya pulverulenta</i>	21	0.2	0.2	0.2	
Cryptogam							
	SEBI	<i>Selaginella bigelovii</i>	25	2.5	0.2	7	

***Eriogonum fasciculatum* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.1	18-90	-
Herb	27.1	5-60	0-1
Shrub	24.6	10-55	1-5
Hardwood	1.1	0-8	1-15
Conifer	0.0	0-0	-
Non-native plant presence	43.6	0-69	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (4), E (4), Variable (3), W (1), SW (1), SE (1)

Macrotopography: Entire slope (1), Bottom to Lower 1/3 of slope (2), Lower 1/3 of slope (6), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Ridge top (1), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (7), convex (5), flat (2)

Parent Material: Granitic (8), Sedimentary (3), Conglomerate (1), Diorite (1), Metamorphic (1)

Soil Texture: loam or sandy loam (8), sand (4)

General slope steepness: flat to steep

	Mean	Range
Elevation	190 ft.	27-360 ft.
Slope	12°	0-30°
Large rock cover	10.8%	0-63%
Small rock cover	23.8%	1-58%
Bare ground cover	41.8%	20-73%
Litter cover	18.9%	1-55%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0308AK22, 0506AK04, 1528EB01, 1549KH02, 1651JD01, 1738EB01, 1738JD01, SDRP0060, SDRP0074, SDRP0088, SDRP0089, SDRP0091, SDRP0131, SDRP0436

Relevé(s): none

CONSERVATION STATUS RANK G5 S5

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	1 of 14	2.1	S3.1	G3G4	
<i>Ceanothus verrucosus</i>	1 of 14	2.2	S2.2	G3	
<i>Ferocactus viridescens</i>	1 of 14	2.1	S3.1	G4	
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	1 of 14	4.2	S3.2	G5T3	
<i>Quercus engelmannii</i>	1 of 14	4.2	S3.2	G3	

<i>Selaginella cinerascens</i>	1 of 14	4.1	S3S4	G3G4
<i>Viguiera laciniata</i>	2 of 14	4.2	S3.2	G4

STAND TABLE

Eriogonum fasciculatum Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	21	2.7	0.2	6	
Shrub							
	ARCA11	<i>Artemisia californica</i>	93	1.5	0.2	7	X
	ERFA2	<i>Eriogonum fasciculatum</i>	79	16.6	5.0	30	
	BASA2	<i>Baccharis sarothroides</i>	36	1.2	0.2	5	
	MALA6	<i>Malosma laurina</i>	29	4.6	0.2	15	
	LOSC2	<i>Lotus scoparius</i>	29	3.6	0.2	8	
	SAAP2	<i>Salvia apiana</i>	29	0.4	0.2	1	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	21	12.7	10.0	18	
	RHCR	<i>Rhamnus crocea</i>	21	4.8	0.2	14	
	ADFA	<i>Adenostoma fasciculatum</i>	21	2.0	1.0	4	
	OPLI3	<i>Opuntia littoralis</i>	21	0.3	0.2	0.40	
	ISME5	<i>Isocoma menziesii</i>	21	0.2	0.2	0.20	
	SAME3	<i>Salvia mellifera</i>	21	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	50	7.1	2.0	20	
	CEME2	* <i>Centaurea melitensis</i>	50	1.2	0.2	4	
	BRHO2	* <i>Bromus hordeaceus</i>	43	5.4	0.2	15	
	HIIN3	* <i>Hirschfeldia incana</i>	43	1.7	0.2	4	
	AVFA	* <i>Avena fatua</i>	36	15.8	1.0	20	
	AVBA	* <i>Avena barbata</i>	36	5.5	0.2	15	
	ERBO	* <i>Erodium botrys</i>	29	5.1	0.2	15	
	BRDI3	* <i>Bromus diandrus</i>	29	4.5	2.0	10	
	ERODI	* <i>Erodium</i>	21	12.7	4.0	22	
	VUMY	* <i>Vulpia myuros</i>	21	5.3	3.0	8	
	BRRU2	* <i>Bromus rubens</i>	21	4.7	4.0	5	
	NAPU4	<i>Nassella pulchra</i>	21	2.1	0.2	6	
	HEFA	<i>Deinandra fasciculata</i>	21	1.7	0.2	3	

Eriogonum fasciculatum/*Salvia columbariae*-*Mirabilis laevis* Provisional Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	32.8	8-55	-
Herb	28.4	5-50	0-2
Shrub	8.8	8-11	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	45.3	11-71	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (2), W (1), Variable (1), SE (1)

Macrotopography: Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (2)

Microtopography: flat (2), concave (1), convex (1), undulating (1)

Parent Material: Granitic (3), Conglomerate (1), Sandstone (1)

Soil Texture: loam or sandy loam (3), sand (1), silt or silt loam (1)

General slope steepness: moderate to steep

	Mean	Range
Elevation	287 ft.	218-374 ft.
Slope	22°	12-32°
Large rock cover	2.5%	0-8%
Small rock cover	20.0%	10-50%
Bare ground cover	45.8%	8-78%
Litter cover	29.8%	5-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0506DH21, 0507TK02, SDG0067, SDRP0421, SDRP0441

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

STAND TABLE

***Eriogonum fasciculatum*/Salvia columbariae-Mirabilis laevis**

Provisional Association

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						
ERFA2	<i>Eriogonum fasciculatum</i>	100	4.0	1.0	6	X
ARCA11	<i>Artemisia californica</i>	80	0.9	0.2	2	X
MALA6	<i>Malosma laurina</i>	60	3.7	2.0	5	
CNDU	<i>Cneoridium dumosum</i>	40	2.0	1.0	3	
SAME3	<i>Salvia mellifera</i>	40	1.6	0.2	3	
LOSC2	<i>Lotus scoparius</i>	40	0.6	0.2	1	
HEWH	<i>Hesperoyucca whipplei</i>	40	0.2	0.2	0.20	

	ADFA	<i>Adenostoma fasciculatum</i>	20	3.0	3.0	3	
	HASQ2	<i>Hazardia squarrosa</i>	20	0.2	0.2	0.20	
	KEAN	<i>Keckiella antirrhinoides</i>	20	0.2	0.2	0.20	
	SANIC5	<i>Sambucus nigra ssp. cerulea</i>	20	0.2	0.2	0.20	
Herb							
	CEME2	* <i>Centaurea melitensis</i>	100	4.2	0.2	8	X
	BRMA3	* <i>Bromus madritensis</i>	80	11.0	5.0	23	X
	HIIN3	* <i>Hirschfeldia incana</i>	80	3.6	0.2	8	X
	MILA6	<i>Mirabilis laevis</i>	80	0.4	0.2	1	X
	AVFA	* <i>Avena fatua</i>	60	10.3	4.0	20	
	SACO6	<i>Salvia columbariae</i>	60	4.3	2.0	9	
	ERCI6	* <i>Erodium cicutarium</i>	60	1.4	0.2	2	
	PTDR	<i>Pterostegia drymarioides</i>	40	1.6	0.2	3	
	CRYPT	<i>Cryptantha</i>	40	1.1	0.2	2	
	PHCIH2	<i>Phacelia cicutaria var. hispida</i>	40	1.1	0.2	2	
	CAMA24	<i>Calystegia macrostegia</i>	40	0.6	0.2	1	
	CRIN8	<i>Cryptantha intermedia</i>	40	0.6	0.2	1	
	LENIN	<i>Lepidium nitidum var. nitidum</i>	40	0.6	0.2	1	
	MIBR4	<i>Mimulus brevipes</i>	40	0.6	0.2	1	
	STVI2	<i>Stephanomeria virgata</i>	40	0.6	0.2	1	
	HYGL2	* <i>Hypochaeris glabra</i>	40	0.2	0.2	0.20	
	PHPA3	<i>Phacelia parryi</i>	40	0.2	0.2	0.20	
	LOGA2	* <i>Logfia gallica</i>	20	5.0	5.0	5	
	CHGL	<i>Chaenactis glabriuscula</i>	20	4.0	4.0	4	
	ESCA2	<i>Eschscholzia californica</i>	20	4.0	4.0	4	
	AMSIN	<i>Amsinckia</i>	20	1.0	1.0	1	
	CACA32	<i>Camissonia californica</i>	20	1.0	1.0	1	
	CHAEN	<i>Chaenactis</i>	20	1.0	1.0	1	
	CRMI2	<i>Cryptantha micromeres</i>	20	1.0	1.0	1	
	VUMY	* <i>Vulpia myuros</i>	20	1.0	1.0	1	
	APAN	<i>Apiastrum angustifolium</i>	20	0.2	0.2	0.20	
	CEGL2	* <i>Cerastium glomeratum</i>	20	0.2	0.2	0.20	
	CHPO12	<i>Chamaesyce polycarpa</i>	20	0.2	0.2	0.20	
	DICA14	<i>Dichelostemma capitatum</i>	20	0.2	0.2	0.20	
	ERIAS	<i>Eriastrum</i>	20	0.2	0.2	0.20	
	ERBO	* <i>Erodium botrys</i>	20	0.2	0.2	0.20	
	2GRAM	<i>Graminoid (grass or grasslike)</i>	20	0.2	0.2	0.20	
	LOCA19	<i>Logfia californica</i>	20	0.2	0.2	0.20	
	LOTUS	<i>Lotus</i>	20	0.2	0.2	0.20	
	LOST4	<i>Lotus strigosus</i>	20	0.2	0.2	0.20	
	LUTR2	<i>Lupinus truncatus</i>	20	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus var. macrocarpus</i>	20	0.2	0.2	0.20	
	MUMI	<i>Muhlenbergia microsperma</i>	20	0.2	0.2	0.20	
	PLER3	<i>Plantago erecta</i>	20	0.2	0.2	0.20	
	PSCA13	<i>Pseudognaphalium californicum</i>	20	0.2	0.2	0.20	

SCCA2	<i>Scrophularia californica</i>	20	0.2	0.2	0.20	
VUMI	<i>Vulpia microstachys</i>	20	0.2	0.2	0.20	
Cryptogam						
SEBI	<i>Selaginella bigelovii</i>	80	3.6	0.2	7	X

***Eriogonum fasciculatum*-*Bebbia juncea* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	28.5	23-39	-
Herb	11.2	6-15	0-2
Shrub	21.8	18-35	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	17.9	9-27	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (2), W (1), SE (1), S (1), Flat (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Middle 1/3 of slope (2)

Microtopography: flat (3), undulating (3)

Parent Material: Metamorphic (3), Mixed alluvium (1), Sandy alluvium (1), Sedimentary (1)

Soil Texture: sand (4), clay or clay loam (1), loam or sandy loam (1)

General slope steepness: flat to very steep

	Mean	Range
Elevation	106 ft.	15-221 ft.
Slope	23°	0-49°
Large rock cover	35.0%	2-59%
Small rock cover	28.5%	15-53%
Bare ground cover	21.8%	9-42%
Litter cover	13.5%	5-40%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0611DH01, 0624AK02, 0624AK03, 0624JJ01, 1388KG01, 1719FS01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 6	4.2	S3.2	G3	
<i>Adolphia californica</i>	1 of 6	2.1	S3.1	G3G4	
<i>Dudleya alainae</i>	1 of 6	3.2	S1?	G1?Q	
<i>Ferocactus viridescens</i>	2 of 6	2.1	S3.1	G4	
<i>Viguiera laciniata</i>	1 of 6	4.2	S3.2	G4	

STAND TABLE

Eriogonum fasciculatum-*Bebbia juncea* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic	
Shrub								
	ERFA2	<i>Eriogonum fasciculatum</i>	100	10.7	6.0	23	X	
	BEJUA	<i>Bebbia juncea</i> var. <i>aspera</i>	67	4.3	0.2	10		
	SAME3	<i>Salvia mellifera</i>	50	3.7	0.2	8		
	BRCA3	<i>Brickellia californica</i>	50	3.1	0.2	5		
	MALA6	<i>Malosma laurina</i>	50	2.1	0.2	5		
	ARCA11	<i>Artemisia californica</i>	50	0.2	0.2	0.20		
	OPLI3	<i>Opuntia littoralis</i>	50	0.2	0.2	0.20		
	BEJU	<i>Bebbia juncea</i>	33	3.5	2.0	5		
	LESQ	<i>Lepidospartum</i>	33	1.6	0.2	3		
	LOSC2	<i>Lotus scoparius</i>	33	1.1	0.2	2		
	BASA2	<i>Baccharis sarothroides</i>	33	0.6	0.2	1		
	FEVI2	<i>Ferocactus viridescens</i>	33	0.2	0.2	0.20		
Herb								
	DUPU	<i>Dudleya pulverulenta</i>	100	0.2	0.2	0.20	X	
	BRMA3	* <i>Bromus madritensis</i>	67	3.8	2.0	5		
	AVBA	* <i>Avena barbata</i>	50	0.5	0.2	1		
	CRCO34	<i>Crassula connata</i>	50	0.2	0.2	0.20		
	BRDI3	* <i>Bromus diandrus</i>	33	5.5	1.0	10		
	HIIN3	* <i>Hirschfeldia incana</i>	33	1.6	0.2	3		
	CHGL	<i>Chaenactis glabriuscula</i>	33	1.5	1.0	2		
	CRCA5	<i>Croton californicus</i>	33	0.6	0.2	1		
	DUED	<i>Dudleya edulis</i>	33	0.6	0.2	1		
	CAMA24	<i>Calystegia macrostegia</i>	33	0.2	0.2	0.20		
	PEMUM	<i>Pellaea mucronata</i> ssp. <i>mucronata</i>	33	0.2	0.2	0.20		
Cryptogam								
	2LICHN	<i>Lichen</i>	50	4.4	0.2	7		
	SEBI	<i>Selaginella bigelovii</i>	50	1.1	0.2	2		
	2MOSS	<i>Moss</i>	50	1.0	1.0	1		

Eriogonum fasciculatum-Salvia apiana Alliance
California Buckwheat-Salvia apiana Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Eriogonum fasciculatum-Salvia apiana Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	44.3	27-64	-
Herb	21.8	6-47	0-1
Shrub	33.3	18-50	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	23.3	4-55	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Variable (2), SW (1), S (1), NW (1), N (1)

Macrotopography: Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (2), Middle to Upper 1/3 of slope (1)

Microtopography: undulating (5), convex (1)

Parent Material: Metamorphic (4), Granitic (2)

Soil Texture: loam or sandy loam (5), clay or clay loam (1)

General slope steepness: somewhat steep to somewhat steep

	Mean	Range
Elevation	230 ft.	129-513 ft.
Slope	19°	15-22°
Large rock cover	21.0%	3-38%
Small rock cover	19.3%	10-30%
Bare ground cover	33.3%	30-40%
Litter cover	24.3%	15-38%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 1125PG01, 1542MM01, 1614MB01, SDRP0083, SDRP0188, SDRP0195

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

STAND TABLE

Eriogonum fasciculatum-*Salvia apiana* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	SAAP2	<i>Salvia apiana</i>	100	7.8	3.0	20	X
	ARCA11	<i>Artemisia californica</i>	100	7.2	0.2	17	X
	MALA6	<i>Malosma laurina</i>	83	6.0	1.0	14	X
	ERFA2	<i>Eriogonum fasciculatum</i>	67	16.8	10.0	30	
	RHCR	<i>Rhamnus crocea</i>	67	2.5	1.0	5	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	0.5	0.2	1	
	GUSA2	<i>Gutierrezia sarothrae</i>	50	0.5	0.2	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	2.6	0.2	5	
Herb							
	CEME2	* <i>Centaurea melitensis</i>	83	2.7	0.2	7	X
	HIIN3	* <i>Hirschfeldia incana</i>	67	1.4	0.2	4	
	BRRU2	* <i>Bromus rubens</i>	50	8.0	2.0	17	
	VUMY	* <i>Vulpia myuros</i>	50	1.8	0.2	5	
	NAPU4	<i>Nassella pulchra</i>	50	0.5	0.2	1	
	ERODI	* <i>Erodium</i>	33	12.5	7.0	18	
	BRHO2	* <i>Bromus hordeaceus</i>	33	5.0	5.0	5	
	BRDI3	* <i>Bromus diandrus</i>	33	2.6	0.2	5	
	AVBA	* <i>Avena barbata</i>	33	2.5	1.0	4	
	COFI2	<i>Corethrogyne filaginifolia</i>	33	0.6	0.2	1	

Frankenia palmeri Special Stands Palmer's Frankenia Scrub

Frankenia palmeri Special Stands

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	53.0	53-53	-
Herb	1.0	1-1	0-0.5
Shrub	52.0	52-52	0-1

Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.4	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (1)
Macrotopography: Lower 1/3 of slope (1)
Microtopography: convex (1)
Parent Material: Sandstone (1)
Soil Texture: loam or sandy loam (1)
General slope steepness: gentle to gentle

	Mean	Range
Elevation	-31 ft.	-31--31 ft.
Slope	3°	3-3°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	28.0%	28-28%
Litter cover	70.0%	70-70%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 1023AK03
Relevé(s): none

CONSERVATION STATUS RANK G1? S1.1?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Frankenia palmeri</i>	1 of 1	2.1	S1.1	G3G4	

STAND TABLE

Frankenia palmeri
Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	FRPA	<i>Frankenia palmeri</i>	100	52.0	52.0	52	X
	ARSU11	<i>Arthrocnemum subterminale</i>	100	1.0	1.0	1	X
	MECR3	* <i>Mesembryanthemum crystallinum</i>	100	0.2	0.2	0.20	X
	SABI	<i>Salicornia bigelovii</i>	100	0.2	0.2	0.20	X

***Fremontodendron mexicanum* Special Stands**
Mexican Flannelbush Chaparral

***Fremontodendron mexicanum* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	57.5	50-65	-
Herb	4.0	1-7	0-0.5
Shrub	55.5	50-61	2-10
Hardwood	3.0	0-6	5-10
Conifer	0.0	0-0	-
Non-native plant presence	3.4	0-7	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1), NE (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1)

Microtopography: concave (1), flat (1)

Parent Material: Gabbro (1), Metamorphic (1)

Soil Texture: loam or sandy loam (1), unknown (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	300 ft.	249-351 ft.
Slope	9°	2-15°
Large rock cover	9.5%	5-14%
Small rock cover	38.5%	17-60%
Bare ground cover	11.0%	5-17%
Litter cover	40.0%	30-50%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0519TK04, 1604JD01

Relevé(s): none

CONSERVATION STATUS RANK G1? S1.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Callitropsis forbesii</i>	2 of 2	1B.1	S1.1	G2	
<i>Fremontodendron mexicanum</i>	2 of 2	1B.1	S2.1	G2	Rare
<i>Lepechinia ganderi</i>	1 of 2	1B.3	S2.2	G2	
<i>Romneya coulteri</i>	1 of 2	4.2	S3.2	G3	

STAND TABLE

Fremontodendron mexicanum

Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	CUFO2	<i>Callitropsis forbesii</i>	100	1.5	1.0	2	X
	QUAG	<i>Quercus agrifolia</i>	50	6.0	6.0	6	
	PLRA	<i>Platanus racemosa</i>	50	1.0	1.0	1	
Shrub	FRME2	<i>Fremontodendron mexicanum</i>	100	44.5	44.0	45	X
	VECA	<i>Venegasia carpesioides</i>	100	0.2	0.2	0.20	X
	CETO	<i>Ceanothus tomentosus</i>	50	10.0	10.0	10	
	MALA6	<i>Malosma laurina</i>	50	2.0	2.0	2	
	TODI	<i>Toxicodendron</i>	50	2.0	2.0	2	
	BASA4	<i>Baccharis salicifolia</i>	50	1.0	1.0	1	
	DERI	<i>Dendromecon rigida</i>	50	1.0	1.0	1	
	LEGA	<i>Lepechinia ganderi</i>	50	1.0	1.0	1	
	MAFA	<i>Malacothamnus fasciculatus</i>	50	1.0	1.0	1	
	PIMO5	<i>Pickeringia montana</i>	50	1.0	1.0	1	
	ROTR2	<i>Romneya trichocalyx</i>	50	1.0	1.0	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	50	0.2	0.2	0.20	
	HASQ2	<i>Hazardia squarrosa</i>	50	0.2	0.2	0.20	
	HESC2	<i>Helianthemum scoparium</i>	50	0.2	0.2	0.20	
	HEAR5	<i>Heteromeles arbutifolia</i>	50	0.2	0.2	0.20	
	KECO	<i>Keckiella cordifolia</i>	50	0.2	0.2	0.20	
	PRIL	<i>Prunus ilicifolia</i>	50	0.2	0.2	0.20	
	ROCO	<i>Romneya coulteri</i>	50	0.2	0.2	0.20	
	SALA6	<i>Salix lasiolepis</i>	50	0.2	0.2	0.20	
Herb	BRMA3	* <i>Bromus madritensis</i>	50	5.0	5.0	5	
	BRDI3	* <i>Bromus diandrus</i>	50	0.2	0.2	0.20	
	EPCA3	<i>Epilobium canum</i>	50	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	50	0.2	0.2	0.20	
	PSCA13	<i>Pseudognaphalium californicum</i>	50	0.2	0.2	0.20	

Gutierrezia (californica, sarothrae) Provisional Alliance
California Matchweed Patches or Broom Snake Weed Scrub

Isocoma menziesii Alliance
Menzie's Goldenbush Scrub

ALLIANCE STAND TABLE

Isocoma menziesii
Alliance

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	91	16.7	7.0	28	X
	CYPR19	<i>Cylindropuntia prolifera</i>	27	0.2	0.2	0.2	
Herb	DISP	<i>Distichlis spicata</i>	64	4.2	0.2	22	
	BRHO2	* <i>Bromus hordeaceus</i>	45	13.6	0.2	60	
	BRMA3	* <i>Bromus madritensis</i>	45	12.6	0.2	30	
	BRDI3	* <i>Bromus diandrus</i>	36	7.8	1.0	25	
	CEME2	* <i>Centaurea melitensis</i>	36	4.6	0.2	12	
	ATSE	* <i>Atriplex semibaccata</i>	36	2.2	0.2	8	
	BRNI	* <i>Brassica nigra</i>	36	1.3	0.2	3	
	VUMY	* <i>Vulpia myuros</i>	27	9.7	1.0	25	
	MEIN2	* <i>Melilotus indicus</i>	27	1.1	0.2	2	
	AMPS	<i>Ambrosia psilostachya</i>	27	0.5	0.2	1	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	27	0.2	0.2	0.2	

***Isocoma menziesii* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	39.7	18-55	-
Herb	29.3	10-45	0-0.5
Shrub	16.7	10-28	1-1
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	62.9	53-82	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2), S (1)

Macrotopography: Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2)

Microtopography: flat (2), convex (1)

Parent Material: Granitic (1), Sandy alluvium (1), Silty alluvium (1)

Soil Texture: loam or sandy loam (2), silt or silt loam (1)

General slope steepness: flat to moderate

	Mean	Range
Elevation	16 ft.	-38-113 ft.
Slope	3°	0-10°
Large rock cover	0.0%	0-0%
Small rock cover	0.2%	0-0%
Bare ground cover	21.0%	10-32%
Litter cover	76.5%	65-88%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0312RB22, 1019DH02, SDRP0242

Relevé(s): none

CONSERVATION STATUS RANK G4 S3?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Lycium californicum</i>	1 of 3	4.2	S3.2	G4	

STAND TABLE

Isocoma menziesii

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	100	15.0	7.0	28	X
	ERFA2	<i>Eriogonum fasciculatum</i>	67	0.2	0.2	0.20	
	GUCA	<i>Gutierrezia californica</i>	33	4.0	4.0	4	
	BASA2	<i>Baccharis sarothroides</i>	33	1.0	1.0	1	
	CYPR19	<i>Cylindropuntia prolifera</i>	33	0.2	0.2	0.20	
	HYSAS	<i>Hymenoclea salsola</i> var. <i>salsola</i>	33	0.2	0.2	0.20	
	LYCA	<i>Lycium californicum</i>	33	0.2	0.2	0.20	
Herb	BRMA3	* <i>Bromus madritensis</i>	100	11.7	0.2	30	X
	VUMY	* <i>Vulpia myuros</i>	67	14.0	3.0	25	
	ERCI6	* <i>Erodium cicutarium</i>	67	7.5	1.0	14	
	CEME2	* <i>Centaurea melitensis</i>	67	3.1	0.2	6	
	AMPS	<i>Ambrosia psilostachya</i>	67	0.6	0.2	1	

BRNI	* <i>Brassica nigra</i>	67	0.6	0.2	1
ATSE	* <i>Atriplex semibaccata</i>	33	8.0	8.0	8
ERODI	* <i>Erodium</i>	33	4.0	4.0	4
BRDI3	* <i>Bromus diandrus</i>	33	2.0	2.0	2
LOPEM2	* <i>Lolium perenne ssp. multiflorum</i>	33	2.0	2.0	2
ASTRL	<i>Astragalus trichopodus var. lonchus</i>	33	1.0	1.0	1
BRHO2	* <i>Bromus hordeaceus</i>	33	1.0	1.0	1
CRSE11	<i>Croton setigerus</i>	33	1.0	1.0	1
HYGL2	* <i>Hypochaeris glabra</i>	33	1.0	1.0	1
LETR5	<i>Leymus triticoides</i>	33	1.0	1.0	1
FOVU	* <i>Foeniculum vulgare</i>	33	0.2	0.2	0.20
HECR2	* <i>Hedypnois cretica</i>	33	0.2	0.2	0.20
LAAU	* <i>Lamarckia aurea</i>	33	0.2	0.2	0.20
MECR3	* <i>Mesembryanthemum crystallinum</i>	33	0.2	0.2	0.20
OXPE	* <i>Oxalis pes-caprae</i>	33	0.2	0.2	0.20
RASA2	* <i>Raphanus sativus</i>	33	0.2	0.2	0.20
SOOL	* <i>Sonchus oleraceus</i>	33	0.2	0.2	0.20
Cryptogam					
2LICHN	<i>Lichen</i>	33	0.2	0.2	0.20

***Isocoma menziesii*/Distichlis spicata Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), North Coast (NC), Southern Coast (SC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.4	26-92	-
Herb	27.6	2-90	0-1
Shrub	22.6	5-33	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	30.4	2-90	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (3), Variable (2), SE (1), NW (1), Flat (1)

Macrotopography: Bottom (2), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (3), Ridge top (2)

Microtopography: flat (3), convex (3), concave (1), undulating (1)

Parent Material: Mixed alluvium (3), Sand dunes (2), Sandy alluvium (2), Clayey alluvium (1)

Soil Texture: loam or sandy loam (3), sand (3), clay or clay loam (2)

General slope steepness: flat to gentle

	Mean	Range
Elevation	37 ft.	-30-166 ft.
Slope	2°	0-4°
Large rock cover	0.0%	0-0%
Small rock cover	3.2%	0-13%
Bare ground cover	23.0%	6-42%
Litter cover	72.0%	47-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=8)

Rapid Assessment(s): 0310AK22, 0310AK24, 0310DH21, 0603DH02, SDG0062, SDG0063, SDRP0076, SDRP0337

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Abronia maritima</i>	1 of 8	4.2	S3?	G4?	

<i>Frankenia palmeri</i>	2 of 8	2.1	S1.1	G3G4
<i>Iva hayesiana</i>	2 of 8	2.2	S2.2?	G3?
<i>Lycium californicum</i>	1 of 8	4.2	S3.2	G4

STAND TABLE

Isocoma menziesii/*Distichlis spicata* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	88	17.4	7.0	23	X
	SNAG	<i>Standing snag</i>	25	8.5	5.0	12	
	ARCA11	<i>Artemisia californica</i>	25	1.1	0.2	2	
	ATCA2	<i>Atriplex canescens</i>	25	0.2	0.2	0.20	
	BASA4	<i>Baccharis salicifolia</i>	25	0.2	0.2	0.20	
	CYPR19	<i>Cylindropuntia prolifera</i>	25	0.2	0.2	0.20	
Herb	DISP	<i>Distichlis spicata</i>	88	4.2	0.2	22	X
	BRHO2	* <i>Bromus hordeaceus</i>	50	16.8	0.2	60	
	BRDI3	* <i>Bromus diandrus</i>	38	9.7	1.0	25	
	MEIN2	* <i>Melilotus indicus</i>	38	1.1	0.2	2	
	ATSE	* <i>Atriplex semibaccata</i>	38	0.2	0.2	0.20	
	BRMA3	* <i>Bromus madritensis</i>	25	14.0	8.0	20	
	FRPA	<i>Frankenia palmeri</i>	25	9.5	4.0	15	
	CEME2	* <i>Centaurea melitensis</i>	25	6.1	0.2	12	
	HIIN3	* <i>Hirschfeldia incana</i>	25	6.1	0.2	12	
	SAPA30	<i>Sarcocornia pacifica</i>	25	2.6	0.2	5	
	FRSA	<i>Frankenia salina</i>	25	2.2	0.4	4	
	BRNI	* <i>Brassica nigra</i>	25	2.0	1.0	3	
	IVHA	<i>Iva hayesiana</i>	25	0.6	0.2	1	
	AMCH4	<i>Ambrosia chamissonis</i>	25	0.2	0.2	0.20	
	CACH13	<i>Camissonia cheiranthifolia</i>	25	0.2	0.2	0.20	
	CAED3	* <i>Carpobrotus edulis</i>	25	0.2	0.2	0.20	
	COAU3	* <i>Cotula australis</i>	25	0.2	0.2	0.20	
	CRCO34	<i>Crassula connata</i>	25	0.2	0.2	0.20	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	25	0.2	0.2	0.20	
	Cryptogam						
2MOSS		<i>Moss</i>	25	2.6	0.2	5	

***Keckiella antirrhinoides* Alliance**

Bush Penstemon Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Keckiella antirrhinoides*-*Artemisia californica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	52.7	37-90	-
Herb	20.4	3-50	0-2
Shrub	40.1	22-87	1-5
Hardwood	0.1	0-1	2-10
Conifer	0.0	0-0	-
Non-native plant presence	21.4	0-41	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (7), N (4), NW (3), E (3), Variable (1)

Macrotopography: Lower 1/3 of slope (2), Bottom to Mid 1/3 of slope (1), Lower to Middle 1/3 of slope (6), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (1), Upper 1/3 of slope (1)

Microtopography: convex (10), undulating (5), concave (2), flat (1)

Parent Material: Granitic (16), Metamorphic (2)

Soil Texture: loam or sandy loam (14), sand (2), clay or clay loam (1), silt or silt loam (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	199 ft.	92-405 ft.
Slope	23°	4-42°
Large rock cover	14.1%	1-58%
Small rock cover	4.6%	0-22%
Bare ground cover	32.0%	2-67%
Litter cover	46.8%	25-83%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=18)

Rapid Assessment(s): 0520AK02, 0520TK03, 0611TK01, 1352EB01, 1478MB01, 1493PG01, 1548JD01, SDRP0070, SDRP0084, SDRP0135, SDRP0263, SDRP0318, SDRP0429, SDRP0440, SDRP0463, SDRP0464, SDRP0480

Relevé(s): SDG0069

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Quercus engelmannii</i>	2 of 18	4.2	S3.2	G3	

STAND TABLE

Keckiella antirrhinoides-*Artemisia californica* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	100	7.1	0.2	24	X
	KEAN	<i>Keckiella antirrhinoides</i>	94	19.0	4.0	80	X
	MALA6	<i>Malosma laurina</i>	89	7.1	1.0	23	X
	ERFA2	<i>Eriogonum fasciculatum</i>	72	3.9	1.0	14	
	SAAP2	<i>Salvia apiana</i>	67	2.3	0.2	15	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	44	1.5	0.2	4	
	CNDU	<i>Cneoridium dumosum</i>	33	4.5	1.0	9	
	RHCR	<i>Rhamnus crocea</i>	33	2.7	0.2	10	
	ADFA	<i>Adenostoma fasciculatum</i>	28	5.2	2.0	10	
	XYBI	<i>Xylococcus bicolor</i>	28	3.0	0.2	8	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	28	1.4	0.2	4	
	LOSC2	<i>Lotus scoparius</i>	22	0.7	0.2	2	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	22	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	89	6.6	0.2	18	X
	HIIN3	* <i>Hirschfeldia incana</i>	50	2.0	0.2	6	
	CEME2	* <i>Centaurea melitensis</i>	39	1.7	0.2	6	
	HYGL2	* <i>Hypochaeris glabra</i>	33	2.8	0.2	15	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	33	2.1	0.2	7	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	33	1.3	0.2	7	
	PTDR	<i>Pterostegia drymarioides</i>	28	3.2	2.0	5	
	BRDI3	* <i>Bromus diandrus</i>	28	2.6	0.2	5	
	VUMY	* <i>Vulpia myuros</i>	22	3.8	0.2	6	
	AVBA	* <i>Avena barbata</i>	22	0.6	0.2	1	

***Lotus scoparius* Alliance**
Deerweed Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Lotus scoparius* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	38.0	8-60	-
Herb	18.1	6-49	0-0.5
Shrub	22.4	7-47	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	35.5	2-78	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (3), SW (1), NW (1), NE (1), Flat (1)

Macrotopography: Lower to Middle 1/3 of slope (2), Middle 1/3 of slope (3), Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (1)

Microtopography: undulating (4), convex (3)

Parent Material: Granitic (4), Metamorphic (3)

Soil Texture: loam or sandy loam (5), clay or clay loam (1), sand (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	335 ft.	140-512 ft.
Slope	18°	0-28°
Large rock cover	5.0%	0-10%
Small rock cover	6.1%	0-14%
Bare ground cover	76.2%	70-82%
Litter cover	9.4%	2-18%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 0423RB02, 0519DH05, SDG0084, SDG0086, SDRP0192, SDRP0193
Relevé(s): SDG0104

CONSERVATION STATUS RANK G5 S5

STAND TABLE

Lotus scoparius Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	LOSC2	<i>Lotus scoparius</i>	100	15.0	4.0	29	X
	ERFA2	<i>Eriogonum fasciculatum</i>	100	1.5	0.2	5	X
	HASQ2	<i>Hazardia squarrosa</i>	71	2.4	1.0	6	
	ARCA11	<i>Artemisia californica</i>	57	0.4	0.2	1	
	SAAP2	<i>Salvia apiana</i>	57	0.4	0.2	1	
	RHCR	<i>Rhamnus crocea</i>	29	10.1	0.2	20	
	RHOV	<i>Rhus ovata</i>	29	2.1	0.2	4	
	ADFA	<i>Adenostoma fasciculatum</i>	29	1.1	0.2	2	
	MAFA	<i>Malacothamnus fasciculatus</i>	29	1.1	0.2	2	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	100	7.7	1.0	23	X
	CEME2	* <i>Centaurea melitensis</i>	43	7.7	2.0	18	
	BRHO2	* <i>Bromus hordeaceus</i>	43	1.4	0.2	3	
	HYGL2	* <i>Hypochaeris glabra</i>	43	1.4	0.2	3	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	43	0.2	0.2	0.20	
	HIIN3	* <i>Hirschfeldia incana</i>	29	9.5	4.0	15	
	STGN	<i>Stylocline gnaphalioides</i>	29	5.5	5.0	6	
	VUMY	* <i>Vulpia myuros</i>	29	2.1	0.2	4	
	PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	29	1.1	0.2	2	
	ERCI6	* <i>Erodium cicutarium</i>	29	1.0	1.0	1	
	CRYPT	<i>Cryptantha</i>	29	0.6	0.2	1	
	PSCA13	<i>Pseudognaphalium californicum</i>	29	0.6	0.2	1	
	STMEP	* <i>Stellaria media</i> ssp. <i>pallida</i>	29	0.6	0.2	1	
	CAMA24	<i>Calystegia macrostegia</i>	29	0.2	0.2	0.20	
	DICA14	<i>Dichelostemma capitatum</i>	29	0.2	0.2	0.20	
	LOGA2	* <i>Logfia gallica</i>	29	0.2	0.2	0.20	

***Lycium californicum* Provisional Alliance**
California Desert-thorn Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Lycium californicum* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.8	33-58	-
Herb	26.8	8-44	0-0.5
Shrub	22.7	12-38	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	35.4	6-66	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (2), Variable (1), SW (1), S (1), E (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (1)

Microtopography: undulating (3), convex (2), flat (1)

Parent Material: Sandy alluvium (2), Mixed alluvium (1), Sandstone (1), Siltstone (1)

Soil Texture: loam or sandy loam (4), clay or clay loam (2)

General slope steepness: flat to steep

	Mean	Range
Elevation	1 ft.	-35-45 ft.
Slope	9°	0-27°
Large rock cover	0.0%	0-0%
Small rock cover	1.7%	0-7%
Bare ground cover	51.8%	12-86%
Litter cover	44.4%	5-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0312RB21, 0312TK21, 0312TK22, 0503AK21, 0707TK04, 1710JD01

Relevé(s): none

CONSERVATION STATUS RANK G3? S2.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Coreopsis maritima</i>	1 of 6	2.2	S2.2	G3	
<i>Ferocactus viridescens</i>	1 of 6	2.1	S3.1	G4	
<i>Lycium californicum</i>	6 of 6	4.2	S3.2	G4	
<i>Viguiera laciniata</i>	1 of 6	4.2	S3.2	G4	

STAND TABLE

Lycium californicum Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	LYCA	<i>Lycium californicum</i>	100	11.7	2.0	23	X
	CYPR19	<i>Cylindropuntia prolifera</i>	83	3.8	0.2	8	X
	ERFA2	<i>Eriogonum fasciculatum</i>	67	3.8	0.2	7	
	ARCA11	<i>Artemisia californica</i>	50	2.7	1.0	4	
	ISME5	<i>Isocoma menziesii</i>	33	2.1	0.2	4	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	83	19.8	4.0	30	X
	ARSU11	<i>Arthrocnemum subterminale</i>	67	3.3	0.2	7	
	FRSA	<i>Frankenia salina</i>	67	2.8	0.2	7	
	DISP	<i>Distichlis spicata</i>	67	0.6	0.2	1	
	BRDI3	* <i>Bromus diandrus</i>	33	6.0	4.0	8	
	SANU6	<i>Sairoparpus nuttallianus</i>	33	5.0	2.0	8	
	PTDR	<i>Pterostegia drymarioides</i>	33	4.0	3.0	5	
	HEFA	<i>Deinandra fasciculata</i>	33	3.5	3.0	4	
	CEME2	* <i>Centaurea melitensis</i>	33	3.0	2.0	4	
	AMPU3	<i>Amblyopappus pusillus</i>	33	1.6	0.2	3	
	SPAI	<i>Sporobolus airoides</i>	33	0.6	0.2	1	
	VUMY	* <i>Vulpia myuros</i>	33	0.6	0.2	1	
	ATSE	* <i>Atriplex semibaccata</i>	33	0.2	0.2	0.20	
	AVBA	* <i>Avena barbata</i>	33	0.2	0.2	0.20	
	CRTR5	<i>Cressa truxillensis</i>	33	0.2	0.2	0.20	
	OXPE	* <i>Oxalis pes-caprae</i>	33	0.2	0.2	0.20	
	SOOL	* <i>Sonchus oleraceus</i>	33	0.2	0.2	0.20	

***Malacothamnus fasciculatus* Alliance**
Bush Mallow Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Malacothamnus fasciculatus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	52.8	40-65	-
Herb	16.0	1-30	0-0.5
Shrub	44.8	30-55	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	21.8	0-34	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SE (2), NW (1), NE (1), E (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (2), Lower to Upper 1/3 of slope (1)

Microtopography: undulating (2), concave (1), convex (1), flat (1)

Parent Material: Sedimentary (2), Diorite (1), Metamorphic (1)

Soil Texture: loam or sandy loam (3), sand (1), silt or silt loam (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	176 ft.	39-340 ft.
Slope	13°	0-30°
Large rock cover	31.6%	16-50%
Small rock cover	18.8%	2-50%
Bare ground cover	31.6%	2-79%
Litter cover	16.8%	2-35%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0422RB02, 1525EB01, 1526MM02, 1531EB03, 1817TK01

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Viguiera laciniata</i>	1 of 5	4.2	S3.2	G4	

STAND TABLE

Malacothamnus fasciculatus

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	MAFA	<i>Malacothamnus fasciculatus</i>	100	26.0	15.0	35	X
	MALA6	<i>Malosma laurina</i>	100	6.0	1.0	9	X
	ARCA11	<i>Artemisia californica</i>	80	2.1	0.2	3	X
	SAAP2	<i>Salvia apiana</i>	60	0.2	0.2	0.20	
	SAME3	<i>Salvia mellifera</i>	40	7.6	0.2	15	
	CETO	<i>Ceanothus tomentosus</i>	40	5.5	3.0	8	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	40	2.6	0.2	5	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	40	2.5	2.0	3	
	CELE2	<i>Ceanothus leucodermis</i>	40	2.0	1.0	3	
	BASA2	<i>Baccharis sarothroides</i>	40	1.1	0.2	2	
	LOSCS2	<i>Lotus scoparius</i> var. <i>scoparius</i>	40	1.1	0.2	2	
	ADFA	<i>Adenostoma fasciculatum</i>	40	0.6	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	40	0.6	0.2	1	
	RHCR	<i>Rhamnus crocea</i>	40	0.2	0.2	0.20	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	40	0.2	0.2	0.20	
	LOSC2	<i>Lotus scoparius</i>	20	5.0	5.0	5	
	BACCH	<i>Baccharis</i>	20	2.0	2.0	2	
	CECR	<i>Ceanothus crassifolius</i>	20	2.0	2.0	2	
	RHIN2	<i>Rhus integrifolia</i>	20	2.0	2.0	2	
	BRCA3	<i>Brickellia californica</i>	20	1.0	1.0	1	
	CNDU	<i>Cneoridium dumosum</i>	20	1.0	1.0	1	
	HASQ2	<i>Hazardia squarrosa</i>	20	1.0	1.0	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	20	1.0	1.0	1	
	LOSU2	<i>Lonicera subspicata</i>	20	1.0	1.0	1	
	LOSCB	<i>Lotus scoparius</i> var. <i>brevialatus</i>	20	1.0	1.0	1	
	TODI	<i>Toxicodendron</i>	20	1.0	1.0	1	
	ACCA3	<i>Acalypha californica</i>	20	0.2	0.2	0.20	
	ERFA2	<i>Eriogonum fasciculatum</i>	20	0.2	0.2	0.20	

	RHIL	<i>Rhamnus ilicifolia</i>	20	0.2	0.2	0.20
	VILA3	<i>Viguiera laciniata</i>	20	0.2	0.2	0.20
	XYBI	<i>Xylococcus bicolor</i>	20	0.2	0.2	0.20
Herb						
	CAMA24	<i>Calystegia macrostegia</i>	60	1.1	0.2	3
	BRRU2	* <i>Bromus rubens</i>	40	7.5	5.0	10
	VUMY	* <i>Vulpia myuros</i>	40	6.5	5.0	8
	BRMA3	* <i>Bromus madritensis</i>	40	4.5	2.0	7
	BRHO2	* <i>Bromus hordeaceus</i>	40	3.1	0.2	6
	BRDI3	* <i>Bromus diandrus</i>	40	3.0	1.0	5
	CEME2	* <i>Centaurea melitensis</i>	40	1.0	1.0	1
	BRDI2	* <i>Brachypodium distachyon</i>	20	20.0	20.0	20
	CUCA	<i>Cuscuta californica</i>	20	3.0	3.0	3
	HIIN3	* <i>Hirschfeldia incana</i>	20	3.0	3.0	3
	AVBA	* <i>Avena barbata</i>	20	2.0	2.0	2
	HEFA	<i>Deinandra fasciculata</i>	20	2.0	2.0	2
	HYGL2	* <i>Hypochaeris glabra</i>	20	1.0	1.0	1
	AVFA	* <i>Avena fatua</i>	20	0.2	0.2	0.20
	BLCRC	<i>Bloomeria crocea</i> var. <i>crocea</i>	20	0.2	0.2	0.20
	DICA14	<i>Dichelostemma capitatum</i>	20	0.2	0.2	0.20
	GAAN2	<i>Galium angustifolium</i>	20	0.2	0.2	0.20
	HEGR3	<i>Helianthus gracilentus</i>	20	0.2	0.2	0.20
	MILA6	<i>Mirabilis laevis</i>	20	0.2	0.2	0.20
	MURI2	<i>Muhlenbergia rigens</i>	20	0.2	0.2	0.20
	OSTE	<i>Osmadenia tenella</i>	20	0.2	0.2	0.20
	PEMUM	<i>Pellaea mucronata</i> ssp. <i>mucronata</i>	20	0.2	0.2	0.20
	PESE3	<i>Pennisetum setaceum</i>	20	0.2	0.2	0.20
	PSCA13	<i>Pseudognaphalium californicum</i>	20	0.2	0.2	0.20
	SIBE	<i>Sisyrinchium bellum</i>	20	0.2	0.2	0.20

***Malosma laurina* Alliance**

Laurel Sumac Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Malosma laurina*-*Lotus scoparius* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.2	10-85	-
Herb	23.4	2-65	0-1
Shrub	23.6	7-80	1-10
Hardwood	0.3	0-5	2-10
Conifer	0.0	0-0	-
Non-native plant presence	37.4	1-73	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (9), SE (6), NE (6), W (4), SW (4), NW (2), N (2), E (2), Flat (1)

Macrotopography: Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (6), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (4), Middle 1/3 of slope (12), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (1), Ridge top (1), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (22), convex (6), concave (5), flat (2)

Parent Material: Granitic (17), Metamorphic (15), Gabbro (2), Phyllite (1), Sedimentary (1)

Soil Texture: loam or sandy loam (15), clay or clay loam (5), sand (5), silt or silt loam (3)

General slope steepness: flat to steep

	Mean	Range
Elevation	307 ft.	113-504 ft.
Slope	20°	0-45°
Large rock cover	19.4%	0-78%
Small rock cover	16.6%	0-35%
Bare ground cover	35.7%	4-94%
Litter cover	25.5%	0-82%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=36)

Rapid Assessment(s): 0421RB01, 0422AK02, 0422AK04, 0422RB01, 0422RB03, 0423AK01, 0506TK02, 0507DH02, 0519AK01, 0519RB01, 0603JJ02, 0611AK01, 1069FS02, 1216MB01, 1216MM01, 1327KH01, 1393KG02, 1529MM01, 1536EB01, 1538JD01, 1539PG02, 1539PJ01, 1604EB01, SDG0008, SDG0020, SDG0031, SDG0039, SDG0040, SDG0048, SDG0108, SDG0109, SDG0116, SDRP0427, SDRP0477

Relevé(s): SDG0052, SDG0103

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	1 of 36	4.2	S3.2	G3	
<i>Ferocactus viridescens</i>	1 of 36	2.1	S3.1	G4	
<i>Tetracoccus dioicus</i>	1 of 36	1B.2	S2.2	G3	
<i>Viguiera laciniata</i>	8 of 36	4.2	S3.2	G4	

STAND TABLE

Malosma laurina-*Lotus scoparius*

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	MALA6	<i>Malosma laurina</i>	100	8.9	2.0	23	X
	ARCA11	<i>Artemisia californica</i>	75	1.2	0.2	5	
	LOSC2	<i>Lotus scoparius</i>	64	8.0	0.2	26	
	SAAP2	<i>Salvia apiana</i>	61	1.1	0.2	4	
	ERFA2	<i>Eriogonum fasciculatum</i>	53	1.7	0.2	8	
	RHCR	<i>Rhamnus crocea</i>	36	2.0	0.2	15	
	HEWH	<i>Hesperoyucca whipplei</i>	36	0.4	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	28	1.9	0.2	6	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	28	0.7	0.2	4	
	XYBI	<i>Xylococcus bicolor</i>	22	1.2	0.2	2	
	VILA3	<i>Viguiera laciniata</i>	22	1.1	0.2	3	
	HASQ2	<i>Hazardia squarrosa</i>	22	0.9	0.2	3	
	MAFA	<i>Malacothamnus</i> <i>fasciculatus</i>	22	0.9	0.2	3	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	58	6.4	1.0	15	
	CEME2	* <i>Centaurea melitensis</i>	47	2.4	0.2	10	
	HIIN3	* <i>Hirschfeldia incana</i>	44	6.3	0.2	50	
	VUMY	* <i>Vulpia myuros</i>	42	3.7	0.2	12	
	AVBA	* <i>Avena barbata</i>	36	5.0	0.2	23	
	CAMA24	<i>Calystegia macrostegia</i>	33	4.0	0.2	18	
	HYGL2	* <i>Hypochaeris glabra</i>	31	5.1	0.2	20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	28	0.4	0.2	1	
	ERIC6	* <i>Erodium cicutarium</i>	25	3.8	0.2	10	
	MILA6	<i>Mirabilis laevis</i>	25	0.6	0.2	4	
	CHAR	<i>Chaenactis artemisiifolia</i>	25	0.6	0.2	3	
	CRIN8	<i>Cryptantha intermedia</i>	22	1.5	0.2	5	

Pluchea sericea Alliance

Arrow Weed Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Pluchea sericea Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.8	32-68	-
Herb	17.7	0-32	0-1
Shrub	33.3	13-68	1-5
Hardwood	0.9	0-4	2-10
Conifer	0.0	0-0	-
Non-native plant presence	30.9	1-59	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2), SW (1), SE (1), NW (1), E (1)
Macrotopography: Bottom (4), Lower 1/3 of slope (2)
Microtopography: flat (4), convex (1), undulating (1)
Parent Material: Sandy alluvium (5), Mixed alluvium (1)
Soil Texture: loam or sandy loam (4), sand (2)
General slope steepness: flat to steep

	Mean	Range
Elevation	-10 ft.	-36-83 ft.
Slope	8°	0-40°
Large rock cover	0.0%	0-0%
Small rock cover	2.0%	0-6%
Bare ground cover	22.3%	5-41%
Litter cover	72.8%	50-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0310AK21, 0310RB21, 0310RB23, 0311AK26, 0505AK21, 0707DH03
Relevé(s): none

CONSERVATION STATUS RANK G4 S3.2

STAND TABLE

Pluchea sericea Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	PLSE	<i>Pluchea sericea</i>	100	32.7	12.0	68	X
	BAPI	<i>Baccharis pilularis</i>	33	1.6	0.2	3	
Herb							

BRDI3	* <i>Bromus diandrus</i>	50	22.7	19.0	27
DISP	<i>Distichlis spicata</i>	50	7.7	0.2	22
RASA2	* <i>Raphanus sativus</i>	33	0.6	0.2	1
BRNI	* <i>Brassica nigra</i>	33	0.2	0.2	0.20
FRSA	<i>Frankenia salina</i>	33	0.2	0.2	0.20

***Quercus berberidifolia* Alliance**
Scrub Oak Chaparral

ALLIANCE STAND TABLE

***Quercus berberidifolia*
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ADFA	<i>Adenostoma fasciculatum</i>	57	3.1	0.2	15	
	QUBE5	<i>Quercus berberidifolia</i>	50	35.0	8.0	70	
	QUAC3	<i>Quercus xacutidens</i> [cornelius-mulleri x engelmannii]	50	27.1	6.0	75	
	HEAR5	<i>Heteromeles arbutifolia</i>	43	2.1	0.2	6	
	LOSU2	<i>Lonicera subspicata</i>	40	1.4	0.2	5	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. confertiflorum	40	1.0	0.2	6	
	TODI	<i>Toxicodendron diversilobum</i>	38	2.4	0.2	6	
	RHIL	<i>Rhamnus ilicifolia</i>	36	2.8	0.2	8	
	XYBI	<i>Xylococcus bicolor</i>	33	3.2	0.2	12	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. aurantiacus	33	0.9	0.2	3	
	RHIN2	<i>Rhus integrifolia</i>	31	3.6	0.2	12	
	HASQ2	<i>Hazardia squarrosa</i>	31	0.6	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	29	4.9	0.2	16	
	RHOV	<i>Rhus ovata</i>	29	1.1	0.2	7	
	CEMOM	<i>Cercocarpus montanus</i> var. minutiflorus	26	7.6	1.0	20	
	MALA6	<i>Malosma laurina</i>	26	3.9	0.2	12	
	KECO	<i>Keckiella cordifolia</i>	24	3.0	0.2	10	
	MAFA	<i>Malacothamnus fasciculatus</i>	24	1.8	0.2	10	
	ARCA11	<i>Artemisia californica</i>	24	1.4	0.2	8	
	ERFA2	<i>Eriogonum fasciculatum</i>	21	1.3	0.2	5	
Herb							
	MAMAM4	<i>Marah macrocarpus</i> var. macrocarpus	45	1.1	0.2	5	
	BRMA3	* <i>Bromus madritensis</i>	40	6.1	0.2	28	
	VUMY	* <i>Vulpia myuros</i>	40	3.6	0.2	15	
	NALE2	<i>Nassella lepida</i>	21	0.4	0.2	1	

***Quercus (berberidifolia, xacutidens)* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	60.9	28-87	-
Herb	8.6	0-60	0-2
Shrub	55.3	19-86	1-10
Hardwood	0.2	0-2	1-15
Conifer	0.0	0-0	-
Non-native plant presence	9.6	0-45	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (8), NW (6), NE (5), W (4), Variable (1), S (1), E (1)

Macrotopography: Entire slope (1), Bottom (1), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (5), Bottom to Upper 1/3 of slope (2), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope (3), Middle to Upper 1/3 of slope (4), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (4), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (11), flat (8), convex (4), concave (3)

Parent Material: Metamorphic (9), Sedimentary (6), Granitic (5), Gabbro (2), Diorite (1), Mixed metamorphic (1)

Soil Texture: loam or sandy loam (16), sand (4), silt or silt loam (3), clay or clay loam (2)

General slope steepness: gentle to steep

	Mean	Range
Elevation	354 ft.	65-961 ft.
Slope	20°	4-45°
Large rock cover	11.2%	0-44%
Small rock cover	16.9%	0-43%
Bare ground cover	19.0%	1-65%
Litter cover	51.1%	3-87%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=26)

Rapid Assessment(s): 0506RB02, 0506RB23, 0609AK03, 0609RB01, 0610DH03, 0610TK03, 1038MB01, 1304JD02, 1361KH01, 1384JD01, 1561JD01, 1607MM01, 1607MM03, 1613MB01, 1645FS02, 1696LS01, 1702MB01, 1702PG01, 1710JD04, 1710JD07, 1710JD09, 1710JD12, 1737JD04, 1817TK02, SDRP0197

Relevé(s): SDG0053

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	1 of 26	2.1	S3.1	G3G4	
<i>Artemisia palmeri</i>	1 of 26	4.2	S3.2	G3	
<i>Ceanothus otayensis</i>	1 of 26	1B.2	S1.2	G1	
<i>Chamaebatia australis</i>	1 of 26	4.2	S3.2	G4	
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	1 of 26	1B.1	S1.1	G4T1	
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	1 of 26	1B.1	S1.1	G4T1	
<i>Ferocactus viridescens</i>	1 of 26	2.1	S3.1	G4	
<i>Lepechinia ganderi</i>	2 of 26	1B.3	S2.2	G2	
<i>Mimulus clevelandii</i>	1 of 26	4.2	S3.2	G3G4	
<i>Pickeringia montana</i> var. <i>tomentosa</i>	2 of 26	4.3	S2S4.3	G5T2T4	
<i>Polygala cornuta</i> var. <i>fishiae</i>	2 of 26	4.3	S3.3	G5T4	
<i>Quercus dumosa</i>	1 of 26	1B.1	S1.1	G1G2	
<i>Quercus engelmannii</i>	1 of 26	4.2	S3.2	G3	

STAND TABLE

Quercus (*berberidifolia*, *xacutidens*)

Association

<u>Lifeform</u>	<u>Code</u>	<u>Species Name</u>	<u>Con</u>	<u>Avg</u>	<u>Min</u>	<u>Max</u>	<u>Diagnostic</u>
Shrub							
	HEAR5	<i>Heteromeles arbutifolia</i>	54	1.9	0.2	6	
	QUBE5	<i>Quercus berberidifolia</i>	50	46.2	15.0	70	
	QUAC3	<i>Quercus xacutidens</i> [<i>cornelius-mulleri</i> x <i>engelmannii</i>]	50	33.6	6.0	75	
	ADFA	<i>Adenostoma fasciculatum</i>	50	3.4	0.2	15	
	RHIN2	<i>Rhus integrifolia</i>	42	2.4	0.2	10	
	LOSU2	<i>Lonicera subspicata</i>	38	1.2	0.2	5	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	35	1.4	0.2	6	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	35	0.9	0.2	3	
	XYBI	<i>Xylococcus bicolor</i>	31	3.6	1.0	12	
	TODI	<i>Toxicodendron</i>	31	2.3	0.2	6	
	LOSC2	<i>Lotus scoparius</i>	27	2.6	0.2	7	
	HASQ2	<i>Hazardia squarrosa</i>	27	0.5	0.2	1	
	ARGL3	<i>Arctostaphylos glandulosa</i>	23	4.7	0.2	10	

Herb	HESC2	<i>Helianthemum scoparium</i>	23	2.2	0.2	9
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	38	0.6	0.2	3
	VUMY	* <i>Vulpia myuros</i>	35	2.7	0.2	7
	BRMA3	* <i>Bromus madritensis</i>	27	6.8	0.2	28
	NALE2	<i>Nassella lepida</i>	27	0.3	0.2	1

***Quercus (berberidifolia, xacutidens)-Cercocarpus montanus* var. *minutiflorus* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Santa Margarita (MA), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	56.3	34-85	-
Herb	16.0	3-37	0-1
Shrub	43.6	27-77	1-5
Hardwood	1.0	0-5	5-10
Conifer	0.0	0-0	-
Non-native plant presence	17.4	0-56	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (4), NW (3), SW (1), E (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (1), Upper 1/3 of slope (3)

Microtopography: flat (3), undulating (3), convex (2), concave (1)

Parent Material: Granitic (3), Metamorphic (3), Gabbro (1), Volcanic (1)

Soil Texture: Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (1), Upper 1/3 of slope (3)

General slope steepness: somewhat steep to steep

	Mean	Range
Elevation	371 ft.	75-856 ft.
Slope	28°	15-40°
Large rock cover	8.8%	0-18%
Small rock cover	19.4%	3-45%
Bare ground cover	17.1%	5-30%
Litter cover	52.8%	5-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 0311AK23, 0505RB02, 0521TK02, 0604DH01, 1068MB01, 1133KH01, 1393MB02, 1546JD01, 1799JD02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Ceanothus verrucosus</i>	1 of 9	2.2	S2.2	G3	
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	1 of 9	1B.1	S1.1	G4T1	
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	1 of 9	1B.1	S1.1	G4T1	
<i>Satureja chandleri</i>	1 of 9	1B.2	S3.2?	G4	

STAND TABLE

Quercus (berberidifolia, xacutidens)-Cercocarpus montanus* var. *minutiflorus
Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	22	2.6	0.2	5	
Shrub	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	89	9.9	4.0	20	X
	QUAC3	<i>Quercus xacutidens</i> [cornelius-mulleri x engelmannii]	67	14.0	10.0	20	
	ADFA	<i>Adenostoma fasciculatum</i>	67	2.9	0.2	6	
	MALA6	<i>Malosma laurina</i>	44	4.5	1.0	12	
	KECO	<i>Keckiella cordifolia</i>	44	3.6	0.2	10	
	HEAR5	<i>Heteromeles arbutifolia</i>	44	2.6	0.2	5	
	RHIL	<i>Rhamnus ilicifolia</i>	44	2.5	1.0	5	
	LOSU2	<i>Lonicera subspicata</i>	44	2.1	0.2	5	
	TODI	<i>Toxicodendron</i>	44	1.9	0.2	5	
	QUBE5	<i>Quercus berberidifolia</i>	33	14.3	8.0	21	
	RHCR	<i>Rhamnus crocea</i>	33	3.1	0.2	5	
	SAME3	<i>Salvia mellifera</i>	33	3.0	2.0	4	
	XYBI	<i>Xylococcus bicolor</i>	33	2.1	0.2	5	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	1.1	0.2	2	
	ARCA11	<i>Artemisia californica</i>	33	0.8	0.2	2	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	33	0.7	0.2	1	
	MAFA	<i>Malacothamnus fasciculatus</i>	33	0.2	0.2	0.20	

	RHIN2	<i>Rhus integrifolia</i>	22	10.5	9.0	12
	RHOV	<i>Rhus ovata</i>	22	4.5	2.0	7
	LOSC2	<i>Lotus scoparius</i>	22	2.1	0.2	4
	HASQ2	<i>Hazardia squarrosa</i>	22	0.6	0.2	1
	CLLA3	<i>Clematis lasiantha</i>	22	0.2	0.2	0.20
	HEWH	<i>Hesperoyucca whipplei</i>	22	0.2	0.2	0.20
Herb						
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	56	1.3	0.2	5
	BRMA3	* <i>Bromus madritensis</i>	33	7.3	1.0	13
	BRRU2	* <i>Bromus rubens</i>	22	15.5	7.0	24
	CEME2	* <i>Centaurea melitensis</i>	22	7.5	1.0	14
	BRDI3	* <i>Bromus diandrus</i>	22	6.6	0.2	13
	VUMY	* <i>Vulpia myuros</i>	22	6.5	4.0	9
	HIIN3	* <i>Hirschfeldia incana</i>	22	2.5	1.0	4
	GAAP2	<i>Galium aparine</i>	22	1.1	0.2	2
	ACMI3	<i>Acourtia microcephala</i>	22	0.6	0.2	1
	ADJO	<i>Adiantum jordanii</i>	22	0.6	0.2	1
	PETR7	<i>Pentagramma triangularis</i>	22	0.6	0.2	1
	MEIM	<i>Melica imperfecta</i>	22	0.2	0.2	0.20
	PSCA13	<i>Pseudognaphalium californicum</i>	22	0.2	0.2	0.20

***Quercus (berberidifolia, xacutidens)-Ceanothus leucodermis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Santa Margarita (MA)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	50.0	40-60	-
Herb	13.5	3-25	0-1
Shrub	41.0	32-56	1-5
Hardwood	1.5	0-9	5-10
Conifer	0.0	0-0	-
Non-native plant presence	19.6	0-44	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (3), Variable (1), NW (1), E (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (3)

Microtopography: convex (2), flat (2), undulating (2)

Parent Material: Granitic (5), Metamorphic (1)

Soil Texture: Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (3)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	438 ft.	295-602 ft.
Slope	17°	4-26°
Large rock cover	8.1%	1-18%
Small rock cover	15.0%	1-27%
Bare ground cover	24.8%	2-40%
Litter cover	50.2%	22-93%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=6)

Rapid Assessment(s): 0423TK02, 0505AK01, 0505AK02, 0506RB01, 0610AK04, 1292TK01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	1 of 6	1B.2	S2.2	G4T2	

STAND TABLE

Quercus (berberidifolia, xacutidens)-Ceanothus leucodermis Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	CELE2	<i>Ceanothus leucodermis</i>	100	8.2	1.0	26	X
	QUBE5	<i>Quercus berberidifolia</i>	83	18.6	10.0	27	X
	ADFA	<i>Adenostoma fasciculatum</i>	83	2.4	1.0	4	X
	RHIL	<i>Rhamnus ilicifolia</i>	83	1.6	1.0	2	X
	TODI	<i>Toxicodendron</i>	67	3.3	1.0	5	
	MAFA	<i>Malacothamnus fasciculatus</i>	67	1.6	0.2	5	
	ERFA2	<i>Eriogonum fasciculatum</i>	67	1.2	0.2	4	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	67	0.6	0.2	1	
	HASQ2	<i>Hazardia squarrosa</i>	67	0.6	0.2	1	
	RHOV	<i>Rhus ovata</i>	67	0.4	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	50	12.0	6.0	16	
	XYBI	<i>Xylococcus bicolor</i>	50	3.1	0.2	7	
	LOSU2	<i>Lonicera subspicata</i>	50	1.1	0.2	2	
	ARCA11	<i>Artemisia californica</i>	50	0.5	0.2	1	
	MALA6	<i>Malosma laurina</i>	33	2.5	2.0	3	

	HESC2	<i>Helianthemum scoparium</i>	33	1.0	1.0	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	33	0.6	0.2	1	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	100	5.5	0.2	14	X
	VUMY	* <i>Vulpia myuros</i>	83	4.6	0.2	15	X
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	67	2.3	1.0	4	
	LOGA2	* <i>Logfia gallica</i>	50	1.1	0.2	2	
	PTDR	<i>Pterostegia drymarioides</i>	33	3.6	0.2	7	
	BRDI3	* <i>Bromus diandrus</i>	33	3.0	1.0	5	
	CRIN8	<i>Cryptantha intermedia</i>	33	2.5	2.0	3	
	HYGL2	* <i>Hypochaeris glabra</i>	33	2.5	1.0	4	
	APAN	<i>Apiastrum angustifolium</i>	33	0.2	0.2	0.20	
	NAHA2	<i>Navarretia hamata</i>	33	0.2	0.2	0.20	

***Quercus berberidifolia*-*Adenostoma fasciculatum* Alliance**
Scrub Oak-Chamise Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Quercus (berberidifolia, xacutidens)*-*Adenostoma fasciculatum* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.8	30-85	-
Herb	7.7	0-25	0-2
Shrub	44.1	25-85	1-5
Hardwood	0.3	0-2	2-10
Conifer	0.0	0-0	-
Non-native plant presence	9.3	0-36	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (4), Variable (1), SW (1), S (1), N (1)

Macrotopography: Bottom to Mid 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (1), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope to Ridgetop (1)

Microtopography: undulating (6), convex (1), flat (1)

Parent Material: Granitic (5), Metamorphic (3)

Soil Texture: Bottom to Mid 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (1), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope to Ridgetop (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	430 ft.	187-620 ft.
Slope	13°	4-30°
Large rock cover	18.4%	1-55%
Small rock cover	17.1%	0-63%
Bare ground cover	31.1%	5-60%
Litter cover	32.7%	0-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=8)

Rapid Assessment(s): 0605RB01, 1029MB01, 1224FS01, 1225FS01, 1251TK01, 1274TK03, 1362LW01, SDRP0331

Relevé(s): none

CONSERVATION STATUS RANK G4 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

Scientific Name	# of	CNPS List	Global	State Rank	Fed Status
<i>Arctostaphylos rainbowensis</i>	1 of 8	1B.1	S2.1	G2	
<i>Brodiaea orcuttii</i>	1 of 8	1B.1	S3.1	G3	
<i>Ceanothus verrucosus</i>	1 of 8	2.2	S2.2	G3	
<i>Quercus engelmannii</i>	1 of 8	4.2	S3.2	G3	

STAND TABLE

Quercus (berberidifolia, xacutidens)-Adenostoma fasciculatum Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	25	1.6	0.2	3	
Shrub	ADFA	<i>Adenostoma fasciculatum</i>	100	14.1	3.0	30	X
	QUAC3	<i>Quercus xacutidens</i> [cornelius-mulleri x engelmannii]	88	20.9	5.0	60	X
	LOSC2	<i>Lotus scoparius</i>	75	2.6	0.2	10	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. confertiflorum	63	1.3	0.2	5	
	CETO	<i>Ceanothus tomentosus</i>	50	6.5	2.0	9	

	MALA6	<i>Malosma laurina</i>	50	2.8	1.0	6
	XYBI	<i>Xylococcus bicolor</i>	50	0.2	0.2	0.20
	HESC2	<i>Helianthemum scoparium</i>	38	8.1	0.2	20
	SAAP2	<i>Salvia apiana</i>	38	1.8	0.2	5
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	38	0.8	0.2	2
	RHIL	<i>Rhamnus ilicifolia</i>	38	0.5	0.2	1
	CEMOM	<i>Cercocarpus montanus</i> var. <i>minutiflorus</i>	25	0.6	0.2	1
	LOSU2	<i>Lonicera subspicata</i>	25	0.6	0.2	1
	HASQ2	<i>Hazardia squarrosa</i>	25	0.2	0.2	0.20
	HEWH	<i>Hesperoyucca whipplei</i>	25	0.2	0.2	0.20
Herb	BRMA3	* <i>Bromus madritensis</i>	50	3.3	1.0	8
	VUMY	* <i>Vulpia myuros</i>	25	4.5	3.0	6
	CRIN8	<i>Cryptantha intermedia</i>	25	0.6	0.2	1
	MEIM	<i>Melica imperfecta</i>	25	0.6	0.2	1
	HYGL2	* <i>Hypochaeris glabra</i>	25	0.2	0.2	0.20
	NALE2	<i>Nassella lepida</i>	25	0.2	0.2	0.20
	PSCA13	<i>Pseudognaphalium</i> <i>californicum</i>	25	0.2	0.2	0.20

***Quercus cedrosensis* Special Stands**

Cedros Island Oak Stands

***Quercus cedrosensis* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	50.0	50-50	-
Herb	8.0	8-8	0-0.5
Shrub	45.0	45-45	2-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	10.0	10-10	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1)

Macrotopography: Middle 1/3 of slope (1)

Microtopography: flat (1)

Parent Material: Metamorphic (1)

Soil Texture: Middle 1/3 of slope (1)
General slope steepness: moderate to moderate

	Mean	Range
Elevation	309 ft.	309-309 ft.
Slope	10°	10-10°
Large rock cover	65.0%	65-65%
Small rock cover	20.0%	20-20%
Bare ground cover	4.0%	4-4%
Litter cover	10.0%	10-10%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 1388FS01
Relevé(s): none

CONSERVATION STATUS RANK G1? S1.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Monardella stoneana</i>	1 of 1	1B.2	S1.2	G1	
<i>Quercus cedrosensis</i>	1 of 1	2.2	S1.2	G2?	

STAND TABLE

Quercus cedrosensis Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	QUCE2	<i>Quercus cedrosensis</i>	100	35.0	35.0	35	X
	MALA6	<i>Malosma laurina</i>	100	5.0	5.0	5	X
	BASA2	<i>Baccharis sarothroides</i>	100	2.0	2.0	2	X
	ROTR2	<i>Romneya trichocalyx</i>	100	2.0	2.0	2	X
	RHCR	<i>Rhamnus crocea</i>	100	0.2	0.2	0.20	X
Herb							
	BRRU2	* <i>Bromus rubens</i>	100	5.0	5.0	5	X
	CUCA	<i>Cuscuta californica</i>	100	0.2	0.2	0.20	X
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	100	0.2	0.2	0.20	X
	n/a	<i>Monardella stoneana</i>	100	0.2	0.2	0.20	X
	SCCA2	<i>Scrophularia californica</i>	100	0.2	0.2	0.20	X

Quercus dumosa Alliance Leather Oak Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Quercus dumosa Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	48.8	30-75	-
Herb	7.8	0-30	0-2
Shrub	43.3	17-70	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	5-10
Non-native plant presence	7.5	0-63	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (4), Variable (3), SE (1), S (1), NW (1), NE (1), E (1)

Macrotopography: Bottom (1), Bottom to Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (4), Upper 1/3 of slope to Ridgetop (1)

Microtopography: convex (5), undulating (4), concave (2), flat (1)

Parent Material: Sandstone (4), Sedimentary (4), Conglomerate (2)

Soil Texture: Bottom (1), Bottom to Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (4), Upper 1/3 of slope to Ridgetop (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	62 ft.	22-105 ft.
Slope	18°	2-32°
Large rock cover	3.5%	0-24%
Small rock cover	10.7%	0-29%
Bare ground cover	17.3%	6-36%
Litter cover	66.3%	35-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=12)

Rapid Assessment(s): 0308AK21, 0309AK25, 0309DH22, 0309RB23, 0310DH24, 0624JS01, 0708AK03, 1299JD02, 1299JD03, 1546JD02, 1737MM01, SDRP0283

Relevé(s): none

CONSERVATION STATUS RANK G2 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	3 of 12	2.1	S3.1	G3G4	
<i>Ceanothus verrucosus</i>	1 of 12	2.2	S2.2	G3	
<i>Coreopsis maritima</i>	1 of 12	2.2	S2.2	G3	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	1 of 12	1B.2	S1.2	G1T1	
<i>Quercus dumosa</i>	12 of 12	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	1 of 12	4.1	S3S4	G3G4	

STAND TABLE

Quercus dumosa Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	QUDU	<i>Quercus dumosa</i>	100	27.3	14.0	48	X
	RHIN2	<i>Rhus integrifolia</i>	83	4.2	0.2	11	X
	ADFA	<i>Adenostoma fasciculatum</i>	75	4.5	0.2	18	
	SAME3	<i>Salvia mellifera</i>	67	1.9	0.2	5	
	HEAR5	<i>Heteromeles arbutifolia</i>	67	1.0	0.2	2	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	50	0.5	0.2	2	
	ARCA11	<i>Artemisia californica</i>	33	4.3	0.2	8	
	LOSU2	<i>Lonicera subspicata</i>	33	0.2	0.2	0.20	
	XYBI	<i>Xylococcus bicolor</i>	25	5.1	0.2	12	
	ADCA2	<i>Adolphia californica</i>	25	1.8	0.2	5	
	HASQ2	<i>Hazardia squarrosa</i>	25	0.5	0.2	1	
	YUSC2	<i>Yucca schidigera</i>	25	0.5	0.2	1	
Herb	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	42	1.1	0.2	3	
	BRMA3	* <i>Bromus madritensis</i>	33	0.9	0.2	2	
	GAPOP	<i>Galium porrigens</i> var. <i>porrigens</i>	33	0.2	0.2	0.20	
	CLPE	<i>Claytonia perfoliata</i>	25	7.3	1.0	18	
	VUMY	* <i>Vulpia myuros</i>	25	3.1	0.2	7	
	NALE2	<i>Nassella lepida</i>	25	0.2	0.2	0.20	
Cryptogam							
	2MOSS	<i>Moss</i>	33	1.6	0.2	2	

Rhamnus crocea Provisional Alliance Spiny Redberry Chaparral

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Rhamnus crocea Provisional Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	46.2	25-70	-
Herb	30.0	7-70	0-1
Shrub	21.0	10-32	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	38.6	24-80	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (2), NE (1), N (1), E (1)

Macrotopography: Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (1)

Microtopography: undulating (2), convex (1), concave (1), flat (1)

Parent Material: Metamorphic (3), Clayey alluvium (1), Volcanic (1)

Soil Texture: Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (1)

General slope steepness: somewhat steep to steep

	Mean	Range
Elevation	232 ft.	145-371 ft.
Slope	26°	20-32°
Large rock cover	13.4%	0-40%
Small rock cover	23.8%	0-60%
Bare ground cover	42.6%	23-54%
Litter cover	14.2%	2-30%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0311AK21, 1393FS01, 1478MM01, 1604EB02, 1604JD02

Relevé(s): none

CONSERVATION STATUS RANK G3? S3.2?

STAND TABLE

Rhamnus crocea

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	RHCR	<i>Rhamnus crocea</i>	100	12.0	4.0	18	X
	MALA6	<i>Malosma laurina</i>	100	2.8	0.2	5	X
	SAAP2	<i>Salvia apiana</i>	100	1.8	1.0	3	X
	ARCA11	<i>Artemisia californica</i>	60	2.3	2.0	3	
	HEAR5	<i>Heteromeles arbutifolia</i>	60	1.4	0.2	3	
	HASQ2	<i>Hazardia squarrosa</i>	60	0.7	0.2	1	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	40	5.0	2.0	8	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	40	2.5	1.0	4	
	LOSC2	<i>Lotus scoparius</i>	40	1.0	1.0	1	
	MAFA	<i>Malacothamnus fasciculatus</i>	40	0.6	0.2	1	
	SAME3	<i>Salvia mellifera</i>	20	7.0	7.0	7	
	ERFA2	<i>Eriogonum fasciculatum</i>	20	2.0	2.0	2	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	20	1.0	1.0	1	
	LOSCS2	<i>Lotus scoparius</i> var. <i>scoparius</i>	20	1.0	1.0	1	
	BASA2	<i>Baccharis sarothroides</i>	20	0.2	0.2	0.20	
	HEWH	<i>Hesperoyucca whipplei</i>	20	0.2	0.2	0.20	
	ISME5	<i>Isocoma menziesii</i>	20	0.2	0.2	0.20	
Herb							
	BRRU2	* <i>Bromus rubens</i>	80	7.0	1.0	20	X
	BRHO2	* <i>Bromus hordeaceus</i>	80	1.5	1.0	2	X
	AVBA	* <i>Avena barbata</i>	60	3.0	1.0	7	
	VUMY	* <i>Vulpia myuros</i>	40	13.5	12.0	15	
	CEME2	* <i>Centaurea melitensis</i>	40	2.0	1.0	3	
	NALE2	<i>Nassella lepida</i>	40	2.0	1.0	3	
	LUBI	<i>Lupinus bicolor</i>	40	1.1	0.2	2	
	NAPU4	<i>Nassella pulchra</i>	40	0.6	0.2	1	
	PSCA13	<i>Pseudognaphalium californicum</i>	40	0.6	0.2	1	
	BRMA3	* <i>Bromus madritensis</i>	40	0.2	0.2	0.20	
	CAMA24	<i>Calystegia macrostegia</i>	40	0.2	0.2	0.20	
	GAPH2	* <i>Gastidium phleoides</i>	40	0.2	0.2	0.20	
	SIBE	<i>Sisyrinchium bellum</i>	40	0.2	0.2	0.20	
	HIIN3	* <i>Hirschfeldia incana</i>	20	40.0	40.0	40	
	BRDI3	* <i>Bromus diandrus</i>	20	25.0	25.0	25	
	ERBO	* <i>Erodium botrys</i>	20	20.0	20.0	20	
	ERCI6	* <i>Erodium cicutarium</i>	20	20.0	20.0	20	
	CLPE	<i>Claytonia perfoliata</i>	20	5.0	5.0	5	
	HEFA	<i>Deinandra fasciculata</i>	20	3.0	3.0	3	
	SANU6	<i>Sairoparpus nuttallianus</i>	20	3.0	3.0	3	
	CLPUQ	<i>Clarkia purpurea</i> ssp.	20	2.0	2.0	2	

	<i>quadrivulnera</i>				
ERFOF	<i>Erigeron foliosus</i> var. <i>foliosus</i>	20	2.0	2.0	2
ACMI2	<i>Achillea millefolium</i>	20	1.0	1.0	1
APAR2	<i>Aphanes arvensis</i>	20	1.0	1.0	1
CASTI2	<i>Castilleja</i>	20	1.0	1.0	1
DOCLC	<i>Dodecatheon clevelandii</i> <i>ssp. clevelandii</i>	20	1.0	1.0	1
GAPOP	<i>Galium porrigens</i> var. <i>porrigens</i>	20	1.0	1.0	1
MEIM	<i>Melica imperfecta</i>	20	1.0	1.0	1
RELU2	* <i>Reseda luteola</i>	20	1.0	1.0	1
CALOC	<i>Calochortus</i>	20	0.2	0.2	0.20
CAWE	<i>Calochortus weedii</i>	20	0.2	0.2	0.20
CRCO34	<i>Crassula connata</i>	20	0.2	0.2	0.20
CRIN8	<i>Cryptantha intermedia</i>	20	0.2	0.2	0.20
CUSCU	<i>Cuscuta</i>	20	0.2	0.2	0.20
DAPU3	<i>Daucus pusillus</i>	20	0.2	0.2	0.20
GAAN2	<i>Galium angustifolium</i>	20	0.2	0.2	0.20
JEPA	<i>Jepsonia parryi</i>	20	0.2	0.2	0.20
LEGL18	<i>Lessingia glandulifera</i>	20	0.2	0.2	0.20
LOHA2	<i>Lotus hamatus</i>	20	0.2	0.2	0.20
MILI5	<i>Microseris lindleyi</i>	20	0.2	0.2	0.20
OSTE	<i>Osmadenia tenella</i>	20	0.2	0.2	0.20
PSCA11	<i>Pseudognaphalium</i> <i>canescens</i>	20	0.2	0.2	0.20
SCCAF2	<i>Scrophularia californica</i> <i>ssp. floribunda</i>	20	0.2	0.2	0.20
SIGA	* <i>Silene gallica</i>	20	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	20	10.0	10.0	10
2LICHN	<i>Lichen</i>	20	2.0	2.0	2
2LW	<i>Liverwort</i>	20	1.0	1.0	1

***Rhus integrifolia* Alliance**
Lemonade Berry Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Rhus integrifolia* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	67.4	37-95	-
Herb	5.2	0-11	0-5
Shrub	63.6	28-95	2-10
Hardwood	0.0	0-0	-
Conifer	0.2	0-2	-
Non-native plant presence	4.8	0-15	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (7), W (2), NW (2), Variable (1), SW (1), NE (1)

Macrotopography: Entire slope (1), Bottom (1), Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (4), Lower to Upper 1/3 of slope (3), Upper 1/3 of slope (1), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (9), concave (3), convex (1), flat (1)

Parent Material: Sandstone (4), Sedimentary (3), Conglomerate (1), Metamorphic (1), Sandy alluvium (1)

Soil Texture: Entire slope (1), Bottom (1), Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (4), Lower to Upper 1/3 of slope (3), Upper 1/3 of slope (1), Lower 1/3 of slope to Ridgetop (1)

General slope steepness: gentle to very steep

	Mean	Range
Elevation	63 ft.	16-129 ft.
Slope	21°	3-50°
Large rock cover	3.9%	0-25%
Small rock cover	10.7%	0-36%
Bare ground cover	27.2%	2-48%
Litter cover	56.0%	12-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0623DH03, 0625DH04, 0625JS01, 0706DH01, 0706TK05, 1520KH02, 1602KH01, 1620JD01, 1625MB01, 1710JD10, SDRP0096, SDRP0251, SDRP0256, SDRP0284
Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 14	4.2	S3.2	G3	
<i>Ceanothus verrucosus</i>	1 of 14	2.2	S2.2	G3	
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	2 of 14	1B.2	S2.2	G3T2	
<i>Coreopsis maritima</i>	1 of 14	2.2	S2.2	G3	
<i>Iva hayesiana</i>	1 of 14	2.2	S2.2?	G3?	
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	1 of 14	4.2	S3.2	G5T5	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	1 of 14	1B.2	S1.2	G1T1	
<i>Quercus dumosa</i>	1 of 14	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	1 of 14	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	1 of 14	4.2	S3.2	G4	

STAND TABLE

***Rhus integrifolia*
Association**

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						
RHIN2	<i>Rhus integrifolia</i>	100	48.2	14.0	85	X
ARCA11	<i>Artemisia californica</i>	86	4.8	0.2	20	X
HEAR5	<i>Heteromeles arbutifolia</i>	64	4.2	0.2	20	
DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	64	1.4	0.2	8	
SAME3	<i>Salvia mellifera</i>	57	2.9	0.2	9	
MALA6	<i>Malosma laurina</i>	50	5.3	0.2	13	
ENCA	<i>Encelia californica</i>	43	0.8	0.2	3.20	
XYBI	<i>Xylococcus bicolor</i>	36	3.9	0.2	10	
OPLI3	<i>Opuntia littoralis</i>	29	2.1	0.2	5	
RHCR	<i>Rhamnus crocea</i>	29	0.4	0.2	1	
ERFA2	<i>Eriogonum fasciculatum</i>	21	1.7	0.2	4	
NIGL	* <i>Nicotiana glauca</i>	21	0.5	0.2	1	
RISP	<i>Ribes speciosum</i>	21	0.5	0.2	1	
SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	21	0.5	0.2	1	
Herb						

BRMA3	* <i>Bromus madritensis</i>	43	3.4	0.2	8
MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	36	0.9	0.2	2
NALE2	<i>Nassella lepida</i>	29	1.1	0.2	3
LECO12	<i>Leymus condensatus</i>	29	1.1	0.2	2
CEME2	* <i>Centaurea melitensis</i>	29	0.4	0.2	1
FOVU	* <i>Foeniculum vulgare</i>	21	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	21	4.4	0.2	8

***Salix exigua* Alliance**
Sandbar Willow Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because only one stand of this type was sampled within the study area.

***Salix lasiolepis* Alliance**
Arroyo Willow Thickets

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Salix lasiolepis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	56.2	24-90	-
Herb	18.8	0-45	0-5
Shrub	40.9	11-90	1-10
Hardwood	5.6	0-25	0.5-20
Conifer	0.0	0-0	-
Non-native plant presence	13.7	0-69	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (4), W (3), SW (3), S (3), NW (2), SE (1)

Macrotopography: Bottom (16)

Microtopography: flat (9), concave (6), undulating (1)

Parent Material: Mixed alluvium (4), Sandy alluvium (4), Silty alluvium (3), Granitic (1), Sandstone (1)

Soil Texture: Bottom (16)

General slope steepness: flat to gentle

	Mean	Range
Elevation	60 ft.	-36-309 ft.
Slope	1°	0-3°
Large rock cover	3.9%	0-35%
Small rock cover	3.0%	0-10%
Bare ground cover	21.8%	5-78%
Litter cover	65.3%	20-88%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=16)

Rapid Assessment(s): 0310TK21, 0311TK25, 0421TK03, 0504TK21, 0624RB01, 0625DH03, 0625DH05, 0707RB02, 0709JS02, 0709RB01, 1702FS01, 1766KH01, SDRP0066, SDRP0095, SDRP0339

Relevé(s): 1730KH02

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	1 of 16	4.2	S3.2	G3	
<i>Iva hayesiana</i>	2 of 16	2.2	S2.2?	G3?	
<i>Juncus acutus ssp. leopoldii</i>	5 of 16	4.2	S3.2	G5T5	

STAND TABLE

Salix lasiolepis

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	38	4.2	1.0	8	
	PLRA	<i>Platanus racemosa</i>	38	1.4	0.2	5	
Shrub							
	SALA6	<i>Salix lasiolepis</i>	100	33.7	9.0	88	X
	BASA4	<i>Baccharis salicifolia</i>	63	9.2	0.2	30	
	SAEX	<i>Salix exigua</i>	25	5.3	0.2	10	
	BAPI	<i>Baccharis pilularis</i>	25	1.2	0.2	4	

Herb	HEAR5	<i>Heteromeles arbutifolia</i>	25	0.2	0.2	0.20
	ANCA10	<i>Anemopsis californica</i>	50	2.5	0.2	10
	CASP6	<i>Carex spissa</i>	31	8.5	0.2	37
	ARDO3	<i>Artemisia douglasiana</i>	31	1.7	0.2	6
	JUACL	<i>Juncus acutus</i> ssp.	31	0.4	0.2	1
	BRDI3	* <i>Bromus diandrus</i>	25	15.8	0.2	30
	APGR2	* <i>Apium graveolens</i>	25	2.1	0.2	7
	CYPER	<i>Cyperus</i>	25	0.2	0.2	0.20

***Salvia apiana* Alliance**
White Sage Scrub

ALLIANCE STAND TABLE

Salvia apiana
Alliance

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	SAAP2	<i>Salvia apiana</i>	100	9.7	4.0	20	X
	ARCA11	<i>Artemisia californica</i>	79	11.7	0.2	35	
	ERFA2	<i>Eriogonum fasciculatum</i>	74	2.6	0.2	15	
	MALA6	<i>Malosma laurina</i>	68	3.6	1.0	12	
	LOSC2	<i>Lotus scoparius</i>	47	1.1	0.2	8	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	47	0.8	0.2	6	
	RHCR	<i>Rhamnus crocea</i>	37	1.4	0.2	7	
	HASQ2	<i>Hazardia squarrosa</i>	37	0.6	0.2	2	
	GUCA	<i>Gutierrezia californica</i>	26	1.7	0.2	4	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	26	0.7	0.2	2	
	HEWH	<i>Hesperoyucca whipplei</i>	26	0.2	0.2	0.2	
Herb	BRMA3	* <i>Bromus madritensis</i>	53	3.2	0.2	12	
	HIIN3	* <i>Hirschfeldia incana</i>	47	2.2	0.2	10	
	VUMY	* <i>Vulpia myuros</i>	37	4.6	0.2	12	
	CEME2	* <i>Centaurea melitensis</i>	32	1.8	0.2	4	
	ERODI	* <i>Erodium</i>	26	27.8	2.0	45	
	COFI2	<i>Corethrogyne filaginifolia</i>	26	0.4	0.2	1	
	ERIC6	* <i>Erodium cicutarium</i>	21	11.0	1.0	23	
	CAMA24	<i>Calystegia macrostegia</i>	21	1.8	0.2	4	
	AVBA	* <i>Avena barbata</i>	21	0.4	0.2	1	

***Salvia apiana* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Palomar - Cuyamaca Peak (M262Bo), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Mountains (NM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	32.2	25-42	-
Herb	19.8	7-30	0-0.5
Shrub	14.0	11-21	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	40.2	0-68	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: N (2), SW (1), SE (1), NE (1)

Macrotopography: Lower 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (3)

Microtopography: convex (2), flat (1), undulating (1), concave (1)

Parent Material: Granitic (3), Metamorphic (1), Sandstone (1)

Soil Texture: Lower 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (3)

General slope steepness: moderate to steep

	Mean	Range
Elevation	479 ft.	234-1017 ft.
Slope	24°	6-45°
Large rock cover	2.5%	0-7%
Small rock cover	38.4%	29-62%
Bare ground cover	47.6%	30-60%
Litter cover	9.2%	4-25%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0504RB21, 0506RB03, 0602RB01, 0603RB04, 0604RB01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	2 of 5	4.2	S3.2	G3	

STAND TABLE

Salvia apiana

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	SAAP2	<i>Salvia apiana</i>	100	8.4	5.0	12	X
	LOSC2	<i>Lotus scoparius</i>	100	1.8	0.2	8	X
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	80	1.7	0.2	6	X
	HASQ2	<i>Hazardia squarrosa</i>	80	0.4	0.2	1	X
	HEWH	<i>Hesperoyucca whipplei</i>	60	0.2	0.2	0.20	
	RHCR	<i>Rhamnus crocea</i>	40	4.0	1.0	7	
	MALA6	<i>Malosma laurina</i>	40	1.5	1.0	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	40	0.6	0.2	1	
	ADFA	<i>Adenostoma fasciculatum</i>	40	0.2	0.2	0.20	
	HESC2	<i>Helianthemum scoparium</i>	40	0.2	0.2	0.20	
	GUCA	<i>Gutierrezia californica</i>	20	4.0	4.0	4	
	ARCA11	<i>Artemisia californica</i>	20	0.2	0.2	0.20	
	CETO	<i>Ceanothus tomentosus</i>	20	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	80	4.8	0.2	12	X
	ERCI6	* <i>Erodium cicutarium</i>	60	7.0	1.0	14	
	VUMY	* <i>Vulpia myuros</i>	60	7.0	4.0	12	
	COFI2	<i>Corethrogyne filaginifolia</i>	60	0.5	0.2	1	
	BRHO2	* <i>Bromus hordeaceus</i>	40	3.1	0.2	6	
	HIIN3	* <i>Hirschfeldia incana</i>	40	1.6	0.2	3	
	CAMA24	<i>Calystegia macrostegia</i>	40	1.1	0.2	2	
	ACDI10	<i>Achnatherum diegoense</i>	40	0.6	0.2	1	
	CAWE	<i>Calochortus weedii</i>	40	0.2	0.2	0.20	
	GAAN2	<i>Galium angustifolium</i>	40	0.2	0.2	0.20	
	PETR7	<i>Pentagramma triangularis</i>	40	0.2	0.2	0.20	
	AVENA	* <i>Avena</i>	20	6.0	6.0	6	
	CEME2	* <i>Centaurea melitensis</i>	20	4.0	4.0	4	
	CHAR	<i>Chaenactis artemisiifolia</i>	20	4.0	4.0	4	
	ACCO21	<i>Achnatherum coronatum</i>	20	3.0	3.0	3	
	ERFI	<i>Eriastrum filifolium</i>	20	3.0	3.0	3	
	LACA7	<i>Lasthenia californica</i>	20	3.0	3.0	3	
	NALE2	<i>Nassella lepida</i>	20	3.0	3.0	3	
	LUCO	<i>Lupinus concinnus</i>	20	2.0	2.0	2	
	ASCA3	<i>Asclepias californica</i>	20	1.0	1.0	1	
	LAPL	<i>Layia platyglossa</i>	20	1.0	1.0	1	
	LOGA2	* <i>Logfia gallica</i>	20	1.0	1.0	1	
	PSCA13	<i>Pseudognaphalium californicum</i>	20	1.0	1.0	1	
	ASTER	<i>Aster</i>	20	0.2	0.2	0.20	
	AVBA	* <i>Avena barbata</i>	20	0.2	0.2	0.20	
	CASP	<i>Calochortus splendens</i>	20	0.2	0.2	0.20	
	CHGL	<i>Chaenactis glabriuscula</i>	20	0.2	0.2	0.20	

DAPU3	<i>Daucus pusillus</i>	20	0.2	0.2	0.20
DEPA2	<i>Delphinium parryi</i>	20	0.2	0.2	0.20
DICA14	<i>Dichelostemma capitatum</i>	20	0.2	0.2	0.20
ERFOF	<i>Erigeron foliosus</i> var. <i>foliosus</i>	20	0.2	0.2	0.20
HYGL2	* <i>Hypochaeris glabra</i>	20	0.2	0.2	0.20
OSTE	<i>Osmadenia tenella</i>	20	0.2	0.2	0.20
PHCIH2	<i>Phacelia cicutaria</i> var. <i>hispida</i>	20	0.2	0.2	0.20
POA	<i>Poa</i>	20	0.2	0.2	0.20
SCCA2	<i>Scrophularia californica</i>	20	0.2	0.2	0.20
STD16	<i>Stephanomeria diegensis</i>	20	0.2	0.2	0.20
Cryptogam					
2MOSS	<i>Moss</i>	20	3.0	3.0	3
SELAG	<i>Selaginella</i>	20	0.2	0.2	0.20
SEBI	<i>Selaginella bigelovii</i>	20	0.2	0.2	0.20

***Salvia apiana*-*Artemisia californica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Northern Valley (NV), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.9	22-75	-
Herb	24.4	3-52	0-1
Shrub	28.7	10-55	1-2
Hardwood	0.4	0-5	2-10
Conifer	0.0	0-0	-
Non-native plant presence	37.2	3-69	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (4), NE (4), SE (2), Variable (1), NW (1), N (1), E (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Ridge top (1)

Microtopography: convex (5), flat (5), undulating (3), concave (1)

Parent Material: Granitic (7), Metamorphic (5), Gabbro (2)

Soil Texture: Bottom (1), Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (3), Lower to Upper 1/3 of slope (3), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (2), Ridge top (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	262 ft.	114-535 ft.
Slope	17°	0-30°

Large rock cover	15.3%	0-49%
Small rock cover	12.9%	3-38%
Bare ground cover	43.4%	15-70%
Litter cover	27.0%	6-60%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0603RB01, 1073FS01, 1102MB01, 1633MB01, 1686FS01, 1720FS01, SDG0009, SDG0030, SDG0033, SDG0042, SDRP0097, SDRP0136, SDRP0140, SDRP0471

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Quercus engelmannii</i>	2 of 14	4.2	S3.2	G3	
<i>Romneya coulteri</i>	1 of 14	4.2	S3.2	G3	

STAND TABLE

Salvia apiana-*Artemisia californica* Association

Lifefom	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	100	12.5	0.2	35	X
	SAAP2	<i>Salvia apiana</i>	100	10.2	4.0	20	X
	ERFA2	<i>Eriogonum fasciculatum</i>	86	2.9	0.2	15	X
	MALA6	<i>Malosma laurina</i>	79	4.0	1.0	12	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	36	0.7	0.2	2	
	RHCR	<i>Rhamnus crocea</i>	36	0.4	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	36	0.2	0.2	0.20	
	GUCA	<i>Gutierrezia californica</i>	29	1.1	0.2	3	
	LOSC2	<i>Lotus scoparius</i>	29	0.2	0.2	0.20	
	HASQ2	<i>Hazardia squarrosa</i>	21	0.8	0.2	2	
	CLIS	<i>Cleome isomeris</i>	21	0.2	0.2	0.20	
Herb							
	HIIN3	* <i>Hirschfeldia incana</i>	50	2.4	0.2	10	
	BRMA3	* <i>Bromus madritensis</i>	43	2.2	0.2	5	
	ERODI	* <i>Erodium</i>	36	27.8	2.0	45	
	CEME2	* <i>Centaurea melitensis</i>	36	1.3	0.2	3.20	
	VUMY	* <i>Vulpia myuros</i>	29	2.8	0.2	6	
	BRRU2	* <i>Bromus rubens</i>	21	6.7	4.0	8	
	BRDI3	* <i>Bromus diandrus</i>	21	4.3	1.0	10	
	HORDE	* <i>Hordeum</i>	21	1.7	1.0	2	

AVBA	* <i>Avena barbata</i>	21	0.5	0.2	1
GALIU	<i>Galium</i>	21	0.2	0.2	0.20

***Salvia mellifera* Alliance**

Black Sage Scrub

ALLIANCE STAND TABLE

***Salvia mellifera* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	SAME3	<i>Salvia mellifera</i>	100	21.1	5.0	60	X
	MALA6	<i>Malosma laurina</i>	84	6.1	0.2	30	X
	ARCA11	<i>Artemisia californica</i>	59	3.2	0.2	8	
	ERFA2	<i>Eriogonum fasciculatum</i>	57	5.5	0.2	30	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	41	9.4	0.2	40	
	RHIN2	<i>Rhus integrifolia</i>	41	5.2	0.2	20	
	LOSC2	<i>Lotus scoparius</i>	27	3.3	0.2	11	
	RHCR	<i>Rhamnus crocea</i>	27	0.6	0.2	1	
	OPLI3	<i>Opuntia littoralis</i>	24	0.4	0.2	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	22	2.1	0.2	5	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	49	5.3	0.2	35	
	PSCA13	<i>Pseudognaphalium californicum</i>	35	2.0	0.2	15	
	CEME2	* <i>Centaurea melitensis</i>	27	1.5	0.2	11	

***Salvia mellifera*-*Eriogonum fasciculatum* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), North Coast (NC), Northern Foothills (NF)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	40.1	21-73	-
Herb	6.3	0-17	0-1
Shrub	37.5	21-73	1-2
Hardwood	0.0	0-0	-
Conifer	0.1	0-1	2-15
Non-native plant presence	8.5	0-33	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (3), W (2), SW (2), SE (2), Variable (1), E (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (3), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (1)

Microtopography: concave (4), flat (3), undulating (2), convex (2)

Parent Material: Granitic (4), Sandstone (4), Metamorphic (1)

Soil Texture: Bottom (1), Lower 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (3), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	124 ft.	50-362 ft.
Slope	12°	2-38°
Large rock cover	3.8%	0-17%
Small rock cover	10.4%	0-38%
Bare ground cover	40.6%	4-68%
Litter cover	43.6%	30-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=11)

Rapid Assessment(s): 0625RB01, 0625RB02, 0706TK01, 0707TK05, 1115PG01, 1126FS01, 1312KH01, 1730KH01, SDG0093, SDG0099, SDRP0334

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 11	4.2	S3.2	G3	
<i>Adolphia californica</i>	1 of 11	2.1	S3.1	G3G4	
<i>Ceanothus verrucosus</i>	2 of 11	2.2	S2.2	G3	
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	2 of 11	1B.1	S1.1	G4T1	
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	2 of 11	1B.1	S1.1	G4T1	
<i>Ferocactus viridescens</i>	3 of 11	2.1	S3.1	G4	
<i>Pinus torreyana</i> ssp. <i>torreyana</i>	3 of 11	1B.2	S1.2	G1T1	
<i>Selaginella cinerascens</i>	4 of 11	4.1	S3S4	G3G4	

STAND TABLE

Salvia mellifera-*Eriogonum fasciculatum*

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	PITOT2	<i>Pinus torreyana</i> var. <i>torreyana</i>	27	0.2	0.2	0.20	
Shrub	SAME3	<i>Salvia mellifera</i>	100	11.3	5.0	28	X
	ERFA2	<i>Eriogonum fasciculatum</i>	73	12.0	3.0	30	
	ARCA11	<i>Artemisia californica</i>	73	3.5	0.2	6	
	MALA6	<i>Malosma laurina</i>	64	3.6	1.0	10	
	OPLI3	<i>Opuntia littoralis</i>	55	0.3	0.2	1	
	RHIN2	<i>Rhus integrifolia</i>	45	7.0	3.0	15	
	CNDU	<i>Cneoridium dumosum</i>	36	2.0	1.0	5	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	27	11.0	6.0	15	
	ENCA	<i>Encelia californica</i>	27	4.0	1.0	9	
	LOSC2	<i>Lotus scoparius</i>	27	0.5	0.2	1	
	RHCR	<i>Rhamnus crocea</i>	27	0.5	0.2	1	
	YUSC2	<i>Yucca schidigera</i>	27	0.5	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	27	0.2	0.2	0.20	
	FEVI2	<i>Ferocactus viridescens</i>	27	0.2	0.2	0.20	
	ISME5	<i>Isocoma menziesii</i>	27	0.2	0.2	0.20	
Herb	HEFA	<i>Deinandra fasciculata</i>	45	0.6	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	36	2.8	0.2	5	
	BRRU2	* <i>Bromus rubens</i>	36	0.9	0.2	2	
	PSCA13	<i>Pseudognaphalium californicum</i>	36	0.4	0.2	1	
Cryptogam	SECI	<i>Selaginella cinerascens</i>	36	1.6	0.2	5	

Salvia mellifera-*Malosma laurina* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Northern Foothills (NF), Northern Valley (NV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	49.4	14-93	-
Herb	7.9	0-35	0-2
Shrub	44.8	13-90	1-5
Hardwood	0.1	0-2	5-10
Conifer	0.0	0-0	-

Non-native plant presence 7.7 0-38 -
 *Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (4), Variable (4), S (4), SW (3), SE (2), NW (2), NE (2), N (2), E (2)
Macrotopography: Lower 1/3 of slope to Ridegetop (1), Lower 1/3 of slope (2), Bottom to Mid 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (4), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (7), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3)
Microtopography: convex (10), undulating (10), flat (3), concave (2)
Parent Material: Granitic (6), Sedimentary (6), Conglomerate (3), Metamorphic (3), Mixed sedimentary (2), Volcanic (2), Sandstone (1)
Soil Texture: Lower 1/3 of slope to Ridegetop (1), Lower 1/3 of slope (2), Bottom to Mid 1/3 of slope (1), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (4), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (7), Middle 1/3 of slope to Ridgetop (1), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3)
General slope steepness: gentle to steep

	Mean	Range
Elevation	196 ft.	34-403 ft.
Slope	19°	3-38°
Large rock cover	6.7%	0-45%
Small rock cover	24.0%	2-55%
Bare ground cover	32.7%	0-68%
Litter cover	34.5%	3-87%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=25)

Rapid Assessment(s): 0311AK22, 0311TK24, 0507DH01, 0507MG01, 0507RB01, 0623RB03, 0624DH02, 0624RB03, 0708AK01, 0708JS01, 1278LS01, 1339FS01, 1439FS01, 1485MM01, 1493FS01, 1700FS01, 1732JD01, SDG0081, SDG0117, SDRP0059, SDRP0061, SDRP0235, SDRP0270, SDRP0329, SDRP0359
Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	2 of 25	2.1	S3.1	G3G4	
<i>Ceanothus cyaneus</i>	1 of 25	1B.2	S2.2	G2	
<i>Ceanothus verrucosus</i>	2 of 25	2.2	S2.2	G3	
<i>Dichondra occidentalis</i>	1 of 25	4.2	S3.2	G4?	
<i>Ferocactus viridescens</i>	2 of 25	2.1	S3.1	G4	
<i>Quercus dumosa</i>	1 of 25	1B.1	S1.1	G1G2	
<i>Selaginella cinerascens</i>	2 of 25	4.1	S3S4	G3G4	

STAND TABLE

Salvia mellifera-*Malosma laurina* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	SAME3	<i>Salvia mellifera</i>	100	26.0	5.0	60	X
	MALA6	<i>Malosma laurina</i>	96	6.9	0.2	30	X
	ARCA11	<i>Artemisia californica</i>	56	3.0	0.2	8	
	ERFA2	<i>Eriogonum fasciculatum</i>	52	1.5	0.2	4	
	DIAUA	<i>Diplacus aurantiacus</i> ssp. <i>aurantiacus</i>	48	11.0	0.2	40	
	RHIN2	<i>Rhus integrifolia</i>	40	4.4	0.2	20	
	LOSC2	<i>Lotus scoparius</i>	28	4.5	0.2	11	
	RHCR	<i>Rhamnus crocea</i>	28	0.7	0.2	1	
	HEAR5	<i>Heteromeles arbutifolia</i>	24	1.7	0.2	5	
	MAFA	<i>Malacothamnus</i> <i>fasciculatus</i>	24	0.3	0.2	1	
	HASQ2	<i>Hazardia squarrosa</i>	20	0.4	0.2	1	
	BRMA3	* <i>Bromus madritensis</i>	56	6.0	0.2	35	
	PSCA13	<i>Pseudognaphalium</i> <i>californicum</i>	36	2.6	0.2	15	
	CEME2	* <i>Centaurea melitensis</i>	36	1.7	0.2	11	
	NALE2	<i>Nassella lepida</i>	28	1.4	0.2	5	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	20	0.9	0.2	3	
Cryptogam	BRNI	* <i>Brassica nigra</i>	20	0.2	0.2	0.20	
	2LICHN	<i>Lichen</i>	24	2.2	0.4	4	

Simmondsia chinensis Alliance Jojoba Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Simmondsia chinensis-*Viguiera laciniata* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	40.9	8-80	-
Herb	7.9	1-35	0-1
Shrub	34.6	5-70	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	13.6	0-52	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (9), SE (5), SW (3), NE (3), W (2), N (2), E (2)

Macrotopography: Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (4), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (9), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (4), Ridge top (2), Lower 1/3 of slope to Ridgetop (1)

Microtopography: undulating (13), flat (11), convex (2)

Parent Material: Sedimentary (13), Metamorphic (2)

Soil Texture: Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (4), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (9), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Middle 1/3 of slope to Ridgetop (2), Upper 1/3 of slope (4), Ridge top (2), Lower 1/3 of slope to Ridgetop (1)

General slope steepness: gentle to steep

	Mean	Range
Elevation	113 ft.	-4-233 ft.
Slope	21°	2-37°
Large rock cover	6.7%	0-30%
Small rock cover	31.2%	5-60%
Bare ground cover	37.5%	16-66%
Litter cover	20.7%	3-65%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=26)

Rapid Assessment(s): 0623JJ01, 1546EB01, 1546LS01, 1602JD01, 1614MB02, 1617MB02, 1622JD01, 1622KH01, 1623JD01, 1623JD02, 1623KH01, 1624JD01, 1624KH01, 1626MB01, 1626MB02, 1627MB01, 1629JD01, 1629KH02, 1630KH01, 1634JD01, 1634JD03, 1635JD01, SDG0032, SDG0044, SDG0129, SDG0130

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	4 of 26	4.2	S3.2	G3	
<i>Adolphia californica</i>	4 of 26	2.1	S3.1	G3G4	

<i>Ambrosia chenopodiifolia</i>	7 of 26	2.1	S2.1	G3?	Endangered
<i>Bergerocactus emoryi</i>	1 of 26	2.2	S2.1	G2G3	
<i>Deinandra conjugens</i>	2 of 26	1B.1	S1.1	G1	
<i>Euphorbia misera</i>	3 of 26	2.2	S3.2	G5	
<i>Ferocactus viridescens</i>	14 of 26	2.1	S3.1	G4	
<i>Lycium californicum</i>	1 of 26	4.2	S3.2	G4	
<i>Opuntia californica</i> var. <i>californica</i>	1 of 26	1B.1	S1.1	G3T2	
<i>Selaginella cinerascens</i>	3 of 26	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	18 of 26	4.2	S3.2	G4	

STAND TABLE

Simmondsia chinensis-*Viguiera laciniata* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	SICH	<i>Simmondsia chinensis</i>	96	11.0	1.0	35	X
	VILA3	<i>Viguiera laciniata</i>	69	6.6	0.2	36	
	ARCA11	<i>Artemisia californica</i>	65	5.2	0.2	27	
	CYPR19	<i>Cylindropuntia prolifera</i>	54	7.6	0.2	26	
	RHIN2	<i>Rhus integrifolia</i>	54	4.6	0.2	16	
	FEVI2	<i>Ferocactus viridescens</i>	54	0.4	0.2	1	
	ERFA2	<i>Eriogonum fasciculatum</i>	38	5.2	0.2	17	
	OPLI3	<i>Opuntia littoralis</i>	31	1.1	0.2	5	
	MADI3	<i>Mammillaria dioica</i>	31	0.4	0.2	1	
	AMCH5	<i>Ambrosia chenopodiifolia</i>	27	8.3	0.2	22	
Herb							
	CEME2	* <i>Centaurea melitensis</i>	46	1.3	0.2	3	
	HEFA	<i>Deinandra fasciculata</i>	38	0.6	0.2	2	
	BRRU2	* <i>Bromus rubens</i>	31	4.2	0.2	9	
	DUED	<i>Dudleya edulis</i>	27	0.4	0.2	1	
	MILA6	<i>Mirabilis laevis</i>	27	0.3	0.2	1	
	BRMA3	* <i>Bromus madritensis</i>	23	5.6	0.2	22	
	DUPU	<i>Dudleya pulverulenta</i>	23	0.3	0.2	1	

Tamarix Semi-Natural Stands

Tamarisk Thickets

Tamarix Semi-Natural Stands

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	98.0	98-98	-
Herb	30.0	30-30	0-0.5
Shrub	75.0	75-75	2-5
Hardwood	1.0	1-1	5-10
Conifer		-	-
Non-native plant presence	97.2	97-97	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1)

Macrotopography: Bottom (1)

Microtopography: flat (1)

Parent Material: Sandy alluvium (1)

Soil Texture: Bottom (1)

General slope steepness: flat to flat

	Mean	Range
Elevation	106 ft.	106-106 ft.
Slope	0°	0-0°
Large rock cover	%	-%
Small rock cover	%	-%
Bare ground cover	%	-%
Litter cover	%	-%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): SDRP0244

Relevé(s): none

CONSERVATION STATUS RANK n/a

STAND TABLE

Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	100	1.0	1.0	1	X
Shrub							
	TAMAR2	* <i>Tamarix</i>	100	75.0	75.0	75	X
	BASA4	<i>Baccharis salicifolia</i>	100	2.0	2.0	2	X
Herb							
	LELA2	* <i>Lepidium latifolium</i>	100	30.0	30.0	30	X

***Toxicodendron diversilobum* Alliance**
Poison Oak Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Toxicodendron diversilobum*-*Artemisia californica*/*Leymus condensatus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	78.3	65-85	-
Herb	20.3	6-30	1-2
Shrub	59.0	55-65	1-5
Hardwood		-	-
Conifer		-	-
Non-native plant presence	0.6	0-1	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1), NE (1), N (1)

Macrotopography: Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (2)

Microtopography: undulating (1), convex (1), flat (1)

Parent Material: Sedimentary (2)

Soil Texture: Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (2)

General slope steepness: moderate to steep

	Mean	Range
Elevation	65 ft.	60-72 ft.
Slope	20°	12-30°
Large rock cover	0.0%	0-0%
Small rock cover	11.7%	0-25%
Bare ground cover	22.0%	13-30%
Litter cover	65.0%	45-85%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 1737JD05, 1737JD07, 1739JD01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	3 of 3	4.2	S3.2	G3	

STAND TABLE

Toxicodendron diversilobum-*Artemisia californica*/*Leymus condensatus* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	QUAG	<i>Quercus agrifolia</i>	67	1.1	0.2	2	
Shrub	TODI	<i>Toxicodendron</i>	100	47.3	42.0	55	X
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	100	0.5	0.2	1	X
	RHIN2	<i>Rhus integrifolia</i>	67	10.5	9.0	12	
	ARCA11	<i>Artemisia californica</i>	33	8.0	8.0	8	
	MALA6	<i>Malosma laurina</i>	33	3.0	3.0	3	
	BAPI	<i>Baccharis pilularis</i>	33	0.2	0.2	0.20	
	QUBE5	<i>Quercus berberidifolia</i>	33	0.2	0.2	0.20	
Herb	ARPA15	<i>Artemisia palmeri</i>	100	19.0	5.0	30	X
	LECO12	<i>Leymus condensatus</i>	100	0.5	0.2	1	X
	BRNI	* <i>Brassica nigra</i>	67	0.6	0.2	1	
	FOVU	* <i>Foeniculum vulgare</i>	33	0.2	0.2	0.20	

Viguiera laciniata Alliance San Diego Sunflower Scrub

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Viguiera laciniata-*Artemisia californica*-*Eriogonum fasciculatum* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Southern Coast (SC), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	39.5	23-68	-
Herb	20.4	2-50	0-1
Shrub	26.9	9-50	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	31.1	1-74	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (15), SW (6), W (3), SE (3), NW (1), NE (1), E (1)

Macrotopography: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (9), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (5), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3), Ridge top (1), Lower 1/3 of slope to Ridgetop (2)

Microtopography: undulating (13), convex (9), flat (5), concave (3)

Parent Material: Metamorphic (18), Granitic (5), Sedimentary (2), Conglomerate (1), Gabbro (1), no data (1)

Soil Texture: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (9), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (5), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3), Ridge top (1), Lower 1/3 of slope to Ridgetop (2)

General slope steepness: moderate to steep

	Mean	Range
Elevation	252 ft.	62-507 ft.
Slope	23°	7-35°
Large rock cover	16.6%	0-48%
Small rock cover	30.5%	5-70%
Bare ground cover	32.6%	6-68%
Litter cover	17.1%	1-77%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=30)

Rapid Assessment(s): 0504AK21, 0504MJ21, 0519TK03, 0520AK01, 0520DH05, 0521AK02, 0521RB01, 0603JS01, 0603JS03, 0GPSMB01, 1336EB01, 1361KH04, 1393MB01, 1395MB01, 1526MM01, 1530MM01, 1537EB02, 1539PG01, 1541JD01, 1541KH01, 1541MB01, 1594MB01, 1595PG01, 1604LS01, 1606JD01, 1616KG01, 1637MB01, SDG0006, SDG0027, SDG0079

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 30	4.2	S3.2	G3	
<i>Bergerocactus emoryi</i>	1 of 30	2.2	S2.1	G2G3	
<i>Euphorbia misera</i>	1 of 30	2.2	S3.2	G5	
<i>Ferocactus viridescens</i>	3 of 30	2.1	S3.1	G4	

<i>Nolina interrata</i>	1 of 30	1B.1	S1.2	G1	Endangered
<i>Selaginella cinerascens</i>	1 of 30	4.1	S3S4	G3G4	
<i>Viguiera laciniata</i>	30 of 30	4.2	S3.2	G4	

STAND TABLE

Viguiera laciniata-*Artemisia californica*-*Eriogonum fasciculatum* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	VILA3	<i>Viguiera laciniata</i>	100	15.8	5.0	28	X
	MALA6	<i>Malosma laurina</i>	87	4.1	0.2	22	X
	ARCA11	<i>Artemisia californica</i>	83	2.9	0.2	12	X
	ERFA2	<i>Eriogonum fasciculatum</i>	67	5.7	0.2	20	
	HEWH	<i>Hesperoyucca whipplei</i>	40	0.4	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	27	1.5	0.2	7	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	20	6.0	1.0	10	
	SAAP2	<i>Salvia apiana</i>	20	0.5	0.2	1	
Herb							
	CEME2	* <i>Centaurea melitensis</i>	67	4.2	0.2	25	
	HIIN3	* <i>Hirschfeldia incana</i>	50	2.1	0.2	10	
	AVBA	* <i>Avena barbata</i>	50	1.8	0.2	8	
	BRMA3	* <i>Bromus madritensis</i>	47	9.1	0.2	26	
	BRRU2	* <i>Bromus rubens</i>	43	7.8	0.2	20	
	MILA6	<i>Mirabilis laevis</i>	43	1.1	0.2	7	
	ERCI6	* <i>Erodium cicutarium</i>	30	3.0	0.2	10	
	CAMA24	<i>Calystegia macrostegia</i>	30	0.7	0.2	2	
	VUMY	* <i>Vulpia myuros</i>	23	2.9	0.2	7	
	LENIN	<i>Lepidium nitidum</i> var. <i>nitidum</i>	20	1.6	0.2	6	

HERB DESCRIPTIONS

Abronia latifolia-*Ambrosia chamissonis* Alliance

Dune Mat

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Ambrosia chamissonis-*Abronia maritima*-*Cakile maritima* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	14.1	5-35	-
Herb	13.7	5-35	0-0.5
Shrub	0.5	0-3	0-1
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	7.9	2-17	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (3), Variable (2), W (1), NE (1)

Macrotopography: Entire slope (1), Bottom (3), Lower 1/3 of slope (3)

Microtopography: undulating (4), flat (2), convex (1)

Parent Material: Sand dunes (3), Sandstone (3), Sedimentary (1)

Soil Texture: Entire slope (1), Bottom (3), Lower 1/3 of slope (3)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	-21 ft.	-36-4 ft.
Slope	4°	0-18°
Large rock cover	0.1%	0-0%
Small rock cover	4.3%	0-15%
Bare ground cover	90.3%	82-99%
Litter cover	4.9%	0-15%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 0707MG03, 1022DH05, 1022RY02, 1022RY04, 1023AK02, 1661JD01, SDG0111

Relevé(s): none

CONSERVATION STATUS RANK G3 S3

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Abronia maritima</i>	4 of 7	4.2	S3?	G4?	
<i>Frankenia palmeri</i>	1 of 7	2.1	S1.1	G3G4	
<i>Suaeda taxifolia</i>	1 of 7	4.2	S2S3	G3	

STAND TABLE

Ambrosia chamissonis-*Abronia maritima*-*Cakile maritime* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	29	0.6	0.2	1	
Herb							
	AMCH4	<i>Ambrosia chamissonis</i>	100	4.5	0.2	14	X
	CACH13	<i>Camissonia cheiranthifolia</i>	71	3.0	0.2	7	
	ABMA2	<i>Abronia maritima</i>	57	9.8	7.0	14	
	CAMA	* <i>Cakile maritime</i>	57	1.0	1.0	1	
	DISP	<i>Distichlis spicata</i>	43	1.5	0.2	4	
	CAED3	* <i>Carpobrotus edulis</i>	43	0.2	0.2	0.20	
	ABUMU	<i>Abronia umbellata</i> ssp. <i>umbellata</i>	29	0.2	0.2	0.20	

Anemopsis californica Alliance

Yerba Mansa Meadows

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Anemopsis californica*-*Juncus arcticus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	61.4	30-85	-
Herb	61.4	30-85	0-1
Shrub	0.3	0-1	1-5
Hardwood	0.0	0-0	5-10
Conifer	0.0	0-0	-
Non-native plant presence	3.6	0-6	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (2), Variable (1), SE (1), Flat (1)

Macrotopography: Bottom (5)

Microtopography: flat (4), undulating (1)

Parent Material: Metamorphic (2), Clayey alluvium (1), Mixed alluvium (1), Sandy alluvium (1)

Soil Texture: Bottom (5)

General slope steepness: flat to moderate

	Mean	Range
Elevation	143 ft.	-12-285 ft.
Slope	2°	0-8°
Large rock cover	0.0%	0-0%
Small rock cover	0.2%	0-0%
Bare ground cover	32.5%	3-88%
Litter cover	64.5%	10-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=5)

Rapid Assessment(s): 0504AK23, 0504AK24, 0623RB01, 1564EB01, SDRP0243

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	2 of 5	4.2	S3.2	G5T5	

STAND TABLE

Anemopsis californica-*Juncus arcticus* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	PLRA	<i>Platanus racemosa</i>	20	0.2	0.2	0.20	
Shrub	ISME5	<i>Isocoma menziesii</i>	40	0.2	0.2	0.20	
	ACLO	* <i>Acacia longifolia</i>	20	4.0	4.0	4	
	BASA2	<i>Baccharis sarothroides</i>	20	3.2	3.2	3.20	
	NIGL	* <i>Nicotiana glauca</i>	20	0.2	0.2	0.20	
Herb	ANCA10	<i>Anemopsis californica</i>	100	32.8	6.0	78	X
	DISP	<i>Distichlis spicata</i>	60	6.3	1.0	15	
	JUME4	<i>Juncus mexicanus</i>	60	2.1	0.2	5	
	AMPS	<i>Ambrosia psilostachya</i>	60	1.1	0.2	2	
	FRSA	<i>Frankenia salina</i>	40	14.1	0.2	28	
	LETR5	<i>Leymus triticoides</i>	40	12.5	3.0	22	
	SCAM6	<i>Schoenoplectus americanus</i>	40	2.1	0.2	4	
	RUCR	* <i>Rumex crispus</i>	40	2.0	1.0	3	
	JUACL	<i>Juncus acutus</i> ssp.	40	0.6	0.2	1	
	BRDI3	* <i>Bromus diandrus</i>	40	0.2	0.2	0.20	
	JUNCU	<i>Juncus</i>	20	35.0	35.0	35	
	JUAR2	<i>Juncus arcticus</i>	20	25.0	25.0	25	
	CAREX	<i>Carex</i>	20	6.0	6.0	6	
	BRMA3	* <i>Bromus madritensis</i>	20	1.0	1.0	1	
	ELMO2	<i>Eleocharis montevidensis</i>	20	1.0	1.0	1	
	HECU3	<i>Heliotropium curassavicum</i>	20	1.0	1.0	1	
	LELA2	* <i>Lepidium latifolium</i>	20	1.0	1.0	1	
	ANAR	* <i>Anagallis arvensis</i>	20	0.2	0.2	0.20	
	AVBA	* <i>Avena barbata</i>	20	0.2	0.2	0.20	
	BRHO2	* <i>Bromus hordeaceus</i>	20	0.2	0.2	0.20	
	CYDA	* <i>Cynodon dactylon</i>	20	0.2	0.2	0.20	
	JUXI	<i>Juncus xiphioides</i>	20	0.2	0.2	0.20	
	LASE	* <i>Lactuca serriola</i>	20	0.2	0.2	0.20	
	PHLA3	<i>Phyla lanceolata</i>	20	0.2	0.2	0.20	
	PIEC	* <i>Picris echioides</i>	20	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	20	0.2	0.2	0.20	
	RASA2	* <i>Raphanus sativus</i>	20	0.2	0.2	0.20	
	SCACO2	<i>Schoenoplectus acutus</i>	20	0.2	0.2	0.20	
	SIMA3	* <i>Silybum marianum</i>	20	0.2	0.2	0.20	

***Artemisia dracunculus* Alliance**
Wild Tarragon Patches

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Artemisia dracunculus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	39.7	35-44	-
Herb	28.0	17-37	0-0.5
Shrub	12.0	2-17	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	39.2	27-63	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), NW (1), NE (1)

Macrotopography: Lower 1/3 of slope (2), Middle 1/3 of slope (1)

Microtopography: flat (2), convex (1)

Parent Material: Sandstone (2)

Soil Texture: Lower 1/3 of slope (2), Middle 1/3 of slope (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	18 ft.	-27-54 ft.
Slope	12°	4-18°
Large rock cover	0.0%	0-0%
Small rock cover	1.0%	1-1%
Bare ground cover	48.0%	48-48%
Litter cover	49.0%	49-49%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0707MG02, SDRP0231, SDRP0258

Relevé(s): none

CONSERVATION STATUS RANK G5 S3.3

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	1 of 3	1B.1	S2.1	G5T3	
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	1 of 3	4.2	S3.2	G5?T3	

STAND TABLE

Artemisia dracunculus Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	LOSC2	<i>Lotus scoparius</i>	100	5.7	0.2	12	X
	OPLI3	<i>Opuntia littoralis</i>	100	0.5	0.2	1	X
	ARCA11	<i>Artemisia californica</i>	67	3.0	2.0	4	
	ENCA	<i>Encelia californica</i>	33	2.0	2.0	2	
	HESC2	<i>Helianthemum scoparium</i>	33	2.0	2.0	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	1.0	1.0	1	
	BASA2	<i>Baccharis sarothroides</i>	33	0.2	0.2	0.20	
	ERIOG	<i>Eriogonum</i>	33	0.2	0.2	0.20	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	33	0.2	0.2	0.20	
Herb							
	ARDR4	<i>Artemisia dracunculus</i>	100	9.7	8.0	11	X
	CEME2	* <i>Centaurea melitensis</i>	100	0.7	0.2	1	X
	BRMA3	* <i>Bromus madritensis</i>	67	16.0	4.0	28	
	CRCA5	<i>Croton californicus</i>	67	9.0	8.0	10	
	BRNI	* <i>Brassica nigra</i>	67	7.5	2.0	13	
	ERODI	* <i>Erodium</i>	67	5.5	5.0	6	
	HESE	<i>Heterotheca sessiliflora</i>	33	11.0	11.0	11	
	AMPS	<i>Ambrosia psilostachya</i>	33	7.0	7.0	7	
	VUMY	* <i>Vulpia myuros</i>	33	7.0	7.0	7	
	CHGLO	<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	33	4.0	4.0	4	
	PHRAA	<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	33	3.0	3.0	3	
	CHORI2	<i>Chorizanthe</i>	33	2.0	2.0	2	
	PTDR	<i>Pterostegia drymarioides</i>	33	1.0	1.0	1	
	COFI2	<i>Corethrogyne filaginifolia</i>	33	0.2	0.2	0.20	
	CRYPT	<i>Cryptantha</i>	33	0.2	0.2	0.20	
	HIIN3	* <i>Hirschfeldia incana</i>	33	0.2	0.2	0.20	
	STD16	<i>Stephanomeria diegensis</i>	33	0.2	0.2	0.20	

***Arthrocnemum subterminale* Alliance**
Parish's Glasswort Patches

ALLIANCE STAND TABLE

***Arthrocnemum subterminale* Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	25	3.6	0.2	10	
Herb							
	ARSU11	<i>Arthrocnemum subterminale</i>	100	24.2	4.0	51	X
	SAPA30	<i>Sarcocornia pacifica</i>	70	15.5	0.2	60	
	FRSA	<i>Frankenia salina</i>	50	9.7	0.2	50	
	MOLI	<i>Monanthochloe littoralis</i>	35	9.7	0.2	31	
	DISP	<i>Distichlis spicata</i>	35	1.6	0.2	3	
	BRHO2	* <i>Bromus hordeaceus</i>	30	5.1	0.2	15	
	LICA5	<i>Limonium californicum</i>	30	1.6	0.2	4	
	CRTR5	<i>Cressa truxillensis</i>	20	5.6	0.2	12	
	BRMA3	* <i>Bromus madritensis</i>	20	4.3	0.2	10	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	20	4.3	1.0	6	

***Arthrocnemum subterminale* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	51.5	22-90	-
Herb	47.0	20-90	0-0.5
Shrub	5.6	0-35	0-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	32.3	0-92	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), N (2), S (1), NE (1)

Macrotopography: Bottom (7), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (3)

Microtopography: flat (9), concave (1), undulating (1)

Parent Material: Clayey alluvium (4), Sedimentary (3), Silty alluvium (3), Mixed alluvium (1)

Soil Texture: Bottom (7), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (3)

General slope steepness: flat to moderate

Mean

Range

Elevation	-15 ft.	-37-18 ft.
Slope	2°	0-10°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	52.4%	5-98%
Litter cover	45.9%	0-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=11)

Rapid Assessment(s): 0707TK02, 1020AK02, 1021DH01, 1022AK02, 1022AK05, 1022TK04, 1023DH03, 1023TK05, 1661MM01, SDRP0259, SDRP0342

Relevé(s): none

CONSERVATION STATUS RANK G4 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	1 of 11	1B.2	S2.1	G4?T2	Endangered
<i>Ferocactus viridescens</i>	1 of 11	2.1	S3.1	G4	
<i>Lycium californicum</i>	2 of 11	4.2	S3.2	G4	

STAND TABLE

Arthrocnemum subterminale

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	ARSU11	<i>Arthrocnemum subterminale</i>	100	25.7	4.0	50	X
	BRHO2	* <i>Bromus hordeaceus</i>	45	6.0	0.2	15	
	SAPA30	<i>Sarcocornia pacifica</i>	45	0.7	0.2	1	
	MOLI	<i>Monanthochloe littoralis</i>	36	10.1	0.2	31	
	PAIN	* <i>Parapholis incurva</i>	27	14.0	2.0	35	
	CRTR5	<i>Cressa truxillensis</i>	27	7.3	2.0	12	
	BRMA3	* <i>Bromus madritensis</i>	27	5.7	1.0	10	
	CEME2	* <i>Centaurea melitensis</i>	27	2.7	1.0	5	
	FRSA	<i>Frankenia salina</i>	27	2.5	0.2	7	
	DISP	<i>Distichlis spicata</i>	27	1.7	1.0	3	

***Arthrocnemum subterminale*-*Sarcocornia pacifica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	59.3	14-90	-
Herb	50.8	12-85	0-0.5
Shrub	10.0	0-60	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	6.9	0-37	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (5), E (2), Variable (1), NE (1)

Macrotopography: Bottom (7), Lower 1/3 of slope (2)

Microtopography: flat (4), undulating (3), concave (1), convex (1)

Parent Material: Silty alluvium (5), Clayey alluvium (1), Mixed alluvium (1), Sand dunes (1), Sedimentary (1)

Soil Texture: Bottom (7), Lower 1/3 of slope (2)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-14 ft.	-34-14 ft.
Slope	1°	0-4°
Large rock cover	0.0%	0-0%
Small rock cover	0.4%	0-2%
Bare ground cover	40.6%	0-95%
Litter cover	52.0%	1-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 1019AK03, 1020TK02, 1022RY01, 1022TK02, 1023AK04, SDG0075, SDRP0338, SDRP0340, SDRP0344

Relevé(s): none

CONSERVATION STATUS RANK G3 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	1 of 9	1B.2	S2.1	G4?T2	Endangered

STAND TABLE**Arthrocnemum subterminale-Sarcocornia pacifica
Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	33	5.4	0.2	10	
	NIGL	* <i>Nicotiana glauca</i>	22	0.2	0.2	0.20	
Herb	SAPA30	<i>Sarcocornia pacifica</i>	100	23.8	3.0	60	X
	ARSU11	<i>Arthrocnemum subterminale</i>	100	22.3	6.0	51	X
	FRSA	<i>Frankenia salina</i>	78	12.7	0.2	50	
	LICA5	<i>Limonium californicum</i>	56	1.9	0.2	4	
	DISP	<i>Distichlis spicata</i>	44	1.6	0.2	3	
	MOLI	<i>Monanthochloe littoralis</i>	33	9.3	6.0	14	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	22	6.0	6.0	6	
	SATR12	* <i>Salsola tragus</i>	22	2.1	0.2	4	
	CUSA	<i>Cuscuta salina</i>	22	0.2	0.2	0.20	

Arundo donax Semi-Natural Stands**Giant Reed Breaks****Arundo donax Semi-Natural Stands****DISTRIBUTION IN STUDY AREA**

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	77.0	77-77	-
Herb	68.0	68-68	2-5
Shrub	2.0	2-2	-
Hardwood	7.0	7-7	10-15
Conifer	0.0	0-0	-
Non-native plant presence	81.2	81-81	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NW (1)

Macrotopography: Bottom (1)

Microtopography: concave (1)
Parent Material: Sandy alluvium (1)
Soil Texture: Bottom (1)
General slope steepness: gentle to gentle

	Mean	Range
Elevation	101 ft.	101-101 ft.
Slope	1°	1-1°
Large rock cover	%	-%
Small rock cover	%	-%
Bare ground cover	%	-%
Litter cover	%	-%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): SDRP0198
Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Arundo donax
 Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree	SALA3	<i>Salix laevigata</i>	100	7.0	7.0	7	X
	QUAG	<i>Quercus agrifolia</i>	100	2.0	2.0	2	X
Shrub	BASA4	<i>Baccharis salicifolia</i>	100	2.0	2.0	2	X
	RUUR	<i>Rubus ursinus</i>	100	2.0	2.0	2	X
Herb	ARDO4	* <i>Arundo donax</i>	100	65.0	65.0	65	X
	CAED3	* <i>Carpobrotus edulis</i>	100	5.0	5.0	5	X
	AMPS	<i>Ambrosia psilostachya</i>	100	2.0	2.0	2	X
	VIMA	* <i>Vinca major</i>	100	2.0	2.0	2	X
	SCIRP	<i>Scirpus</i>	100	1.0	1.0	1	X
	ARDO3	<i>Artemisia douglasiana</i>	100	0.2	0.2	0.20	X
	EPCIC	<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	100	0.2	0.2	0.20	X
	MEOF	* <i>Melilotus officinalis</i>	100	0.2	0.2	0.20	X
	OEEL	<i>Oenothera elata</i>	100	0.2	0.2	0.20	X
	PHLEU	* <i>Phleum</i>	100	0.2	0.2	0.20	X
	RUCR	* <i>Rumex crispus</i>	100	0.2	0.2	0.20	X
	URDIH	<i>Urtica dioica</i> ssp. <i>holosericea</i>	100	0.2	0.2	0.20	X

***Avena (barbata, fatua)* Semi-Natural Stands**

Wild Oats Grasslands

***Avena barbata-Avena fatua* Semi-Natural Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	48.9	29-65	-
Herb	46.3	25-65	0-2
Shrub	3.3	0-8	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	90.5	71-99	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (3), W (2), NW (2), E (2), Variable (1), SE (1), S (1), NE (1)

Macrotopography: Entire slope (1), Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (1), Bottom to Mid 1/3 of slope (3), Bottom to Upper 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (2), Lower 1/3 of slope to Ridgetop (1)

Microtopography: convex (5), undulating (4), concave (2), flat (2)

Parent Material: Metamorphic (5), Sedimentary (3), Granitic (2), Sandy alluvium (1)

Soil Texture: Entire slope (1), Bottom (1), Bottom to Lower 1/3 of slope (1), Lower 1/3 of slope (1), Bottom to Mid 1/3 of slope (3), Bottom to Upper 1/3 of slope (1), Lower to Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (2), Lower 1/3 of slope to Ridgetop (1)

General slope steepness: flat to steep

	Mean	Range
Elevation	198 ft.	35-393 ft.
Slope	17°	0-42°
Large rock cover	3.2%	0-11%
Small rock cover	6.9%	0-30%
Bare ground cover	36.8%	5-72%
Litter cover	39.3%	1-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=13)

Rapid Assessment(s): 0519DH01, 0519RB04, 0519TK02, 1339EB02, 1361KH03, 1361LS01, 1545LS01, 1560LS01, 1587LS01, 1596KH01, 1697LS01, 1737JD08, SDRP0237

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Viguiera laciniata</i>	3 of 13	4.2	S3.2	G4	

STAND TABLE

Avena barbata*-*Avena fatua **Semi-Natural Stands**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	62	0.9	0.2	3	
	MALA6	<i>Malosma laurina</i>	38	2.2	0.2	6	
	ERFAF3	<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	38	1.1	0.2	3	
	SAAP2	<i>Salvia apiana</i>	23	1.1	0.2	2	
	VILA3	<i>Viguiera laciniata</i>	23	0.8	0.2	2	
	RHIN2	<i>Rhus integrifolia</i>	23	0.5	0.2	1	
Herb							
	AVBA	* <i>Avena barbata</i>	85	22.6	6.0	45	X
	CEME2	* <i>Centaurea melitensis</i>	54	6.2	0.2	20	
	BRDI3	* <i>Bromus diandrus</i>	54	3.3	0.2	10	
	AVFA	* <i>Avena fatua</i>	38	24.6	3.0	40	
	BRRU2	* <i>Bromus rubens</i>	38	10.4	8.0	15	
	HIIN3	* <i>Hirschfeldia incana</i>	38	1.3	0.2	5	
	BRNI	* <i>Brassica nigra</i>	31	4.8	0.2	17	
	SATR12	* <i>Salsola tragus</i>	31	0.9	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	23	4.4	0.2	11	
	NAPU4	<i>Nassella pulchra</i>	23	1.1	0.2	2	
	CRSE11	<i>Croton setigerus</i>	23	0.7	0.2	1	
	CAMA24	<i>Calystegia macrostegia</i>	23	0.2	0.2	0.20	

***Bolboschoenus maritimus* Alliance**

Salt Marsh Bulrush Marshes

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Bolboschoenus maritimus*-*Sarcocornia pacifica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	47.5	43-52	-
Herb	47.5	43-52	0.5-2
Shrub	0.1	0-0	2-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.6	0-1	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2)

Macrotopography: Bottom (2)

Microtopography: flat (2)

Parent Material: Clayey alluvium (1), Silty alluvium (1)

Soil Texture: Bottom (2)

General slope steepness: flat to flat

	Mean	Range
Elevation	-31 ft.	-31--30 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	32.5%	22-43%
Litter cover	65.0%	55-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 1020RY05, 1022AK01

Relevé(s): none

CONSERVATION STATUS RANK G4 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Bolboschoenus maritimus-Sarcocornia pacifica Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	BASA4	<i>Baccharis salicifolia</i>	50	0.2	0.2	0.20	
	TAMAR2	* <i>Tamarix</i>	50	0.2	0.2	0.20	
Herb	SCMA8	<i>Bolboschoenus maritimus</i> <i>ssp. paludosus</i>	100	33.0	26.0	40	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	2.5	1.0	4	X
	FRSA	<i>Frankenia salina</i>	100	0.6	0.2	1	X
	PLOD	<i>Pluchea odorata</i>	50	22.0	22.0	22	
	ATPR	<i>Atriplex prostrata</i>	50	18.0	18.0	18	
	POMO5	* <i>Polypogon monspeliensis</i>	50	0.2	0.2	0.20	
	SOOL	* <i>Sonchus oleraceus</i>	50	0.2	0.2	0.20	
	TYDO	<i>Typha domingensis</i>	50	0.2	0.2	0.20	
	XAST	<i>Xanthium strumarium</i>	50	0.2	0.2	0.20	

Brassica (nigra) and Other Mustards Semi-Natural Stands

Upland Mustards

STAND TABLE

A stand table for these semi-natural stands is not provided because there is currently only one semi-natural type defined in the study area. See stand table for this type below.

Brassica nigra Semi-Natural Stand Type

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	40.5	15-66	-
Herb	39.5	13-66	0.5-2
Shrub	3.0	3-3	1-1
Hardwood	0.0	0-0	-

Conifer	0.0	0-0	-
Non-native plant presence	79.9	62-98	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1), NW (1)
Macrotopography: Lower to Middle 1/3 of slope (1)
Microtopography: convex (1)
Parent Material: Sedimentary (1)
Soil Texture: Lower to Middle 1/3 of slope (1)
General slope steepness: somewhat steep to steep

	Mean	Range
Elevation	96 ft.	39-152 ft.
Slope	24°	18-29°
Large rock cover	0.5%	0-1%
Small rock cover	25.0%	5-45%
Bare ground cover	42.5%	33-52%
Litter cover	30.1%	0-60%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 1703JD01, SDG0118
Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Adolphia californica</i>	1 of 2	2.1	S3.1	G3G4	

STAND TABLE

Brassica nigra

Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	100	0.2	0.2	0.20	X
	MALA6	<i>Malosma laurina</i>	50	2.0	2.0	2	
	MAFA	<i>Malacothamnus fasciculatus</i>	50	1.0	1.0	1	
	ADCA2	<i>Adolphia californica</i>	50	0.2	0.2	0.20	
	ENCA	<i>Encelia californica</i>	50	0.2	0.2	0.20	
	SAME3	<i>Salvia mellifera</i>	50	0.2	0.2	0.20	
Herb							
	BRNI	* <i>Brassica nigra</i>	100	31.0	7.0	55	X
	CAPY2	* <i>Carduus pycnocephalus</i>	50	10.0	10.0	10	

CEME2	* <i>Centaurea melitensis</i>	50	3.0	3.0	3
CRYPT	<i>Cryptantha</i>	50	1.0	1.0	1
LECO12	<i>Leymus condensatus</i>	50	1.0	1.0	1
PHDI	<i>Phacelia distans</i>	50	1.0	1.0	1
ASTRL	<i>Astragalus trichopodus</i> var. <i>lonchus</i>	50	0.2	0.2	0.20
BRDI3	* <i>Bromus diandrus</i>	50	0.2	0.2	0.20
BRMA3	* <i>Bromus madritensis</i>	50	0.2	0.2	0.20
CAMA24	<i>Calystegia macrostegia</i>	50	0.2	0.2	0.20
CIVU	* <i>Cirsium vulgare</i>	50	0.2	0.2	0.20
ERMO7	* <i>Erodium moschatum</i>	50	0.2	0.2	0.20
EUCH	<i>Eucrypta chrysanthemifolia</i>	50	0.2	0.2	0.20
FOVU	* <i>Foeniculum vulgare</i>	50	0.2	0.2	0.20
HECU3	<i>Heliotropium curassavicum</i>	50	0.2	0.2	0.20
MEIN2	* <i>Melilotus indicus</i>	50	0.2	0.2	0.20
MILA6	<i>Mirabilis laevis</i>	50	0.2	0.2	0.20
RASA2	* <i>Raphanus sativus</i>	50	0.2	0.2	0.20
SANU6	<i>Sairocarpus nuttallianus</i>	50	0.2	0.2	0.20
VUMY	* <i>Vulpia myuros</i>	50	0.2	0.2	0.20

***Bromus (diandrus, hordeaceus)-Brachypodium distachyon* Semi-Natural Stands**
Annual Brome Grasslands

STAND TABLE

Bromus (diandrus, hordeaceus)-Brachypodium distachyon
Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	50	0.6	0.2	1	
	ARCA11	<i>Artemisia californica</i>	38	0.2	0.2	0.2	
	LOSC2	<i>Lotus scoparius</i>	25	2.5	1.0	4	
	ERFA2	<i>Eriogonum fasciculatum</i>	25	1.1	0.2	2	
	SAME3	<i>Salvia mellifera</i>	25	1.1	0.2	2	
	BASA2	<i>Baccharis sarothroides</i>	25	1.0	1.0	1	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	25	0.2	0.2	0.2	
Herb							
	HIIN3	* <i>Hirschfeldia incana</i>	63	5.3	0.2	25	
	BRDI3	* <i>Bromus diandrus</i>	50	46.0	17.	80	
	BRDI2	* <i>Brachypodium distachyon</i>	38	21.0	15.	30	
	BRMA3	* <i>Bromus madritensis</i>	38	2.7	1.0	5	
	BRHO2	* <i>Bromus hordeaceus</i>	38	2.0	1.0	3	
	LASE	* <i>Lactuca serriola</i>	38	0.2	0.2	0.2	
	VIVI	* <i>Vicia villosa</i>	25	23.0	15.	31	
	ERBO	* <i>Erodium botrys</i>	25	9.0	3.0	15	
	AMPS	<i>Ambrosia psilostachya</i>	25	3.1	0.2	6	
	ERMO7	* <i>Erodium moschatum</i>	25	1.1	0.2	2	
	AVENA	* <i>Avena</i>	25	0.6	0.2	1	

ERIC6	* <i>Erodium cicutarium</i>	25	0.6	0.2	1
AVBA	* <i>Avena barbata</i>	25	0.2	0.2	0.2
DICA14	<i>Dichelostemma capitatum</i>	25	0.2	0.2	0.2

***Brachypodium distachyon* Semi-Natural Stand Type**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.0	31-75	-
Herb	52.7	28-67	0-2
Shrub	7.0	1-15	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	85.4	75-99	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), Variable (1), NW (1)

Macrotopography: Lower to Middle 1/3 of slope (2), Middle 1/3 of slope (1)

Microtopography: undulating (2), convex (1)

Parent Material: Mixed sedimentary (2)

Soil Texture: Lower to Middle 1/3 of slope (2), Middle 1/3 of slope (1)

General slope steepness: moderate to somewhat steep

	Mean	Range
Elevation	183 ft.	76-237 ft.
Slope	14°	8-20°
Large rock cover	1.0%	0-3%
Small rock cover	16.0%	0-38%
Bare ground cover	15.3%	10-21%
Litter cover	65.0%	50-77%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 1571JD01, SDG0078, SDG0080

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Viguiera laciniata</i>	1 of 3	4.2	S3.2	G4	

STAND TABLE

Brachypodium distachyon Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ARCA11	<i>Artemisia californica</i>	100	0.2	0.2	0.20	X
	LOSC2	<i>Lotus scoparius</i>	67	2.5	1.0	4	
	SAME3	<i>Salvia mellifera</i>	67	1.1	0.2	2	
	BASA2	<i>Baccharis sarothroides</i>	67	1.0	1.0	1	
	ISME5	<i>Isocoma menziesii</i>	67	0.2	0.2	0.20	
	MALA6	<i>Malosma laurina</i>	33	4.0	4.0	4	
	VILA3	<i>Viguiera laciniata</i>	33	2.0	2.0	2	
	HEWH	<i>Hesperoyucca whipplei</i>	33	1.0	1.0	1	
	MAFA	<i>Malacothamnus fasciculatus</i>	33	1.0	1.0	1	
	BAPI	<i>Baccharis pilularis</i>	33	0.2	0.2	0.20	
	ENCA	<i>Encelia californica</i>	33	0.2	0.2	0.20	
	ERIOG	<i>Eriogonum</i>	33	0.2	0.2	0.20	
	SAAP2	<i>Salvia apiana</i>	33	0.2	0.2	0.20	
	TARA	* <i>Tamarix ramosissima</i>	33	0.2	0.2	0.20	
Herb							
	BRDI2	* <i>Brachypodium distachyon</i>	100	21.0	15.0	30	X
	HIIN3	* <i>Hirschfeldia incana</i>	67	12.6	0.2	25	
	LOPE	* <i>Lolium perenne</i>	33	18.0	18.0	18	
	FOVU	* <i>Foeniculum vulgare</i>	33	14.0	14.0	14	
	AVFA	* <i>Avena fatua</i>	33	8.0	8.0	8	
	BRMA3	* <i>Bromus madritensis</i>	33	5.0	5.0	5	
	PIEC	* <i>Picris echioides</i>	33	4.0	4.0	4	
	CEME2	* <i>Centaurea melitensis</i>	33	3.0	3.0	3	
	ERBO	* <i>Erodium botrys</i>	33	3.0	3.0	3	
	ERMO7	* <i>Erodium moschatum</i>	33	2.0	2.0	2	
	GLCO6	* <i>Glebionis coronarium</i>	33	2.0	2.0	2	
	AVENA	* <i>Avena</i>	33	1.0	1.0	1	
	BRASS2	* <i>Brassica</i>	33	1.0	1.0	1	
	CAMA24	<i>Calystegia macrostegia</i>	33	0.2	0.2	0.20	
	CYDA	* <i>Cynodon dactylon</i>	33	0.2	0.2	0.20	
	HEGR7	<i>Heterotheca grandiflora</i>	33	0.2	0.2	0.20	
	HORDE	* <i>Hordeum</i>	33	0.2	0.2	0.20	
	LASE	* <i>Lactuca serriola</i>	33	0.2	0.2	0.20	
	MAMAM4	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	33	0.2	0.2	0.20	
	PIMI3	* <i>Piptatherum miliaceum</i>	33	0.2	0.2	0.20	
	RUCR	* <i>Rumex crispus</i>	33	0.2	0.2	0.20	
	SOPA	<i>Solanum parishii</i>	33	0.2	0.2	0.20	
	STEPH	<i>Stephanomeria</i>	33	0.2	0.2	0.20	
	TRPO	* <i>Tragopogon porrifolius</i>	33	0.2	0.2	0.20	

TRIFO

Trifolium

33 0.2 0.2 0.20

Bromus diandrus* Semi-Natural Stand Type*DISTRIBUTION IN STUDY AREA**

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.0	40-83	-
Herb	56.5	40-80	0-1
Shrub	2.1	0-4	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	92.4	87-99	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (1), N (1), Flat (1), E (1)

Macrotopography: Bottom (2), Lower 1/3 of slope (2)

Microtopography: flat (2), undulating (1), concave (1)

Parent Material: Granitic (3), Silty alluvium (1)

Soil Texture: Bottom (2), Lower 1/3 of slope (2)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	206 ft.	-29-395 ft.
Slope	6°	0-17°
Large rock cover	0.0%	0-0%
Small rock cover	4.3%	0-10%
Bare ground cover	25.3%	4-52%
Litter cover	67.0%	45-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=4)

Rapid Assessment(s): 0421DH02, 0423DH02, 1022DH06, SDRP0068

Relevé(s): none

CONSERVATION STATUS RANK n/a**NOTEWORTHY SPECIES**

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

STAND TABLE

Bromus diandrus

Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ERFA2	<i>Eriogonum fasciculatum</i>	50	1.1	0.2	2	
	ISME5	<i>Isocoma menziesii</i>	50	1.0	1.0	1	
	SANIC5	<i>Sambucus nigra</i> ssp. <i>cerulea</i>	50	0.2	0.2	0.20	
	ATCA2	<i>Atriplex canescens</i>	25	4.0	4.0	4	
	CYLIN2	<i>Cylindropuntia</i>	25	0.2	0.2	0.20	
Herb	BRDI3	* <i>Bromus diandrus</i>	100	46.0	17.0	80	X
	BRHO2	* <i>Bromus hordeaceus</i>	75	2.0	1.0	3	
	HIIN3	* <i>Hirschfeldia incana</i>	75	0.5	0.2	1	
	BRMA3	* <i>Bromus madritensis</i>	50	1.5	1.0	2	
	ERCI6	* <i>Erodium cicutarium</i>	50	0.6	0.2	1	
	AVBA	* <i>Avena barbata</i>	50	0.2	0.2	0.20	
	DICA14	<i>Dichelostemma capitatum</i>	50	0.2	0.2	0.20	
	VIVI	* <i>Vicia villosa</i>	25	31.0	31.0	31	
	ERBO	* <i>Erodium botrys</i>	25	15.0	15.0	15	
	CRSE11	<i>Croton setigerus</i>	25	6.0	6.0	6	
	DISP	<i>Distichlis spicata</i>	25	3.0	3.0	3	
	CLARK	<i>Clarkia</i>	25	2.0	2.0	2	
	CHSP11	<i>Chloracantha spinosa</i>	25	1.0	1.0	1	
	RASA2	* <i>Raphanus sativus</i>	25	1.0	1.0	1	
	SOOL	* <i>Sonchus oleraceus</i>	25	1.0	1.0	1	
	VUMY	* <i>Vulpia myuros</i>	25	1.0	1.0	1	
	AMPS	<i>Ambrosia psilostachya</i>	25	0.2	0.2	0.20	
	AMMEI2	<i>Amsinckia menziesii</i> var. <i>intermedia</i>	25	0.2	0.2	0.20	
	ARDO4	* <i>Arundo donax</i>	25	0.2	0.2	0.20	
	ASCA3	<i>Asclepias californica</i>	25	0.2	0.2	0.20	
	ASTEXX	<i>Asteraceae</i>	25	0.2	0.2	0.20	
	COAR4	* <i>Convolvulus arvensis</i>	25	0.2	0.2	0.20	
	COFI2	<i>Corethrogyne filaginifolia</i>	25	0.2	0.2	0.20	
	CRCA5	<i>Croton californicus</i>	25	0.2	0.2	0.20	
	EPBR3	<i>Epilobium brachycarpum</i>	25	0.2	0.2	0.20	
	ERMO7	* <i>Erodium moschatum</i>	25	0.2	0.2	0.20	
	FRSA	<i>Frankenia salina</i>	25	0.2	0.2	0.20	
	HECR2	* <i>Hedypnois cretica</i>	25	0.2	0.2	0.20	
	HYGL2	* <i>Hypochaeris glabra</i>	25	0.2	0.2	0.20	
	IVHA	<i>Iva hayesiana</i>	25	0.2	0.2	0.20	
	LASE	* <i>Lactuca serriola</i>	25	0.2	0.2	0.20	
	LUBI	<i>Lupinus bicolor</i>	25	0.2	0.2	0.20	
	SIGA	* <i>Silene gallica</i>	25	0.2	0.2	0.20	

***Bromus rubens*-*Schismus (arabicus, barbatus)* Semi-Natural Stands**
Red Brome or Mediterranean Grass Grasslands

STAND TABLE

A stand table for these semi-natural stands is not provided because there is currently only one semi-natural type defined in the study area. See stand table for this type below.

***Bromus rubens* Semi-Natural Stand Type**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	30.0	30-30	-
Herb	30.0	30-30	0-0.5
Shrub	0.2	0-0	0-1
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	98.6	99-99	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Variable (1)

Macrotopography: Bottom (1)

Microtopography: undulating (1)

Parent Material: Sedimentary (1)

Soil Texture: Bottom (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	199 ft.	199-199 ft.
Slope	3°	3-3°
Large rock cover	1.2%	1-1%
Small rock cover	5.0%	5-5%
Bare ground cover	10.0%	10-10%
Litter cover	81.0%	81-81%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 0311AK25

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Bromus rubens

Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	BASA2	<i>Baccharis sarothroides</i>	100	0.2	0.2	0.20	X
	ISME5	<i>Isocoma menziesii</i>	100	0.2	0.2	0.20	X
Herb							
	BRMA3	* <i>Bromus madritensis</i>	100	23.0	23.0	23	X
	ERBO	* <i>Erodium botrys</i>	100	8.0	8.0	8	X
	CEME2	* <i>Centaurea melitensis</i>	100	5.0	5.0	5	X
	BRDI3	* <i>Bromus diandrus</i>	100	3.0	3.0	3	X
	HIIN3	* <i>Hirschfeldia incana</i>	100	2.0	2.0	2	X
	ANAR	* <i>Anagallis arvensis</i>	100	1.0	1.0	1	X
	2FORB	<i>Forb (herbaceous, not grass nor grasslike)</i>	100	0.2	0.2	0.20	X

Conium maculatum-Foeniculum vulgare Semi-Natural Stands

Poison Hemlock or Fennel Patches

STAND TABLE

A stand table for these semi-natural stands is not provided because there is currently only one semi-natural type defined in the study area. See stand table for this type below.

Conium maculatum Semi-Natural Stand Type

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	99.0	99-99	-
Herb	98.0	98-98	0-0.5
Shrub	0.0	0-0	-
Hardwood	0.2	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	99.8	100-100	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (1)

Macrotopography: Bottom (1)

Microtopography: flat (1)

Parent Material: Mixed alluvium (1)

Soil Texture: Bottom (1)

General slope steepness: flat to flat

	Mean	Range
Elevation	114 ft.	114-114 ft.
Slope	0°	0-0°
Large rock cover	%	-%
Small rock cover	%	-%
Bare ground cover	%	-%
Litter cover	%	-%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): SDRP0079

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Conium maculatum

Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	POFRF3	<i>Populus fremontii</i> ssp. <i>fremontii</i>	100	0.2	0.2	0.20	X
Herb							
	COMA2	* <i>Conium maculatum</i>	100	98.0	98.0	98	X

***Corethrogyne filaginifolia* Provisional Alliance**

Sandaster Patches

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Corethrogyne filaginifolia* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	32.5	24-37	-
Herb	34.0	24-43	0-1
Shrub	1.4	0-4	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	45.9	21-57	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: E (2), S (1), NW (1)

Macrotopography: Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (1)

Microtopography: undulating (3), convex (1)

Parent Material: Granitic (3), Sandy alluvium (1)

Soil Texture: Lower 1/3 of slope (3), Lower to Middle 1/3 of slope (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	330 ft.	304-363 ft.
Slope	10°	5-19°
Large rock cover	0.1%	0-0%
Small rock cover	12.9%	7-25%
Bare ground cover	62.3%	45-77%
Litter cover	23.5%	12-47%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=4)

Rapid Assessment(s): 0421DH01, 0506AK03, 0506TK21, 0507MJ21

Relevé(s): none

CONSERVATION STATUS RANK G3? S3.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Corethrogyne filaginifolia

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	GUCA	<i>Gutierrezia californica</i>	50	1.1	0.2	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	50	0.6	0.2	1	
	HASQ2	<i>Hazardia squarrosa</i>	50	0.2	0.2	0.20	
	HESC2	<i>Helianthemum scoparium</i>	25	1.0	1.0	1	
	ARCA11	<i>Artemisia californica</i>	25	0.2	0.2	0.20	

Herb	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	25	0.2	0.2	0.20	
	HEWH	<i>Hesperoyucca whipplei</i>	25	0.2	0.2	0.20	
	LOSC2	<i>Lotus scoparius</i>	25	0.2	0.2	0.20	
Herb	COFI2	<i>Corethrogyne filaginifolia</i>	100	13.3	6.0	18	X
	BRMA3	* <i>Bromus madritensis</i>	100	1.9	0.2	4	X
	VUMY	* <i>Vulpia myuros</i>	75	3.4	0.2	9	
	LOGA2	* <i>Logfia gallica</i>	75	0.5	0.2	1	
	ERCI6	* <i>Erodium cicutarium</i>	50	15.5	8.0	23	
	ERBO	* <i>Erodium botrys</i>	50	12.5	5.0	20	
	LOHA2	<i>Lotus hamatus</i>	50	4.5	4.0	5	
	BRHO2	* <i>Bromus hordeaceus</i>	50	1.6	0.2	3	
	CEVE3	<i>Centaurium venustum</i>	50	1.1	0.2	2	
	HYGL2	* <i>Hypochaeris glabra</i>	50	0.6	0.2	1	
	DICA14	<i>Dichelostemma capitatum</i>	50	0.3	0.2	0.40	
	CHPA7	<i>Chlorogalum parviflorum</i>	50	0.2	0.2	0.20	
	CRSE11	<i>Croton setigerus</i>	50	0.2	0.2	0.20	
	CRMU2	<i>Cryptantha muricata</i>	50	0.2	0.2	0.20	
	DAPU3	<i>Daucus pusillus</i>	50	0.2	0.2	0.20	
	LOCA19	<i>Logfia californica</i>	50	0.2	0.2	0.20	
	HEFA	<i>Deinandra fasciculata</i>	25	7.0	7.0	7	
	CASP	<i>Calochortus splendens</i>	25	1.0	1.0	1	
	CRCO34	<i>Crassula connata</i>	25	1.0	1.0	1	
	PLER3	<i>Plantago erecta</i>	25	1.0	1.0	1	
	ANAR	* <i>Anagallis arvensis</i>	25	0.2	0.2	0.20	
	BRASXX	<i>Brassicaceae</i>	25	0.2	0.2	0.20	
	CAMIS	<i>Camissonia</i>	25	0.2	0.2	0.20	
	CAHI13	<i>Camissonia hirtella</i>	25	0.2	0.2	0.20	
	CAIN23	<i>Camissonia intermedia</i>	25	0.2	0.2	0.20	
	CAST20	<i>Camissonia strigulosa</i>	25	0.2	0.2	0.20	
	CAEX14	<i>Castilleja exserta</i>	25	0.2	0.2	0.20	
	CAEXE	<i>Castilleja exserta</i> ssp. <i>exserta</i>	25	0.2	0.2	0.20	
	CEME2	* <i>Centaurea melitensis</i>	25	0.2	0.2	0.20	
	CHGL	<i>Chaenactis glabriuscula</i>	25	0.2	0.2	0.20	
	CLPUQ	<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i>	25	0.2	0.2	0.20	
	CRIN8	<i>Cryptantha intermedia</i>	25	0.2	0.2	0.20	
	HYRA3	* <i>Hypochaeris radicata</i>	25	0.2	0.2	0.20	
	LOST4	<i>Lotus strigosus</i>	25	0.2	0.2	0.20	
	LUCO	<i>Lupinus concinnus</i>	25	0.2	0.2	0.20	
	OSTE	<i>Osmadenia tenella</i>	25	0.2	0.2	0.20	
	PELIF2	<i>Pectocarya linearis</i> ssp. <i>ferocula</i>	25	0.2	0.2	0.20	
	SABI3	<i>Sanicula bipinnatifida</i>	25	0.2	0.2	0.20	
	SIGA	* <i>Silene gallica</i>	25	0.2	0.2	0.20	
	STGN	<i>Stylocline gnaphalioides</i>	25	0.2	0.2	0.20	
	TRGRG	<i>Trifolium gracilentum</i> var. <i>gracilentum</i>	25	0.2	0.2	0.20	
	TRMI4	<i>Trifolium microcephalum</i>	25	0.2	0.2	0.20	

VUBR * *Vulpia bromoides* 25 0.2 0.2 0.20

***Cressa truxillensis*-*Distichlis spicata* Alliance**
Alkali Weed-Salt Grass Playas and Sinks

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Cressa truxillensis* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	31.5	25-38	-
Herb	31.5	25-38	0-0.5
Shrub	0.0	0-0	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	17.3	0-35	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2)

Macrotopography: Bottom (2)

Microtopography: flat (2)

Parent Material: Silty alluvium (2)

Soil Texture: Bottom (2)

General slope steepness: flat to flat

	Mean	Range
Elevation	-27 ft.	-30--24 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	29.5%	6-53%
Litter cover	69.0%	45-93%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0309RB21, 1020TK04

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Cressa truxillensis

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	CRTR5	<i>Cressa truxillensis</i>	100	21.0	5.0	37	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	0.6	0.2	1	X
	SPSA5	<i>Spergularia salina</i>	50	13.0	13.0	13	
	MENO2	* <i>Mesembryanthemum nodiflorum</i>	50	3.0	3.0	3	
	MAPA5	* <i>Malva parviflora</i>	50	2.0	2.0	2	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	50	2.0	2.0	2	
	CYDA	* <i>Cynodon dactylon</i>	50	1.0	1.0	1	
	SOOL	* <i>Sonchus oleraceus</i>	50	1.0	1.0	1	
	BASC5	* <i>Bassia scoparia</i>	50	0.2	0.2	0.20	
	CIVU	* <i>Cirsium vulgare</i>	50	0.2	0.2	0.20	
	LASE	* <i>Lactuca serriola</i>	50	0.2	0.2	0.20	
	TETE3	<i>Tetragonia tetragonioides</i>	50	0.2	0.2	0.20	
	URUR	* <i>Urtica urens</i>	50	0.2	0.2	0.20	
Cryptogam							
	2MOSS	<i>Moss</i>	50	0.2	0.2	0.20	

Deinandra fasciculata Alliance

Clustered Tarweed Fields

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Deinandra fasciculata Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Santa Ana Mountains (M262Bf), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Northern Valley (NV), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

Mean % Cover	Range % Cover	Height (m)
--------------	---------------	------------

Total vegetation	33.4	10-65	-
Herb	30.5	10-63	0-2
Shrub	4.4	0-14	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	46.7	1-94	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (6), S (6), NW (2), NE (2), W (1), Variable (1), SE (1), Flat (1)

Macrotopography: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3), Ridge top (4)

Microtopography: flat (9), convex (5), undulating (5), concave (1)

Parent Material: Granitic (3), Metamorphic (3), Sedimentary (3), Conglomerate (2), Gabbro (2), Mixed alluvium (1), Mixed metamorphic (1), Sandstone (1), Silty alluvium (1)

Soil Texture: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (5), Middle to Upper 1/3 of slope (2), Upper 1/3 of slope (2), Upper 1/3 of slope to Ridgetop (3), Ridge top (4)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	188 ft.	2-400 ft.
Slope	9°	0-18°
Large rock cover	2.8%	0-15%
Small rock cover	17.2%	0-38%
Bare ground cover	60.1%	20-88%
Litter cover	18.4%	0-75%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=20)

Rapid Assessment(s): 0505DH21, 0505DH22, 0505MJ21, 0505TK21, 0505TK23, 0505TK24, 0507TK21, 0602JJ01, 0622AK02, 0707TK03, 0708DH03, 1021FS02, 1169JD01, 1169KH01, 1310KH01, 1338JD01, 1339JD04, 1455LS01, 1513KH02, 1545JD02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Dichondra occidentalis</i>	1 of 20	4.2	S3.2	G4?	
<i>Ferocactus viridescens</i>	4 of 20	2.1	S3.1	G4	
<i>Harpagonella palmeri</i>	2 of 20	4.2	S3.2	G4	
<i>Lycium californicum</i>	1 of 20	4.2	S3.2	G4	
<i>Nolina interrata</i>	2 of 20	1B.1	S1.2	G1	Endangered
<i>Selaginella cinerascens</i>	4 of 20	4.1	S3S4	G3G4	

<i>Selaginella eremophila</i>	1 of 20	2.2	S2.2?	G4
<i>Viguiera laciniata</i>	5 of 20	4.2	S3.2	G4

STAND TABLE

Deinandra fasciculata Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ERFA2	<i>Eriogonum fasciculatum</i>	45	1.1	0.2	6	
	ARCA11	<i>Artemisia californica</i>	45	1.1	0.2	4	
	LOSC2	<i>Lotus scoparius</i>	35	0.7	0.2	2	
	MALA6	<i>Malosma laurina</i>	30	1.3	0.2	4	
	VILA3	<i>Viguiera laciniata</i>	25	2.1	0.2	4	
	ISME5	<i>Isocoma menziesii</i>	25	0.4	0.2	1	
	ADFA	<i>Adenostoma fasciculatum</i>	20	1.6	0.2	5	
	FEVI2	<i>Ferocactus viridescens</i>	20	0.2	0.2	0.20	
	OPLI3	<i>Opuntia littoralis</i>	20	0.2	0.2	0.20	
Herb							
	HEFA	<i>Deinandra fasciculata</i>	100	6.5	1.0	19	X
	BRMA3	* <i>Bromus madritensis</i>	70	4.0	0.2	14	
	CEME2	* <i>Centaurea melitensis</i>	65	2.9	0.2	14	
	AVBA	* <i>Avena barbata</i>	65	1.8	0.2	7	
	ERCI6	* <i>Erodium cicutarium</i>	45	4.1	0.2	12	
	LOGA2	* <i>Logfia gallica</i>	45	0.7	0.2	5	
	NALE2	<i>Nassella lepida</i>	35	1.5	0.2	6	
	BRHO2	* <i>Bromus hordeaceus</i>	30	5.7	0.2	29	
	PLER3	<i>Plantago erecta</i>	30	0.7	0.2	3	
	CASP	<i>Calochortus splendens</i>	30	0.3	0.2	1	
	VUMY	* <i>Vulpia myuros</i>	25	3.5	0.2	12	
	HIIN3	* <i>Hirschfeldia incana</i>	25	1.1	0.2	3	
	HYGL2	* <i>Hypochaeris glabra</i>	25	0.9	0.2	2	
	CHPA7	<i>Chlorogalum parviflorum</i>	25	0.4	0.2	1	
	GAPH2	* <i>Gastidium phleoides</i>	25	0.4	0.2	1	
	NAPU4	<i>Nassella pulchra</i>	25	0.4	0.2	1	
	SOOL	* <i>Sonchus oleraceus</i>	25	0.2	0.2	0.20	
	CRSE11	<i>Croton setigerus</i>	20	2.7	0.2	10	
	SIGA	* <i>Silene gallica</i>	20	0.9	0.2	2	
	BRNI	* <i>Brassica nigra</i>	20	0.8	0.2	1	
	LENIN	<i>Lepidium nitidum</i> var. <i>nitidum</i>	20	0.4	0.2	1	
	SATR12	* <i>Salsola tragus</i>	20	0.4	0.2	1	
Cryptogam							
	SECI	<i>Selaginella cinerascens</i>	20	19.5	2.0	36	
	CRYPTO	<i>Cryptogammic crust</i>	20	16.0	3.0	30	
	2LICHN	<i>Lichen</i>	20	4.6	0.2	14	

Distichlis spicata Alliance Salt Grass Flats

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Distichlis spicata-Annual Grasses Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	48.4	25-72	-
Herb	47.3	25-72	0-0.5
Shrub	0.6	0-3	0-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	48.3	1-90	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (4), SE (2), W (1), S (1), N (1)

Macrotopography: Bottom (4), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (1)

Microtopography: undulating (5), flat (2), concave (1), convex (1)

Parent Material: Gravelly alluvium (2), Sandy alluvium (2), Silty alluvium (2), Clayey alluvium (1), Gabbro (1), Sand dunes (1)

Soil Texture: Bottom (4), Lower 1/3 of slope (1), Lower to Middle 1/3 of slope (1), Middle 1/3 of slope (1), Middle to Upper 1/3 of slope (1), Upper 1/3 of slope to Ridgetop (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	150 ft.	-32-424 ft.
Slope	1°	0-3°
Large rock cover	6.2%	0-37%
Small rock cover	3.9%	0-10%
Bare ground cover	50.6%	0-88%
Litter cover	34.0%	8-96%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 0308DH21, 0310DH22, 1020DH03, 1021TK03, 1022RB03, 1646FS02, 1647FS01, 1694FS01, SDRP0092

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Atriplex coulteri</i>	1 of 9	1B.2	S2.2	G2	
<i>Atriplex parishii</i>	1 of 9	1B.1	S1.1	G1G2	
<i>Centromadia parryi</i> ssp. <i>australis</i>	1 of 9	1B.1	S2.1	G4T2	
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	1 of 9	4.2	S3.2	G5T3	

STAND TABLE

Distichlis spicata-Annual Grasses Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	67	0.2	0.2	0.20	
	BAPI	<i>Baccharis pilularis</i>	33	0.5	0.2	1	
	ERFA2	<i>Eriogonum fasciculatum</i>	22	0.2	0.2	0.20	
Herb	DISP	<i>Distichlis spicata</i>	100	21.0	3.0	65	X
	BRHO2	* <i>Bromus hordeaceus</i>	56	2.2	1.0	7	
	ERBO	* <i>Erodium botrys</i>	44	17.8	5.0	40	
	BRDI3	* <i>Bromus diandrus</i>	44	3.6	0.2	8	
	BRMA3	* <i>Bromus madritensis</i>	44	2.4	0.2	5	
	AVBA	* <i>Avena barbata</i>	33	7.1	0.2	15	
	FRSA	<i>Frankenia salina</i>	33	4.7	2.0	8	
	VUMY	* <i>Vulpia myuros</i>	33	4.0	3.0	6	
	HOMAG	* <i>Hordeum marinum</i> ssp. <i>gussonianum</i>	22	20.0	10.0	30	
	AMPS	<i>Ambrosia psilostachya</i>	22	7.0	2.0	12	
	LOPEM2	* <i>Lolium perenne</i> ssp. <i>multiflorum</i>	22	6.0	5.0	7	
	JACA4	<i>Jaumea carnosa</i>	22	5.0	1.0	9	
	SAPA30	<i>Sarcocornia pacifica</i>	22	1.1	0.2	2	
	HIIN3	* <i>Hirschfeldia incana</i>	22	0.6	0.2	1	
	RUCR	* <i>Rumex crispus</i>	22	0.2	0.2	0.20	

Frankenia salina Alliance

Alkali Heath Marsh

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Frankenia salina-*Distichlis spicata* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	62.4	21-86	-
Herb	62.3	21-86	0-1
Shrub	0.3	0-2	0-5
Hardwood	0.1	0-1	10-15
Conifer	0.0	0-0	-
Non-native plant presence	14.8	0-63	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), Variable (1), NW (1), N (1)

Macrotopography: Bottom (8), Lower 1/3 of slope (2)

Microtopography: flat (6), undulating (4)

Parent Material: Clayey alluvium (4), Silty alluvium (4), Sandy alluvium (2)

Soil Texture: Bottom (8), Lower 1/3 of slope (2)

General slope steepness: flat to moderate

	Mean	Range
Elevation	-35 ft.	-65--29 ft.
Slope	1°	0-8°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	13.2%	0-78%
Litter cover	84.0%	20-97%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0707AK01, 1020AK05, 1020AK06, 1020RB03, 1020TK01, 1020TK03, 1021RB03, 1022AK04, 1022DH02, 1023TK06

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Nemacaulis denudata</i> var. <i>denudata</i>	1 of 10	1B.2	S2.2	G3G4T3?	

STAND TABLE

Frankenia salina*-*Distichlis spicata
Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	BAPI	<i>Baccharis pilularis</i>	20	0.2	0.2	0.20	
	ISME5	<i>Isocoma menziesii</i>	20	0.2	0.2	0.20	
Herb	FRSA	<i>Frankenia salina</i>	100	42.3	17.0	82	X
	DISP	<i>Distichlis spicata</i>	80	5.9	1.0	18	X
	SAPA30	<i>Sarcocornia pacifica</i>	80	3.5	0.2	7	X
	ATPR	<i>Atriplex prostrata</i>	30	8.7	1.0	22	
	ARSU11	<i>Arthrocnemum subterminale</i>	30	1.7	1.0	2	
	HECU3	<i>Heliotropium curassavicum</i>	30	0.5	0.2	1	
	CRTR5	<i>Cressa truxillensis</i>	30	0.2	0.2	0.20	
	SOOL	* <i>Sonchus oleraceus</i>	30	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	20	29.0	3.0	55	
	CUSA	<i>Cuscuta salina</i>	20	10.5	1.0	20	
	MALE3	<i>Malvella leprosa</i>	20	9.1	0.2	18	
	SATR12	* <i>Salsola tragus</i>	20	4.0	3.0	5	
	CEME2	* <i>Centaurea melitensis</i>	20	1.1	0.2	2	
	BRMA3	* <i>Bromus madritensis</i>	20	0.6	0.2	1	
	BRDI3	* <i>Bromus diandrus</i>	20	0.2	0.2	0.20	

***Glebionis coronarium* Semi-Natural Stands**
Crown Daisy Fields

***Glebionis coronarium* Semi-Natural Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	34.5	31-38	-
Herb	31.5	28-35	0-1
Shrub	6.5	6-7	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	81.0	78-84	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1), Flat (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1)

Microtopography: undulating (2)

Parent Material: Sandy alluvium (2)

Soil Texture: Bottom (1), Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-24 ft.	-27--20 ft.
Slope	3°	0-5°
Large rock cover	0.0%	0-0%
Small rock cover	5.5%	5-6%
Bare ground cover	73.0%	71-75%
Litter cover	18.5%	16-21%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0311TK26, 0503RB21

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

<i>Agave shawii</i>	1 of 2	2.1	S1.2	G2G3
<i>Euphorbia misera</i>	1 of 2	2.2	S3.2	G5

STAND TABLE

Glebionis coronarium Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	BASA2	<i>Baccharis sarothroides</i>	100	3.1	0.2	6	X
	ISME5	<i>Isocoma menziesii</i>	100	0.6	0.2	1	X
	ARCA11	<i>Artemisia californica</i>	50	1.0	1.0	1	
	ATLE	<i>Atriplex lentiformis</i>	50	1.0	1.0	1	
	MAFA	<i>Malacothamnus fasciculatus</i>	50	1.0	1.0	1	
	ACCY2	* <i>Acacia cyclops</i>	50	0.2	0.2	0.20	
	AGSH	<i>Agave shawii</i>	50	0.2	0.2	0.20	
	CLIS	<i>Cleome isomeris</i>	50	0.2	0.2	0.20	
	CYPR19	<i>Cylindropuntia prolifera</i>	50	0.2	0.2	0.20	
	ENCA	<i>Encelia californica</i>	50	0.2	0.2	0.20	
	ERFA2	<i>Eriogonum fasciculatum</i>	50	0.2	0.2	0.20	
	EUMI4	<i>Euphorbia misera</i>	50	0.2	0.2	0.20	
	MALA6	<i>Malosma laurina</i>	50	0.2	0.2	0.20	
	OPLI3	<i>Opuntia littoralis</i>	50	0.2	0.2	0.20	
	SAAP2	<i>Salvia apiana</i>	50	0.2	0.2	0.20	
	SAME3	<i>Salvia mellifera</i>	50	0.2	0.2	0.20	
Herb							
	GLCO6	* <i>Glebionis coronarium</i>	100	24.5	21.0	28	X
	RARA2	* <i>Raphanus raphanistrum</i>	50	8.0	8.0	8	
	MEIN2	* <i>Melilotus indicus</i>	50	6.0	6.0	6	
	CACH13	<i>Camissonia cheiranthifolia</i>	50	3.0	3.0	3	
	MECR3	* <i>Mesembryanthemum crystallinum</i>	50	3.0	3.0	3	
	ERCI6	* <i>Erodium cicutarium</i>	50	1.0	1.0	1	
	MENO2	* <i>Mesembryanthemum nodiflorum</i>	50	1.0	1.0	1	
	CAST20	<i>Camissonia strigulosa</i>	50	0.2	0.2	0.20	
	CEME2	* <i>Centaurea melitensis</i>	50	0.2	0.2	0.20	
	CRCO34	<i>Crassula connata</i>	50	0.2	0.2	0.20	
	DAWR2	<i>Datura wrightii</i>	50	0.2	0.2	0.20	
	DUDLE	<i>Dudleya</i>	50	0.2	0.2	0.20	
	DUED	<i>Dudleya edulis</i>	50	0.2	0.2	0.20	
	ERBO	* <i>Erodium botrys</i>	50	0.2	0.2	0.20	
	HYGL2	* <i>Hypochaeris glabra</i>	50	0.2	0.2	0.20	
	LOTUS	<i>Lotus</i>	50	0.2	0.2	0.20	
	RUCR	* <i>Rumex crispus</i>	50	0.2	0.2	0.20	
	SATR12	* <i>Salsola tragus</i>	50	0.2	0.2	0.20	

***Iva hayesiana* Special Stands**
San Diego Marsh-elder Patches

***Iva hayesiana* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	35.0	24-44	-
Herb	27.7	14-37	0-1
Shrub	8.7	0-14	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	15.6	2-32	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (2), Flat (1)

Macrotopography: Bottom (3)

Microtopography: undulating (2), concave (1)

Parent Material: Mixed alluvium (1), Sandy alluvium (1), Sedimentary (1)

Soil Texture: Bottom (3)

General slope steepness: flat to gentle

	Mean	Range
Elevation	25 ft.	-8-83 ft.
Slope	2°	0-3°
Large rock cover	6.1%	0-17%
Small rock cover	9.8%	0-20%
Bare ground cover	33.3%	20-44%
Litter cover	29.3%	12-60%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0309DH21, 0312DH22, 1599KH01

Relevé(s): none

CONSERVATION STATUS RANK G1? S1.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
------------------------	-------------	------------------	---------------	-------------------	-------------------

<i>Iva hayesiana</i>	3 of 3	2.2	S2.2?	G3?
<i>Juncus acutus ssp. leopoldii</i>	1 of 3	4.2	S3.2	G5T5

STAND TABLE

Iva hayesiana Special Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	BASA2	<i>Baccharis sarothroides</i>	67	1.6	0.2	3	
	BASA4	<i>Baccharis salicifolia</i>	33	5.0	5.0	5	
	SALA6	<i>Salix lasiolepis</i>	33	4.0	4.0	4	
	TARA	* <i>Tamarix ramosissima</i>	33	4.0	4.0	4	
	TODI	<i>Toxicodendron</i>	33	3.0	3.0	3	
	ISME5	<i>Isocoma menziesii</i>	33	0.2	0.2	0.20	
	ISMEM	<i>Isocoma menziesii</i> var. <i>menziesii</i>	33	0.2	0.2	0.20	
Herb							
	IVHA	<i>Iva hayesiana</i>	100	17.3	14.0	19	X
	POMO5	* <i>Polypogon monspeliensis</i>	67	8.1	0.2	16	
	MEIN2	* <i>Melilotus indicus</i>	67	0.2	0.2	0.20	
	RUCR	* <i>Rumex crispus</i>	67	0.2	0.2	0.20	
	MURI2	<i>Muhlenbergia rigens</i>	33	6.0	6.0	6	
	TYDO	<i>Typha domingensis</i>	33	6.0	6.0	6	
	JUACL	<i>Juncus acutus ssp.</i>	33	3.0	3.0	3	
	AMPS	<i>Ambrosia psilostachya</i>	33	1.0	1.0	1	
	APGR2	* <i>Apium graveolens</i>	33	1.0	1.0	1	
	ARDO3	<i>Artemisia douglasiana</i>	33	1.0	1.0	1	
	DISP	<i>Distichlis spicata</i>	33	1.0	1.0	1	
	LUTR2	<i>Lupinus truncatus</i>	33	1.0	1.0	1	
	SOOL	* <i>Sonchus oleraceus</i>	33	1.0	1.0	1	
	ANAR	* <i>Anagallis arvensis</i>	33	0.2	0.2	0.20	
	BRNI	* <i>Brassica nigra</i>	33	0.2	0.2	0.20	
	FOVU	* <i>Foeniculum vulgare</i>	33	0.2	0.2	0.20	
	GNPA	<i>Gnaphalium palustre</i>	33	0.2	0.2	0.20	
	JUNCU	<i>Juncus</i>	33	0.2	0.2	0.20	
	JUME4	<i>Juncus mexicanus</i>	33	0.2	0.2	0.20	
	PIMI3	* <i>Piptatherum miliaceum</i>	33	0.2	0.2	0.20	
	PSCAM	<i>Pseudognaphalium</i> <i>canescens ssp.</i> <i>microcephalum</i>	33	0.2	0.2	0.20	
	PSST7	<i>Pseudognaphalium</i> <i>stramineum</i>	33	0.2	0.2	0.20	
	SEVU	* <i>Senecio vulgaris</i>	33	0.2	0.2	0.20	
	VIVI	* <i>Vicia villosa</i>	33	0.2	0.2	0.20	
Cryptogam							
	2ALGA	<i>Algae</i>	33	18.0	18.0	18	
	2MOSS	<i>Moss</i>	33	3.0	3.0	3	

***Juncus acutus* Provisional Alliance**
Southwestern spiny rush marsh

ALLIANCE STAND TABLE

***Juncus acutus*
Provisional Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	56	1.1	0.2	3	
	BASA4	<i>Baccharis salicifolia</i>	22	1.0	1.0	1	
	BAPI	<i>Baccharis pilularis</i>	22	0.2	0.2	0.2	
Herb							
	JUACL	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	100	33.2	18.	56	X
	JACA4	<i>Jaumea carnosa</i>	78	21.7	7.0	45	
	DISP	<i>Distichlis spicata</i>	78	9.0	0.2	35	
	SAPA30	<i>Sarcocornia pacifica</i>	78	8.6	1.0	27	
	FRSA	<i>Frankenia salina</i>	67	9.7	0.2	25	
	TYDO	<i>Typha domingensis</i>	33	0.5	0.2	1	
	POMO5	* <i>Polypogon monspeliensis</i>	33	0.2	0.2	0.2	
	IVHA	<i>Iva hayesiana</i>	22	14.5	7.0	22	
	CAED3	* <i>Carpobrotus edulis</i>	22	1.5	1.0	2	
	ATPR	<i>Atriplex prostrata</i>	22	0.2	0.2	0.2	

***Juncus acutus* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	83.0	68-98	-
Herb	75.0	60-90	0-2
Shrub	6.0	4-8	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	2.9	1-5	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (1), Flat (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1)

Microtopography: flat (1), undulating (1)

Parent Material: Sandstone (1), Sedimentary (1)

Soil Texture: Bottom (1), Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	69 ft.	61-76 ft.
Slope	1°	0-1°
Large rock cover	0.6%	0-1%
Small rock cover	1.5%	0-3%
Bare ground cover	48.5%	2-95%
Litter cover	41.0%	2-80%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0310TK23, 1630JD01

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Artemisia palmeri</i>	1 of 2	4.2	S3.2	G3	
<i>Iva hayesiana</i>	2 of 2	2.2	S2.2?	G3?	
<i>Juncus acutus ssp. leopoldii</i>	2 of 2	4.2	S3.2	G5T5	

STAND TABLE

Juncus acutus

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	50	0.2	0.2	0.20	
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	100	1.0	1.0	1	X
	TARA	* <i>Tamarix ramosissima</i>	50	5.0	5.0	5	
	BASA2	<i>Baccharis sarothroides</i>	50	1.0	1.0	1	
	ISME5	<i>Isocoma menziesii</i>	50	1.0	1.0	1	
	BAPI	<i>Baccharis pilularis</i>	50	0.2	0.2	0.20	
	TAMAR2	* <i>Tamarix</i>	50	0.2	0.2	0.20	
Herb							
	JUACL	<i>Juncus acutus ssp.</i>	100	40.5	35.0	46	X
	IVHA	<i>Iva hayesiana</i>	100	14.5	7.0	22	X
	TYDO	<i>Typha domingensis</i>	100	0.6	0.2	1	X
	DISP	<i>Distichlis spicata</i>	50	35.0	35.0	35	
	LECO12	<i>Leymus condensatus</i>	50	12.0	12.0	12	

ANCA10	<i>Anemopsis californica</i>	50	3.0	3.0	3
ARPA15	<i>Artemisia palmeri</i>	50	0.2	0.2	0.20
COSE4	* <i>Cortaderia selloana</i>	50	0.2	0.2	0.20
POMO5	* <i>Polypogon monspeliensis</i>	50	0.2	0.2	0.20
SCAM6	<i>Schoenoplectus Americanus</i>	50	0.2	0.2	0.20

***Juncus acutus*-*Jaumea carnosa* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	62.3	45-76	-
Herb	62.1	45-76	0.5-2
Shrub	0.6	0-3	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.8	0-3	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (5), SW (1), S (1)

Macrotopography: Bottom (6), Lower 1/3 of slope (1)

Microtopography: flat (4), undulating (1), concave (1)

Parent Material: Clayey alluvium (3), Silty alluvium (3), Sandy alluvium (1)

Soil Texture: Bottom (6), Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-32 ft.	-37--23 ft.
Slope	1°	0-3°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	28.7%	5-64%
Litter cover	68.3%	33-92%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 0310RB22, 1019DH03, 1020DH04, 1021AK03, 1021DH02, 1021RB02, 1021TK08

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>		<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus ssp. leopoldii</i>	7	of 7	4.2	S3.2	G5T5	

STAND TABLE

Juncus acutus-*Jaumea carnosa*

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	57	1.1	0.2	3	
Herb	JUACL	<i>Juncus acutus ssp.</i>	100	31.1	18.0	56	X
	JACA4	<i>Jaumea carnosa</i>	100	21.7	7.0	45	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	8.6	1.0	27	X
	FRSA	<i>Frankenia salina</i>	86	9.7	0.2	25	X
	DISP	<i>Distichlis spicata</i>	86	4.7	0.2	7	X
	CAED3	* <i>Carpobrotus edulis</i>	29	1.5	1.0	2	
	ATPR	<i>Atriplex prostrata</i>	29	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	29	0.2	0.2	0.20	

Lepidium latifolium Semi-Natural Stands

Perennial Pepperweed Patches

Lepidium latifolium Semi-Natural Stands

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Northern Valley (NV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	68.0	68-68	-
Herb	68.0	68-68	0.5-1
Shrub		-	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	85.3	85-85	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (1)

Macrotopography: Bottom (1)

Microtopography: flat (1)
Parent Material: Metamorphic (1)
Soil Texture: Bottom (1)
General slope steepness: flat to flat

	Mean	Range
Elevation	166 ft.	166-166 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	5.0%	5-5%
Bare ground cover	45.0%	45-45%
Litter cover	48.0%	48-48%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 1187JD01
Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Lepidium latifolium Semi-Natural Stands

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb						
LELA2	* <i>Lepidium latifolium</i>	100	34.0	34.0	34	X
PIEC	* <i>Picris echioides</i>	100	12.0	12.0	12	X
RASA2	* <i>Raphanus sativus</i>	100	6.0	6.0	6	X
XAST	<i>Xanthium strumarium</i>	100	6.0	6.0	6	X
CYER	<i>Cyperus eragrostis</i>	100	3.0	3.0	3	X
RUCR	* <i>Rumex crispus</i>	100	3.0	3.0	3	X
BRNA	* <i>Brassica napus</i>	100	1.0	1.0	1	X
FOVU	* <i>Foeniculum vulgare</i>	100	1.0	1.0	1	X
MADI6	* <i>Matricaria discoidea</i>	100	1.0	1.0	1	X
URDIH	<i>Urtica dioica</i> ssp. <i>holosericea</i>	100	1.0	1.0	1	X
PHAQ	* <i>Phalaris aquatica</i>	100	0.2	0.2	0.20	X

Leymus condensatus Alliance

Giant Wild Rye Grassland

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Leymus condensatus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	46.0	46-46	-
Herb	36.0	36-36	1-2
Shrub	13.0	13-13	2-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1)

Macrotopography: Bottom (1)

Microtopography: concave (1)

Parent Material: Sandstone (1)

Soil Texture: Bottom (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	77 ft.	77-77 ft.
Slope	5°	5-5°
Large rock cover	0.0%	0-0%
Small rock cover	0.2%	0-0%
Bare ground cover	16.0%	16-16%
Litter cover	81.0%	81-81%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 0708MG03

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

***Leymus condensatus*
Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	MALA6	<i>Malosma laurina</i>	100	6.0	6.0	6	X
	ERCR2	<i>Eriodictyon crassifolium</i>	100	5.0	5.0	5	X
	ARCA11	<i>Artemisia californica</i>	100	1.0	1.0	1	X
	LOSC2	<i>Lotus scoparius</i>	100	1.0	1.0	1	X
	SAME3	<i>Salvia mellifera</i>	100	1.0	1.0	1	X
	BAPI	<i>Baccharis pilularis</i>	100	0.2	0.2	0.20	X
	DIAUA	<i>Diplacus aurantiacus ssp. aurantiacus</i>	100	0.2	0.2	0.20	X
	LOSU2	<i>Lonicera subspicata</i>	100	0.2	0.2	0.20	X
	MAFA	<i>Malacothamnus fasciculatus</i>	100	0.2	0.2	0.20	X
	YUSC2	<i>Yucca schidigera</i>	100	0.2	0.2	0.20	X
Herb	LECO12	<i>Leymus condensatus</i>	100	46.0	46.0	46	X
	GAAN2	<i>Galium angustifolium</i>	100	0.2	0.2	0.20	X
	MAMAM4	<i>Marah macrocarpus var. macrocarpus</i>	100	0.2	0.2	0.20	X
	PSCA13	<i>Pseudognaphalium californicum</i>	100	0.2	0.2	0.20	X

***Leymus triticoides* Alliance**

Creeping Rye Grass Turfs

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Leymus triticoides* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	71.5	63-80	-
Herb	69.0	63-75	0.5-1
Shrub	3.0	0-6	2-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	11.9	4-20	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (1), Flat (1)

Macrotopography: Bottom (1), Lower 1/3 of slope (1)

Microtopography: flat (2)

Parent Material: Mixed alluvium (1), Silty alluvium (1)

Soil Texture: Bottom (1), Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	210 ft.	-24-444 ft.
Slope	1°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	1.6%	0-3%
Litter cover	91.5%	89-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 1019AK01

Relevé(s): SDG0055

CONSERVATION STATUS RANK G4 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Iva hayesiana</i>	1 of 2	2.2	S2.2?	G3?	

STAND TABLE

Leymus triticoides Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	BASA4	<i>Baccharis salicifolia</i>	50	6.0	6.0	6	
	RICO3	* <i>Ricinus communis</i>	50	0.2	0.2	0.20	
Herb							
	LETR5	<i>Leymus triticoides</i>	100	58.5	45.0	72	X
	MALE3	<i>Malvella leprosa</i>	50	15.0	15.0	15	
	FRSA	<i>Frankenia salina</i>	50	10.0	10.0	10	
	VIVI	* <i>Vicia villosa</i>	50	5.0	5.0	5	
	AVENA	* <i>Avena</i>	50	4.0	4.0	4	
	HEFA	<i>Deinandra fasciculata</i>	50	3.0	3.0	3	
	RASA2	* <i>Raphanus sativus</i>	50	3.0	3.0	3	
	LASE	* <i>Lactuca serriola</i>	50	2.0	2.0	2	
	RUCR	* <i>Rumex crispus</i>	50	2.0	2.0	2	
	AMPS	<i>Ambrosia psilostachya</i>	50	1.0	1.0	1	
	JUME4	<i>Juncus mexicanus</i>	50	1.0	1.0	1	
	SIMA2	<i>Sidalcea malviflora</i>	50	1.0	1.0	1	
	XAST	<i>Xanthium strumarium</i>	50	1.0	1.0	1	
	CADR	* <i>Cardaria draba</i>	50	0.2	0.2	0.20	
	CRTR5	<i>Cressa truxillensis</i>	50	0.2	0.2	0.20	
	CYER	<i>Cyperus eragrostis</i>	50	0.2	0.2	0.20	
	IVHA	<i>Iva hayesiana</i>	50	0.2	0.2	0.20	
	PIEC	* <i>Picris echioides</i>	50	0.2	0.2	0.20	
	SOOL	* <i>Sonchus oleraceus</i>	50	0.2	0.2	0.20	

Lolium perenne Semi-Natural Stands Perennial Rye Grass Fields

STAND TABLE

A stand table for these semi-natural stands is not provided because there is currently only one semi-natural type defined in the study area. See stand table for this type below.

***Lolium perenne* Semi-Natural Stand Type**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	66.7	42-88	-
Herb	66.7	42-88	0-1
Shrub	0.1	0-0	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	84.2	71-100	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: W (1), S (1), Flat (1)

Macrotopography: Bottom (2), Bottom to Lower 1/3 of slope (1)

Microtopography: flat (2), concave (1)

Parent Material: Clayey alluvium (1), Metamorphic (1), Sandy alluvium (1)

Soil Texture: Bottom (2), Bottom to Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	135 ft.	-26-268 ft.
Slope	1°	0-2°
Large rock cover	0.0%	0-0%
Small rock cover	3.7%	0-10%
Bare ground cover	25.3%	3-63%
Litter cover	68.7%	25-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0505TK22, 1019RB01, 1563MM01

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	1 of 3	4.2	S3.2	G5T5	

STAND TABLE

Lolium perenne
Semi-Natural Stand Type

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	BASA4	<i>Baccharis salicifolia</i>	33	0.2	0.2	0.20	
	BASA2	<i>Baccharis sarothroides</i>	33	0.2	0.2	0.20	
	ISME5	<i>Isocoma menziesii</i>	33	0.2	0.2	0.20	
Herb	LOPEM2	* <i>Lolium perenne</i> ssp. <i>multiflorum</i>	100	51.0	28.0	85	X
	RUCR	* <i>Rumex crispus</i>	100	1.4	0.2	3	X
	HOMUG	* <i>Hordeum murinum</i> ssp. <i>glaucum</i>	33	15.0	15.0	15	
	JUDU	<i>Juncus dubius</i>	33	12.0	12.0	12	
	AMPS	<i>Ambrosia psilostachya</i>	33	8.0	8.0	8	
	HIIN3	* <i>Hirschfeldia incana</i>	33	8.0	8.0	8	
	MEIN2	* <i>Melilotus indicus</i>	33	5.0	5.0	5	
	FRSA	<i>Frankenia salina</i>	33	3.0	3.0	3	
	SAPA30	<i>Sarcocornia pacifica</i>	33	3.0	3.0	3	
	HECU3	<i>Heliotropium curassavicum</i>	33	2.0	2.0	2	
	DISP	<i>Distichlis spicata</i>	33	1.0	1.0	1	
	MALE3	<i>Malvella leprosa</i>	33	1.0	1.0	1	
	ATPR	<i>Atriplex prostrata</i>	33	0.2	0.2	0.20	
	AVBA	* <i>Avena barbata</i>	33	0.2	0.2	0.20	
	BRHO2	* <i>Bromus hordeaceus</i>	33	0.2	0.2	0.20	
	CADR	* <i>Cardaria draba</i>	33	0.2	0.2	0.20	
	CUSCU	<i>Cuscuta</i>	33	0.2	0.2	0.20	
	ERBO	* <i>Erodium botrys</i>	33	0.2	0.2	0.20	
	FOVU	* <i>Foeniculum vulgare</i>	33	0.2	0.2	0.20	
	JUACL	<i>Juncus acutus</i> ssp.	33	0.2	0.2	0.20	
	PIEC	* <i>Picris echioides</i>	33	0.2	0.2	0.20	
	RASA2	* <i>Raphanus sativus</i>	33	0.2	0.2	0.20	
	XAST	<i>Xanthium strumarium</i>	33	0.2	0.2	0.20	

Mediterranean California Naturalized Annual and Perennial Grassland Semi-Natural Stands
Mediterranean California Naturalized Annual and Perennial Grasslands

SUMMARY

Unlike the other descriptions in this report, this is based on a group level description. As a result of early sampling with *Erodium* spp. dominant and *Bromus* spp (non-natives) not fully leafed out, several of the stands of grasslands analyzed could not be determined to a semi-natural stand type more completely. When sampled early it is difficult to determine beyond the group level, so these stands were left at this "basal" level in the classification.

Mediterranean California Naturalized Annual and Perennial Grassland Semi-Natural Stands

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), Northern Foothills (NF), Southern Foothills (), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	42.1	15-85	-
Herb	38.0	10-84	0-1
Shrub	4.9	0-12	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	80.1	49-100	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (4), W (3), SW (2), N (2), SE (1), NW (1), E (1)

Macrotopography: Bottom (3), Lower 1/3 of slope (4), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (1), Ridge top (1)

Microtopography: undulating (8), convex (3), flat (2), concave (1)

Parent Material: Metamorphic (10), Granitic (2), Gravelly alluvium (1), Shale (1)

Soil Texture: Bottom (3), Lower 1/3 of slope (4), Lower to Middle 1/3 of slope (2), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (2), Middle to Upper 1/3 of slope (1), Ridge top (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	205 ft.	-28-420 ft.
Slope	9°	1-18°
Large rock cover	13.9%	0-42%
Small rock cover	14.0%	0-29%
Bare ground cover	35.4%	12-64%
Litter cover	35.0%	6-72%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=14)

Rapid Assessment(s): 0309TK01, 0324DHF5, 0519TK05, 1606JD02, 1684FS01, 1695LS01, SDG0015, SDG0023, SDG0024, SDG0035, SDG0047, SDG0050, SDG0119, SDRP0146

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Achnatherum diegoense</i>	1 of 14	4.2	S3.2	G3	
<i>Dichondra occidentalis</i>	1 of 14	4.2	S3.2	G4?	
<i>Nolina interrata</i>	1 of 14	1B.1	S1.2	G1	Endangered
<i>Viguiera laciniata</i>	2 of 14	4.2	S3.2	G4	

STAND TABLE

Mediterranean California Naturalized Annual and Perennial Grassland
Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	MALA6	<i>Malosma laurina</i>	50	1.2	0.2	4	
	ARCA11	<i>Artemisia californica</i>	50	0.6	0.2	2	
	SAAP2	<i>Salvia apiana</i>	36	1.1	0.2	2	
	ERFA2	<i>Eriogonum fasciculatum</i>	29	0.9	0.2	2	
	RHCR	<i>Rhamnus crocea</i>	29	0.4	0.2	1	
	ISOCO	<i>Isocoma</i>	21	0.5	0.2	1	
	ERCOC12	<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	21	0.2	0.2	0.20	
Herb							
	BRMA3	* <i>Bromus madritensis</i>	50	3.0	0.2	10	
	ERBO	* <i>Erodium botrys</i>	36	34.0	10.0	60	
	ERODI	* <i>Erodium</i>	36	25.0	7.0	70	
	BRHO2	* <i>Bromus hordeaceus</i>	36	2.8	1.0	5	
	NAPU4	<i>Nassella pulchra</i>	36	0.4	0.2	1	
	CEME2	* <i>Centaurea melitensis</i>	29	7.6	0.2	16	
	AVBA	* <i>Avena barbata</i>	29	2.8	0.2	5	
	BRDI3	* <i>Bromus diandrus</i>	29	2.1	0.2	4	
	HIIN3	* <i>Hirschfeldia incana</i>	29	1.9	0.2	5	
	CAMA24	<i>Calystegia macrostegia</i>	21	0.5	0.2	1	
	COFI2	<i>Corethrogyne filaginifolia</i>	21	0.2	0.2	0.20	
	CRSE11	<i>Croton setigerus</i>	21	0.2	0.2	0.20	

***Muhlenbergia rigens* Alliance**
Deergrass Beds

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Muhlenbergia rigens* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Northern Foothills (NF)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	75.5	72-79	-
Herb	75.5	72-79	0-1
Shrub	0.1	0-0	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	40.7	9-72	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1), N (1)

Macrotopography: Bottom (1), Middle to Upper 1/3 of slope (1)

Microtopography: convex (1), flat (1)

Parent Material: Granitic (2)

Soil Texture: Bottom (1), Middle to Upper 1/3 of slope (1)

General slope steepness: gentle to gentle

	Mean	Range
Elevation	508 ft.	384-631 ft.
Slope	2°	1-3°
Large rock cover	2.2%	1-3%
Small rock cover	2.5%	0-5%
Bare ground cover	7.0%	3-11%
Litter cover	86.5%	80-93%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=2)

Rapid Assessment(s): 0311RB22, 1036MB01

Relevé(s): none

CONSERVATION STATUS RANK G3 S2.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Muhlenbergia rigens Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	CEMOM	<i>Cercocarpus montanus</i> <i>var. minutiflorus</i>	50	0.2	0.2	0.20	
	QUAC3	<i>Quercus xacutidens</i> <i>[cornelius-mulleri x engelmannii]</i>	50	0.2	0.2	0.20	
Herb							
	MURI2	<i>Muhlenbergia rigens</i>	100	27.5	15.0	40	X
	CAPY2	* <i>Carduus pycnocephalus</i>	100	22.6	0.2	45	X
	THFE	<i>Thalictrum fendleri</i>	100	5.1	0.2	10	X
	AGROS2	<i>Agrostis</i>	50	25.0	25.0	25	
	VUMY	* <i>Vulpia myuros</i>	50	20.0	20.0	20	
	CLPE	<i>Claytonia perfoliata</i>	50	6.0	6.0	6	
	BRRU2	* <i>Bromus rubens</i>	50	5.0	5.0	5	
	SIMAS	<i>Sidalcea malviflora</i> var. <i>sparsifolia</i>	50	5.0	5.0	5	
	BRDI3	* <i>Bromus diandrus</i>	50	2.0	2.0	2	
	BRMA3	* <i>Bromus madritensis</i>	50	2.0	2.0	2	
	HEFA	<i>Deinandra fasciculata</i>	50	2.0	2.0	2	
	GAAP2	<i>Galium aparine</i>	50	2.0	2.0	2	
	SIMA2	<i>Sidalcea malviflora</i>	50	2.0	2.0	2	
	GAPA5	* <i>Galium parisiense</i>	50	1.0	1.0	1	
	SIBE	<i>Sisyrinchium bellum</i>	50	1.0	1.0	1	
	CEGL2	* <i>Cerastium glomeratum</i>	50	0.2	0.2	0.20	
	CIOCO	<i>Cirsium occidentale</i> var. <i>occidentale</i>	50	0.2	0.2	0.20	
	DICAC5	<i>Dichelostemma capitatum</i> <i>ssp. capitatum</i>	50	0.2	0.2	0.20	
	ERBO	* <i>Erodium botrys</i>	50	0.2	0.2	0.20	
	GAAN2	<i>Galium angustifolium</i>	50	0.2	0.2	0.20	
	GAPOP	<i>Galium porrigens</i> var. <i>porrigens</i>	50	0.2	0.2	0.20	
	GED1	* <i>Geranium dissectum</i>	50	0.2	0.2	0.20	
	HYGL2	* <i>Hypochaeris glabra</i>	50	0.2	0.2	0.20	
	LATHY	<i>Lathyrus</i>	50	0.2	0.2	0.20	
	LOTUS	<i>Lotus</i>	50	0.2	0.2	0.20	
	NASSE	<i>Nassella</i>	50	0.2	0.2	0.20	
	SOAS	* <i>Sonchus asper</i>	50	0.2	0.2	0.20	
	STRIR3	<i>Stachys rigida</i> var. <i>rigida</i>	50	0.2	0.2	0.20	
Cryptogam							
	2MOSS	<i>Moss</i>	50	0.2	0.2	0.20	

***Nassella lepida* Provisional Alliance**
Foothill Needlegrass Grassland

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Nassella lepida* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): North Coast (NC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	23.0	22-24	-
Herb	22.0	21-23	0-0.5
Shrub	1.7	1-2	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	49.6	48-51	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: SW (2), E (1)

Macrotopography: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1)

Microtopography: convex (1), flat (1), undulating (1)

Parent Material: Conglomerate (1), Sandstone (1), Sedimentary (1)

Soil Texture: Lower 1/3 of slope (2), Lower to Middle 1/3 of slope (1)

General slope steepness: gentle to somewhat steep

	Mean	Range
Elevation	74 ft.	-29-206 ft.
Slope	12°	4-16°
Large rock cover	0.0%	0-0%
Small rock cover	1.1%	0-3%
Bare ground cover	72.0%	38-89%
Litter cover	24.0%	4-60%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): 0310RB25, 0504AK22, SDG0090
Relevé(s): none

CONSERVATION STATUS RANK G3? S3.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Nassella lepida

Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	67	0.6	0.2	1	
	LOSC2	<i>Lotus scoparius</i>	67	0.2	0.2	0.20	
	ARCA11	<i>Artemisia californica</i>	33	1.0	1.0	1	
	CLIS	<i>Cleome isomeris</i>	33	1.0	1.0	1	
	BAPI	<i>Baccharis pilularis</i>	33	0.2	0.2	0.20	
	BASA2	<i>Baccharis sarothroides</i>	33	0.2	0.2	0.20	
	ENCA	<i>Encelia californica</i>	33	0.2	0.2	0.20	
	ERFA2	<i>Eriogonum fasciculatum</i>	33	0.2	0.2	0.20	
	MALA6	<i>Malosma laurina</i>	33	0.2	0.2	0.20	
	SNAG	<i>Standing snag</i>	33	0.2	0.2	0.20	
Herb							
	NALE2	<i>Nassella lepida</i>	100	8.3	6.0	11	X
	BRMA3	* <i>Bromus madritensis</i>	100	4.7	1.0	12	X
	VUMY	* <i>Vulpia myuros</i>	67	4.1	0.2	8	
	AVFA	* <i>Avena fatua</i>	67	0.6	0.2	1	
	HYGL2	* <i>Hypochaeris glabra</i>	67	0.6	0.2	1	
	HEFA	<i>Deinandra fasciculata</i>	67	0.2	0.2	0.20	
	ERCI6	* <i>Erodium cicutarium</i>	33	9.0	9.0	9	
	ERBO	* <i>Erodium botrys</i>	33	4.0	4.0	4	
	DISP	<i>Distichlis spicata</i>	33	3.0	3.0	3	
	LOHA2	<i>Lotus hamatus</i>	33	3.0	3.0	3	
	SIBE	<i>Sisyrinchium bellum</i>	33	3.0	3.0	3	
	BRHO2	* <i>Bromus hordeaceus</i>	33	2.0	2.0	2	
	CEME2	* <i>Centaurea melitensis</i>	33	2.0	2.0	2	
	BRDI2	* <i>Brachypodium distachyon</i>	33	1.0	1.0	1	
	CRSE11	<i>Croton setigerus</i>	33	1.0	1.0	1	
	FOVU	* <i>Foeniculum vulgare</i>	33	1.0	1.0	1	
	LIDI	<i>Linanthus dianthiflorus</i>	33	1.0	1.0	1	
	ANAR	* <i>Anagallis arvensis</i>	33	0.2	0.2	0.20	
	ASGA	<i>Astragalus gambelianus</i>	33	0.2	0.2	0.20	
	BRNI	* <i>Brassica nigra</i>	33	0.2	0.2	0.20	
	CASU3	<i>Calochortus superbus</i>	33	0.2	0.2	0.20	
	CALYS	<i>Calystegia</i>	33	0.2	0.2	0.20	
	CARA3	<i>Cardionema</i>	33	0.2	0.2	0.20	
	CENTA2	<i>Centaurium</i>	33	0.2	0.2	0.20	
	COFI2	<i>Corethrogyne filaginifolia</i>	33	0.2	0.2	0.20	
	CRCO34	<i>Crassula connata</i>	33	0.2	0.2	0.20	

CRTR5	<i>Cressa truxillensis</i>	33	0.2	0.2	0.20
CRCA5	<i>Croton californicus</i>	33	0.2	0.2	0.20
DAPU3	<i>Daucus pusillus</i>	33	0.2	0.2	0.20
DUPU	<i>Dudleya pulverulenta</i>	33	0.2	0.2	0.20
GAAN2	<i>Galium angustifolium</i>	33	0.2	0.2	0.20
GRIND	<i>Grindelia</i>	33	0.2	0.2	0.20
LENIN	<i>Lepidium nitidum</i> var. <i>nitidum</i>	33	0.2	0.2	0.20
LOGA2	* <i>Logfia gallica</i>	33	0.2	0.2	0.20
NAPU4	<i>Nassella pulchra</i>	33	0.2	0.2	0.20
PIEC	* <i>Picris echioides</i>	33	0.2	0.2	0.20
PLOV	<i>Plantago ovata</i>	33	0.2	0.2	0.20
POGR5	<i>Porophyllum gracile</i>	33	0.2	0.2	0.20
PTDR	<i>Pterostegia drymarioides</i>	33	0.2	0.2	0.20
Cryptogam					
CRYPTO	<i>Cryptogammic crust</i>	33	0.2	0.2	0.20

***Nassella pulchra* Alliance**
Purple Needlegrass Grassland

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Nassella pulchra* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj), Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Central Foothills (CM), Central Valley (CM), North Coast (NC), Northern Foothills (NF), Southern Foothills (CM), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	52.1	28-90	-
Herb	50.0	27-90	0-1
Shrub	3.2	0-18	0-5
Hardwood	0.2	0-4	2-10
Conifer	0.0	0-0	-
Non-native plant presence	63.7	23-86	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (4), W (3), Flat (3), E (3), NW (2), N (2), SW (1), SE (1)

Macrotopography: Bottom (2), Bottom to Lower 1/3 of slope (3), Lower 1/3 of slope (5), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (6), Middle to Upper 1/3 of slope (1)

Microtopography: undulating (7), convex (5), flat (5), concave (2)

Parent Material: Sedimentary (7), Metamorphic (3), Sandy alluvium (2), Gabbro (1), Granitic (1), Mixed alluvium (1), Sandstone (1)

Soil Texture: Bottom (2), Bottom to Lower 1/3 of slope (3), Lower 1/3 of slope (5), Lower to Middle 1/3 of slope (1), Lower to Upper 1/3 of slope (1), Middle 1/3 of slope (6), Middle to Upper 1/3 of slope (1)

General slope steepness: flat to somewhat steep

	Mean	Range
Elevation	167 ft.	19-483 ft.
Slope	10°	0-26°
Large rock cover	4.3%	0-20%
Small rock cover	11.0%	0-25%
Bare ground cover	32.9%	2-88%
Litter cover	47.5%	0-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=19)

Rapid Assessment(s): 0309DH23, 0505RB21, 0505RB22, 0505RB24, 0506DH22, 0507AK21, 0624RB02, 1158FS01, 1548JD02, 1616KG02, 1617MM01, 1690FS01, 1706EB01, 1707EB01, 1761EB01, SDG0089, SDG0120, SDRP0094, SDRP0357

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Corethrogyne filaginifolia</i> var. <i>incana</i>	1 of 19	1B.1	S1.1	G4T1	
<i>Corethrogyne filaginifolia</i> var. <i>linifolia</i>	1 of 19	1B.1	S1.1	G4T1	
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	1 of 19	4.2	S3.2	G5T3	
<i>Nolina interrata</i>	1 of 19	1B.1	S1.2	G1	Endangered
<i>Quercus engelmannii</i>	1 of 19	4.2	S3.2	G3	

STAND TABLE

Nassella pulchra Association

Lifform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	53	1.0	0.2	3	
	ERFA2	<i>Eriogonum fasciculatum</i>	53	0.3	0.2	1	
	ARCA11	<i>Artemisia californica</i>	32	0.6	0.2	2	
	BASA2	<i>Baccharis sarothroides</i>	26	0.7	0.2	2	

	LOSC2	<i>Lotus scoparius</i>	21	2.1	0.2	5	
	MALA6	<i>Malosma laurina</i>	21	1.9	0.2	5	
Herb							
	NAPU4	<i>Nassella pulchra</i>	100	9.7	2.0	25	X
	BRMA3	* <i>Bromus madritensis</i>	47	6.1	0.2	20	
	BRHO2	* <i>Bromus hordeaceus</i>	47	3.6	0.2	18	
	CASP	<i>Calochortus splendens</i>	47	0.7	0.2	2	
	CEME2	* <i>Centaurea melitensis</i>	47	0.5	0.2	2	
	ERBO	* <i>Erodium botrys</i>	42	19.4	2.0	70	
	BRDI2	* <i>Brachypodium distachyon</i>	42	9.8	0.2	22	
	BRDI3	* <i>Bromus diandrus</i>	42	9.8	0.2	38	
	AVBA	* <i>Avena barbata</i>	42	5.1	0.2	18	
	SIBE	<i>Sisyrinchium bellum</i>	37	0.8	0.2	3	
	HIIN3	* <i>Hirschfeldia incana</i>	37	0.5	0.2	2	
	AVFA	* <i>Avena fatua</i>	32	16.5	0.2	30	
	VUMY	* <i>Vulpia myuros</i>	32	5.3	0.2	20	
	LOPEM2	* <i>Lolium perenne ssp. multiflorum</i>	32	4.2	0.2	19	
	AMPS	<i>Ambrosia psilostachya</i>	32	2.1	0.2	10	
	CYCA	* <i>Cynara cardunculus</i>	26	4.3	0.2	18	
	DISP	<i>Distichlis spicata</i>	26	4.2	0.2	8	
	HEFA	<i>Deinandra fasciculata</i>	26	0.7	0.2	2	
	BLCRC	<i>Bloomeria crocea var. crocea</i>	21	4.3	0.2	8	
	HYGL2	* <i>Hypochaeris glabra</i>	21	1.9	0.2	5	
	COFI2	<i>Corethrogyne filaginifolia</i>	21	1.4	0.2	3	
	ERCI6	* <i>Erodium cicutarium</i>	21	1.4	0.2	4	
	DICA14	<i>Dichelostemma capitatum</i>	21	0.7	0.2	2	

***Pennisetum setaceum* Semi-Natural Stands**

Fountain Grass Swards

***Pennisetum setaceum* Semi-Natural Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	55.0	55-55	-
Herb	49.0	49-49	0.5-1
Shrub	6.0	6-6	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.4	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1)

Macrotopography: Middle to Upper 1/3 of slope (1)

Microtopography: undulating (1)

Parent Material:

Soil Texture: Middle to Upper 1/3 of slope (1)

General slope steepness: steep to steep

	Mean	Range
Elevation	112 ft.	112-112 ft.
Slope	28°	28-28°
Large rock cover	0.0%	0-0%
Small rock cover	51.0%	51-51%
Bare ground cover	35.0%	35-35%
Litter cover	12.0%	12-12%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 1336JD01

Relevé(s): none

CONSERVATION STATUS RANK n/a

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Viguiera laciniata</i>	1 of 1	4.2	S3.2	G4	

STAND TABLE

Pennisetum setaceum Semi-Natural Stands

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	VILA3	<i>Viguiera laciniata</i>	100	5.0	5.0	5	X
	RHIN2	<i>Rhus integrifolia</i>	100	1.0	1.0	1	X
	ARCA11	<i>Artemisia californica</i>	100	0.2	0.2	0.20	X
	MALA6	<i>Malosma laurina</i>	100	0.2	0.2	0.20	X
	SANIC5	<i>Sambucus nigra ssp. cerulea</i>	100	0.2	0.2	0.20	X
Herb							
	PESE3	<i>Pennisetum setaceum</i>	100	49.0	49.0	49	X
	CEME2	* <i>Centaurea melitensis</i>	100	0.2	0.2	0.20	X
	DAWR2	<i>Datura wrightii</i>	100	0.2	0.2	0.20	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	0.2	0.2	0.20	X

***Sarcocornia pacifica* (*Salicornia depressa*) Alliance**

Pickleweed Mats

ALLIANCE STAND TABLE

***Sarcocornia pacifica* (*Salicornia depressa*)
Alliance**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	SAPA30	<i>Sarcocornia pacifica</i>	100	24.3	0.2	93	X
	FRSA	<i>Frankenia salina</i>	71	5.5	0.2	28	
	JACA4	<i>Jaumea carnosa</i>	54	17.3	0.2	58	
	BAMA5	<i>Batis maritima</i>	42	5.1	0.2	18	
	DISP	<i>Distichlis spicata</i>	38	7.5	0.2	29	
	LICA5	<i>Limonium californicum</i>	35	4.2	0.2	13	
	SABI	<i>Salicornia bigelovii</i>	23	7.4	0.2	26	
	SUAED	<i>Suaeda</i>	23	4.9	0.2	21	
	SPFO	<i>Spartina foliosa</i>	23	1.9	0.2	9	
	CUSA	<i>Cuscuta salina</i>	21	2.2	0.2	9	
	CRTR5	<i>Cressa truxillensis</i>	21	0.5	0.2	2	
	JUACL	<i>Juncus acutus</i> ssp. <i>leopoldii</i>	21	0.5	0.2	2	

***Salicornia bigelovii* Provisional Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	27.9	8-53	-
Herb	27.9	8-53	0-0.5
Shrub	0.0	0-0	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (6), E (1)

Macrotopography: Bottom (7)

Microtopography: flat (7)

Parent Material: Clayey alluvium (3), Silty alluvium (2), Mixed alluvium (1), Sand dunes (1)

Soil Texture: Bottom (7)

General slope steepness: flat to flat

	Mean	Range
Elevation	-30 ft.	-35--22 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	34.4%	7-48%
Litter cover	4.0%	0-10%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 1022TK03, 1023AK05, 1023DH02, 1023RB03, 1023RB04, 1023TK02, 1023TK07

Relevé(s): none

CONSERVATION STATUS RANK G3 S2.2?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Salicornia bigelovii
Provisional Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	SABI	<i>Salicornia bigelovii</i>	100	11.1	3.0	26	X
	BAMA5	<i>Batis maritima</i>	100	6.0	0.2	12	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	5.2	0.2	21	X
	SUAED	<i>Suaeda</i>	57	5.9	0.2	21	
	JACA4	<i>Jaumea carnosa</i>	57	5.8	1.0	11	
	SPFO	<i>Spartina foliosa</i>	57	3.8	0.2	9	
	LICA5	<i>Limonium californicum</i>	57	1.9	0.2	6	
	FRSA	<i>Frankenia salina</i>	29	2.0	1.0	3	
Cryptogam							
	2ALGA	<i>Algae</i>	43	4.0	2.0	7	

***Sarcocornia pacifica* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	57.8	1-97	-
Herb	47.4	0-87	0-1
Shrub	10.9	0-97	0-1
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	7.7	0-68	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), Variable (1), E (1)

Macrotopography: Bottom (9)

Microtopography: flat (8), concave (1)

Parent Material: Silty alluvium (5), Clayey alluvium (4)

Soil Texture: Bottom (9)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-24 ft.	-40-5 ft.
Slope	0°	0-2°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	38.1%	0-99%
Litter cover	44.4%	0-98%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 1020AK03, 1020AK04, 1020DH02, 1021TK06, 1022AK03, 1022DH01, 1022RB01, SDRP0343
Relevé(s): SDG0107

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus ssp. leopoldii</i>	1 of 9	4.2	S3.2	G5T5	

STAND TABLE

Sarcocornia pacifica Association

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb						
SAPA30	<i>Sarcocornia pacifica</i>	100	50.6	1.0	93	X
ARSU11	<i>Arthrocnemum subterminale</i>	44	0.6	0.2	1	
FRSA	<i>Frankenia salina</i>	44	0.4	0.2	1	
BAMA5	<i>Batis maritima</i>	33	1.7	0.2	3	
CRTR5	<i>Cressa truxillensis</i>	22	0.2	0.2	0.20	

Sarcocornia pacifica-*Frankenia salina* Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	70.4	52-82	-
Herb	61.5	15-82	0-2
Shrub	11.0	0-55	1-5
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	4.3	0-22	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (9), NE (1)

Macrotopography: Bottom (8), Bottom to Lower 1/3 of slope (2)

Microtopography: flat (9), concave (1)

Parent Material: Clayey alluvium (3), Silty alluvium (3), Sandy alluvium (2), Mixed alluvium (1), Sedimentary (1)

Soil Texture: Bottom (8), Bottom to Lower 1/3 of slope (2)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-20 ft.	-36-13 ft.
Slope	0°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	20.6%	3-78%
Litter cover	76.7%	18-95%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0707RB01, 1019RY01, 1019TK01, 1020RY01, 1020RY03, 1020RY04, 1021AK02, 1021RY02, SDG0064

Relevé(s): SDG0074

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

Scientific Name	# of	CNPS List	Global	State Rank	Fed Status
<i>Juncus acutus ssp. leopoldii</i>	3 of 10	4.2	S3.2	G5T5	

STAND TABLE

Sarcocornia pacifica-*Frankenia salina* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	ISME5	<i>Isocoma menziesii</i>	40	13.6	0.2	32	
Herb							
	SAPA30	<i>Sarcocornia pacifica</i>	100	40.0	12.0	70	X
	FRSA	<i>Frankenia salina</i>	100	10.8	0.2	28	X
	DISP	<i>Distichlis spicata</i>	50	11.6	0.2	29	
	PLOD	<i>Pluchea odorata</i>	40	4.9	0.2	18	
	POMO5	* <i>Polypogon monspeliensis</i>	40	2.1	0.2	7	
	ATPR	<i>Atriplex prostrata</i>	30	18.4	0.2	50	
	SCMA8	<i>Bolboschoenus maritimus ssp. paludosus</i>	30	5.1	0.2	15	
	SYEX	<i>Symphyotrichum</i>	30	1.5	0.2	4	
	PIEC	* <i>Picris echioides</i>	30	1.1	0.2	3	
	CRTR5	<i>Cressa truxillensis</i>	30	0.8	0.2	2	
	JUACL	<i>Juncus acutus ssp.</i>	30	0.5	0.2	1	
	MALE3	<i>Malvella leprosa</i>	20	18.5	6.0	31	
	CUSA	<i>Cuscuta salina</i>	20	0.6	0.2	1	

BRNI	* <i>Brassica nigra</i>	20	0.2	0.2	0.20
JACA4	<i>Jaumea carnosa</i>	20	0.2	0.2	0.20
RUCR	* <i>Rumex crispus</i>	20	0.2	0.2	0.20
XAST	<i>Xanthium strumarium</i>	20	0.2	0.2	0.20

***Sarcocornia pacifica*-*Jaumea carnosa* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	56.0	35-75	-
Herb	56.0	35-75	0-0.5
Shrub	0.1	0-0	0-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.8	0-3	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), SW (1), S (1), NW (1)

Macrotopography: Bottom (10)

Microtopography: flat (7), concave (2), undulating (1)

Parent Material: Silty alluvium (5), Clayey alluvium (3), Sand dunes (1), Sandy alluvium (1)

Soil Texture: Bottom (10)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-25 ft.	-36-1 ft.
Slope	0°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	24.6%	0-73%
Litter cover	42.6%	1-97%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=10)

Rapid Assessment(s): 0708TK04, 1019TK02, 1020AK01, 1020RB02, 1021AK05, 1021RB01, 1021RB06, 1021TK05, 1022RB04, SDG0077

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus ssp. leopoldii</i>	5 of 10	4.2	S3.2	G5T5	

STAND TABLE

Sarcocornia pacifica-*Jaumea carnosa* Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub	ISME5	<i>Isocoma menziesii</i>	20	0.2	0.2	0.20	
Herb	JACA4	<i>Jaumea carnosa</i>	100	34.3	6.0	58	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	15.0	0.2	58	X
	FRSA	<i>Frankenia salina</i>	90	3.2	0.2	17	X
	DISP	<i>Distichlis spicata</i>	80	7.0	1.0	25	X
	JUACL	<i>Juncus acutus ssp.</i>	50	0.6	0.2	2	
	CUSA	<i>Cuscuta salina</i>	40	4.1	0.2	9	
	CUSCU	<i>Cuscuta</i>	30	3.5	0.2	10	
	LICA5	<i>Limonium californicum</i>	30	2.5	0.2	7	
	SPFO	<i>Spartina foliosa</i>	30	1.5	0.2	4	
	APGR2	* <i>Apium graveolens</i>	30	0.8	0.2	2	
	MALE3	<i>Malvella leprosa</i>	20	4.0	2.0	6	
	ARSU11	<i>Arthrocnemum subterminale</i>	20	1.1	0.2	2	
	CRTR5	<i>Cressa truxillensis</i>	20	0.6	0.2	1	
	POMO5	* <i>Polypogon monspeliensis</i>	20	0.6	0.2	1	

***Sarcocornia pacifica*-*Jaumea carnosa*-*Batis maritima* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	46.0	21-63	-
Herb	45.5	21-63	0-1
Shrub	0.0	0-0	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), NW (1)

Macrotopography: Bottom (8)

Microtopography: flat (8)

Parent Material: Clayey alluvium (5), Sandy alluvium (1), Sedimentary (1), Silty alluvium (1)

Soil Texture: Bottom (8)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-26 ft.	-43-25 ft.
Slope	0°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	66.6%	1-86%
Litter cover	8.0%	3-16%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=8)

Rapid Assessment(s): 1022RB02, 1022RY03, 1022RY05, 1023RB05, 1023RB06, 1023RY01, 1023TK01, 1023TK03

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

***Sarcocornia pacifica*-*Jaumea carnosa*-*Batis maritima*
Association**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	SAPA30	<i>Sarcocornia pacifica</i>	100	14.3	2.0	32	X
	JACA4	<i>Jaumea carnosa</i>	100	10.1	2.0	22	X
	LICA5	<i>Limonium californicum</i>	100	6.8	0.2	13	X
	BAMA5	<i>Batis maritima</i>	100	6.8	0.2	18	X
	FRSA	<i>Frankenia salina</i>	88	6.1	1.0	19	X
	SUAED	<i>Suaeda</i>	88	4.3	0.2	18	X
	MOLI	<i>Monanthochloe littoralis</i>	50	8.1	0.2	17	
	CUSA	<i>Cuscuta salina</i>	50	1.1	0.2	3	
	SABI	<i>Salicornia bigelovii</i>	50	0.9	0.2	2	
	DISP	<i>Distichlis spicata</i>	38	0.8	0.2	2	
	SPFO	<i>Spartina foliosa</i>	38	0.2	0.2	0.20	
Cryptogam							
	2ALGA	<i>Algae</i>	25	2.0	1.0	3	

***Sarcocornia pacifica*-*Monanthochloe littoralis* Special Stands**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	55.3	24-74	-
Herb	55.3	24-74	0-0.5
Shrub	0.1	0-0	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.4	0-1	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (2), NW (1)

Macrotopography: Bottom (3)

Microtopography: flat (2), convex (1)

Parent Material: Clayey alluvium (1), Sand dunes (1), Silty alluvium (1)

Soil Texture: Bottom (3)

General slope steepness: flat to gentle

	Mean	Range
Elevation	-29 ft.	-31--25 ft.
Slope	0°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	76.7%	52-94%
Litter cover	21.0%	3-45%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)**Rapid Assessment(s):** 1021TK01, 1022AK06, 1023DH01**Relevé(s):** none**CONSERVATION STATUS RANK** G3 S3.2?**NOTEWORTHY SPECIES**

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Juncus acutus ssp. leopoldii</i>	1 of 3	4.2	S3.2	G5T5	

STAND TABLE***Sarcocornia pacifica*-*Monanthochloe littoralis*****Special Stands**

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	TAMAR2	* <i>Tamarix</i>	33	0.2	0.2	0.20	
Herb							
	MOLI	<i>Monanthochloe littoralis</i>	100	54.0	22.0	74	X
	SAPA30	<i>Sarcocornia pacifica</i>	100	2.7	0.2	4	X
	CRTR5	<i>Cressa truxillensis</i>	67	0.2	0.2	0.20	
	FRSA	<i>Frankenia salina</i>	67	0.2	0.2	0.20	
	LICA5	<i>Limonium californicum</i>	33	2.0	2.0	2	
	ARSU11	<i>Arthrocnemum subterminale</i>	33	1.0	1.0	1	
	BAMA5	<i>Batis maritima</i>	33	0.2	0.2	0.20	
	JACA4	<i>Jaumea carnosa</i>	33	0.2	0.2	0.20	
	JUACL	<i>Juncus acutus ssp.</i>	33	0.2	0.2	0.20	
	PAIN	* <i>Parapholis incurva</i>	33	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	33	0.2	0.2	0.20	

***Schoenoplectus acutus* Alliance**

Hardstem Bulrush Marsh

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Schoenoplectus acutus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	80.0	80-80	-
Herb	75.0	75-75	1-2
Shrub	15.0	15-15	2-5
Hardwood	1.0	1-1	5-10
Conifer	0.0	0-0	-
Non-native plant presence	14.2	14-14	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: NE (1)

Macrotopography: Lower 1/3 of slope (1)

Microtopography: convex (1)

Parent Material: Granitic (1)

Soil Texture: Lower 1/3 of slope (1)

General slope steepness: somewhat steep to somewhat steep

	Mean	Range
Elevation	102 ft.	102-102 ft.
Slope	15°	15-15°
Large rock cover	%	-%
Small rock cover	%	-%
Bare ground cover	%	-%
Litter cover	%	-%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): SDRP0269

Relevé(s): none

CONSERVATION STATUS RANK G4 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Schoenoplectus acutus

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	100	0.2	0.2	0.20	X
Shrub							
	BAPI	<i>Baccharis pilularis</i>	100	9.0	9.0	9	X
	BASA4	<i>Baccharis salicifolia</i>	100	8.0	8.0	8	X
	ISME5	<i>Isocoma menziesii</i>	100	5.0	5.0	5	X
	TAMAR2	* <i>Tamarix</i>	100	2.0	2.0	2	X
	OPLI3	<i>Opuntia littoralis</i>	100	0.2	0.2	0.20	X
Herb							
	SCACO2	<i>Schoenoplectus acutus</i> var. <i>occidentalis</i>	100	50.0	50.0	50	X
	BRDI3	* <i>Bromus diandrus</i>	100	5.0	5.0	5	X
	DISP	<i>Distichlis spicata</i>	100	5.0	5.0	5	X
	BRHO2	* <i>Bromus hordeaceus</i>	100	3.0	3.0	3	X
	AMPS	<i>Ambrosia psilostachya</i>	100	1.0	1.0	1	X
	AVENA	* <i>Avena</i>	100	1.0	1.0	1	X
	BRNI	* <i>Brassica nigra</i>	100	1.0	1.0	1	X
	CEME2	* <i>Centaurea melitensis</i>	100	1.0	1.0	1	X

Schoenoplectus americanus Alliance

American Bulrush Marsh

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Schoenoplectus americanus Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	69.0	69-69	-
Herb	69.0	69-69	1-2
Shrub	2.0	2-2	2-5
Hardwood	0.0	0-0	-

Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: S (1)
Macrotopography: Bottom (1)
Microtopography: concave (1)
Parent Material: Silty alluvium (1)
Soil Texture: Bottom (1)
General slope steepness: gentle to gentle

	Mean	Range
Elevation	175 ft.	175-175 ft.
Slope	1°	1-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	6.0%	6-6%
Litter cover	35.0%	35-35%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 0504TK22
Relevé(s): none

CONSERVATION STATUS RANK G5 S3.2

NOTEWORTHY SPECIES
*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Schoenoplectus americanus
Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub							
	SALA6	<i>Salix lasiolepis</i>	100	2.0	2.0	2	X
Herb							
	SCAM6	<i>Schoenoplectus americanus</i>	100	69.0	69.0	69	X
	ANCA10	<i>Anemopsis californica</i>	100	0.2	0.2	0.20	X

Schoenoplectus californicus Alliance
California Bulrush Marsh

ALLIANCE STAND TABLE
A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

***Schoenoplectus californicus* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Foothills (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	45.5	20-95	-
Herb	45.5	20-95	1-5
Shrub	0.0	0-0	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	13.2	0-53	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (3), S (1)

Macrotopography: Bottom (3), Lower 1/3 of slope (1)

Microtopography: flat (3), concave (1)

Parent Material: Silty alluvium (2), Clayey alluvium (1), Metamorphic (1)

Soil Texture: Bottom (3), Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	21 ft.	-50-191 ft.
Slope	0°	0-1°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	10.0%	0-18%
Litter cover	33.8%	0-90%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=4)

Rapid Assessment(s): 1020RY02, 1021RY01, 1021TK04, 1545JD01

Relevé(s): none

CONSERVATION STATUS RANK G5 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Schoenoplectus californicus

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb							
	SCCA11	<i>Schoenoplectus californicus</i>	100	27.8	19.0	35	X
	SAPA30	<i>Sarcocornia pacifica</i>	75	4.7	0.2	11	
	AZFI	* <i>Azolla filiculoides</i>	25	50.0	50.0	50	
	ELMO2	<i>Eleocharis montevidensis</i>	25	8.0	8.0	8	
	ATPR	<i>Atriplex prostrata</i>	25	2.0	2.0	2	
	JACA4	<i>Jaumea carnosa</i>	25	2.0	2.0	2	
	JUDU	<i>Juncus dubius</i>	25	2.0	2.0	2	
	TYDO	<i>Typha domingensis</i>	25	2.0	2.0	2	
	SCMA8	<i>Bolboschoenus maritimus</i> <i>ssp. paludosus</i>	25	0.2	0.2	0.20	
	FRSA	<i>Frankenia salina</i>	25	0.2	0.2	0.20	

Selaginella bigelovii Alliance

Bushy Spikemoss Mats

A stand table for this Alliance is not provided because there is currently only one association defined in the study area

Spartina foliosa Alliance

California Cordgrass Marsh

ALLIANCE STAND TABLE

A stand table for this Alliance is not provided because there is currently only one association defined in the study area. See stand table for this association below.

Spartina foliosa Association

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	28.7	11-55	-
Herb	28.7	11-55	0-1
Shrub	0.0	0-0	-
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	0.0	0-0	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (6), SE (1)

Macrotopography: Bottom (7)

Microtopography: flat (7)

Parent Material: Silty alluvium (5), Mixed alluvium (1), Sand dunes (1)

Soil Texture: Bottom (7)

General slope steepness: flat to flat

	Mean	Range
Elevation	-33 ft.	-38--29 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	5.4%	0-28%
Litter cover	3.3%	0-10%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=7)

Rapid Assessment(s): 1021AK04, 1021TK02, 1021TK07, 1022TK01, 1023AK01, 1023AK06, 1023RB02

Relevé(s): none

CONSERVATION STATUS RANK G3 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Spartina foliosa Association

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Herb						
SPFO	<i>Spartina foliosa</i>	100	22.9	10.0	55	X
SAPA30	<i>Sarcocornia pacifica</i>	100	2.3	0.2	8	X
BAMA5	<i>Batis maritima</i>	43	5.4	0.2	15	
Cryptogam						
2ALGA	<i>Algae</i>	29	18.5	2.0	35	

Suaeda esteroa Special Stands

Estuary sea-blite

Suaeda esteroa Special Stands

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Southern Coast (SC)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.0	58-58	-
Herb	35.0	35-35	0-0.5
Shrub	27.0	27-27	1-2
Hardwood	0.0	0-0	-
Conifer	0.0	0-0	-
Non-native plant presence	60.2	60-60	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (1)

Macrotopography: Bottom (1)

Microtopography: flat (1)

Parent Material: Silty alluvium (1)

Soil Texture: Bottom (1)

General slope steepness: flat to flat

	Mean	Range
Elevation	-17 ft.	-17--17 ft.
Slope	0°	0-0°
Large rock cover	0.0%	0-0%
Small rock cover	0.0%	0-0%
Bare ground cover	35.0%	35-35%
Litter cover	62.0%	62-62%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=1)

Rapid Assessment(s): 1022DH03

Relevé(s): none

CONSERVATION STATUS RANK G1 S1.1?

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

<u>Scientific Name</u>	<u># of</u>	<u>CNPS List</u>	<u>Global</u>	<u>State Rank</u>	<u>Fed Status</u>
<i>Suaeda esteroa</i>	1 of 1	1B.2	S3.2	G4	

STAND TABLE

Suaeda esteroa

Special Stands

Lifeform Code	Species Name	Con	Avg	Min	Max	Diagnostic
Shrub						

Herb	ATCA2	<i>Atriplex canescens</i>	100	0.2	0.2	0.20	X
	SUES	<i>Suaeda esteroa</i>	100	25.0	25.0	25	X
	BRDI3	* <i>Bromus diandrus</i>	100	22.0	22.0	22	X
	MECR3	* <i>Mesembryanthemum crystallinum</i>	100	16.0	16.0	16	X
	BRMA3	* <i>Bromus madritensis</i>	100	3.0	3.0	3	X
	SUAED	<i>Suaeda</i>	100	2.0	2.0	2	X
	CEME2	* <i>Centaurea melitensis</i>	100	0.2	0.2	0.20	X

Typha (angustifolia, domingensis, latifolia) Alliance
Cattail Marshes

ALLIANCE STAND TABLE

Typha (angustifolia, domingensis, latifolia)
Alliance

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	42	1.1	0.2	3	
Herb							
	TYDO	<i>Typha domingensis</i>	75	43.3	5.0	78	
	APGR2	* <i>Apium graveolens</i>	42	2.6	0.2	6	
	POMO5	* <i>Polypogon monspeliensis</i>	42	0.4	0.2	1	
	PIEC	* <i>Picris echioides</i>	33	1.6	0.2	5	
	RUCR	* <i>Rumex crispus</i>	33	0.9	0.2	2	
	XAST	<i>Xanthium strumarium</i>	33	0.4	0.2	1	
	TYLA	<i>Typha latifolia</i>	25	77.3	72.	80	
	PLOD	<i>Pluchea odorata</i>	25	6.1	0.2	18	
	DISP	<i>Distichlis spicata</i>	25	3.5	0.2	10	
	JUACL	<i>Juncus acutus ssp. leopoldii</i>	25	1.1	0.2	3	
	ANCA10	<i>Anemopsis californica</i>	25	0.5	0.2	1	

***Typha domingensis* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Coastal Hills (261Bi), Coastal Terraces (261Bj)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Coast (CC), North Coast (NC), Southern Valley (SV)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	58.3	23-84	-
Herb	56.7	21-83	1-10

Shrub	1.5	0-5	1-5
Hardwood	0.8	0-5	2-10
Conifer	0.0	0-0	-
Non-native plant presence	6.2	0-34	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Flat (7), SW (1), NE (1)

Macrotopography: Bottom (8), Bottom to Lower 1/3 of slope (1)

Microtopography: flat (7), concave (1), undulating (1)

Parent Material: Clayey alluvium (2), Silty alluvium (2), Mixed alluvium (1), Sandy alluvium (1), Sedimentary (1), Volcanic (1)

Soil Texture: Bottom (8), Bottom to Lower 1/3 of slope (1)

General slope steepness: flat to gentle

	Mean	Range
Elevation	0 ft.	-33-73 ft.
Slope	0°	0-1°
Large rock cover	3.4%	0-17%
Small rock cover	1.2%	0-9%
Bare ground cover	29.2%	0-87%
Litter cover	25.4%	0-94%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=9)

Rapid Assessment(s): 0309AK22, 0623DH01, 0708MG02, 0708MG04, 1020RB01, 1020TK05, 1021AK01, 1021RB05, 1571EB01

Relevé(s): none

CONSERVATION STATUS RANK G5 S3.2

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

Scientific Name	# of	CNPS List	Global	State Rank	Fed Status
<i>Iva hayesiana</i>	1 of 9	2.2	S2.2?	G3?	
<i>Juncus acutus ssp. leopoldii</i>	3 of 9	4.2	S3.2	G5T5	

STAND TABLE

Typha domingensis Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	33	0.7	0.2	1	
Shrub							
	SALA6	<i>Salix lasiolepis</i>	22	2.6	0.2	5	
	BASA4	<i>Baccharis salicifolia</i>	22	2.0	1.0	3	
Herb							

TYDO	<i>Typha domingensis</i>	100	43.3	5.0	78	X
APGR2	* <i>Apium graveolens</i>	56	2.6	0.2	6	
PIEC	* <i>Picris echioides</i>	44	1.6	0.2	5	
RUCR	* <i>Rumex crispus</i>	44	0.9	0.2	2	
POMO5	* <i>Polypogon monspeliensis</i>	44	0.4	0.2	1	
XAST	<i>Xanthium strumarium</i>	44	0.4	0.2	1	
PLOD	<i>Pluchea odorata</i>	33	6.1	0.2	18	
DISP	<i>Distichlis spicata</i>	33	3.5	0.2	10	
JUACL	<i>Juncus acutus</i> ssp.	33	1.1	0.2	3	
ANCA10	<i>Anemopsis californica</i>	33	0.5	0.2	1	
SCAM6	<i>Schoenoplectus americanus</i>	22	5.6	0.2	11	
NAOF	<i>Nasturtium officinale</i>	22	4.0	3.0	5	
ELMO2	<i>Eleocharis montevidensis</i>	22	3.0	1.0	5	
SCMA8	<i>Bolboschoenus maritimus</i> ssp. <i>paludosus</i>	22	2.5	1.0	4	
CYER	<i>Cyperus eragrostis</i>	22	0.6	0.2	1	
LASE	* <i>Lactuca serriola</i>	22	0.6	0.2	1	
SAPA30	<i>Sarcocornia pacifica</i>	22	0.6	0.2	1	
SAVAP	<i>Samolus valerandi</i> ssp. <i>parviflorus</i>	22	0.2	0.2	0.20	

***Typha latifolia* Association**

DISTRIBUTION IN STUDY AREA

USDA Ecological Subsection(s) (Miles and Goudey 1997): Western Granitic Foothills (M262Bn)

Oberbauer Ecoregion(s) of San Diego County (unpublished document): Central Foothills (CM), Central Valley (CM)

LOCAL VEGETATION DESCRIPTION

	Mean % Cover	Range % Cover	Height (m)
Total vegetation	86.0	80-98	-
Herb	85.0	80-95	2-10
Shrub	0.2	0-0	-
Hardwood	1.5	0-3	5-10
Conifer	0.0	0-0	-
Non-native plant presence	10.4	0-31	-

*Seedling and sapling data are included in height and cover values for hardwoods and conifers

LOCAL ENVIRONMENTAL DESCRIPTION

Aspect: Variable (1), NE (1), Flat (1)

Macrotopography: Bottom (3)

Microtopography: flat (2), concave (1)

Parent Material: Granitic (1), Metamorphic (1), Sandy alluvium (1)

Soil Texture: Bottom (3)

General slope steepness: flat to moderate

Mean

Range

Elevation	201 ft.	88-341 ft.
Slope	5°	0-13°
Large rock cover	%	-%
Small rock cover	%	-%
Bare ground cover	%	-%
Litter cover	%	-%

SAMPLES USED TO DESCRIBE ASSOCIATION (n=3)

Rapid Assessment(s): SDRP0055, SDRP0073, SDRP0241

Relevé(s): none

CONSERVATION STATUS RANK G5 S4

NOTEWORTHY SPECIES

*Scientific names are consistent with the CNPS Rare Plant Inventory.

STAND TABLE

Typha latifolia

Association

Lifeform	Code	Species Name	Con	Avg	Min	Max	Diagnostic
Tree							
	SAGO	<i>Salix gooddingii</i>	67	1.6	0.2	3	
Shrub							
	TAMAR2	* <i>Tamarix</i>	33	0.2	0.2	0.20	
Herb							
	TYLA	<i>Typha latifolia</i>	100	77.3	72.0	80	X
	LELA2	* <i>Lepidium latifolium</i>	33	35.0	35.0	35	
	SCCA11	<i>Schoenoplectus californicus</i>	33	4.0	4.0	4	
	CYPER	<i>Cyperus</i>	33	0.2	0.2	0.20	
	POMO5	* <i>Polypogon monspeliensis</i>	33	0.2	0.2	0.20	