

NAPA COUNTY BASELINE DATA REPORT
BIOLOGICAL RESOURCES APPENDIX A

CROSSWALK BETWEEN NAPA COUNTY LAND COVER MAP AND OTHER CLASSIFICATION SYSTEMS

PI	LAND COVER NAME (Long)	WHR Code	WHR Habitat	CalVeg Code	CalVeg Alliances	Holland code	Notes
1100	Winter-Rain Sclerophyll Forests & Woodlands	Many	Many	Many	Many		(WHR-UNESCO X-Walk)
1101	California Bay - Coast Live Oak - (Madrone - Black Oak - Big Leaf Maple) Map Unit	COW	Coastal Oak Woodland	NX	Mixed Hardwoods		74.100.05 = CA Bay-Coast Live Oak/Poison oak-hazelnut
1122	Canyon Live Oak Alliance	MHW	Montane Hardwood	QC	Canyon Live Oak	71.050.0	
1123	Eucalyptus Alliance	EUC	Eucalyptus	QZ	Eucalyptus	79.000.00	
1124	Tanbark Oak Alliance	MHW	Montane Hardwood	QT	Tanoak	73.100.00	
1201	Coast Live Oak - Blue Oak - (Foothill Pine) Map Unit	COW, BOW, (BOP)	Coastal Oak Woodland, Blue Oak Woodland, (Blue Oak - Foothill Pine)	NX	Mixed Hardwoods		71.020.01 = Coast Live Oak- Blue Oak No WHR Foothill Pine Habitat Type, conifer cov <50%
1202	Interior Live Oak - Blue Oak - (Foothill Pine) Map Unit	BOW, (BOP)	Blue Oak Woodland, (Blue Oak - Foothill Pine)	NX	Mixed Hardwoods	71.020.13	Interior Live Oak- Blue Oak (Foothill Pine/Grass) No WHR Foothill Pine Habitat Type
1221	Coast Live Oak (Foothill Pine) Alliance	COW	Coastal Oak Woodland	QA	Coast Live Oak	71.060.0	No WHR Foothill Pine Habitat Type
1222	Interior Live Oak (Foothill Pine) Alliance	BOW, (BOP)	Blue Oak Woodland, (Blue Oak - Foothill Pine)	QD	Blue Oak	71.080.0	
1223	Mixed Oak (Foothill Pine - Ponderosa Pine) Map Unit	COW, (BOP, PPN)	Coastal Oak Woodland, (Blue Oak - Foothill Pine, Ponderosa Pine)	NX	Mixed Hardwoods		71.100.07 = Mixed Oak - Foothill Pine/grass
2104	Foothill Pine / Mesic Non-Serpentine Map Unit	CRC, MCH, Other	Chamise-Redshank Chaparral, Mixed Chaparral, Other	CA, (CQ), PD	Chamise, (Lower Montane Mixed Chaparral) + Gray Pine		No WHR Foothill Pine Habitat Type, conifer cov <50%
2105	Foothill Pine / Whiteleaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine Map Unit	MCH, Other	Mixed Chaparral, Other	PD, MU?	Gray Pine, Ultramafic Mixed Conifer?		No WHR Foothill Pine Habitat Type
2106	Foothill Pine / California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine Map Unit	MCH, Other	Mixed Chaparral, Other	PD, MU?	Gray Pine, Ultramafic Mixed Conifer?		No WHR Foothill Pine Habitat Type
2121	Foothill Pine Alliance	Unclear	Unclear	PD	Gray Pine	87.130.0	No WHR Foothill Pine Habitat Type
2122	Knobcone Pine Alliance	CPC	Closed Cone Pine-Cypress	KP	Knobcone Pine	87.100.0	
2123	Ponderosa Pine Alliance	PPN	Ponderosa Pine	PP	Ponderosa Pine	87.010.0	
2124	McNab Cypress Alliance	CPC	Closed Cone Pine-Cypress	MN	McNab Cypress	81.300.0	
2125	Sargent Cypress Alliance	CPC	Closed Cone Pine-Cypress	MS	Sargent Cypress	81.500.0	

PI	LAND COVER NAME (Long)	WHR Code	WHR Habitat	CalVeg Code	CalVeg Alliances	Holland code	Notes
2126	Sugar Pine / Canyon Oak Map Unit	WFR	White Fir	MP	Mixed Conifer-Pine		
2127	California Juniper Alliance	JUN	Juniper	Unclear	Unclear	89.100.0	
2201	Coast Redwood - Douglas Fir / California Bay Map Unit	RDW	Redwood	RD	Redwood-Douglas Fir	86.100.17	
2222	Douglas Fir Alliance	DFR	Douglas Fir	DF	Pacific Douglas Fir	82.200.0	
2224	Douglas Fir - Ponderosa Pine Alliance	DFR, SMC	Douglas Fir, Sierra Mixed Conifer	DP	Douglas Fir-Ponderosa Pine	82.400.0	
2230	Coast Redwood Alliance	RDW	Redwood	RW	Redwood	86.100.0	
3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Map Unit	VRI (COW)	Valley-Foothill Riparian/Coastal Oak Woodland	QL/NX	Valley Oak/Mixed Hardwood		
3102	Valley Oak - Fremont Cottonwood (Coast Live Oak - Salix spp.) Riparian Map Unit	VRI (COW)	Valley-Foothill Riparian/Coastal Oak Woodland	QL/QJ	Valley Oak/Cottonwood-Alder		
3121	Black Oak Alliance	COW, MHW	Coastal Oak Woodland, Montane Hardwood	QK	Black Oak	71.010.0	
3122	Blue Oak Alliance	BOW	Blue Oak Woodland	QD	Blue Oak	71.020.0	
3123	Valley Oak Alliance	VOW	Valley Oak Woodland	QL	Valley Oak	71.040.0	
3124	Oregon White Oak Alliance	COW, MHW	Coastal Oak Woodland, Montane Hardwood	QG	Oregon White Oak	71.030.0	
3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Map Unit	MRI	Montane Riparian	QY/	Willow-Alder/		61.420.00 = white alder forest and woodland
3202	(Brewer Willow) Poorly Developed Serpentine Riparian Map Unit	Unclear	Unclear	WL	Willow (Riparian scrub)		
3221	Mixed Willow Super Alliance	VRI	Valley-Foothill Riparian	WL	Willow (Riparian scrub)	61.207.0	
4300	Sclerophyllous Shrubland	CRC, MCH, MCP	Chamise-Redshank Chaparral, Mixed Chaparral, Montane Chaparral	Unclear	Unclear		
4301	Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Buckbrush) Mesic East County Map Unit	MCH	Mixed Chaparral	CS	Scrub Oak		
4302	(Stanford Manzanita - Eastwood Manzanita - Interior Live Oak - Chamise) Mesic West County Map Unit or Stanford Manzanita Alliance	MCH	Mixed Chaparral	CQ	Lower Montane Mixed Chaparral		
4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine Map Unit	MCH	Mixed Chaparral	CL	Ultramafic Mixed Chaparral		37.405.00 = leatheroak chaparral
4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine Map Unit	MCH	Mixed Chaparral	SQ	Mixed Soft Scrub/Chaparral		37.405.00 = leatheroak chaparral
4321	Chamise Alliance	CRC	Chamise-Redshank Chaparral	CA	Chamise	37.101.0	
4322	Chamise - Wedgeleaf Ceanothus Alliance	CRC	Chamise-Redshank Chaparral	CQ	Lower Montane Mixed Chaparral	37.108.00	
4501	Coyote Brush - California Sagebrush (Lupine spp.) Map Unit	CSC	Coastal Scrub	NC	North Coastal Scrub		32.060.18 = coyote brush-california sagebrush-poison oak
6402	(Bulrush - Cattail) Fresh Water Marsh Map Unit	FEW	Freshwater Emergent Wetland	HT	Tule-Cattail	52.102.01	

PI	LAND COVER NAME (Long)	WHR Code	WHR Habitat	CalVeg Code	CalVeg Alliances	Holland code	Notes
6403	(Carex spp. - Juncus spp.) Map Unit	WTM	Wet Meadow	HJ	Wet Meadow		45.110.06 = slough sedge - salt rush, 45.110.25 = slough sedge - spreading rush
6501	Saltgrass - Pickleweed Map Unit	SEW	Saline Emergent Wetland	HC	Pickleweed-Cordgrass	52.201.03	listed as pickleweed-saltgrass
7100	Upland Annual Grasslands & Forbs	AGS	Annual Grassland	HG	Annual Grass-Forb		
7101	Native Grassland Restoration Sites	AGS	Annual Grassland	HG	Annual Grass-Forb		
7120	California Annual Grasslands Alliance	AGS	Annual Grassland	HG	Annual Grass-Forb	42.040.0	
7130	Serpentine Grassland Map Unit	AGS/PGS?	Annual Grassland/Perennial Grassland	HM	Perennial Grasses/Forbs		
9001	Rock Outcrop	BAR	Barren	BA	Barren		
9002	Riverine, Lacustrine & Tidal Mudflats	BAR	Barren	BA	Barren		
9003	Serpentine Barrens	BAR	Barren	BA	Barren		
9100	Urban or Built-up	URB	Urban	UB	Urban		
9200	Agriculture	Unclear	Unclear	AG	Agriculture		
9300	Vacant	Unmapped	Unmapped	NF	Non-Forested		
9400	Water	None	None	WA	Water		
9999	Unidentified	Unmapped	Unmapped	NF	Non-Forested		

NAPA COUNTY BASELINE DATA REPORT
BIOLOGICAL RESOURCES APPENDIX B

ASSOCIATION BETWEEN SPECIAL-STATUS PLANT SPECIES AND LAND COVER TYPES IN NAPA COUNTY

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
1	Crater onion	<i>Allium cratericola</i>	4300	Sclerophyllous Shrubland Formation	Mostly East of Napa Valley	Vocanics, Barrens
1	Crater onion	<i>Allium cratericola</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
1	Crater onion	<i>Allium cratericola</i>	7120	California Annual Grasslands Alliance		Low vegetative cover, barren rock outcrops
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	1124	Tanbark Oak Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	1223	Mixed Oak Alliance	Not in the Blue Ridge or Vaca Mountains	
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	2123	Ponderosa Pine Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	2222	Douglas-fir Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	2230	Coast Redwood Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	3121	Black Oak Alliance		
2	Napa false indigo	<i>Amorpha californica var. napensis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1122	Canyon Live Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1221	Coast Live Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1222	Interior Live Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	1223	Mixed Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	3121	Black Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	3122	Blue Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	3123	Valley Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	3124	Oregon White Oak Alliance		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	7100	Upland Annual Grasslands & Forbs Formation		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	7101	Perennial Bunchgrass Restoration Sites		
3	Bent-flowered fiddleneck	<i>Amsinckia lunaris</i>	7120	California Annual Grasslands Alliance		
4	Tall snapdragon	<i>Antirrhinum virga</i>	1122	Canyon Live Oak Alliance		
4	Tall snapdragon	<i>Antirrhinum virga</i>	2122	Knobcone Pine Alliance		
4	Tall snapdragon	<i>Antirrhinum virga</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
4	Tall snapdragon	<i>Antirrhinum virga</i>	4300	Sclerophyllous Shrubland Formation		
4	Tall snapdragon	<i>Antirrhinum virga</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
4	Tall snapdragon	<i>Antirrhinum virga</i>	5222	Brewer Willow Alliance		
4	Tall snapdragon	<i>Antirrhinum virga</i>	9001	Rock Outcrop		Follows Fire
5	Modest Rock Cress	<i>Arabis modesta</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance		
5	Modest Rock Cress	<i>Arabis modesta</i>	4321	Chamise Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	2124	McNab Cypress Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
6	Oregon Rock Cress	<i>Arabis oregana</i>	9003	Serpentine Barren		
7	Konocti manzanita	<i>Arctostaphylos manzanita ssp. Elegans</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
7	Konocti manzanita	<i>Arctostaphylos manzanita ssp. Elegans</i>	1122	Canyon Live Oak Alliance		
7	Konocti manzanita	<i>Arctostaphylos manzanita ssp. Elegans</i>	2122	Knobcone Pine Alliance		
7	Konocti manzanita	<i>Arctostaphylos manzanita ssp. Elegans</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
7	Konocti manzanita	<i>Arctostaphylos manzanita ssp. Elegans</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Not in the Blue Ridge Mountains	Volcanics
8	Solano milkweed	<i>Asclepias solanoana</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
8	Solano milkweed	<i>Asclepias solanoana</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
9	Suisun Marsh aster	<i>Aster lentus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		Can be found among bullrushes along sloughs in marshlands
9	Suisun Marsh aster	<i>Aster lentus</i>	7100	Upland Annual Grasslands & Forbs Formation	Restricted to Marshlands	
10	Brewer's milkvetch	<i>Astragalus breweri</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
10	Brewer's milkvetch	<i>Astragalus breweri</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
10	Brewer's milkvetch	<i>Astragalus breweri</i>	7100	Upland Annual Grasslands & Forbs Formation	Restricted to Calistoga Area	
10	Brewer's milkvetch	<i>Astragalus breweri</i>	7120	California Annual Grasslands Alliance	Restricted to Calistoga Area	
10	Brewer's milkvetch	<i>Astragalus breweri</i>	7130	Serpentine Grasslands NFD Super Alliance		
10	Brewer's milkvetch	<i>Astragalus breweri</i>	9100	Urban or Built-up	Restricted to Calistoga Area, St Helena	
10	Brewer's milkvetch	<i>Astragalus breweri</i>	9200	Agriculture	Restricted to Calistoga Area	
10	Brewer's milkvetch	<i>Astragalus breweri</i>	9999	Unkown		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	1223	Mixed Oak Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	1223	Mixed Oak Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	2121	Foothill Pine Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	3122	Blue Oak Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	7120	California Annual Grasslands Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	7130	Serpentine Grasslands NFD Super Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	7130	Serpentine Grasslands NFD Super Alliance		
11	Clara Hunt's milk-vetch	<i>Astragalus clarianus</i>	9100	Urban or Built-up		
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	2124	McNab Cypress Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	5222	Brewer Willow Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	7100	Upland Annual Grasslands & Forbs Formation		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	7130	Serpentine Grasslands NFD Super Alliance		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
12	Cleveland's Milkvetch	<i>Astragalus clevelandii</i>	9999	Unkown		Serpentine endemic, seasonal or perenial drains/seeps/springs, moist soils
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	2121	Foothill Pine Alliance		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Grasslands within the vegetation type
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	7130	Serpentine Grasslands NFD Super Alliance		
13	Jepson's milk-vetch	<i>Astragalus rattanii</i> var. <i>jepsonianus</i>	7130	Serpentine Grasslands NFD Super Alliance		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
14	Alkali milk-vetch	<i>Astragalus tener var. tener</i>	0	Vernal pools		
14	Alkali milk-vetch	<i>Astragalus tener var. tener</i>	7100	Upland Annual Grasslands & Forbs Formation	Restricted to Marshlands	
14	Alkali milk-vetch	<i>Astragalus tener var. tener</i>	9100	Urban or Built-up		
15	San Joaquin spearscale	<i>Atriplex joaquiniana</i>	7120	California Annual Grasslands Alliance	Restricted to Marshlands	
15	San Joaquin spearscale	<i>Atriplex joaquiniana</i>	9100	Urban or Built-up		
16	Big-scale balsamroot	<i>Balsamorhiza macrolepis var. macrolepis</i>	7100	Upland Annual Grasslands & Forbs Formation		
16	Big-scale balsamroot	<i>Balsamorhiza macrolepis var. macrolepis</i>	7120	California Annual Grasslands Alliance		
16	Big-scale balsamroot	<i>Balsamorhiza macrolepis var. macrolepis</i>	7130	Serpentine Grasslands NFD Super Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	2122	Knobcone Pine Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	4321	Chamise Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	7120	California Annual Grasslands Alliance		
17	Narrow-anthered California brodiaea	<i>Brodiaea californica var. leptandra</i>	9001	Rock Outcrop		
18	Serpentine reed grass	<i>Calamagrostis ophitdis</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
18	Serpentine reed grass	<i>Calamagrostis ophitdis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
18	Serpentine reed grass	<i>Calamagrostis ophitdis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
18	Serpentine reed grass	<i>Calamagrostis ophitdis</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
19		<i>Calandrinia breweri</i>	2121	Foothill Pine Alliance		Fire Following Annual
19		<i>Calandrinia breweri</i>	4300	Sclerophyllous Shrubland Formation		Fire Following Annual
19		<i>Calandrinia breweri</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Fire Following Annual
19		<i>Calandrinia breweri</i>	4321	Chamise Alliance		Fire Following Annual
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		Grassland or seasonal wetland within vegetation type

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Grassland or seasonal wetland within vegetation type
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	3123	Valley Oak Alliance		Grassland or seasonal wetland within vegetation type
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	7130	Serpentine Grasslands NFD Super Alliance		
20	Large-Flowered pink star tulip	<i>Calochortus uniflorus</i>	9100	Urban or Built-up		Grassland or seasonal wetland within vegetation type
21	Four petaled pussypaws	<i>Calyptridium quadripetalum</i>	2124	McNab Cypress Alliance		Barren Flat
21	Four petaled pussypaws	<i>Calyptridium quadripetalum</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Barren Flat
21	Four petaled pussypaws	<i>Calyptridium quadripetalum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Barren Flat
21	Four petaled pussypaws	<i>Calyptridium quadripetalum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Barren Flat
21	Four petaled pussypaws	<i>Calyptridium quadripetalum</i>	9001	Rock Outcrop		Barren Flat
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	2122	Knobcone Pine Alliance		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	2224	Douglas-fir - Ponderosa Pine Alliance		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Potentially Serpentine Edge Spp
22	Mt. Saint Helena morning-glory	<i>Calystegia collina ssp. Oxyphylla</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Potentially Serpentine Edge Spp
23	Tiburon Indian paintbrush	<i>Castilleja affinis ssp. neglecta</i>	7120	California Annual Grasslands Alliance	Restricted to the Napa River Watershed, Suisun Creek	Serpentine
23	Tiburon Indian paintbrush	<i>Castilleja affinis ssp. neglecta</i>	7130	Serpentine Grasslands NFD Super Alliance	Restricted to the Napa River Watershed, Suisun Creek	Serpentine
24	Salt marsh owl's clover	<i>Castilleja ambigua ssp. ambigua</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		Seasonally wet grassland with woodlands
24	Salt marsh owl's clover	<i>Castilleja ambigua ssp. ambigua</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		Seasonally wet grassland with woodlands
24	Salt marsh owl's clover	<i>Castilleja ambigua ssp. ambigua</i>	7100	Upland Annual Grasslands & Forbs Formation		
24	Salt marsh owl's clover	<i>Castilleja ambigua ssp. ambigua</i>	7120	California Annual Grasslands Alliance		
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		Generally seasonally wet
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		Generally seasonally wet

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25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	2121	Foothill Pine Alliance		Generally seasonally wet
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	2124	McNab Cypress Alliance		Generally seasonally wet
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Generally seasonally wet
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	7101	Perennial Bunchgrass Restoration Sites		Generally seasonally wet
25	Pink creamsacs	<i>Castilleja rubicundula ssp. rubicundula</i>	7130	Serpentine Grasslands NFD Super Alliance		Generally seasonally wet
26	Rincon Ridge ceanothus	<i>Ceanothus confusus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
26	Rincon Ridge ceanothus	<i>Ceanothus confusus</i>	2122	Knobcone Pine Alliance		
26	Rincon Ridge ceanothus	<i>Ceanothus confusus</i>	2222	Douglas-fir Alliance		
26	Rincon Ridge ceanothus	<i>Ceanothus confusus</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
26	Rincon Ridge ceanothus	<i>Ceanothus confusus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	1223	Mixed Oak Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	2122	Knobcone Pine Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
27	Calistoga ceanothus	<i>Ceanothus divergens</i>	9100	Urban or Built-up		
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	1221	Coast Live Oak Alliance	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	1223	Mixed Oak Alliance		
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	4300	Sclerophyllous Shrubland Formation	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	4321	Chamise Alliance	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	9100	Urban or Built-up	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	9200	Agriculture	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	9300	Vacant	Not in the Blue Ridge Mountains	Volcanics
28	Holly-leaf ceanothus	<i>Ceanothus purpureus</i>	9999	Unkown	Not in the Blue Ridge Mountains	Volcanics
29	Sonoma ceanothus	<i>Ceanothus sonomensis</i>	2122	Knobcone Pine Alliance		
29	Sonoma ceanothus	<i>Ceanothus sonomensis</i>	2222	Douglas-fir Alliance		Brushy Areas
29	Sonoma ceanothus	<i>Ceanothus sonomensis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
29	Sonoma ceanothus	<i>Ceanothus sonomensis</i>	4321	Chamise Alliance		

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29	Sonoma ceanothus	<i>Ceanothus sonomensis</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	2121	Foothill Pine Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	2124	McNab Cypress Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	3122	Blue Oak Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	4321	Chamise Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	7130	Serpentine Grasslands NFD Super Alliance		
55	Tracy's clarkia	<i>Clarkia gracilis ssp</i>	9100	Urban or Built-up	Knowxville Area	
30	Serpentine collomia	<i>Collomia diversifolia</i>	2121	Foothill Pine Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	2124	McNab Cypress Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	2125	Sargent Cypress Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
30	Serpentine collomia	<i>Collomia diversifolia</i>	7100	Upland Annual Grasslands & Forbs Formation		Serpentine areas within vegetation type
30	Serpentine collomia	<i>Collomia diversifolia</i>	9003	Serpentine Barren		
31	Soft bird's-beak	<i>Cordylanthus mollis ssp. mollis</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		
32	Serpentine bird's beak	<i>Cordylanthus tenuis ssp. Brunneus</i>	2124	McNab Cypress Alliance		
32	Serpentine bird's beak	<i>Cordylanthus tenuis ssp. Brunneus</i>	2125	Sargent Cypress Alliance		
32	Serpentine bird's beak	<i>Cordylanthus tenuis ssp. Brunneus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
32	Serpentine bird's beak	<i>Cordylanthus tenuis ssp. Brunneus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
32	Serpentine bird's beak	<i>Cordylanthus tenuis ssp. Brunneus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
33	Serpentine cryptantha	<i>Cryptantha clevelandii var. dissita</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
33	Serpentine cryptantha	<i>Cryptantha clevelandii var. dissita</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
33	Serpentine cryptantha	<i>Cryptantha clevelandii var. dissita</i>	2124	McNab Cypress Alliance		
33	Serpentine cryptantha	<i>Cryptantha clevelandii var. dissita</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		

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33	Serpentine cryptantha	<i>Cryptantha clevelandii</i> var. <i>dissita</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
34	Boggs Lake Dodder	<i>Cuscuta howelliana</i>	7120	California Annual Grasslands Alliance		Vernal pools, seasonal wetlands with in chapparal or grasslands
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	2121	Foothill Pine Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	2124	McNab Cypress Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	2125	Sargent Cypress Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Serpentine Areas
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	5222	Brewer Willow Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	7130	Serpentine Grasslands NFD Super Alliance		
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	9100	Urban or Built-up		Serpentine Areas
35	Serpentine larkspur	<i>Delphinium uliginosum</i>	9999	Unkown		
36	Dwarf downingia	<i>Downingia pusilla</i>	0	Vernal pools		
36	Dwarf downingia	<i>Downingia pusilla</i>	1221	Coast Live Oak Alliance		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	1223	Mixed Oak Alliance		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	4300	Sclerophyllous Shrubland Formation		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	7100	Upland Annual Grasslands & Forbs Formation		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	7120	California Annual Grasslands Alliance		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	9100	Urban or Built-up		Within Drainages/Ponds/Ditches/Vernal Pools
36	Dwarf downingia	<i>Downingia pusilla</i>	9200	Agriculture		Within Drainages/Ponds/Ditches/Vernal Pools
37	Dwarf spikerush	<i>Eleocharis parvula</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		
37	Dwarf spikerush	<i>Eleocharis parvula</i>	9002	Riverine, Lacustrine and Tidal Mudflats		
37	Dwarf spikerush	<i>Eleocharis parvula</i>	9400	Water		
38	Marsh horsetail	<i>Equisetum palustre</i>	5222	Brewer Willow Alliance		
38	Marsh horsetail	<i>Equisetum palustre</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance		
38	Marsh horsetail	<i>Equisetum palustre</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		

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38	Marsh horsetail	<i>Equisetum palustre</i>	6406	Diked Pasture		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	1221	Coast Live Oak Alliance		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	2121	Foothill Pine Alliance		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	2124	McNab Cypress Alliance		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
39	Narrow-leaved daisy	<i>Erigeron angustatus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	1221	Coast Live Oak Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	4321	Chamise Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	7120	California Annual Grasslands Alliance		
40	Tiburon buckwheat	<i>Eriogonum lateolum var. caninum</i>	7130	Serpentine Grasslands NFD Super Alliance		
41	Snow Mtn. Buckwheat	<i>Eriogonum nervulosum</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		Serpentine Barren
41	Snow Mtn. Buckwheat	<i>Eriogonum nervulosum</i>	2121	Foothill Pine Alliance		Serpentine Barren
41	Snow Mtn. Buckwheat	<i>Eriogonum nervulosum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Serpentine Barren
42	Tripod Buckwheat	<i>Eriogonum tripodum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
42	Tripod Buckwheat	<i>Eriogonum tripodum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	2122	Knobcone Pine Alliance		Brushy Areas within Knobcone Pine
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	2124	McNab Cypress Alliance	West County	non-serpentine
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	4300	Sclerophyllous Shrubland Formation		
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	4321	Chamise Alliance		Open Areas
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
112	Bay Buckwheat	<i>Eriogonum umbellatum var. bahiiforne</i>	9001	Rock Outcrop		
43	Round-leaved filaree	<i>Erodium macrophyllum</i>	3122	Blue Oak Alliance		Near Serpentine
43	Round-leaved filaree	<i>Erodium macrophyllum</i>	7100	Upland Annual Grasslands & Forbs Formation		
43	Round-leaved filaree	<i>Erodium macrophyllum</i>	7120	California Annual Grasslands Alliance		Near Serpentine

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
44	St. Helena fawn lily	<i>Erythronium helenae</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	2121	Foothill Pine Alliance		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	3122	Blue Oak Alliance		Volcanics, On Serpentine
44	St. Helena fawn lily	<i>Erythronium helenae</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Volcanics, On Serpentine
44	St. Helena fawn lily	<i>Erythronium helenae</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
44	St. Helena fawn lily	<i>Erythronium helenae</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
45	Adobe-lily	<i>Fritillaria pluriflora</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		Grasslands within vegetation types
45	Adobe-lily	<i>Fritillaria pluriflora</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Grasslands within vegetation types
45	Adobe-lily	<i>Fritillaria pluriflora</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Grasslands within vegetation types
45	Adobe-lily	<i>Fritillaria pluriflora</i>	7130	Serpentine Grasslands NFD Super Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	2121	Foothill Pine Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	2122	Knobcone Pine Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	2124	McNab Cypress Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	7100	Upland Annual Grasslands & Forbs Formation		Volcanics, Serpentine within vegetation type
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	7130	Serpentine Grasslands NFD Super Alliance		
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	9001	Rock Outcrop	Knoxville Area	
46	Purdy's dwarf fritillary	<i>Fritillaria purdyi</i>	9100	Urban or Built-up	Knowxville Area	
47	Salt marsh gumplant	<i>Grindelia stricta var. angustifolia</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		
47	Salt marsh gumplant	<i>Grindelia stricta var. angustifolia</i>	7100	Upland Annual Grasslands & Forbs Formation		Near Marshlands
47	Salt marsh gumplant	<i>Grindelia stricta var. angustifolia</i>	9200	Agriculture		Near Marshlands
48	Hall's harmonia	<i>Harmonia hallii</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
48	Hall's harmonia	<i>Harmonia hallii</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
48	Hall's harmonia	<i>Harmonia hallii</i>	2124	McNab Cypress Alliance		
48	Hall's harmonia	<i>Harmonia hallii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
48	Hall's harmonia	<i>Harmonia hallii</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
49	Serpentine sunflower	<i>Helianthus exilis</i>	2124	McNab Cypress Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	2125	Sargent Cypress Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	5222	Brewer Willow Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	5222	Brewer Willow Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	7130	Serpentine Grasslands NFD Super Alliance		
49	Serpentine sunflower	<i>Helianthus exilis</i>	9100	Urban or Built-up	Knoxville Area	
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	2121	Foothill Pine Alliance		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
50	Two-carpellate western flax	<i>Hesperolinon bicarpellatum</i>	7130	Serpentine Grasslands NFD Super Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	1222	Interior Live Oak Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	1223	Mixed Oak Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	2121	Foothill Pine Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	2124	McNab Cypress Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	3121	Black Oak Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	3122	Blue Oak Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
51	Brewer's western flax	<i>Hesperolinon breweri</i>	7130	Serpentine Grasslands NFD Super Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		

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52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	2124	McNab Cypress Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	2125	Sargent Cypress Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	7130	Serpentine Grasslands NFD Super Alliance		Sparsely vegetated
52	Drymaria-like western flax	<i>Hesperolinon drymarioides</i>	9003	Serpentine Barren		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	2121	Foothill Pine Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	2124	McNab Cypress Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	2125	Sargent Cypress Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4300	Sclerophyllous Shrubland Formation		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	4321	Chamise Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	7130	Serpentine Grasslands NFD Super Alliance		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	9001	Rock Outcrop		
53	Napa western flax	<i>Hesperolinon serpentinum</i>	9100	Urban or Built-up	Knoxville Area	
53	Napa western flax	<i>Hesperolinon serpentinum</i>	9999	Unkown		
54	Northern California black walnut	<i>Juglans californica var. hindsii</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica var. hindsii</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica var. hindsii</i>	1221	Coast Live Oak Alliance		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica var. hindsii</i>	1222	Interior Live Oak Alliance		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica var. hindsii</i>	1223	Mixed Oak Alliance		Just pre-historic trees Pre 1900's

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54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	2222	Douglas-fir Alliance		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3121	Black Oak Alliance		Just pre-historic trees Pre 1900's - near river generally
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3122	Blue Oak Alliance		Just pre-historic trees Pre 1900's - near river generally
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	3221	Mixed Willow Super Alliance		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	9100	Urban or Built-up		Just pre-historic trees Pre 1900's
54	Northern California black walnut	<i>Juglans californica</i> var. <i>hindsii</i>	9200	Agriculture		Just pre-historic trees Pre 1900's
56	Contra Costa goldfields	<i>Lasthenia conjugens</i>	0	Vernal pools		Seasonal wetland / flat topography
56	Contra Costa goldfields	<i>Lasthenia conjugens</i>	7120	California Annual Grasslands Alliance		Seasonal wetland / flat topography
56	Contra Costa goldfields	<i>Lasthenia conjugens</i>	9100	Urban or Built-up		Seasonal wetland / flat topography
56	Contra Costa goldfields	<i>Lasthenia conjugens</i>	9200	Agriculture		Seasonal wetland / flat topography
57	Delta tule pea	<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		Can be found among bullrushes along sloughs in marshlands
57	Delta tule pea	<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	9002	Riverine, Lacustrine and Tidal Mudflats		
57	Delta tule pea	<i>Lathyrus jepsonii</i> var. <i>jepsonii</i>	9100	Urban or Built-up		Urban Marsh interface - Near sanitation plant and american canyon
58	Colusa layia	<i>Layia septentrionalis</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
58	Colusa layia	<i>Layia septentrionalis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
58	Colusa layia	<i>Layia septentrionalis</i>	1223	Mixed Oak Alliance		
58	Colusa layia	<i>Layia septentrionalis</i>	2105	Foothill Pine/White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine		
58	Colusa layia	<i>Layia septentrionalis</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
58	Colusa layia	<i>Layia septentrionalis</i>	2121	Foothill Pine Alliance		
58	Colusa layia	<i>Layia septentrionalis</i>	2124	McNab Cypress Alliance		
58	Colusa layia	<i>Layia septentrionalis</i>	3122	Blue Oak Alliance		

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58	Colusa layia	<i>Layia septentrionalis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
58	Colusa layia	<i>Layia septentrionalis</i>	7100	Upland Annual Grasslands & Forbs Formation		
58	Colusa layia	<i>Layia septentrionalis</i>	7101	Perennial Bunchgrass Restoration Sites		
58	Colusa layia	<i>Layia septentrionalis</i>	7120	California Annual Grasslands Alliance		
58	Colusa layia	<i>Layia septentrionalis</i>	9001	Rock Outcrop		
59	Legenere	<i>Legenere limosa</i>	0	Vernal pools		Seasonal wetland / flat topography
59	Legenere	<i>Legenere limosa</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		Seasonal wetland / flat topography
59	Legenere	<i>Legenere limosa</i>	7120	California Annual Grasslands Alliance		Seasonal wetland / flat topography
59	Legenere	<i>Legenere limosa</i>	9100	Urban or Built-up		Seasonal wetland / flat topography
60	Dwarf peppergrass	<i>Lepidium latipes</i>	3122	Blue Oak Alliance		Generally in disturbed sites
60	Dwarf peppergrass	<i>Lepidium latipes</i>	7100	Upland Annual Grasslands & Forbs Formation		Generally in disturbed sites
60	Dwarf peppergrass	<i>Lepidium latipes</i>	9300	Vacant		Generally in disturbed sites
61	Woolly-headed Lessingia	<i>Lessingia hololeuca</i>	1221	Coast Live Oak Alliance		
61	Woolly-headed Lessingia	<i>Lessingia hololeuca</i>	1223	Mixed Oak Alliance		
61	Woolly-headed Lessingia	<i>Lessingia hololeuca</i>	3122	Blue Oak Alliance		
61	Woolly-headed Lessingia	<i>Lessingia hololeuca</i>	7120	California Annual Grasslands Alliance		
61	Woolly-headed Lessingia	<i>Lessingia hololeuca</i>	9100	Urban or Built-up	At calistoga airport	
62	Mason's lilaepsis	<i>Lilaeopsis masonii</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Tidal Area	Tidal Areas along channels
62	Mason's lilaepsis	<i>Lilaeopsis masonii</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Tidal Area	Tidal Areas along channels
62	Mason's lilaepsis	<i>Lilaeopsis masonii</i>	9100	Urban or Built-up		
63	Charparral Lily	<i>Lilium rubescens</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	1122	Canyon Live Oak Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	1124	Tanbark Oak Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	1124	Tanbark Oak Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
63	Charparral Lily	<i>Lilium rubescens</i>	1223	Mixed Oak Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		
63	Charparral Lily	<i>Lilium rubescens</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
63	Charparral Lily	<i>Lilium rubescens</i>	2222	Douglas-fir Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
63	Charparral Lily	<i>Lilium rubescens</i>	2230	Coast Redwood Alliance		
64	Wooly meadowfoam	<i>Limnanthes floccosa ssp. Floccosa</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Seasonally wet grasslands, seeps or drainages on volcanics
64	Wooly meadowfoam	<i>Limnanthes floccosa ssp. Floccosa</i>	7120	California Annual Grasslands Alliance		Seasonally wet grasslands, seeps or drainages on volcanics
65	Sebastopol meadowfoam	<i>Limnanthes vinculans</i>	0	Vernal pools		
65	Sebastopol meadowfoam	<i>Limnanthes vinculans</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		

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65	Sebastopol meadowfoam	<i>Limnanthes vincularis</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
65	Sebastopol meadowfoam	<i>Limnanthes vincularis</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
66	Bristley Linanthus	<i>Linanthus acicularis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		Vegetation type with grassland understory
66	Bristley Linanthus	<i>Linanthus acicularis</i>	1222	Interior Live Oak Alliance		Vegetation type with grassland understory
66	Bristley Linanthus	<i>Linanthus acicularis</i>	3123	Valley Oak Alliance		
66	Bristley Linanthus	<i>Linanthus acicularis</i>	7100	Upland Annual Grasslands & Forbs Formation		
66	Bristley Linanthus	<i>Linanthus acicularis</i>	7120	California Annual Grasslands Alliance		
67	Jepson's linanthus	<i>Linanthus jepsonii</i>	3122	Blue Oak Alliance		
67	Jepson's linanthus	<i>Linanthus jepsonii</i>	7100	Upland Annual Grasslands & Forbs Formation		
67	Jepson's linanthus	<i>Linanthus jepsonii</i>	7101	Perennial Bunchgrass Restoration Sites		
67	Jepson's linanthus	<i>Linanthus jepsonii</i>	7120	California Annual Grasslands Alliance		
67	Jepson's linanthus	<i>Linanthus jepsonii</i>	7130	Serpentine Grasslands NFD Super Alliance		
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	3122	Blue Oak Alliance	Only known in the North East Corner of the County	
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Only known in the North East Corner of the County	
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	7100	Upland Annual Grasslands & Forbs Formation	Only known in the North East Corner of the County	
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	7120	California Annual Grasslands Alliance	Only known in the North East Corner of the County	
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	7130	Serpentine Grasslands NFD Super Alliance	Only known in the North East Corner of the County	
68	Hoover's Wild Parsnip	<i>Lomatium ciliolatum var. hooveri</i>	9100	Urban or Built-up	Only known in the North East Corner of the County	
69	Napa wild parsnip	<i>Lomatium repostum</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	1223	Mixed Oak Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	2122	Knobcone Pine Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	2222	Douglas-fir Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	2224	Douglas-fir - Ponderosa Pine Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	3121	Black Oak Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	4321	Chamise Alliance		On ridges, not on serpentine
69	Napa wild parsnip	<i>Lomatium repostum</i>	9300	Vacant		On ridges, not on serpentine
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	1223	Mixed Oak Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2122	Knobcone Pine Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2123	Ponderosa Pine Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2126	Sugar Pine - Canyon Oak NFD Association		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2222	Douglas-fir Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	4321	Chamise Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	9001	Rock Outcrop		
70	Cobb Mtn. Lupine	<i>Lupinus sericatus</i>	9100	Urban or Built-up		
71	California Loose Strife	<i>Lythrum californicum</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		
71	California Loose Strife	<i>Lythrum californicum</i>	3221	Mixed Willow Super Alliance		
71	California Loose Strife	<i>Lythrum californicum</i>	5222	Brewer Willow Alliance		
71	California Loose Strife	<i>Lythrum californicum</i>	6406	Diked Pasture		
71	California Loose Strife	<i>Lythrum californicum</i>	9100	Urban or Built-up		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	1122	Canyon Live Oak Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	1221	Coast Live Oak Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	1223	Mixed Oak Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	2222	Douglas-fir Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	4300	Sclerophyllous Shrubland Formation		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	4321	Chamise Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	7120	California Annual Grasslands Alliance		
72	Nodding Mt. Tarweed	<i>Madia nutans</i>	9001	Rock Outcrop		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	3122	Blue Oak Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	3123	Valley Oak Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4300	Sclerophyllous Shrubland Formation		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4321	Chamise Alliance		
73	Heller's bush mallow	<i>Malacothamnus helleri</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
74	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	1123	Eucalyptus Alliance		
74	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	2222	Douglas-fir Alliance		
74	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
74	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	3124	Oregon White Oak Alliance		
74	Mt. Diablo cottonweed	<i>Micropus amphibolus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
75	Bare monkeyflower	<i>Mimulus nudatus</i>	2121	Foothill Pine Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	2124	McNab Cypress Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	2125	Sargent Cypress Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	5222	Brewer Willow Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	7130	Serpentine Grasslands NFD Super Alliance		Only on Serpentine, along seeps and drainages
75	Bare monkeyflower	<i>Mimulus nudatus</i>	9100	Urban or Built-up	Knoxville Area	Only on Serpentine, along seeps and drainages
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	1222	Interior Live Oak Alliance		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	1223	Mixed Oak Alliance		

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	3122	Blue Oak Alliance		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	3123	Valley Oak Alliance		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	4321	Chamise Alliance		
76	Robust monardella	<i>Monardella villosa ssp. globosa</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	1222	Interior Live Oak Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	1223	Mixed Oak Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	2121	Foothill Pine Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	2122	Knobcone Pine Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	3121	Black Oak Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4321	Chamise Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	7120	California Annual Grasslands Alliance		
77	Green coyote mint	<i>Monardella viridis ssp. viridis</i>	7130	Serpentine Grasslands NFD Super Alliance		
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	2106	Foothill Pine/California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine		
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Seasonally wet areas
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Wet meadows within the Chapparal types
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	7101	Perennial Bunchgrass Restoration Sites		
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	7120	California Annual Grasslands Alliance		
78	Cotula navarettia	<i>Navarettia cotulifolia</i>	7130	Serpentine Grasslands NFD Super Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		

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111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2121	Foothill Pine Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2121	Foothill Pine Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2122	Knobcone Pine Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2124	McNab Cypress Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	2222	Douglas-fir Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4321	Chamise Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
111	Pinnate-leaved gilia	<i>Navarettia sinistra ssp. Pinnatisecta</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	2124	McNab Cypress Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	7130	Serpentine Grasslands NFD Super Alliance		
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	9100	Urban or Built-up	Knoxville area	
79	Jepson's navarretia	<i>Navarretia jepsonii</i>	9999	Unkown		
80	Baker's navarretia	<i>Navarretia leucocephala ssp. bakeri</i>	3122	Blue Oak Alliance		Associated with vernal pools
80	Baker's navarretia	<i>Navarretia leucocephala ssp. bakeri</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		Associated with vernal pools
80	Baker's navarretia	<i>Navarretia leucocephala ssp. bakeri</i>	9200	Agriculture		Associated with vernal pools
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		Only in wet meadows within a vegetation type
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		Only in wet meadows within a vegetation type
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	1221	Coast Live Oak Alliance		Only in wet meadows within a vegetation type
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	1223	Mixed Oak Alliance		Only in wet meadows within a vegetation type
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	4300	Sclerophyllous Shrubland Formation		
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		

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81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
81	Few-flowered Navarettia	<i>Navarretia leucocephala ssp. pauciflo</i>	7120	California Annual Grasslands Alliance		
82	Marin County navarretia	<i>Navarretia rosulata</i>	2124	McNab Cypress Alliance		
82	Marin County navarretia	<i>Navarretia rosulata</i>	2125	Sargent Cypress Alliance		
82	Marin County navarretia	<i>Navarretia rosulata</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
82	Marin County navarretia	<i>Navarretia rosulata</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		
82	Marin County navarretia	<i>Navarretia rosulata</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
83	Howell's broomrape	<i>Orobanche valida ssp. howellii</i>	2122	Knobcone Pine Alliance		
83	Howell's broomrape	<i>Orobanche valida ssp. howellii</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
83	Howell's broomrape	<i>Orobanche valida ssp. howellii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
83	Howell's broomrape	<i>Orobanche valida ssp. howellii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
84	Sonoma beardtongue	<i>Penstemon newberryi sonomensis</i>	1122	Canyon Live Oak Alliance		
84	Sonoma beardtongue	<i>Penstemon newberryi sonomensis</i>	2122	Knobcone Pine Alliance		
84	Sonoma beardtongue	<i>Penstemon newberryi sonomensis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
84	Sonoma beardtongue	<i>Penstemon newberryi sonomensis</i>	9001	Rock Outcrop		
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	1223	Mixed Oak Alliance		Seasonal wetland / flat topography
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	2123	Ponderosa Pine Alliance		Seasonal wetland / flat topography
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	2224	Douglas-fir - Ponderosa Pine Alliance		Seasonal wetland / flat topography
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Seasonal wetland / flat topography
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		Seasonal wetland / flat topography
85	Gairdner's yampah	<i>Perideridia gairdneri ssp. gairdneri</i>	9999	Unkown		In "unknown" is similar to other vegetation types for spp.
86	California pinefoot	<i>Pityopus californicus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
86	California pinefoot	<i>Pityopus californicus</i>	2122	Knobcone Pine Alliance		
86	California pinefoot	<i>Pityopus californicus</i>	2126	Sugar Pine - Canyon Oak NFD Association		
86	California pinefoot	<i>Pityopus californicus</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
86	California pinefoot	<i>Pityopus californicus</i>	2222	Douglas-fir Alliance		
86	California pinefoot	<i>Pityopus californicus</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
86	California pinefoot	<i>Pityopus californicus</i>	2230	Coast Redwood Alliance		
87	Calistoga popcorn-flower	<i>Plagiobothrys strictus</i>	7120	California Annual Grasslands Alliance		Not cultivated
87	Calistoga popcorn-flower	<i>Plagiobothrys strictus</i>	9100	Urban or Built-up	North Napa Valley	Not cultivated
87	Calistoga popcorn-flower	<i>Plagiobothrys strictus</i>	9200	Agriculture	North Napa Valley	Not cultivated
88	Napa blue grass	<i>Poa napensis</i>	7120	California Annual Grasslands Alliance		Not cultivated
88	Napa blue grass	<i>Poa napensis</i>	9100	Urban or Built-up	North Napa Valley	Not cultivated
88	Napa blue grass	<i>Poa napensis</i>	9200	Agriculture	North Napa Valley	Not cultivated

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
89	Small-Flowered Pogogyne	<i>Pogogyne douglasii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Wet meadow / vernal pools
89	Small-Flowered Pogogyne	<i>Pogogyne douglasii</i>	7100	Upland Annual Grasslands & Forbs Formation		Wet meadow / vernal pools
89	Small-Flowered Pogogyne	<i>Pogogyne douglasii</i>	7120	California Annual Grasslands Alliance		Serpentine within grasslands, and alkaline soils, wet meadow / vernal pools
89	Small-Flowered Pogogyne	<i>Pogogyne douglasii</i>	7130	Serpentine Grasslands NFD Super Alliance		Wet meadow / vernal pools
89	Small-Flowered Pogogyne	<i>Pogogyne douglasii</i>	9100	Urban or Built-up		Wet meadow / vernal pools
90	Marin knotweed	<i>Polygonum marinense</i>	6501	Saltgrass - Pickleweed NFD Super Alliance		
90	Marin knotweed	<i>Polygonum marinense</i>	9002	Riverine, Lacustrine and Tidal Mudflats		
91	Lyman's fern	<i>Polypodium californicum forma lymanii</i>	1223	Mixed Oak Alliance		
91	Lyman's fern	<i>Polypodium californicum forma lymanii</i>	3122	Blue Oak Alliance		
92	Lobb's Aquatic Buttercup	<i>Ranunculus lobbii</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		Vernal pool, pond, ditch, standing water
92	Lobb's Aquatic Buttercup	<i>Ranunculus lobbii</i>	1221	Coast Live Oak Alliance		Vernal pool, pond, ditch, standing water
92	Lobb's Aquatic Buttercup	<i>Ranunculus lobbii</i>	9100	Urban or Built-up		Vernal pool, pond, ditch, standing water
92	Lobb's Aquatic Buttercup	<i>Ranunculus lobbii</i>	9200	Agriculture		Vernal pool, pond, ditch, standing water
92	Lobb's Aquatic Buttercup	<i>Ranunculus lobbii</i>	9300	Vacant		Vernal pool, pond, ditch, standing water
93	California beaked-rush	<i>Rhynchospora californica</i>	3221	Mixed Willow Super Alliance		
93	California beaked-rush	<i>Rhynchospora californica</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance		
93	California beaked-rush	<i>Rhynchospora californica</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	1221	Coast Live Oak Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	1223	Mixed Oak Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association		
94	Victor's gooseberry	<i>Ribes victoris</i>	2222	Douglas-fir Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		
94	Victor's gooseberry	<i>Ribes victoris</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association		
94	Victor's gooseberry	<i>Ribes victoris</i>	3123	Valley Oak Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
94	Victor's gooseberry	<i>Ribes victoris</i>	9200	Agriculture		
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	2121	Foothill Pine Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	2124	McNab Cypress Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	2125	Sargent Cypress Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii var. clevelandii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Seeps, springs, wetlands, streams

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	5222	Brewer Willow Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	5222	Brewer Willow Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	7130	Serpentine Grasslands NFD Super Alliance		Seeps, springs, wetlands, streams
95	Cleveland's butterweed	<i>Senecio clevelandii</i> var. <i>clevelandii</i>	9999	Unkown		Seeps, springs, wetlands, streams, serpentine only
96	Marin checkerbloom	<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Disturbed Lands
96	Marin checkerbloom	<i>Sidalcea hickmanii</i> ssp. <i>viridis</i>	4321	Chamise Alliance		Disturbed Lands
97	Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	1124	Tanbark Oak Alliance		Wet meadow within vegetation type
97	Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	2224	Douglas-fir - Ponderosa Pine Alliance		
97	Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance		
97	Marsh checkerbloom	<i>Sidalcea oregana</i> ssp. <i>hydrophila</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
98	Pacific cordgrass	<i>Spartina foliosa</i>	9002	Riverine, Lacustrine and Tidal Mudflats		Edge of water in mudflats and sloughs
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	2121	Foothill Pine Alliance		
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	2124	McNab Cypress Alliance		
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
99	Bearded jewelflower	<i>Streptanthus barbiger</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		
100	Socrates Mine jewel-flower	<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	2121	Foothill Pine Alliance		Barrens and rock outcrops
100	Socrates Mine jewel-flower	<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Barrens and rock outcrops
100	Socrates Mine jewel-flower	<i>Streptanthus brachiatus</i> ssp. <i>brachiatus</i>	9003	Serpentine Barren		Barrens and rock outcrops
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	2121	Foothill Pine Alliance		
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	2124	McNab Cypress Alliance		
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		
101	Green jewel-flower	<i>Streptanthus brewerii</i> var. <i>hesperides</i>	9003	Serpentine Barren		
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	2121	Foothill Pine Alliance		Barrens
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	2124	McNab Cypress Alliance		Barrens
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Barrens
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Barrens
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii</i> ssp. <i>elatus</i>	9001	Rock Outcrop		Barrens

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
102	Three Peaks jewel-flower	<i>Streptanthus morrisonii ssp. elatus</i>	9003	Serpentine Barren		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	2121	Foothill Pine Alliance		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	2124	McNab Cypress Alliance		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	9001	Rock Outcrop		Barrens
103	Kruckeberg's jewel-flower	<i>Streptanthus morrisonii ssp. kruckebergii</i>	9003	Serpentine Barren		Barrens
104	Mountain jewelflower	<i>Streptanthus tortuosus</i>	2122	Knobcone Pine Alliance		Rock outcrops
104	Mountain jewelflower	<i>Streptanthus tortuosus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Rock outcrops
104	Mountain jewelflower	<i>Streptanthus tortuosus</i>	4321	Chamise Alliance		Rock outcrops
104	Mountain jewelflower	<i>Streptanthus tortuosus</i>	9001	Rock Outcrop		Rock outcrops
105	Short-podded thelypodium	<i>Thelypodium brachycarpum</i>	2124	McNab Cypress Alliance		Near Alkaline Springs
105	Short-podded thelypodium	<i>Thelypodium brachycarpum</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Near Alkaline Springs
105	Short-podded thelypodium	<i>Thelypodium brachycarpum</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Near Alkaline Springs
105	Short-podded thelypodium	<i>Thelypodium brachycarpum</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Near Alkaline Springs
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	1221	Coast Live Oak Alliance		
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	1223	Mixed Oak Alliance		
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	2123	Ponderosa Pine Alliance		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	3122	Blue Oak Alliance		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	4300	Sclerophyllous Shrubland Formation		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	4321	Chamise Alliance		Volcanics

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		Volcanics
106	Hernandez turpentine weed	<i>Trichostema rubisepalum</i>	7120	California Annual Grasslands Alliance		Volcanics
107	Showy Indian clover	<i>Trifolium amoenum</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
107	Showy Indian clover	<i>Trifolium amoenum</i>	7100	Upland Annual Grasslands & Forbs Formation		
107	Showy Indian clover	<i>Trifolium amoenum</i>	7120	California Annual Grasslands Alliance		
107	Showy Indian clover	<i>Trifolium amoenum</i>	9200	Agriculture		
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	0	Vernal pools		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	6406	Diked Pasture		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	7100	Upland Annual Grasslands & Forbs Formation		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	7101	Perennial Bunchgrass Restoration Sites		Seasonally wet
108	Saline clover	<i>Trifolium depauperatum</i> var. <i>hydrophilum</i>	7120	California Annual Grasslands Alliance		Seasonally wet
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	1124	Tanbark Oak Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	2122	Knobcone Pine Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	2123	Ponderosa Pine Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	2124	McNab Cypress Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	2126	Sugar Pine - Canyon Oak NFD Association		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	4321	Chamise Alliance		
109	Dark-mouthed triteleia	<i>Triteleia lugens</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance		
110	Oval-leaved viburnum	<i>Viburnum ellipticum</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation		
110	Oval-leaved viburnum	<i>Viburnum ellipticum</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance		
110	Oval-leaved viburnum	<i>Viburnum ellipticum</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association		
110	Oval-leaved viburnum	<i>Viburnum ellipticum</i>	1221	Coast Live Oak Alliance		
110	Oval-leaved viburnum	<i>Viburnum ellipticum</i>	1223	Mixed Oak Alliance		
113	Marsh zigadenus	<i>Zigadenus micranthus</i> var. <i>fontanus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association		Serpentine influence
113	Marsh zigadenus	<i>Zigadenus micranthus</i> var. <i>fontanus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance		Perennial seeps and springs

ssp_id	Common Name	Scientific Name	PI code	Veg type	Geographic Restriction	Habitat Restriction
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance		Perennial seeps and springs
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance		Perennial seeps and springs
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance		Perennial seeps and springs
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	5222	Brewer Willow Alliance		
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance		
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	7120	California Annual Grasslands Alliance		Serpentine within vegetation type
113	Marsh zigadenus	<i>Zigadenus micranthus var. fontanus</i>	7130	Serpentine Grasslands NFD Super Alliance		

NAPA COUNTY BASELINE DATA REPORT
BIOLOGICAL RESOURCES APPENDIX C

SPECIAL STATUS WILDLIFE SPECIES ASSOCIATIONS WITH LAND COVER TYPES

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Cooper's hawk	<i>Accipiter cooperii</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Cooper's hawk	<i>Accipiter cooperii</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Cooper's hawk	<i>Accipiter cooperii</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Cooper's hawk	<i>Accipiter cooperii</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Cooper's hawk	<i>Accipiter cooperii</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		
Cooper's hawk	<i>Accipiter cooperii</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Cooper's hawk	<i>Accipiter cooperii</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Cooper's hawk	<i>Accipiter cooperii</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		
Cooper's hawk	<i>Accipiter cooperii</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
Cooper's hawk	<i>Accipiter cooperii</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Cooper's hawk	<i>Accipiter cooperii</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Cooper's hawk	<i>Accipiter cooperii</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Sharp-shinned hawk	<i>Accipiter striatus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Sharp-shinned hawk	<i>Accipiter striatus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
Sharp-shinned hawk	<i>Accipiter striatus</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Sharp-shinned hawk	<i>Accipiter striatus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
Tricolored blackbird	<i>Agelaius tricolor</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Tricolored blackbird	<i>Agelaius tricolor</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Tricolored blackbird	<i>Agelaius tricolor</i>	7100	Upland Annual Grasslands and Forbs Formation	Grassland	Annual grassland		
Grasshopper sparrow	<i>Ammodramus savannarum</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Bell's sage sparrow	<i>Amphispiza belli belli</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Bell's sage sparrow	<i>Amphispiza belli belli</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Bell's sage sparrow	<i>Amphispiza belli belli</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Bell's sage sparrow	<i>Amphispiza belli belli</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Bell's sage sparrow	<i>Amphispiza belli belli</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Bell's sage sparrow	<i>Amphispiza belli belli</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Pallid bat	<i>Antrozous pallidus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Pallid bat	<i>Antrozous pallidus</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance	Aquatic	Aquatic		
Pallid bat	<i>Antrozous pallidus</i>	9200	Agriculture	Agriculture	Agriculture		
Pallid bat	<i>Antrozous pallidus</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Pallid bat	<i>Antrozous pallidus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Pallid bat	<i>Antrozous pallidus</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Pallid bat	<i>Antrozous pallidus</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Pallid bat	<i>Antrozous pallidus</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Pallid bat	<i>Antrozous pallidus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Pallid bat	<i>Antrozous pallidus</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Pallid bat	<i>Antrozous pallidus</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Pallid bat	<i>Antrozous pallidus</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Pallid bat	<i>Antrozous pallidus</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Pallid bat	<i>Antrozous pallidus</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
Pallid bat	<i>Antrozous pallidus</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Pallid bat	<i>Antrozous pallidus</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	7100	Upland Annual Grasslands & Forbs Formation	Grassland	Annual grassland		
Pallid bat	<i>Antrozous pallidus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Pallid bat	<i>Antrozous pallidus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Pallid bat	<i>Antrozous pallidus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Pallid bat	<i>Antrozous pallidus</i>	9400	Water	Aquatic	Aquatic		
Pallid bat	<i>Antrozous pallidus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Golden eagle	<i>Aquila chrysaetos</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Golden eagle	<i>Aquila chrysaetos</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Golden eagle	<i>Aquila chrysaetos</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Golden eagle	<i>Aquila chrysaetos</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Golden eagle	<i>Aquila chrysaetos</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Golden eagle	<i>Aquila chrysaetos</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Golden eagle	<i>Aquila chrysaetos</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Golden eagle	<i>Aquila chrysaetos</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
Golden eagle	<i>Aquila chrysaetos</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Golden eagle	<i>Aquila chrysaetos</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Golden eagle	<i>Aquila chrysaetos</i>	7100	Upland Annual Grasslands and Forbs Formation	Grassland	Annual grassland		
Golden eagle	<i>Aquila chrysaetos</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Great blue heron (rookery)	<i>Ardea herodias</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Great blue heron (rookery)	<i>Ardea herodias</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Great blue heron (rookery)	<i>Ardea herodias</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Great blue heron (rookery)	<i>Ardea herodias</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Great blue heron (rookery)	<i>Ardea herodias</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		
Great blue heron (rookery)	<i>Ardea herodias</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Great blue heron (rookery)	<i>Ardea herodias</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Great blue heron (rookery)	<i>Ardea herodias</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Short-eared owl	<i>Asio flammeus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Short-eared owl	<i>Asio flammeus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Short-eared owl	<i>Asio flammeus</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance	Aquatic	Aquatic		
Short-eared owl	<i>Asio flammeus</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Short-eared owl	<i>Asio flammeus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Short-eared owl	<i>Asio flammeus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Short-eared owl	<i>Asio flammeus</i>	7100	Upland Annual Grasslands and Forbs Formation	Grassland	Annual grassland		
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland	Pope Valley and southern Napa only	
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	7100	Upland Annual Grasslands and Forbs Formation	Grassland	Annual grassland		
Ringtail cat	<i>Bassariscus astutus</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Ringtail cat	<i>Bassariscus astutus</i>	2127	California Juniper Alliance	Shrubland	Shrubland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Ringtail cat	<i>Bassariscus astutus</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Ringtail cat	<i>Bassariscus astutus</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Ringtail cat	<i>Bassariscus astutus</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Ringtail cat	<i>Bassariscus astutus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Ringtail cat	<i>Bassariscus astutus</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Ringtail cat	<i>Bassariscus astutus</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		
Ringtail cat	<i>Bassariscus astutus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
Ringtail cat	<i>Bassariscus astutus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Ringtail cat	<i>Bassariscus astutus</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Ringtail cat	<i>Bassariscus astutus</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
Ringtail cat	<i>Bassariscus astutus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Ringtail cat	<i>Bassariscus astutus</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Ringtail cat	<i>Bassariscus astutus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	But not in Urban Areas	
Ringtail cat	<i>Bassariscus astutus</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
Ringtail cat	<i>Bassariscus astutus</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Ringtail cat	<i>Bassariscus astutus</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Ringtail cat	<i>Bassariscus astutus</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Ringtail cat	<i>Bassariscus astutus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Ringtail cat	<i>Bassariscus astutus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Vernal Pool Fairy Shrimp	<i>Branchinecta lynchi</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance	Aquatic	Aquatic		
Red knot	<i>Calidris canutus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Red knot	<i>Calidris canutus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh	southern marshes only	
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
California Swainson's thrush	<i>Catharus ustulatus oedicus</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
California Swainson's thrush	<i>Catharus ustulatus oedicus</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Western snowy plover (coastal populations)	<i>Charadrius alexandrinus nivosus (nesting)</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Northern harrier	<i>Circus cyaneus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Northern harrier	<i>Circus cyaneus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Northern harrier	<i>Circus cyaneus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Northern harrier	<i>Circus cyaneus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Northern harrier	<i>Circus cyaneus</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2127	California Juniper Alliance	Shrubland	Shrubland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	9400	Water	Aquatic	Aquatic	within .25 mi of water body	
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Olive-sided flycatcher	<i>Contopus cooperi (borealis?)</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2127	California Juniper Alliance	Shrubland	Shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii pallescens</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
Yellow warbler	<i>Dendroica petechia brewsteri (nesting)</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
Yellow warbler	<i>Dendroica petechia brewsteri (nesting)</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Yellow warbler	<i>Dendroica petechia brewsteri (nesting)</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
White-tailed kite	<i>Elanus leucurus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
White-tailed kite	<i>Elanus leucurus</i>	9200	Agriculture	Agriculture	Agriculture		
White-tailed kite	<i>Elanus leucurus</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
White-tailed kite	<i>Elanus leucurus</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
White-tailed kite	<i>Elanus leucurus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California horned lark	<i>Eremophila alpestris actia</i>	9200	Agriculture	Agriculture	Agriculture		no vineyards
California horned lark	<i>Eremophila alpestris actia</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		alkaline flats, airports
California horned lark	<i>Eremophila alpestris actia</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2127	California Juniper Alliance	Shrubland	Shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Greater western mastiff bat	<i>Eumops perotis californicus</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Greater western mastiff bat	<i>Eumops perotis californicus</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
Prairie falcon	<i>Falco mexicanus</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Prairie falcon	<i>Falco mexicanus</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
Prairie falcon	<i>Falco mexicanus</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Prairie falcon	<i>Falco mexicanus</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Prairie falcon	<i>Falco mexicanus</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
Prairie falcon	<i>Falco mexicanus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
American peregrine falcon	<i>Falco peregrinus anatum</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
American peregrine falcon	<i>Falco peregrinus anatum</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
American peregrine falcon	<i>Falco peregrinus anatum</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		
American peregrine falcon	<i>Falco peregrinus anatum</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		
American peregrine falcon	<i>Falco peregrinus anatum</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Bald eagle	<i>Haliaeetus leucocephalus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		large reservoirs only
Bald eagle	<i>Haliaeetus leucocephalus</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Bald eagle	<i>Haliaeetus leucocephalus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Bald eagle	<i>Haliaeetus leucocephalus</i>	9400	Water	Aquatic	Aquatic		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Yellow-breasted chat	<i>Icteria virens</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Yellow-breasted chat	<i>Icteria virens</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Yellow-breasted chat	<i>Icteria virens</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Loggerhead shrike	<i>Lanius ludovicianus</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Loggerhead shrike	<i>Lanius ludovicianus</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Loggerhead shrike	<i>Lanius ludovicianus</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Loggerhead shrike	<i>Lanius ludovicianus</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California black rail	<i>Laterallus jamaicensis coturniculus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
California black rail	<i>Laterallus jamaicensis coturniculus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
California black rail	<i>Laterallus jamaicensis coturniculus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Short-billed dowitcher	<i>Limnodromus griseus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Short-billed dowitcher	<i>Limnodromus griseus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic	southern marshes only	
Short-billed dowitcher	<i>Limnodromus griseus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Short-billed dowitcher	<i>Limnodromus griseus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Marbled godwit	<i>Limosa fedoa</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Marbled godwit	<i>Limosa fedoa</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Marbled godwit	<i>Limosa fedoa</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Lewis's woodpecker	<i>Melanerpes lewis</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Lewis's woodpecker	<i>Melanerpes lewis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Lewis's woodpecker	<i>Melanerpes lewis</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
San Pablo song sparrow	<i>Melospiza melodia samuelis</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Long-eared myotis (bat)	<i>Myotis evotis</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Long-eared myotis (bat)	<i>Myotis evotis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Long-eared myotis (bat)	<i>Myotis evotis</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Long-eared myotis (bat)	<i>Myotis evotis</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Long-legged myotis (bat)	<i>Myotis volans</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Long-legged myotis (bat)	<i>Myotis volans</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Long-legged myotis (bat)	<i>Myotis volans</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Long-legged myotis (bat)	<i>Myotis volans</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Long-legged myotis (bat)	<i>Myotis volans</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
Long-legged myotis (bat)	<i>Myotis volans</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Long-legged myotis (bat)	<i>Myotis volans</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Long-legged myotis (bat)	<i>Myotis volans</i>	9400	Water	Aquatic	Aquatic		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	2127	California Juniper Alliance	Shrubland	Shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	9001	Rock Outcrop	Rock Outcrop	Rock Outcrop		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		Protected areas - not close to urban settings
Yuma myotis (bat)	<i>Myotis yumanensis</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	9400	Water	Aquatic	Aquatic		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Yuma myotis (bat)	<i>Myotis yumanensis</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		
San Francisco lacewing butterfly	<i>Nothochrysa californica</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
San Francisco lacewing butterfly	<i>Nothochrysa californica</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Long-billed curlew	<i>Numenius americanus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		
Long-billed curlew	<i>Numenius americanus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
Long-billed curlew	<i>Numenius americanus</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		greater than 100 acres
Long-billed curlew	<i>Numenius americanus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Long-billed curlew	<i>Numenius americanus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Long-billed curlew	<i>Numenius americanus</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Whimbrel	<i>Numenius phaeopus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
Whimbrel	<i>Numenius phaeopus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Whimbrel	<i>Numenius phaeopus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Osprey	<i>Pandion haliaetus</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
Osprey	<i>Pandion haliaetus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		
Osprey	<i>Pandion haliaetus</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Osprey	<i>Pandion haliaetus</i>	9400	Water	Aquatic	Aquatic		
Double-Crested cormorant (rookery)	<i>Phalacrocorax auritus</i>	9400	Water	Aquatic	Aquatic		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3121	Black Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3122	Blue Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4306	California Bay - Leather Oak - (Rhamnus spp.) Mesic Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1101	California Bay - Madrone - Coast Live Oak - (Black Oak Big - Leaf Maple) NFD Super Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2127	California Juniper Alliance	Shrubland	Shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1122	Canyon Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4322	Chamise - Wedgeleaf Ceanothus Alliance	Shrubland	Chaparral		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4321	Chamise Alliance	Shrubland	Chaparral		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1201	Coast Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1221	Coast Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		need loose sandy soils and abundant ant colonies
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2104	Foothill Pine / Mesic Non-serpentine Chaparral NFD Association	Coniferous forest	Pine forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2121	Foothill Pine Alliance	Coniferous forest	Pine forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1202	Interior Live Oak - Blue Oak - (Foothill Pine) NFD Association	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1222	Interior Live Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2122	Knobcone Pine Alliance	Coniferous forest	Pine forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4304	Leather Oak - California Bay - Rhamnus spp. Mesic Serpentine NFD Alliance	Shrubland	Serpentine shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2124	McNab Cypress Alliance	Coniferous forest	Cypress forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4302	Mixed Manzanita - (Interior Live Oak -California Bay - Chamise) West County NFD Alliance	Shrubland	Chaparral		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1223	Mixed Oak Alliance	Oak Woodlands	Mixed Oak Woodlands		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3124	Oregon White Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	7101	Perennial Bunchgrass Restoration sites	Grassland	Native Grassland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2123	Ponderosa Pine Alliance	Coniferous forest	Pine forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2125	Sargent Cypress Alliance	Coniferous forest	Cypress forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4300	Sclerophyllous Shrubland Formation	Shrubland	Shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4301	Scrub Interior Live Oak - Scrub Oak - (California Bay - Flowering Ash - Birch Leaf Mountain Mahogany - Toyon - California Buckeye) Mesic East County NFD Super Alliance	Shrubland	Chaparral		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	7130	Serpentine Grasslands NFD Super Alliance	Grassland	Serpentine grassland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2128	Sparse California Juniper-Canyon Live Oak-California Bay-California Buckeye / Steep Rock Outcrop NFD Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	2126	Sugar Pine - Canyon Oak NFD Association	Coniferous forest	Pine forest		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1124	Tanbark Oak Alliance	Oak Woodlands	Evergreen Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	7100	Upland Annual Grasslands and Forbs Formation	Grassland	Annual grassland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3123	Valley Oak Alliance	Oak Woodlands	Deciduous Oak Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
California (Coast) horned lizard	<i>Phrynosoma coronatum frontale</i>	1100	Winter-Rain Sclerophyll Forests & Woodlands Formation	Unknown	Unknown		

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Purple martin	<i>Progne subis</i>	2224	Douglas-fir -- Ponderosa pine Alliance	Coniferous forest	Doug fir-Redwood		
Purple martin	<i>Progne subis</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
California clapper rail	<i>Rallus longirostris obsoletus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
California clapper rail	<i>Rallus longirostris obsoletus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
California clapper rail	<i>Rallus longirostris obsoletus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
California red-legged frog	<i>Rana aurora draytoni</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		
California red-legged frog	<i>Rana aurora draytoni</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance	Aquatic	Aquatic		
California red-legged frog	<i>Rana aurora draytoni</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
California red-legged frog	<i>Rana aurora draytoni</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		
California red-legged frog	<i>Rana aurora draytoni</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
California red-legged frog	<i>Rana aurora draytoni</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California red-legged frog	<i>Rana aurora draytoni</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California red-legged frog	<i>Rana aurora draytoni</i>	9400	Water	Aquatic	Aquatic		only in ponds
California red-legged frog	<i>Rana aurora draytoni</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Foothill yellow-legged frog	<i>Rana boylei</i>	5222	Brewer Willow Alliance	Riparian Woodland	Riparian Woodland		
Foothill yellow-legged frog	<i>Rana boylei</i>	3221	Mixed Willow Super Alliance	Riparian Woodland	Riparian Woodland		
Foothill yellow-legged frog	<i>Rana boylei</i>	3101	Valley Oak - (California Bay - Coast Live Oak - Walnut - Ash) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Foothill yellow-legged frog	<i>Rana boylei</i>	3102	Valley Oak - Fremont Cottonwood - (Coast Live Oak) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Foothill yellow-legged frog	<i>Rana boylei</i>	9400	Water	Aquatic	Aquatic		Only occurs in creeks, not ponds or rivers
Foothill yellow-legged frog	<i>Rana boylei</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
Salt-marsh harvest mouse	<i>Reithrodontomys raviventris</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic	southern marshes only	
Salt-marsh harvest mouse	<i>Reithrodontomys raviventris</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic	tidal mudflats only	tidal mudflats only
Salt-marsh harvest mouse	<i>Reithrodontomys raviventris</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		
Western spadefoot	<i>Scaphiopus hammondi</i>	6403	(Carex spp. - Juncus spp - Wet Meadow Grasses) NFD Super Alliance	Aquatic	Aquatic		
Western spadefoot	<i>Scaphiopus hammondi</i>	7120	California Annual Grasslands Alliance	Grassland	Annual Grassland		breed in ponds, vp, seasonal wetlands, shallow streams
Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	6401	(Alkali Bulrush - Bulrush) Brackish Marsh Mapping Unit	Aquatic	Aquatic		northern shores of san pablo and suisun bays
Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic		northern shores of san pablo and suisun bays
Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	9002	Riverine, Lacustrine and Tidal Mudflats	Aquatic	Aquatic		northern shores of san pablo and suisun bays

Common Name	Scientific Name	MCVCode	MCVName	Bio Community	Community Type	Geographic Restriction	Habitat Restriction
Suisun ornate shrew	<i>Sorex ornatus sinuosus</i>	6501	Saltgrass - Pickleweed NFD Super Alliance	Aquatic	Salt Marsh		northern shores of san pablo and suisun bays
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	4502	Sparse Bush Lupine / Annual Grasses / Rock Outcrop NFD Alliance	Grassland	Annual grassland		
Black-chinned sparrow	<i>Spizella atrogularis</i>	4321	Chamise Alliance	Shrubland	Chaparral		
Black-chinned sparrow	<i>Spizella atrogularis</i>	4501	Coyote Brush - California Sagebrush - (Lupine spp.) NFD Super Alliance	Shrubland	Shrubland		
Black-chinned sparrow	<i>Spizella atrogularis</i>	4303	Leather Oak - White Leaf Manzanita - Chamise Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Black-chinned sparrow	<i>Spizella atrogularis</i>	4503	Lotus scoparius Alliance (post-burn)	Shrubland	Chaparral		
Black-chinned sparrow	<i>Spizella atrogularis</i>	4305	White Leaf Manzanita - Leather Oak - (Chamise - Ceanothus spp.) Xeric Serpentine NFD Super Alliance	Shrubland	Serpentine shrubland		
Elegant tern	<i>Sterna elegans</i>	9400	Water	Aquatic	Aquatic	southern marshes only	
Northern spotted owl	<i>Strix occidentalis caurina</i>	2201	Coast Redwood - Douglas-fir / California Bay NFD Association	Coniferous forest	Doug fir-Redwood		
Northern spotted owl	<i>Strix occidentalis caurina</i>	2230	Coast Redwood Alliance	Coniferous forest	Doug fir-Redwood		
Northern spotted owl	<i>Strix occidentalis caurina</i>	2224	Douglas-fir - Ponderosa Pine Alliance	Coniferous forest	Doug fir-Redwood		
Northern spotted owl	<i>Strix occidentalis caurina</i>	2222	Douglas-fir Alliance	Coniferous forest	Doug fir-Redwood		
Northern spotted owl	<i>Strix occidentalis caurina</i>	3201	White Alder (Mixed Willow - California Bay - Big Leaf Maple) Riparian Forest NFD Association	Riparian Woodland	Riparian Woodland		
California freshwater shrimp	<i>Syncaris pacifica</i>	9400	Water	Aquatic	Aquatic		
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	6402	(Bulrush - Cattail) Fresh Water Marsh NFD Super Alliance	Aquatic	Aquatic	southern marshes only	

NAPA COUNTY BIOLOGICAL DATABASE DESCRIPTION

OVERVIEW

The Napa County Biological Database was developed to assist county planning and project proponents in identifying potential habitat for special status species. The Napa County Biological Database is composed of the Napa County Vegetation GIS dataset (ICE/MCV vegetation) and two Microsoft (MS) Access databases. The databases are separated into a plant species database and a wildlife database.

DATABASE DESCRIPTION

ICE/MCV VEGETATION

The vegetation database is an ESRI geodatabase which stores the vegetation map and the vegetation classification. The data was mapped as from 1993 USGS Digital Ortho Quarter Quads (DOQQ). The classification of vegetation was completed by the Information Center for the Environment (ICE, UC Davis). The data dictionary for the vegetation dataset is described in Table 1.

Table 1. Data Dictionary for the Vegetation Dataset

Field Name	Data Type	Description
ObjectID	Object ID	Internal ID for geodatabase
Shape	Polygon	Feature class
PI	Long Integer	MCV/ICE—vegetation community ID
MU_Name	String (Text)	MCV/ICE—vegetation types (long names)
Shape_Length	Integer (Double)	Length of polygon perimeter (feet)
Shape_Area	Integer (Double)	Area of polygon features (sq. feet)

PLANT SPECIES DATABASE

The plant species database is a MS Access relational database containing six data tables and one export table. The plant database contains information about the federal, state, CNPS and local designations for each species, habitat requirements, and known locations in Napa County. Elevation range, flowering time, and soil affinity are included with those species for which that information is available. Each species has been assigned an MCV community type that most likely contains the species. The habitat for some species is below the MMU for the vegetation communities. In these cases, a community type that would contain the smaller habitat was assigned to the species.

The relationships among tables in the plant species database are illustrated in Figure 1. The Tbl_species_lut table is the main table that contains the species unique id and the species name. The Tbl_species_lut table has a one-to-one relationship with the Tbl_spp_attributes table and a one-to-many relationship with Tbl_spp_veg and Tbl_spp_quad. Tbl_spp_veg has a many-to-one relationship with Tbl_mu_name_lut.

The fields in Tbl_species_lut are described in Table 2.

Table 2. Fields in the Species Table: Tbl_species_lut

Field Name	Data Type	Description
Spp_id	Number	Spp_id is the unique id for plant species. Spp_id is used as a join item with other tables
Common_Name	Text	Common name
Scientific_Name	Text	Scientific name
Map_Symbol	Text	Map symbol/species codes

The fields in Tbl_spp_attributes are described in Table 3. The species attributes table describes the federal, state, CNPS and local designation for each species, a description of habitat, flowering times if applicable, distribution in California, and known locations in the County. Some species are found in particular soil types and elevation ranges.

Table 3. Fields in the Species Attributes Table: Tbl_spp_attributes

Field Name	Data Type	Description
Spp_id	Number	Spp_id is the unique id for plant species. Spp_id is used as a join item with other tables
Common_Name	Text	Common name
Scientific_Name	Text	Scientific name
Map_Symbol	Text	Map symbol/species codes
Federal	Text	See Table 8 for explanation of codes
State	Text	See Table 8 for explanation of codes
CNPS	Text	See Table 8 for explanation of codes
Local	Text	See Table 8 for explanation of codes
Habitats	Text	Habitat description
Soil Type Affinity	Text	Affinity to a particular soil type provided only when known or applicable
Soil_texture	Text	Soil texture
Elevation	Text	Elevation range
Flowering_time	Text	Species flowering time
California Distribution	Memo	Distribution in California
Known Occurrences in Napa County	Text	General occurrence information is based on incomplete survey data for Napa County. Species may occur in other areas where surveys are lacking

The fields in Tbl_spp_veg are described in Table 4. Tbl_spp_veg contains the list of species and related vegetation communities. It also indicates whether there are any geographic or habitat restrictions for a species and vegetation combinations. For example, some species may be associated with riparian areas but only near the southern marsh lands. Also, if a species is found in a habitat that falls below the MMU of the vegetation data it is indicated as a habitat restriction.

Table 4. Fields in the Species-Vegetation Table: Tbl_spp_veg

Field Name	Data Type	Description
Spp_id	ID	Spp_id is the unique id for plant species. Spp_id is used as a join item with other tables
PI_Code	Number	MCV/ICE—vegetation community ID
Veg_type	Text	MCV/ICE—vegetation types (long names)
Geographic restriction	Text	Description of geographic restrictions for a species/vegetation combination
Habitat restriction	Text	Descriptions of habitat restrictions. For example species found in wet areas or swales within a grassland

The fields in Tbl_mu_name_lut are described in Table 5. Tbl_mu_name_lut is the master list of MCV/ICE vegetation communities.

Table 5. Fields in the MCV/ICE Vegetation Communities Table: Tbl_mu_name_lut

Field Name	Data Type	Description
PI	Number	MCV/ICE - vegetation community ID
MU_Name	Text	MCV/ICE - vegetation types (long names)

The fields in Tbl_spp_quad are described in Table 6. Tbl_spp_quad lists the species and the quads containing a species occurrence record.

Table 6. Fields in the Species Occurrence Table: Tbl_spp_quad

Field Name	Data Type	Description
Spp_id	ID	Spp_id is the unique id for plant species. Spp_id is used as a join item with other tables
Quad_NO	Number	Quad Number
Quad_Name	Text	Name of USGS 1:24,000K Quad

The fields in Tblstatuscodes are described in Table 7-6 and 7-7. Tblstatuscodes are not related to the other tables but are a lookup table for the codes found in Tbl_spp_attributes federal, state, CNPS and local fields. If a data entry form is designed in the future, this table can be used to look up the appropriate information.

Table 7. Fields in the Species Status Codes Table: Tblstatuscodes

Field Name	Data Type	Description
Code	Text	Status Code found in the Federal, State, CNPS and Local field in Tbl_spp_attributes table
Status Type	Text	Federal, State, CNPS (California Native Plant Society), Local
Description	Text	Description of the codes

The descriptions of the codes in Tblstatuscodes are in Table 8.

Table 8. Fields in the Species Status Codes Table: Tblstatuscodes

Code	Status Type	Description
E	Federal	Listed as endangered under the federal Endangered Species Act
T	Federal	Listed as threatened under the federal Endangered Species Act
PE	Federal	Proposed for federal listing as endangered under the federal Endangered Species Act
PT	Federal	Proposed for federal listing as threatened under the federal Endangered Species Act
C	Federal	Candidate species (species for which USFWS has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposed rule to list)
SLC	Federal	Species of local concern; species whose status is being monitored by the local USFWS district office, but which has no formal protected status under the federal Endangered Species Act
SC	Federal	Species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking
E	State	Listed as endangered under the California Endangered Species Act
T	State	Listed as threatened under the California Endangered Species Act
R	State	Listed as rare under the California Native Plant Protection Act. This category is no longer used for newly listed plants, but some plants listed before the California Native Plant Protection Act was enacted retain this description
CE	State	Candidate species for listing as endangered under the California Endangered Species Act
SSC	State	Species of special concern in California
1A	CNPS	List 1A species: presumed extinct in California
1B	CNPS	List 1B species: rare, threatened, or endangered in California and elsewhere
2	CNPS	List 2 species: rare, threatened, or endangered in California but more common elsewhere
3	CNPS	List 3 species: plants about which more information is needed to determine their status
4	CNPS	List 4 species: plants of limited distribution. A watch list.
LR	Local	Considered by local experts to be rare in the Napa County portion of its range, although it may be more common elsewhere

The final table in the plant_spp_database.mdb database is the veg_export_to_gis table. Running the Qexport_to_gis query generates the table. The query combines data from several of the tables in a single table that can be subsequently related to the MCV/ICE vegetation dataset.

DATA LAYERS

Three spatial data layers were assembled from various sources (see discussion below) and used in developing the GIS-based County Biological Database for the analysis of the County's biological resources.

- Land cover layer.
- Special-status species occurrence layer.
- Special-status species habitat layer.

The GIS database can be used to generate customized maps of the County's biological resources.

LAND COVER LAYER

The land cover layer was developed from several previously existing datasets. The primary dataset used is a unique land cover map created by the University of California at Davis's Information Center for the Environment (ICE) (Thorne et al. 2004).

ICE LAND COVER MAP

The ICE Land Cover Map (ICE Map) was developed as a prototype to implement revisions to the vegetation classification system outlined in the Manual of California Vegetation (MCV) (Sawyer and Keeler-Wolf 1995). Its production involved the first large-scale, detailed mapping effort for this new methodology that is being applied throughout California as the new standard for land cover mapping at a regional and local scale. The basic methodology used represents a relatively simple and inexpensive approach to detailed vegetation mapping on a regional scale (Thorne et al. 2004).

The ICE map depicts 59 land cover types in the County, 52 of which are dominated by natural vegetation. The ICE map land cover categories correspond to alliances, superalliances, and associations in the MCV. Table 7-1 illustrates the classification hierarchy used by the MCV. The ICE map divides the County into 29,227 polygons with a total area of 788 square miles (2,042 square kilometers). The minimum mapping unit used was 2.5 acres (1 hectare). The ICE map was produced by digitizing from Digital Orthophoto Quarter Quadrangles (DOQQs) flown in 1993 with 1-meter pixels. Photo interpretation, polygon delineation and attributing were conducted from February to June 2002. A two-person crew spent 3 months in the field checking polygons from August to October 2002. Approximately 11% of polygons were field verified (Thorne et al. 2004).

ICE MAP LIMITATIONS

While the ICE map is extremely detailed considering its extent, it is limited in its accuracy by the age of the imagery used (in this case, 1993) and by the resolution of the imagery.

Some communities were not mapped because they lack a clear signature on aerial photographs. This is the case for native grassland communities. As with native grassland communities, herbaceous communities had to be lumped into a few coarse classes because they could not be distinguished to a finer level of detail using the available imagery. Serpentine grasslands were identified where grasslands appeared on the DOQQs in a location where the geology and soils maps of the County indicated serpentine soils (Keeler-Wolf, pers. comm.). Serpentine grasslands could not be distinguished visually from non-serpentine grasslands on the basis of the DOQQs. It is likely that many small serpentine areas are not included in the County geology and soil maps, leading them to be mapped as non-serpentine grassland on the ICE map.

Some forest communities also were grouped into coarser classes because of difficulties with resolution. For example, oak assemblages were frequently classified simply as mixed oak. Approximately 3,600 acres were recently burned at the time of the aerial photographs, and it was unclear what specific vegetation type would regenerate in these areas. Based on topographic position and surrounding land cover, these areas were assigned to one of two general vegetation types: sclerophyllous shrubland or winter-rain sclerophyll forests and woodlands (Keeler-Wolf pers. comm.).

Some communities were not mapped because they occur in patches that are smaller than the minimum mapping unit of 2.5 acres (1 hectare). While the minimum mapping unit was applied to most vegetation types, smaller polygons, down to approximately 0.6 acres, were delineated for sensitive communities including seeps, riparian corridors and other wetlands (Thorne et al. 2004). Nonetheless, some variations in and small patches of these community types were not mapped because of the minimum mapping unit. It was sometimes difficult to distinguish different riparian vegetation types on the DOQQs because air photo signatures were similar and vegetation types changed frequently along stream courses (Thorne et al. 2004).

The land cover map classified 99.2% of the County. Three thousand, two hundred (3,200) acres, approximately 0.6% of the County, were added to the County when boundaries were clarified in 2004, after the mapping effort had been completed; these areas have not been mapped. Another 1,159 acres, approximately 0.2% of the County, were not identifiable on the DOQQs and could not be field-checked due to access constraints (Thorne et al. 2004); these areas remain unclassified.

COUNTY VERNAL POOLS MAP

The ICE map was supplemented with information from a map of the County's vernal pools. This map was based on two data sources: a USFWS report on vernal pools (Holland 1996) and maps and description of vernal pools and vernal pool complexes submitted to the County by California Native Plant Society (CNPS) botanist Jake Ruygt (Napa County 2004). The resolution of this map is limited to

approximately 400 feet, as mapping involved manual drawing of vernal pools onto 7.5-minute USGS topographic quadrangles.

SPECIAL-STATUS SPECIES OCCURRENCE LAYER

The special-status species occurrence layer was developed from several previously existing sets of data and consultation with local experts in the field of special-status species. The first step was to generate a list of *special-status species* (species that meet the definition of "rare, endangered, or threatened" under CEQA). A detailed definition of special-status species is provided in the *Special Status Species* section of the report.

Persons with special expertise in this field, including Jones & Stokes staff, academics, and avocational experts, were consulted. In addition, the California Natural Diversity Database (CNDDDB) (2004), the County Rare Plants Map, and the Spotted Owl Database (California Department of Fish and Game 2004) were consulted. These sources are discussed below.

CALIFORNIA NATURAL DIVERSITY DATABASE

The CNDDDB is a database containing information on the location and characteristics of special-status species occurrences. It is maintained by DFG. The accuracy of occurrence data in the CNDDDB varies widely. The database contains information related to the accuracy of each occurrence, such as the spatial resolution of the occurrence mapping, the year when the occurrence was last documented, and the identity of the person who documented the occurrence. Updated CNDDDB data are released every six months. The November 2004 CNDDDB dataset was used as the starting point for the special-status species occurrence layer produced for this report.

COUNTY RARE PLANTS MAP

The County has maintained a database of the occurrences of rare plants for the last 30 years. Much of these data were mapped by local CNPS members on 1:24,000 USGS topographic quad maps. Thus, the resolution of these data is limited to approximately 400 feet. The special-status plant occurrences found in CNDDDB were supplemented and modified where necessary to reflect the County's rare plants data.

SPOTTED OWL OCCURRENCE DATA

DFG maintains a database of spotted owl occurrences (California Department of Fish and Game 2004). The database currently contains data on approximately 85,000 occurrences. Occurrence data in this database are collected from various sources, including DFG personnel, National Park Service staff, California Department of Forestry and Fire Prevention staff, USFWS Staff, and US Forest Service staff. Occurrence data are reviewed and compiled by Glenn Gould of DFG, and information on the accuracy of each occurrence is included in the database. Northern spotted owl occurrences in this database were added to the special-status species occurrence layer.

SPECIAL-STATUS SPECIES HABITAT LAYERS

The land cover and special-status species occurrence layers, together with information on species' natural history taken from CNPS, CNDDDB, scientific literature, and expert review, were used to associate special-status species with the specific areas of the County where they are likely to occur. *Breeding Birds of Napa County, California* (Berner et al. 2003) was an important source of information on bird occurrences and habitat.

Maps of potential habitat for each species were produced through the following three-step process.

1. First, a determination was made as to which of the Land Cover Layer's 59 land cover types would provide habitat for a particular species. This determination was made based on information on species habitat requirements in the literature, the CNDDDB, and local expertise. Jake Ruygt and Joe Callizo, Napa County CNPS botanists, reviewed habitat associations for all special-status plants.
2. Second, a map was generated for each species highlighting all land cover types in the County that had been assigned as potential habitat for the species. This map was compared with the documented occurrences of the species in the County. The habitat associations were revised to include land cover types where documented occurrences were reliably located. Because occurrence data are incomplete, an absence of survey data did not preclude a land cover type from qualifying as suitable habitat.
3. Finally, range restrictions were added to the habitat maps. For example, Hoover's wild parsnip (*Lomatium ciliolatum*) is located in chaparral in the northeast of the County, but not in the south or west. A note describing this range restriction was added to the map of potential habitat for Hoover's wild parsnip.

Jones & Stokes wildlife biologists with expertise in fish, bats, amphibians and reptiles, and birds were involved in producing habitat maps for each of these groups of species. In addition to reviewing habitat associations as described above, Jake Ruygt and Joe Callizo were involved in reviewing potential habitat maps for plant species.

The three GIS data layers discussed above (land cover, special-status species, and special-status species habitat layers) were combined with a revised user interface to produce a new County Biological Database.

The ICE map depicts 59 land cover types in the County, 52 of which are dominated by natural vegetation. The ICE map land cover categories correspond to alliances, superalliances, and associations in the Manual of California Vegetation.

NAPA COUNTY BIOLOGICAL DATABASE: INSTRUCTIONS FOR USE AND MAINTENANCE

DATABASE USE

The Napa County Biological Database can generate maps of documented occurrences and the potential habitat of special-status species. In addition, it can map the sensitive biological communities in the County. The database also contains non-spatial information about special-status species in a tabular format that is fully searchable. This tabular information includes information about species microhabitat requirements (soils, elevation), historical versus current range, and current range restrictions. Access to this database will be available to the public at the County Conservation, Development and Planning Department offices and through the Watershed Information Center and Conservancy.

This new database has a range of applications, from project and site-specific environmental review to County-level planning (Figure 7-2). Some uses of the new Biological Database are as follows.

- Identify species or sensitive communities that are likely to occur on a given site to determine which surveys and permits are likely to be necessary to ensure project compliance with environmental regulations.
- Focus future surveys for special-status species based on the vegetation types actually present on a given site and thus the special-status species that are likely to be found there.
- Provide information about blooming seasons for plant species to aid in scheduling botanical surveys at the appropriate season. This would permit realistic scheduling by applicants of project review.
- Aid in the review of future biological surveys by providing guidance as to which species should have been targeted.
- Identify locations of a given biotic community or special-status species across the County, allowing planners to minimize impacts on sensitive biological resources.
- Allow for the incorporation of additional biological data to update and improve the database.

The database can be useful in project-level environmental review as a source of information for project proponents about sensitive biological resources that may occur on their project sites. The County will

be able to provide a project proponent with a list of mapped biotic communities on their site, as well as the special-status species that are likely to occur there—which will be extremely useful in project planning. It will provide information at an early stage about when biological surveys need to be conducted in order to determine whether special-status species are present.

The database can be useful in regional conservation planning as a source of information about the distribution of sensitive species and habitats across the County. This information will be useful in planning development and land management on a County or evaluation area level. It can be utilized to update the Open Space and Conservation Element of the County's General Plan, to identify conservation priorities, and to direct development away from sensitive areas.

The applicability of the Biological Database should come with some caveats. The ICE map does not provide an exhaustive and completely accurate map of biological resources on a site, because some resources are below the minimum mapping unit and/or do not have an identifiable signature in aerial photographs. These resources will have to be identified in the course of site-level surveys for proposed projects. Site-specific surveys will therefore remain necessary to determine precise community types and locations, as well as potential impact to special-status species. These surveys, however, can now be focused based on the biological resources that the database indicates are likely to be present at a given site. Despite these caveats, the database provides the best information that is available on a County-wide scale.

DATABASE MAINTENANCE

In order to be a useful tool, the database must be updated regularly. For example, updated special-status species occurrence records are available from DFG every six months and should be used to update the database when they become available. Documented reports of special-status species occurrences, and other unmapped sensitive biological resources, should be added to the database every year. The County's vernal pool map should be updated to reflect changes in land use. Surveys of mapped pools are recommended in spring 2005 and every five years thereafter to ensure that the map reflects current conditions. The land cover map should be updated every two years to reflect urban and agricultural development, as well as other changes in land cover. Vegetation change from wildfire should also be documented in the database. In addition, the database could be improved by adding documented records of special status wildlife species from the Museum of Vertebrate Zoology (MVZ) at UC Berkeley. For example, the MVZ database contains 145 records of the pallid bat for Napa County. Location information generally includes spatial coordinates and can be downloaded (<http://elib.cs.berkeley.edu/mvz/>) and digitized.

Recommendations for database expansion and maintenance are listed below.

BIOLOGICAL DATABASE EXPANSION

- Expand the newly developed biological database (described in this report) as follows to make it more complete.
- Add documented records of special-status wildlife species from the Museum of Vertebrate Zoology (MVZ) at UC Berkeley. The MVZ database contains 145 records of the pallid bat for Napa County, most with downloadable spatial coordinates (<http://elib.cs.berkeley.edu/mvz/>).
- Add as many known locations for special-status plants as possible. The current database does not include all of the known locations.

Adding special-status species records to the database could be done by the County's GIS staff. The vernal pool survey would have to be conducted by a qualified biological consultant.

BIOLOGICAL DATABASE MAINTENANCE

The expanded biological database should be updated on a regular schedule so as to increase its accuracy and completeness over time and to maintain and enhance its overall usefulness.

- Add new ICE Vegetation Layer to database when it becomes available.
- Add documented reports of special-status species occurrences, and other unmapped sensitive biological resources, to the database every 3 months.
- Update maps to include new state-documented special-status species occurrences every 6 months when they become available from CNDDB.
- Document vegetation changes from wildfire once a year using CDF data.
- Update the land cover map every other year to reflect urban and agricultural development as well as other changes in land cover.
- Survey and map vernal pools every 5 years and add the results to the database so as to ensure that the map reflects current conditions.

Except for the recommended vernal pool survey, the work required can be done by County Conservation Division staff. On the average, this work will consume approximately one-twelfth of a full-time equivalent staff person per year. Cost for the vernal pool survey is estimated to be \$15,000, for an annual cost of \$3,000 per year.