

# David Magney Environmental Consulting

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Christopher Williamson, Senior Planner  
Planning Division  
City of Oxnard  
214 S. C Street  
Oxnard, CA 93030

**Subject: Comments on the Oxnard 2030 General Plan Draft EIR (SCH# 2007041024)**

Dear Mr. Williamson:

David Magney Environmental Consulting (DMEC) has been retained by the Environmental Defense Center to review and comment on the City of Oxnard's 2030 General Plan (GP2030) on behalf of the Environmental Defense Center, the Sierra Club, Los Padres Chapter, and the Environmental Coalition of Ventura County. This letter provides comments on the Draft Environmental Impact Report (DEIR) for the GP2030. DMEC's comments will focus primarily on biological resource issues assessed, or not adequately assessed in the DEIR published in February 2009.

DMEC has been in business since July 1997, specializing in biological resource assessments, CEQA, and wetlands (including delineation, impact assessment, and mitigation planning). DMEC is owned by Mr. David L. Magney. Mr. Magney is a biologist and geographer, specializing in botanical resources and wetlands, and has been consulting full time since 1985, working for Dames & Moore, Jones & Stokes Associates, Fugro West, Inc., and ENSR before establishing DMEC. Mr. Magney is considered an expert on the flora of Ventura County, and has been "certified" as a qualified biologist by Ventura County Planning Division, Los Angeles County Regional Planning (SEATAC), and Santa Barbara County. He serves on the Los Angeles County Environmental Review Board. Mr. Magney's CV is attached.

DMEC received assistance in this review from Mr. Elihu Gevirtz, AICP, a professional land use planner working on Comprehensive Plan policies and analysis of impacts to biological resources in southern California for 20 years.

This letter provides comments regarding the adequacy of the impact assessment on biological resources present within the City of Oxnard and its Sphere of Influence. The policies in the Open Space and Conservation Elements of a General Plan are extremely important, are probably the most important tool, in protecting biological resources. Once land within the City's jurisdiction is zoned, projects proposed according to current zoning may not receive discretionary review, and any sensitive biological resources present could be entirely eliminated from the project site without any mitigation or repercussions, other than the loss of the resource. It is for this reason, that the City's General Plan, and the impact assessment of the plan, is of extreme importance.

The issues of concern are summarized below, followed by more detailed analysis and comments organized by specific resource issue or area. The relevant GP2030 objectives that will be addressed in this comment letter include:

- Provide options for better usage of land – such as infill or mixed use development;
- Protect existing land uses from incompatible development; and



- Address recent environmental issues such as green house gases, long-term water supply and conservation, and alternative energy sources.

None of the stated objectives (on Page 2-6 of the DEIR) identify biological resources, a serious omission which must be rectified. It should be one of the City's GP objectives to protect and restore the biological resources of the Oxnard Plain and coastal habitats.

The goals and policies within the General Plan that are articulated as ER-1 through ER-4 are good because they articulate some of the City's values and encourage protection of biological resources. However, the goals should be rewritten as full sentences so that the City's intent can be understood. Currently the goals are simply subject headers, but the policies should be unambiguously identified as policies so that the City's intention is clear. For example, ER-1.1 should be titled "Policy ER-1.1".

## **SUMMARY OF ISSUES OF CONCERN**

A summary of the issues of concern related to biological resources include:

- Inadequate protection policies
- Unenforceable resource protection policy language
- Lack of adequate baseline conditions
- Failure to use best available data on resources present in planning area
- Failure to identify all (or even a majority of) the sensitive resources known to occur in Oxnard
- Lack of adequate protection of Ormond Beach wetlands.

Three elements of the GP, the Land Use Element, the Open Space Element and the Conservation Element, are the primary components of the GP that contain, or should contain, goals, objectives, and policies to protect biological resources within the City's jurisdiction. Comments on the draft GP2030 will be provided under separate cover.

## **SPECIFIC ISSUES OF CONCERN**

Specific issues addressed in this letter focus on the DEIR and the BR, which the DEIR relies upon so greatly. The specific issues include:

- an inadequate description of baseline conditions
- lack of an adequate identification and assessment of special-status species of vascular and nonvascular plants;
- lack of adequate description of existing habitats, or delineation of sensitive habitats known to occur in Oxnard;
- inadequately defined thresholds of significance;
- inadequate space (land) provided for habitat migration as sea level rises;
- inadequate or unclear resource protection policies; and
- inadequate or infeasible mitigation measures.



## **Inadequate Baseline Conditions**

The DEIR fails to provide an adequate means to identify, much less assess, what biological resources are known to occur in the City. This is evidenced by what resources were used and which existing data resources were ignored. In order for there to be any real assessment of a plan's effects on a natural resource, the City must attempt to determine what is present, at a scale appropriate for the plan.

The DEIR based its assessment on minimal or gross data of little value for a citywide assessment. FRAP data were used, developed for use on a statewide basis, to determine which plant communities and wildlife habitats were present. In addition, the City failed to use existing data developed for the Ventura County Planning Division by DMEC in 2006.

The Background Report (BR), dated April 2006 reportedly provides all the data needed by the City to perform impact assessments and resource management decisions related to the General Plan, all contained within 20 pages (5-1 through 5-20). How can that be? This letter, describing the data deficiencies of the BR and DEIR, is over 20 pages long. This is so because the preparers of the Background Report failed to conduct any fieldwork or use many recent sources of data readily available for the asking.

The methods described in the BR included the typical generic list of considerations; however, it failed to every identify any locally important species or habitats known to occur in Oxnard, information that is readily available, including the California Native Plant Society's Channel Islands Chapter checklist of rare vascular plants of Ventura County, published since 2001 on the chapter's website ([www.cnpsci.org](http://www.cnpsci.org)). This list was the basis of Ventura County Planning Division's List of Locally Important Species in 2006, until it simply adopted the CNPS list in late 2008<sup>1</sup>.

The DEIR relies on the Background Report (BR, dated April 2006) as the basis for what biological resources are present within the City. The BR allocates only 20 pages to providing the baseline conditions for all plant communities, habitats, and plant and wildlife species. Such a skimpy level of assessment MAY be adequate for a vacant lot in the middle of a developed area, but barely. The glossed-over nature and simplicity of the BR's description of biological resources present within the City is a gross simplification of the truth. Actually, such a cursory description belies the truth that the City of Oxnard has a very rich and diverse flora and fauna.

Page 5-1 of the BR, Methods, lists several (7) resources it used to identify sensitive biological resources. Most of those resources were just lists of species, lacking any locality data. Nothing else is included in the methods section, such as how the preparers determined which species, common or rare, actually occurred in Oxnard, or where in Oxnard they occurred.

No attempt was made to map the natural vegetation and land cover; rather, a cut-out from the state's FRAP mapping was used to determine habitats present in Oxnard. However, the FRAP data are very coarse, usually inaccurate, and lack ground-truthing. DMEC knows this because it created a plant communities GIS database for the Ventura County Planning Division, cobbling together existing GIS databases, including FRAP data (DMEC 2006<sup>2</sup>). The Ventura County vegetation cover GIS database was created from previous work, including: Ventura River Vegetation (David Magney Environmental Consulting & GeoInsight International 2003), Santa Clara River Vegetation (CH<sub>2</sub>M Hill through Ventura County Flood Control District circa 1998), Calleguas Creek Watershed Vegetation (AMEC 2000), Oak Woodlands

<sup>1</sup> Christina Danko, Biologist, Ventura County Planning Division, Ventura, CA. Telephone communication dated December 2008.

<sup>2</sup> David Magney Environmental Consulting. 2006. Vegetation Cover GIS Database of Ventura County, California. 20 June 2006. (PN 03-0001.) Ojai, California. Prepared for Ventura County Planning Division, Ventura, California.



Study (DMEC 2000), *Adenostoma sparsifolium* Study (DMEC 2004), Los Padres National Forest Vegetation (date unknown), and Gap Analysis of Mainland California (UCSB, USGS, and CDFG 1998 – Davis et al. 1995<sup>1</sup>), with the last of these being the most general. The BR, in Table 5-1, Page 5-7, lists acreage values for only nine (9) habitat types, two of which are developed types and one representing planted Eucalyptus groves and windrows.

More detailed mapping has been done for parts of Oxnard for a variety of projects, which should have been obtained and used in the BR. Detailed habitat maps are available for Ormond Beach and Mandalay Beach, with the most recent mapping having been conducted by DMEC in late 2008/early 2009 of Southern California Edison’s Mandalay Beach property. Just on the SCE property, DMEC mapped 293 polygons consisting of 35 alliances in 18 broader groups (based on the primary dominant plant), plus four other land cover types (water, roads, ruderal, and developed), on 53+ acres of land east of Harbor Boulevard and north and south of the Edison Canal.

Every development project EIR within the City contains a map of plant communities/habitats, which should have been used, at the least, to create a better habitat map for the city, as not all projects get developed (if they had, then the habitats present would largely have been destroyed). While uniformity in mapping is desired, unless the city is willing to have the city’s natural resources actually documented well, they could at least have used existing information and developed a more refined map than was done for the GP2030. Also, U.S. Fish and Wildlife Service National Wetlands Inventory maps are available in GIS format, which were completed for most of Ventura County in 2006.

Page 5-2 of the BR defines some key terms, i.e. “Sensitive Natural Community, Special-Status Species, and Wetlands and Other Waters of the U.S.”. For Sensitive Natural Community, the BR defines it as “a biological community that is regionally rare, provides important habitat opportunities for wildlife, are structurally complex, or are in other ways of special concern to local, State, or Federal agencies”. While the definition is good, there is no evidence that the preparers made any attempt to identify any communities that are regionally rare, or those that provide important habitat. The habitat mapping that was used (FRAP) is very coarse and general, and does not identify those habitats that are sensitive. The BR baseline conditions need to be improved to correct this deficiency.

DMEC developed a list of sensitive plant communities for the Ventura County Planning Division based on our knowledge of the vegetation of Ventura County, and using CDFG’s list of sensitive plant communities. The result was that 153 plant communities considered rare (i.e. sensitive) are known to occur in the County, 65 of which occur in Oxnard. Based on that list, those sensitive communities known or expected to occur in Oxnard are provided below in Table 1, Sensitive Plant Communities of the Oxnard Area.

**Table 1. Sensitive Plant Communities of the Oxnard Area**

Code	Plant Community Name	Scientific Names	Holland Code
21.100.00	Sand-verbena-Beach Bursage	<i>Abronia villosa-Ambrosia chamissonis</i>	21210
21.100.07	Strand		
21.100.10	Southern Dune Scrub		21330
21.110.00	Beach Bursage	<i>Ambrosia chamissonis</i>	
31.200.00	Southern Coastal Bluff Scrub		31200

<sup>1</sup> Davis, F.W., P.A. Stine, D.M. Stoms, M.I. Borchert, and A.D. Hollander. 1995. Gap Analysis of the Actual Vegetation of California: 1. The Southwestern Region. *Madroño* 42(1):40-78.



Code	Plant Community Name	Scientific Names	Holland Code
32.020.05	Black Sage - Coast Prickly-pear	<i>Saliva mellifera-Opuntia littoralis and hybrids</i>	
32.040.03	California Buckwheat - Big Sagebrush	<i>Eriogonum fasciculatum-Artemisia tridentata</i>	
32.040.04	California Buckwheat Alluvial Fan	<i>Eriogonum fasciculatum</i>	
32.050.00	California Encelia Scrub	<i>Encelia californica</i>	
32.050.02	California Encelia	<i>Encelia californica</i>	
32.060.03	Coyote Brush / Creeping Ryegrass	<i>Baccharis pilularis/Leymus triticoides</i>	
32.060.10	Coyote Brush / Purple Needlegrass	<i>Baccharis pilularis /Nassella pulchra</i>	
32.150.00	Coast Prickly Pear Succulent Scrub	<i>Opuntia littoralis</i>	
32.160.00	Dune Lupine - Goldenbush Scrub	<i>Lupinus chamissonis-Isocoma menziesii</i>	21330
32.160.01	Heather Goldenbush	<i>Ericameria ericoides</i>	
32.160.02	Dune Lupine	<i>Lupinus chamissonis</i>	
32.160.03	Dune Lupine - Heather Goldenbush	<i>Lupinus chamissonis-Ericameria ericoides</i>	
37.801.00	Sugarbush Scrub	<i>Rhus ovata</i>	
41.140.00	Nodding Needlegrass	<i>Nassella cernua</i>	
41.150.00	Purple Needlegrass	<i>Nassella pulchra</i>	
41.150.01	Italian Ryegrass - Purple Needlegrass	<i>Lolium multiflorum-Nassella pulchra</i>	
41.150.02	Wild Oats - Purple Needlegrass	<i>Avena fatua-Nassella pulchra</i>	
41.170.00	Valley Needlegrass Grassland	<i>Achnatherum spp.</i>	42110
41.200.06	Jaumea – Saltgrass	<i>Jaumea carnosu-Distichlis spicata</i>	
41.200.07	Saltgrass - Alkali Heath – Jaumea	<i>Distichlis spicata-Frankenia salina-Jaumea carnosu</i>	
41.200.08	Alkali Saltgrass		
41.290.00	Wildflower Field		42300
41.640.00	Blue Wildrye Grassland	<i>Elymus glaucus</i>	
41.640.01	Blue Wildrye	<i>Elymus glaucus</i>	
45.210.07	Spikerush - Water Pygmy	<i>Eleocharis spp.-Crassula aquatica</i>	
52.101.00	Bulrush	<i>Scirpus spp.</i>	
52.101.01	California Bulrush Wetland	<i>Scirpus californicus</i>	
52.102.04	Brackish Bulrush – Cattail	<i>Scirpus spp. - Typha spp.</i>	52200
52.103.01	Brackish Cattail	<i>Typha spp.</i>	
52.107.00	Pondweeds with floating leaves Wetland	<i>Potamogeton spp.</i>	
52.108.00	Pondweeds with submerged leaves Wetland	<i>Potamogeton spp.</i>	
52.111.02	Common Three-square/ Silverleaf Cinqufoil	<i>Scirpus americanus/Potentilla anserina</i>	
52.112.00	Alkali Bulrush	<i>Scirpus maritimus</i>	
52.112.01	Alkali Bulrush / Pickleweed	<i>Scirpus maritimus/Salicornia spp.</i>	
52.112.02	Alkali Bulrush – Cattail	<i>Scirpus maritima. - Typha spp.</i>	
52.201.00	Pickleweed Wetland	<i>Salicornia spp.</i>	
52.201.01	Common Pickleweed	<i>Salicornia virginica</i>	
52.201.03	Common Pickleweed – Saltgrass	<i>Salicornia virginica-Distichlis spicata</i>	
52.201.04	Common Pickleweed - Jaumea – Saltgrass	<i>Salicornia virginica-Jaumea carnosu</i>	
52.201.07	South Coastal Pickleweed Salt Marsh		
52.201.08	Alkali Pickleweed		
52.202.00	Ditch-grass Wetland	<i>Ruppia spp.</i>	
61.120.00	Black Cottonwood Riparian Forests and Woodlands	<i>Populus balsamifera</i>	61110





Code	Plant Community Name	Scientific Names	Holland Code
61.130.02	Southern Cottonwood - Willow Riparian	<i>Populus</i> spp.- <i>Salix</i> spp.	61330
61.201.00	Arroyo Willow Riparian Forests and Woodlands	<i>Salix lasiolepis</i>	
61.201.01	Central Coast Arroyo Willow Riparian	<i>Salix lasiolepis</i>	61230
61.201.02	Southern Arroyo Willow Riparian	<i>Salix lasiolepis</i>	
61.204.00	Pacific Willow Riparian Forests	<i>Salix lucida</i> ssp. <i>lasiandra</i>	
61.205.00	Red Willow Riparian Forests	<i>Salix laevigata</i>	
61.207.00	Mixed Willow Riparian Forests and Woodlands	<i>Salix</i> spp.	
61.208.00	Southern Willow Scrub	<i>Salix</i> spp.	
61.800.00	Walnut	<i>Juglans</i> spp.	
61.920.00	Southern Mixed Riparian Forest		61340
61.930.00	Southern Riparian Forest		61300
63.110.00	Narrowleaf Willow	<i>Salix exigua</i>	63410
63.130.00	Southern Willow	<i>Salix</i> spp.	63320
63.160.00	Subalpine Wetland Shrub Habitat		
63.410.01	Elderberry Savanna	<i>Sambucus mexicana</i>	63440
63.900.00	Southern Riparian Scrub		63300
72.100.01	California Walnut Woodland	<i>Juglans californica</i> var. <i>californica</i>	71210

Many of these sensitive habitats are wetland habitats, and many of them are coastal in nature. These communities are at extreme risk of extirpation from development, indirect impacts from human actions and land use practices, and encroachment by the ocean as sea levels rise.

## SEA LEVEL RISE

While the issue of sea level rise is addressed by others, the effects of the eventual rise in sea level on Oxnard's biological resources needs to be seriously considered in the GP2030 and DEIR. The scientific consensus is that sea level is rising. While the GP2030 is projected out only 20 years, the land use decisions made now will lock in development and habitat restoration scenarios that are expected to last much longer than 20 years.

Oxnard ranges in elevation from sea level to about 50 feet near downtown, with higher elevations (about 150 feet) at the extreme northeast corner of the city's sphere of influence near the Camarillo Hills, as depicted on Figure 1-2, Jurisdictional Boundaries Map GP2030. This means that a significant portion of the more coastal portions of the city will be impacted/inundated as the sea level rises.

While the level of sea level rise that will occur in the next 100 years is unknown, it is known to be rising, and will rise enough to result in recession of the coast inland. This means that low-lying coastal areas will be inundated. All of the coastal habitats in Oxnard contain sensitive habitats and species, especially in the Ormond Beach area. Ormond Beach and the Mugu Lagoon are at extreme risk as these are low-lying areas. The only remedy to mitigate sea level rise and its impact on coastal habitats is for the City to provide land adjacent to the existing habitats onto which they can migrate. The movement of plants and animals for long-term survival is the natural ecological process that occurs when humans are not altering the landscape; however, the GP2030, if adopted as drafted, will preclude any such natural migration.



As this scenario is predictable and has been forecast by the scientific community, it is necessary for the City to assess impacts to the habitats and species that will be affected by the lack of a migration path when sea level rises. The Coastal Conservancy and The Nature Conservancy, and others, have long been developing habitat restoration plans for Ormond Beach, including work by Mr. Magney while with Jones & Stokes Associates (1995<sup>1</sup>). The proposed land uses in the Ormond Beach area will prevent natural, or even managed, migration of habitats upslope as sea level rises. This issue needs to be properly considered in the GP2030 and assessed in the DEIR.

### *Special-status Vascular Plants*

The DEIR fails to provide an adequate means to identify, much less assess, what botanical resources are known to occur in the City. Its dependence on the BR is a large part of the problem, since the BR lacks any meaningful accounting or identification of the biological resources that is present in the City.

Based on Mr. Magney's extensive research of the flora of Ventura County over the past 30 years, 456 vascular plant taxa (including species, subspecies, and varieties) are known or have been reported as occurring in Oxnard.

BR Page 5-3 lists Skinner and Pavlik (1994) as its source for describing CNPS-listed vascular plant species. CNPS has greatly modified the 5<sup>th</sup> edition of the Inventory since then, with the publication of the 6<sup>th</sup> edition in 2001 and the constantly updated online version at [www.cnps.org](http://www.cnps.org). CNPS clearly states that all plants on all of CNPS's lists should be considered as special-status species and evaluated as such during project assessments pursuant to CEQA. CNPS states, "Very few of the plants constituting List 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and we strongly recommend that List 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA"<sup>2</sup>.

DMEC has determined, through Mr. Magney's personal research of the flora of Ventura County, that approximately 465 vascular plant taxa are known to occur (or have occurred) in the Oxnard area of the Oxnard Plain, including the areas along the immediate coast, and not including plants occurring exclusively on the Santa Clara River. Of these, 123 taxa (26%) are considered rare or uncommon (10 or fewer populations) in Ventura County (Magney 2008<sup>3</sup>) or rare from a statewide perspective. A list of all the vascular plants known to occur in Oxnard is included in Table 2, Vascular Plants of Oxnard, California, found at the end of this letter.

As an example of how Oxnard is very important botanically, besides containing habitat for many rare species, a variety of dock, named here as Oxnard Dock (*Rumex fueginus* var. *ovato-cordatus*) was first collected from Oxnard by Joseph Burt Davy in 1901 (7804 UC Holotype!<sup>4</sup>). Oxnard, as it was in 1901, is the Type Locality for this variety of dock. Unfortunately, this plant has not been collected from Ventura

<sup>1</sup> Jones & Stokes Associates, Inc. 1995. South Ormond Beach Wetland Restoration and Management Plan. (JSA 94-080.) Sacramento, California. Prepared for City of Oxnard Community Development Department, Oxnard, California.

<sup>2</sup> California Native Plant Society, webpage "The CNPS Ranking System", <http://www.cnps.org/cnps/rareplants/ranking.php>

<sup>3</sup> Magney, D.L. 2008. Checklist of Ventura County Rare Plants. 23 December 2008, Fourteenth edition. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on <http://www.cnpsci.org/PlantInfo/01RarePlants.htm>.

<sup>4</sup> 7804 is J. Burt Davy's collection number. "UC" stands for the University of California Jepson Herbarium. "Holotype" means it is the voucher specimen from which the taxon was formally described from.



County since, and has likely been extirpated from the county and city as a direct result of land use decisions that eliminated its habitat.

Also speaking to the importance of the natural habitats found in and immediately adjacent to Oxnard are eleven (11) plant taxa that are rare globally or from a statewide perspective:

- *Abronia maritima* (Sticky Sand-verbena, Nyctaginaceae), a CNPS List 4 species (Plants of Limited Distribution). This species occurs on the dune habitats of Ormond Beach, Oxnard Shores, and Mandalay Beach;
- *Astragalus pycnostachyus* var. *lanosissimus* (Ventura Marsh Milkvetch, Fabaceae), Listed Endangered. This extremely rare plant is only known naturally at one site, the unfinished North Shore at Mandalay site on Mandalay Beach, with failed experimental plantings at McGrath Lake and Ormond Beach;
- *Calystegia sepium* ssp. *binghamiae* (Bingham Morning-glory, Convolvulaceae), CNPS List 1A (presumed extinct). This small vine grows at the edges/transitional areas of coastal saltmarshes in Oxnard, but is presumed extinct due to the loss of habitat;
- *Cordylanthus maritimus* ssp. *maritimus* (Saltmarsh Bird's Beak, Orobanchaceae), Listed Endangered. This endangered annual wetland plant grows in coastal lagoon habitats when salinity is not too high;
- *Delphinium parryi* ssp. *blochmaniae* (Blochman Larkspur, Ranunculaceae), CNPS List 1B (Plants Rare and Endangered in California and Elsewhere). This larkspur grows on coastal dune scrub habitats, most of which has been eliminated in Oxnard by development;
- *Juncus acutus* ssp. *leopoldii* (Southwestern Spiny Rush, Juncaceae), CNPS List 4. This perennial clumping graminoid grows at the edges of brackish marshes such as in dune swale habitats, most of which has been filled in by development;
- *Phacelia ramosissima* var. *austrolittoralis* (South Coast Branching Phacelia, Boraginaceae), CNPS List 4. This perennial wildflower grows on dune scrub habitats, most of which has been eliminated by development;
- *Pseudognaphalium leucocephalum* (Whiteleaf Everlasting, Asteraceae), CNPS List 2. Same as above;
- *Suaeda californica* var. *pubescens* (Hairy California Seablite, Chenopodiaceae), CNPS List 1B. This shrub grows in coastal saltmarsh habitats, most of which has been filled in for development;
- *Suaeda esteroa* (Estuary Seablite, Chenopodiaceae), CNPS List 1B. Same as above;
- *Suaeda taxifolia* (California Seablite, Chenopodiaceae), CNPS List 4. Same as above.

The DEIR should specifically assess impacts to them, and all the species on Table 2, resulting from the adoption and implementation of the GP2030. Without such an assessment and feasible mitigation, most of these species will be extirpated from Oxnard.

### ***Special-status Non-vascular Plants***

While the BR states that it consulted the CDFG "Special Vascular Plants, Bryophytes, and Lichens List" as part of its methods in determining which plant species should be considered as sensitive, nowhere in the BR does it ever list any species of bryophyte or lichen. There are numerous species of each group known to occur in Oxnard, but no consideration, evaluation, or literature search was conducted to even come up



with a list of species that might occur in Oxnard. A simple reading of some of the documents in the City's possession, or on the Internet, can provide much more information than has been included in the BR. They could have also contacted a few experts and acquired much relevant data. Making such an effort is of vital importance since the EIR depends on the information provided in the BR on biological resources to make its determinations on significant impacts.

Just as an example of information about nonvascular plants known to occur in the City, DMEC collected, identified, and reported on the plants, vascular and nonvascular, found on SCE's Mandalay Beach property. DMEC found several species of mosses on a stabilized sand dune. The mosses found include at least one species each of *Didymodon* (shown on photograph below on left), *Syntrichia* (shown on photograph below on right), and *Timmia*. In fact, the *Syntrichia* found is likely a new species to science<sup>1</sup>, not yet described. It is possible that it may be rare.

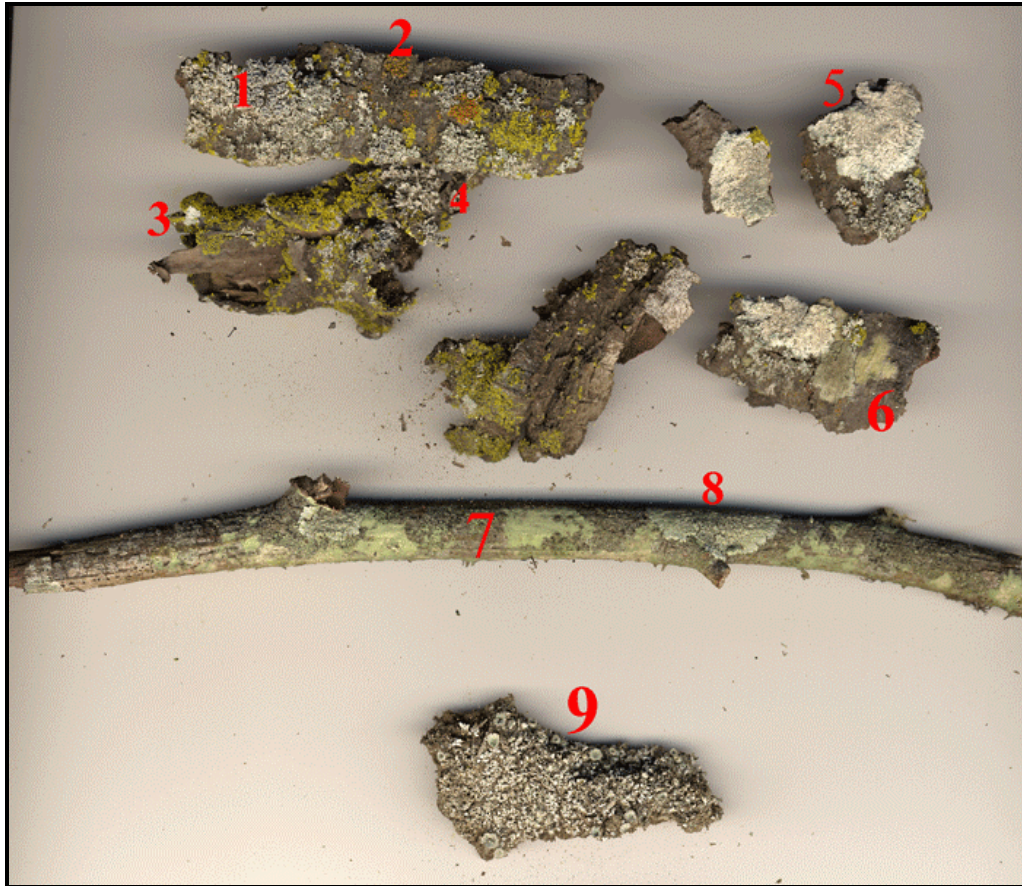


Photographs of mosses in Oxnard. *Didymodon* on left, undescribed species of *Syntrichia* on right.

The image below is of several lichens collected from Mandalay Beach. As seen on the photograph, nine (9) different species of crustose lichens are indicated by red numbers; however, there are actually at least two more species of lichens present. This is from just one small site in northwestern Oxnard, and many have been seen on other parts of Oxnard, such as at Ormond Beach. Many more species of lichens are present in Oxnard, some of which may be rare.

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<sup>1</sup> Correspondence with bryologists Carl Wishner and Tomas Hallingbäck.



Lichens that are considered to be rare in Ventura County, at least on a preliminary basis (Magney 1999<sup>1</sup>), include:

- *Acarospora theloccoides*
- *Caloplaca invadens*
- *Caloplaca chrysophthalma*
- *Caloplaca epithallina*
- *Caloplaca luteominia*
- *Caloplaca supyracella*
- *Endocarpon subnitescens*
- *Parmotrema austrosinense*
- *Pertusaria flavicunda*
- *Phaeophyscia kairamoi*
- *Phaeophyscia sciastra*
- *Protoparmelia badia*
- *Punctelia punctilla*
- *Teloschistes sancti-jacobi*
- *Vermilacinia curuchoides*
- *Xanthoparmelia angustiphylla*.

<sup>1</sup> Magney, D.L. 1999. Preliminary List of Rare California Lichens. *California Lichen Society Bulletin* 6(2):22-27.





One or more of these rare lichens may occur in Oxnard and should be at least added to the list of species of concern in Oxnard.

Basically, nonvascular plants are important components of the biological resources of Oxnard and should be given much more attention in the BR, DEIR, and GP2030. At a minimum, the GP should have a clear policy that nonvascular plants are valuable components of the city's flora and that habitat for at least the sensitive species should be protected from development.

### *Special-status Wildlife*

A number of special-status wildlife species occur in or near the city. The EIR should include an analysis of potential impacts to these species that could result from buildout of the GP, and programmatic mitigation measures that can be implemented to reduce the significance of the impacts. The GP update process provides an opportunity that should not be missed to plan and provide for the restoration of habitat linkages that would benefit special-status and other wildlife species.

A number of special-status wildlife species are not even considered, such as the native terrestrial land snails. Several native terrestrial snails are rare in Ventura County and known to occur in Oxnard, such as *Helminthoglypta traskii* (Magney 2005<sup>1</sup>). Some of these rare snails are tracked by the CNDDDB, even though they have not developed GIS locations for them yet. These snails, and other wildlife species, need to be considered in the DEIR to be adequate.

### **Standards of Significance**

The DEIR on Page 5.4 states, "The project (or the project alternatives) would result in a significant impact if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance."

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<sup>1</sup> Magney, David L. 2005. Atlas of California Native Terrestrial Snails in Ventura County. 16 March 2005. David Magney Environmental Consulting, Ojai, California. Prepared for County of Ventura, Resource Management Agency, Planning Division. Ventura, California. Available at: <http://magney.org/photofiles/VenturaCountySnails1.htm>



These statements are nice, but lack any of the specifics or metrics that are really necessary to be meaningful and measurable. As they stand, these statements are quite subjective and do not provide the decisionmakers, experts, and public with an adequate tool by which to determine significance. Significance thresholds should provide meaningful metrics, but the DEIR fails to provide them.

Without measurable standards, it is no wonder that the DEIR preparers did not find ANY significant impacts from adoption and implementation of the GP2030. This problem can be remedied quite easily, and the standards should be changed accordingly.

For example, a significance threshold to measure whether a plant community would be significantly impacted could read: *Any project that results in a 10 percent reduction of a plant community shall be considered a significant impact.* Such a threshold is clear, measurable, simple, and justifiable. The only subjective part of such a threshold is the 10 percent part. However, a 10 percent change is a reasonable threshold, which is neither excessive nor too restrictive.

Some resources are so valuable and so important that no loss can be tolerated and not considered to be a significant impact. For example, a species of plant or animal listed as Endangered by the federal or state government is so rare that the loss of even one individual must be considered significant.

All parties involved in land use decisions are benefited by clear and unambiguous significance thresholds. What those thresholds should be should be based solely on science, not politics or economics. The political and economic considerations are appropriate only after the significant impacts have been clearly identified.

## Impact Analysis

DMEC finds the impact analysis inadequate in accurately or completely assessing impacts to biological resources, ignoring many impacts entirely. The impacts that were identified are inadequate and should be revised and re-examined, with some suggestions provided below.

**Impact 5.2-1** The Project could have a substantial adverse effect, either directly or through habitat modifications, on a variety of special status species as a result of habitat conversion, indirect impacts, habitat fragmentation, and encroachment by exotic weeds.

This impact is potentially significant. The impact analysis should include a quantification of the acreages of habitats that would be converted and/or fragmented. It should also include a quantification of impacts to specific populations for special status species. These numbers should be compared to the acreages of these habitats and population numbers remaining in or on the edges of the city that could be impacted by build-out of the General Plan. No new studies are suggested. Reasonable estimates based on information presently available would be sufficient. The purpose of this suggestion is to provide an accurate measurement of the impacts, and to ensure that they are adequately mitigated and easily monitored.

To mitigate the impact of encroachment by exotic weeds, the following text should be added to the General Plan or Zoning Ordinance.

**Suggested New Policy #1** All Final Development Plans shall be required to include a landscape plan to be submitted to the City for approval. No landscape plans shall include plants that are listed by the California Invasive Plant Council as being a High Threat. The list is available at: <http://www.cal-ipc.org/ip/inventory>



**Impact 5.2-3** The Project could have a substantial adverse effect on sensitive natural communities including riparian habitats.

This impact is potentially significant. In order to adequately mitigate the impact, the following General Plan policies should be modified as provided below.

**ER-1.1.** Protective measures shall include but not be limited to: buffers of native vegetation between development and habitat areas.

**ER-2.2.** These designations should occur as part of this General Plan update process and when additional resources are identified during subsequent discretionary review of development proposals. The policy should also be modified to specify the types of habitats that are considered sensitive. These should include, for example, wetlands, riparian habitat, the Mugu Lagoon, sand dunes, trees and other habitats used by birds for nesting and roosting, locations of special-status and locally important plants and animals.

**ER-3.1.** All development requiring discretionary approval shall be required to provide buffers of riparian habitat. These buffers shall be vegetated with appropriate native species.

**ER-4.1.** The second “protection” in the sentence should be deleted. Contiguous areas of sensitive habitat should be identified and designated as protected land in the City’s 2030 General Plan prior to its adoption so that permanent protection of these habitat areas is assured.

**ER-4.6.** These protective zoning designations should be adopted as part of the current 2030 General Plan process.

**Impact 5.2-4.** The Project could have a substantial adverse effect on federally protected wetlands and other waters.

This impact is potentially significant. In order to adequately mitigate the impact, the following General Plan policies should be modified as provided below.

**ER-2.1.** Any public or private project in the vicinity of the Ormond Beach wetlands or Mugu Lagoon shall be required to provide buffers adjacent to the wetlands and their tributaries, avoid sedimentation and the introduction of pollutants, and minimize noise, light, and glare that would adversely impact wildlife associated with these wetlands.

**Suggested New Policy #2** All new development shall be required to capture runoff water onsite in order to minimize sedimentation in riparian and wetland areas downstream. Biofilters using native plants are encouraged wherever feasible.

**Impact 5.2-5:** The Project could have a substantial adverse effect on wildlife habitat, nursery sites, or movement opportunities.

This is a potentially significant impact. In order to adequately mitigate this impact, the following new policy should be incorporated into the General Plan.

**Suggested New Policy #3** Any agricultural lands that are proposed for development and any agricultural lands that are proposed for annexation to facilitate future development shall be required to provide at least three percent of the land for habitat restoration to provide habitat for plants and food and shelter for animals, and to protect any remaining native habitat on those lands so that habitat continuity in the city and connections to the Santa Clara River and Mugu Lagoon wetlands for example is continued and expanded.





DMEC wishes to recognize that while this letter is highly critical of certain aspects of the 2030GP DEIR, many aspects of the DEIR are good, and should be supported by eliminating the deficiencies identified above.

Respectfully,

David L. Magney  
 President

cc: Karen Kraus, Environmental Defense Center

**Table 2. Vascular Plants of Oxnard, California**

Scientific Name & Rarity Status	Common Name	Habit	Family
<b><i>Abronia maritima</i> - CNPS 4</b>	<b>Sticky Sand-verbena, Beach Pancake</b>	PH	Nyctaginaceae
<i>Abronia umbellata</i> var. <i>umbellata</i>	Beach Sand-verbena	PH	Nyctaginaceae
<b><i>Abronia villosa</i> var. <i>aurita</i> - VR</b>	<b>Desert Sand-verbena</b>	PH	Nyctaginaceae
<i>Acacia longiflorus</i> *	Golden Wattle	S	Fabaceae
<i>Achillea millefolium</i>	White Yarrow	AH	Asteraceae
<i>Achnatherum brachychaetum</i>	Shortbristled Needlegrass	PG	Poaceae
<i>Acroptilon repens</i> *	Russian Knapweed	PH	Asteraceae
<i>Agapanthus africanus</i> *	Lily-of-the-Nile	PH	Liliaceae
<b><i>Agoseris heterophylla</i> var. <i>cryptopleura</i> - VU</b>	<b>Mountain Dandelion</b>	AH	Asteraceae
<b><i>Agrostis stolonifera</i> var. <i>palustris</i> - VU</b>	<b>Creeping Bentgrass</b>	PG	Poaceae
<i>Agrostis viridis</i> *	Green Bentgrass	PG	Poaceae
<i>Albizia lophantha</i> *	Plume Acacia	T	Fabaceae
<i>Allenrolfea occidentalis</i>	Iodinebush	S	Chenopodiaceae
<i>Alternanthera caracasana</i> *	Alternanthera	PH	Chenopodiaceae
<i>Amaranthus albus</i> *	Prostrate Pigweed	AH	Amaranthaceae
<i>Amaranthus blithoides</i>	Prostrate Amaranth	AH	Amaranthaceae
<i>Amaranthus deflexus</i> *	Low Amaranth	AH	Amaranthaceae
<i>Amaranthus hybridus</i> *	Hybrid Amaranth	AH	Amaranthaceae
<b><i>Amaranthus powellii</i> ssp. <i>bocuhonii</i> - VR</b>	<b>Powell Amaranth</b>	AH	Amaranthaceae
<i>Amaranthus retroflexus</i> *	Red-root Amaranth	AH	Amaranthaceae
<i>Amblyopappus pusillus</i>	Dwarf Coastweed	PH	Asteraceae
<i>Ambrosia acanthicarpa</i>	Burweed	AH	Asteraceae
<i>Ambrosia artemisiifolia</i>	Common Ragweed	AH	Asteraceae
<b><i>Ambrosia chamissonis</i> - VU</b>	<b>Beach Bur</b>	S	Asteraceae
<i>Ambrosia psilostachya</i> var. <i>californica</i>	Western Ragweed	BH	Asteraceae
<i>Ammophila arenaria</i> *	European Beachgrass	PG	Poaceae
<i>Amsinckia menziesii</i> var. <i>intermedia</i>	Rancher's Fire, Common Fiddleneck	AH	Boraginaceae
<b><i>Amsinckia spectabilis</i> var. <i>spectabilis</i> - VR</b>	<b>Seaside Fiddleneck</b>	AH	Boraginaceae



Scientific Name & Rarity Status	Common Name	Habit	Family
<i>Anagallis arvensis</i> *	Scarlet Pimpernel	AH	Primulaceae
<i>Anemopsis californica</i> var. <i>californica</i>	Yerba Manza	PH	Saururaceae
<i>Anthemis cotula</i> *	Mayweed	AH	Asteraceae
<i>Antirrhinum majus</i> *	Snapdragon	S	Veronicaceae
<b><i>Antirrhinum nuttallianum</i> ssp. <i>subsessile</i> - VR</b>	<b>Lesser Nuttall Snapdragon</b>	AV	Veronicaceae
<i>Apium graveolens</i> *	Celery	PH	Apiaceae
<i>Arachis hypogaea</i> *	Peanut	PH	Fabaceae
<i>Araujia sericifera</i> *	Bladderflower	PV	Apocynaceae
<i>Argentina egedii</i> ssp. <i>egedii</i>	Cinquefoil	PH	Rosaceae
<i>Artemisia biennis</i> *	Biennial Wormwood	BH	Asteraceae
<i>Artemisia californica</i>	California Sagebrush	S	Asteraceae
<i>Artemisia douglasiana</i>	Mugwort	PH	Asteraceae
<i>Artemisia dracunculus</i>	Wormwood	PH	Asteraceae
<i>Artemisia tridentata</i> ssp. <i>tridentata</i>	Big Sagebrush	S	Asteraceae
<b><i>Arthrocnemum</i> [<i>Salicornia</i>] <i>subterminale</i> - VR</b>	<b>Common Glasswort</b>	S	Chenopodiaceae
<i>Arundo donax</i> *	Giant Reed	PG	Poaceae
<i>Asclepias fascicularis</i>	Narrowleaf Milkweed	PH	Asclepidaceae
<i>Asparagus asparagoides</i> *	Smilax Asparagus	PV	Liliaceae
<i>Asparagus officinalis</i> ssp. <i>officinalis</i> *	Common Asparagus	PH	Liliaceae
<i>Aster subulatus</i> var. <i>ligulatus</i>	Annual Saltmarsh Aster	AH	Asteraceae
<i>Astragalus douglasii</i> var. <i>douglasii</i>	Douglas Milkvetch	PH	Fabaceae
<b><i>Astragalus leucopsis</i> var. <i>leucopsis</i> - VR</b>	<b>Coast Rattleweed</b>	PH	Fabaceae
<b><i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> - LE</b>	<b>Ventura Marsh Milkvetch</b>	PH	Fabaceae
<b><i>Astragalus trichopodus</i> var. <i>lonchus</i> - VU</b>	<b>Three-pod Milkvetch</b>	PH	Fabaceae
<i>Astragalus trichopodus</i> var. <i>phoxus</i>	Antisell Three-pod Milkvetch	PH	Fabaceae
<b><i>Atriplex argentea</i> var. <i>mohavensis</i> - VR</b>	<b>Mojave Silverscale</b>	AH	Chenopodiaceae
<b><i>Atriplex californica</i> - VU</b>	<b>California Saltbush</b>	PH/S	Chenopodiaceae
<b><i>Atriplex lentiformis</i> ssp. <i>lentiformis</i> - VU</b>	<b>Big Saltbrush</b>	S	Chenopodiaceae
<i>Atriplex lentiformis</i> var. <i>breweri</i>	Brewer Saltbush	S	Chenopodiaceae
<b><i>Atriplex leucophylla</i> - VU</b>	<b>Beach Saltbush or Seascale</b>	PH	Chenopodiaceae
<i>Atriplex patula</i> ssp. <i>hastata</i>	Arrowleaf Saltbush	AH	Chenopodiaceae
<b><i>Atriplex prostrata</i> - VR</b>	<b>Triangle Orache</b>	AH	Chenopodiaceae
<i>Atriplex rosea</i> *	Rose or Red or Tumbling Orache	AH	Chenopodiaceae
<i>Atriplex semibaccata</i> *	Australian Saltbush	PH	Chenopodiaceae
<b><i>Atriplex serenana</i> var. <i>davidsonii</i> - VR</b>	<b>Davidson Bractscale</b>	AH	Chenopodiaceae
<b><i>Atriplex serenana</i> var. <i>serenna</i> - VR</b>	<b>Bractscale</b>	AH	Chenopodiaceae
<i>Atriplex subspicata</i> *	Saline Saltscale	AH	Chenopodiaceae
<b><i>Atriplex triangularis</i> - VU</b>	<b>Spearscale</b>	AH	Chenopodiaceae
<i>Atriplex vesicaria</i> *	Aboriginal Saltbush	S	Chenopodiaceae
<b><i>Atriplex watsonii</i> - VR</b>	<b>Matscale</b>	AH	Chenopodiaceae
<i>Avena barbata</i> *	Slender Oat	AG	Poaceae
<i>Avena fatua</i> *	Wild Oat	AG	Poaceae
<b><i>Azolla filiculoides</i> - VU</b>	<b>Mosquito Fern</b>	AF	Azollaceae
<b><i>Baccharis douglasii</i> - VU</b>	<b>Saltmarsh Baccharis</b>	S	Asteraceae



Scientific Name & Rarity Status	Common Name	Habit	Family
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	Coyote Brush	S	Asteraceae
<i>Baccharis salicifolia</i>	Mulefat	S	Asteraceae
<i>Bassia hyssopifolia</i> *	Five-hook	AH	Chenopodiaceae
<b><i>Batis maritima</i> - VR</b>	<b>Saltwort</b>	S	Bataceae
<b><i>Berula erecta</i> - VU</b>	<b>Cutleaf Waterparsnip</b>	PH	Apiaceae
<i>Beta vulgaris</i> *	Common Beet	AH	Chenopodiaceae
<b><i>Bidens laevis</i> - VR</b>	<b>Smooth Beggartick</b>	AH	Asteraceae
<i>Bidens pilosa</i> var. <i>pilosa</i> *	Common Beggar-ticks	AH	Asteraceae
<b><i>Bolboschoenus maritimus</i> var. <i>paludosus</i> - VR</b>	<b>Saltmarsh Bulrush</b>	PH	Cyperaceae
<b><i>Bolboschoenus robustus</i> - VR</b>	<b>Seashore Bulrush</b>	PH	Cyperaceae
<b><i>Bothriochloa barbinodis</i> - VU</b>	<b>Cane Bluestem</b>	PG	Poaceae
<i>Brassica nigra</i> *	Black Mustard	AH	Brassicaceae
<i>Brassica rapa</i> *	Rape Mustard	AH	Brassicaceae
<i>Brassica tournefortii</i> *	Saharan Mustard	AH	Brassicaceae
<b><i>Brickellia desertorum</i> - VR</b>	<b>Desert Bricklebrush</b>	PH	Asteraceae
<i>Bromus carinatus</i>	California Brome	PG	Poaceae
<i>Bromus catharticus</i> *	Rescue Grass	AG/BG	Poaceae
<i>Bromus diandrus</i> *	Rippgut Grass	AG	Poaceae
<i>Bromus hordeaceus</i> *	Soft Chess	AG	Poaceae
<i>Bromus madritensis</i> ssp. <i>madritensis</i> *	Madrid Brome	AG	Poaceae
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	Red Brome	AG	Poaceae
<i>Bromus tectorum</i> var. <i>tectorum</i> *	Cheat Grass	AG	Poaceae
<i>Cakile edentula</i>	American Searocket	AH	Poaceae
<i>Cakile maritima</i> *	European Searocket	AH	Brassicaceae
<i>Callistemon viminalis</i> *+	Weeping Bottlebrush	S	Myrtaceae
<i>Callitropsis macrocarpa</i> +	Monterey Cypress	T	Cupressaceae
<i>Calystegia macrostegia</i> var. ?	Island False Bindweed	PV	Convolvulaceae
<b><i>Calystegia sepium</i> ssp. <i>binghamiae</i> - CNPS 1A</b>	<b>Bingham Morning-glory</b>	PV	Convolvulaceae
<b><i>Calystegia soldonella</i> - VU</b>	<b>Beach Morning-glory</b>	PV	Convolvulaceae
<i>Camissonia bistorta</i>	California Sun-cups	AH	Onagraceae
<b><i>Camissonia cheiranthifolia</i> ssp. <i>suffruticosa</i> - VU</b>	<b>Beach Primrose</b>	S	Onagraceae
<i>Capsella bursa-pastoris</i> *	Shepherd's Purse	AH	Brassicaceae
<b><i>Carex pansa</i> - VR</b>	<b>Sand Dune Sedge</b>	PG	Cyperaceae
<i>Carex praegracilis</i>	Dune Sedge	PH	Cyperaceae
<i>Carpobrotus aequilateris</i> *	Sea Fig	PH/S	Aizoaceae
<i>Carpobrotus chilensis</i> *	Sea Fig	S	Aizoaceae
<i>Carpobrotus edulis</i> *	Hottentot Fig	S	Aizoaceae
<i>Castilleja affinis</i> ssp. <i>affinis</i>	Lay-and-Collie's Indian Paintbrush	PH	Orobanchaceae
<i>Castilleja exserta</i> ssp. <i>exserta</i>	Purple Owl's Clover	AH	Orobanchaceae
<i>Centaurea maculosa</i> *	Spotted Knapweed	BH	Asteraceae
<i>Centaurea melitensis</i> *	Tocalote	AH	Asteraceae
<i>Centaurea repens</i> *	Russian Knapweed	AH	Asteraceae
<i>Cerastium fontanum</i> ssp. <i>vulgare</i> *	Common Chickweed	AH	Caryophyllaceae
<b><i>Chaenactis artemisiifolia</i> - VU</b>	<b>White Pincushion</b>	AH	Asteraceae



Scientific Name & Rarity Status	Common Name	Habit	Family
<i>Chaenactis glabriuscula</i> var. <i>lanosa</i> - VU	<b>Woolly Yellow Pincushion</b>	AH	Asteraceae
<i>Chamaesyce serpyllifolia</i> ssp. <i>serpyllifolia</i> - VR	<b>Tyme-leaved Spurge</b>	AH	Euphorbiaceae
<i>Chamaesyce melanadenia</i> - VR	<b>Squaw Spurge</b>	AH	Euphorbiaceae
<i>Chamaesyce ocellata</i> ssp. <i>ocellata</i> - VR	<b>Littleeye Spurge</b>	AH	Euphorbiaceae
<i>Chamaesyce polycarpa</i> var. <i>hirtella</i> - VR	<b>Hairy Golondrina</b>	PH	Euphorbiaceae
<i>Chamaesyce polycarpa</i> var. <i>polycarpa</i> - VR	<b>Golondrina</b>	PH	Euphorbiaceae
<i>Chamaesyce prostrata</i> *	Prostrate Spurge	AH	Euphorbiaceae
<i>Chamomilla suaveolens</i>	Pineapple Weed	AH	Asteraceae
<i>Chenopodium album</i> *	Lambsquarters	AH	Chenopodiaceae
<i>Chenopodium ambrosioides</i> var. <i>ambrosioides</i> *	Mexican Tea	PH	Chenopodiaceae
<i>Chenopodium ambrosioides</i> var. <i>suffruticosum</i> *	Perennial Mexican Tea	PH	Chenopodiaceae
<i>Chenopodium berlandieri</i>	Pitseed Goosefoot	AH	Chenopodiaceae
<i>Chenopodium macrospermum</i> var. <i>farinosum</i>	Coast Goosefoot	AH	Chenopodiaceae
<i>Chenopodium macrospermum</i> var. <i>halophilum</i> *	Coast Goosefoot	AH	Chenopodiaceae
<i>Chenopodium murale</i> *	Nettle-leaved Goosefoot	AH	Chenopodiaceae
<i>Chorizanthe staticoides</i> var. <i>staticoides</i>	Turkish Rugging	AH	Polygonaceae
<i>Chrysanthemum coronarium</i> *	Garland Chrysanthemum	AH	Asteraceae
<i>Ciclosperum leptophyllum</i> *	Celery	AH	Apiaceae
<i>Cirsium occidentale</i> var. <i>occidentale</i>	Cobweb Thistle	BH	Asteraceae
<i>Cirsium vulgare</i> *	Bull Thistle	AH	Asteraceae
<i>Clematis ligusticifolia</i>	Virgin's Bower	PV	Ranunculaceae
<i>Conium maculatum</i> *	Poison Hemlock	BH	Apiaceae
<i>Conringia orientalis</i> *	Hare's Ear	AH	Brassicaceae
<i>Convolvulus arvensis</i> *	Bindweed	PV	Convolvulaceae
<i>Conyza bonariensis</i> *	Flax-leaved Fleabane	AH	Asteraceae
<i>Conyza canadensis</i> var. <i>canadensis</i>	Western Horseweed	AH	Asteraceae
<i>Conyza coulteri</i> - VR	<b>Coulter Horseweed</b>	AH	Asteraceae
<i>Cordylanthus maritimus</i> ssp. <i>Maritimus</i> - LE	<b>Saltmarsh Bird's Beak</b>	AH	Scrophulariaceae
<i>Coreopsis gigantea</i>	Giant Coreopsis	S	Asteraceae
<i>Corethrogyne filaginifolia</i> var. <i>filaginifolia</i>	California Cudweed-aster	PH	Asteraceae
<i>Coronopus [Lepidium] didymus</i> *	Wart Cress	AH	Brassicaceae
<i>Cortaderia jubata</i> *	Andean Pampas Grass	PG	Poaceae
<i>Cortaderia selloana</i> *	Uruguayan Pampas Grass	PG	Poaceae
<i>Cortaderia dioica</i> *	Pampas Grass	PG	Poaceae
<i>Cotula coronopifolia</i> *	Brass Buttons	PH	Asteraceae
<i>Coryledon orbiculata</i> *	Stonecrop	S	Crassulaceae
<i>Crassula connata</i>	Pygmy Sand-weed	AH	Crassulaceae
<i>Cressa truxillensis</i> var. <i>truxillensis</i> - VU	<b>Spreading Alkali-weed</b>	PH	Convolvulaceae
<i>Croton californicus</i> var. <i>californicus</i>	California Croton	PH	Euphorbiaceae
<i>Crypsis schoenoides</i> *	Swamp Grass	PG	Poaceae
<i>Cryptantha clevelandii</i>	Cleveland Forget-Me-Not	AH	Boraginaceae
<i>Cryptantha leiocarpa</i> - VR	<b>Coast Forget-Me-Not</b>	AH	Boraginaceae
<i>Cupressus macrocarpa</i> +	Monterey Cypress	T	Cupressaceae
<i>Cuscuta californica</i> var. <i>californica</i>	California Dodder	AV	Cuscutaceae



Scientific Name & Rarity Status	Common Name	Habit	Family
<i>Cuscuta salina</i>	Saltmarsh Dodder	AV	Cuscutaceae
<b><i>Cuscuta salina</i> var. <i>major</i> - VU</b>	<b>Saltmarsh Dodder</b>	AV	Cuscutaceae
<i>Cuscuta subinclusa</i>	Canyon Dodder	AV	Cuscutaceae
<i>Cynodon dactylon</i> *	Bermuda Grass	PG	Poaceae
<i>Cynosurus echinatus</i> *	Hedgehog Dogtail	AG	Poaceae
<i>Cyperus eragrostis</i>	Umbrella-sedge	PG	Cyperaceae
<i>Cyperus esculentus</i>	Yellow Nut-sedge	PG	Cyperaceae
<i>Cyperus involucratus</i>	Umbrella-sedge	PG	Cyperaceae
<b><i>Cyperus odoratus</i> - VR</b>	<b>Fragrant Flatsedge</b>	PG	Cyperaceae
<i>Cytisus scoparius</i> *	Scotch Broom	S	Fabaceae
<i>Datura stramonium</i> *	Jimson Weed	AH	Solanaceae
<i>Datura wrightii</i>	Western Jimson Weed	AH	Solanaceae
<i>Deinandra fasciculata</i>	Fascicled Tarplant	AH	Asteraceae
<b><i>Delphinium parryi</i> ssp. <i>blochmaniae</i> - CNPS 1B</b>	<b>Blochman Larkspur</b>	PH	Ranunculaceae
<b><i>Delphinium parryi</i> ssp. <i>maritimum</i> - VR</b>	<b>Maritime Larkspur</b>	PH	Ranunculaceae
<b><i>Descurainia pinnata</i> ssp. <i>menziesii</i> - VU</b>	<b>Menzies Tansy Mustard</b>	AH	Brassicaceae
<i>Descurainia sophia</i> *	Tansy Mustard	AH	Brassicaceae
<i>Digitaria sanguinalis</i> *	Hairy Crabgrass	PG	Poaceae
<i>Distichlis spicata</i> var. <i>spicata</i>	Saltgrass	PG	Poaceae
<b><i>Draba cuneifolia</i> - VR</b>	<b>Wedgeleaf Draba</b>	AH	Brassicaceae
<i>Drosanthemum floribundum</i> *	Dew Flower Iceplant	PH	Aizoaceae
<i>Dudleya lanceolata</i>	Lanceleaf Live-forever	PH	Crassulaceae
<i>Dysphania ambrosioides</i> *	Cutleaf Goosefoot	AH	Chenopodiaceae
<i>Echinochloa crusgalli</i> var. <i>crus-galli</i> *	Barnyard Grass	AG	Poaceae
<i>Echinochloa crus-pavonis</i> var. <i>crus-pavonis</i> *	Gulf Barnyard Grass	A/BG	Poaceae
<i>Echinochloa frumentacea</i> *	Barnyard Grass	A/BG	Poaceae
<i>Echium candicans</i> *	Pride-of-Madiera	S	Boraginaceae
<i>Ehrharta erecta</i> *	Erect Veldtgrass	PG	Poaceae
<i>Eleocharis acicularis</i> var. <i>acicularis</i>	Slender Spike-rush	PG	Cyperaceae
<i>Eleocharis parishii</i>	Parish's Spikerush	PG	Cyperaceae
<i>Elymus glaucus</i>	Blue Wildrye	PG	Poaceae
<i>Emex spinosa</i> *	Devil's Thorn	AH	Polygonaceae
<i>Encelia californica</i>	California Bush Sunflower	S	Asteraceae
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	Northern Willow-herb	AH	Onagraceae
<b><i>Equisetum hyemale</i> var. <i>affine</i> - VU</b>	<b>Giant Scouring Rush</b>	PF	Equisetaceae
<i>Equisetum laevigatum</i>	Smooth Horsetail	PF	Equisetaceae
<i>Eragrostis barrelieri</i> *	Mediterranean Lovegrass	AG	Poaceae
<i>Eragrostis mexicana</i>	Mexican Lovegrass	AG	Poaceae
<b><i>Ericameria ericoides</i> ssp. <i>ericoides</i> - VU</b>	<b>Mock Heather</b>	S	Asteraceae
<i>Eriodictyon crassifolium</i>	Thickleaf Yerba Santa	S	Boraginaceae
<i>Eriogonum cinereum</i>	Coastal Buckwheat	S	Polygonaceae
<b><i>Eriogonum nudum</i> var. <i>auriculatum</i> - VR</b>	<b>Ear-shaped Wild Buckwheat</b>	PH	Polygonaceae
<i>Eriogonum parvifolium</i> var. <i>parvifolium</i>	Dune Buckwheat	S	Polygonaceae
<b><i>Eriogonum parvifolium</i> var. <i>paynei</i> - VU</b>	<b>Payne Dune Buckwheat</b>	S	Polygonaceae





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<i>Erodium cicutarium</i> *	Redstem Filaree	AH	Geraniaceae
<i>Erodium moschatum</i> *	Whitestem Filaree	AH	Geraniaceae
<i>Erucastrum incanum</i> *	Summer Mustard	BH	Brassicaceae
<b><i>Erysimum insulare ssp. suffrutescens</i> - VR</b>	<b>Island Wallflower</b>	BH	Brassicaceae
<i>Eucalyptus globulus</i> var. <i>globulus</i> *+	Tasmanian Blue Gum	T	Myrtaceae
<i>Eucrypta chrysanthemifolia</i> var. <i>chrysanthemifolia</i>	Common Eucrypta	AH	Boraginaceae
<i>Euphorbia pepus</i> *	Petty Spurge	AH	Euphorbiaceae
<i>Euthamia occidentalis</i>	Western Goldenrod	PH	Asteraceae
<i>Festuca pratensis</i> *	Meadow Fescue	PG	Poaceae
<b><i>Festuca rubra</i> - VR</b>	<b>Red Fescue</b>	PG	Poaceae
<i>Filago californica</i>	California Cottonrose	AH	Asteraceae
<i>Foeniculum vulgare</i> *	Sweet Fennel	PH	Apiaceae
<i>Frankenia salina</i>	Alkali Heath	PH	Frankeniaceae
<i>Galistoga parviflora</i> *	Gallant Soldier	AH	Asteraceae
<i>Galium angustifolium</i> ssp. <i>angustifolium</i>	Chapparral Bedstraw	S	Rubiaceae
<i>Galium aparine</i>	Catchseed Bedstraw	AH	Rubiaceae
<i>Gazania linearis</i> *	Gazania	PH	Asteraceae
<i>Gilia capitata</i> ssp. <i>abrotanifolia</i>	Blue Field Gilia	AH	Polemoniaceae
<i>Gnaphalium palustre</i>	Lowland Cudweed	AH	Asteraceae
<b><i>Grindelia hirsutula</i> var. <i>hirsutula</i> - VU</b>	<b>Hirsute Gumplant</b>	S	Asteraceae
<i>Hedypnois cretica</i> *	Crete Hedypnois	AH	Asteraceae
<i>Helianthus annuus</i>	Common Sunflower	AH	Asteraceae
<i>Heliotropium curassavicum</i> ssp./var. <i>oculatum</i>	Alkali Heliotrope	PH	Hydrophyllaceae
<i>Herniaria hirsuta</i> ssp. <i>cinerea</i> *	Hairy Herniawort	AH	Caryophyllaceae
<i>Heterotheca grandiflora</i>	Telegraph Weed	BH	Asteraceae
<i>Heterotheca sessiliflora</i> ssp. <i>echioides</i>	Hairy Golden-Aster	PH	Asteraceae
<i>Hirschfeldia incana</i> * [ <i>Erucastrum incanum</i> ]	Summar Mustard	A/BH	Brassicaceae
<b><i>Hoffmannseggia glauca</i> - VR</b>	<b>Indian Rushpea</b>	S	Fabaceae
<b><i>Hordeum brachyantherum</i> ssp. <i>brachyantherum</i> - VU</b>	<b>Meadow Barley</b>	AG	Poaceae
<i>Hordeum brachyantherum</i> ssp. <i>californicum</i>	California Barley	AG	Poaceae
<b><i>Hordeum depressum</i> - VR</b>	<b>Low Barley</b>	AG	Poaceae
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	Hare Barley	AG	Poaceae
<i>Hordeum vulgare</i> var. <i>vulgare</i> *	Common Barley	AG	Poaceae
<b><i>Hutchinsia</i> [<i>Hornungia</i>] <i>procumbens</i> - VU</b>	<b>Desert Hutchinsia</b>	AH	Brassicaceae
<i>Hydrocotyle umbellata</i>	Marsh Pennywort	PH	Apiaceae
<b><i>Hydrocotyle verticillata</i> - VR</b>	<b>Hydrocotyle</b>	PH	Ranunculaceae
<i>Hypochaeris glabra</i> *	Smooth Cat's-ear	AH	Asteraceae
<i>Isocoma menziesii</i> var. <i>menziesii</i>	Menzies' Jimmyweed	S	Asteraceae
<i>Isocoma menziesii</i> var. <i>vernonioides</i>	Coastal Goldenbush	S	Asteraceae
<i>Isocoma veneta</i> var. <i>vernonioides</i>	Coastal Goldenbush	S	Asteraceae
<b><i>Isolepis cernua</i> var. <i>cernua</i> - VR</b>	<b>Low Clubrush</b>	AG	Cyperaceae
<i>Isomeris arborea</i>	Bladderpod	S	Capperidaceae
<b><i>Jaumea carnosa</i> - VU</b>	<b>Fleshy Jaumea</b>	PH	Asteraceae
<b><i>Juncus acutus</i> ssp. <i>leopoldii</i> - CNPS 4</b>	<b>Southwestern Spiny Rush</b>	PG	Juncaceae



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<i>Juncus balticus</i> ssp. <i>balticus</i>	Baltic Rush	PH	Juncaceae
<b><i>Juncus balticus</i> var. <i>ater</i> - VR</b>	<b>Rocky Mountain Rush</b>	PG	Juncaceae
<i>Juncus breweri</i>	Brewer Rush	PG	Juncaceae
<b><i>Juncus bufonius</i> var. <i>bufonius</i> - VR</b>	<b>Common Toad Rush</b>	AG	Juncaceae
<i>Juncus bufonius</i> var. <i>congestus</i>	Congested Toad Rush	AH	Juncaceae
<i>Juncus mexicanus</i>	Mexican Rush, Wiregrass	PH	Juncaceae
<b><i>Juncus patens</i> - VR</b>	<b>Common Rush</b>	PG	Juncaceae
<b><i>Juncus rugulosus</i> - VU</b>	<b>Wrinkled Rush</b>	PG	Juncaceae
<b><i>Juncus textilis</i> - VU</b>	<b>Basket Rush</b>	PG	Juncaceae
<i>Keckiella ternata</i> var. <i>septentrionalis</i>	Bluestem Bush Penstemon	S	Veronicaceae
<i>Kochia scoparia</i> var. <i>scoparia</i> *	Common Kochia	AH	Chenopodiaceae
<i>Lactuca serriola</i> *	Prickly Lettuce	AH	Asteraceae
<b><i>Laennecia</i> [<i>Conyza</i>] <i>coulteri</i> - VU</b>	<b>Coulter Horseweed</b>	AH	Asteraceae
<i>Lamarckia aurea</i> *	Goldentop	AG	Poaceae
<b><i>Lasthenia ferrisiae</i> - VR</b>	<b>Ferris Goldfields</b>	AH	Asteraceae
<b><i>Lasthenia glabrata</i> ssp. <i>coulteri</i> - VR</b>	<b>Rayless Goldfields</b>	AH	Asteraceae
<b><i>Lavatera assurgentiflora</i> ssp. <i>assurgentiflora</i> - VR</b>	<b>Malva Rose, Island Mallow</b>	S	Malvaceae
<b><i>Lemna valdiviana</i> - VU</b>	<b>Big Duckweed</b>	AH	Araceae
<b><i>Lepidium lasiocarpum</i> var. <i>lasiocarpum</i> - VU</b>	<b>Hairy-pod Peppergrass</b>	AH	Brassicaceae
<i>Lepidium pinnatifidum</i> *	Pepperwort	AH	Brassicaceae
<b><i>Lepidium strictum</i> - VR</b>	<b>Prostrate Pepperwort</b>	AH	Brassicaceae
<i>Leptochloa fusca</i> ssp. <i>uminervia</i>	Mexican Sprangletop	PG	Poaceae
<i>Lessingia filaginifolia</i> ssp. <i>filaginifolia</i>	California Cudweed-aster	PH	Asteraceae
<i>Leymus condensatus</i>	Giant Ryegrass	PG	Poaceae
<i>Leymus triticoides</i>	Creeping Ryegrass	PG	Poaceae
<b><i>Limonium californicum</i> - VR</b>	<b>California Sea Lavender</b>	PH	Plumbaginaceae
<i>Limonium otolepis</i> *	Saltmarsh Sea Lavender	PH	Plumbaginaceae
<i>Limosella aquatica</i>	Mudwort	AH	Scrophulariaceae
<b><i>Linaria canadensis</i> var. <i>canadensis</i> - VR</b>	<b>Toadflax</b>	A/BH	Veronicaceae
<i>Lobularia maritima</i> *	Sweet Alyssum	AH	Brassicaceae
<i>Lolium multiflorum</i> *	Italian Ryegrass	PG	Poaceae
<i>Lolium perenne</i> ssp. <i>perenne</i> *	Perennial Ryegrass	PG	Poaceae
<i>Lotus salsuginosus</i> var. <i>salsuginosus</i> ?	Coastal Lotus	AH	Fabaceae
<i>Lotus scoparius</i> var. <i>scoparius</i>	Deerweed	S	Fabaceae
<b><i>Lupinus arboreus</i> - VU</b>	<b>Dune Bush Lupine</b>	S	Fabaceae
<b><i>Lupinus chamissonis</i> - VR</b>	<b>Dune Lupine</b>	S	Fabaceae
<i>Lupinus hirsutissimus</i>	Stinging Lupine	AH	Fabaceae
<i>Lupinus succulentus</i>	Fleashy Lupine	AH	Fabaceae
<b><i>Malacothrix clevelandii</i> - VR</b>	<b>Cleveland Cliff-aster</b>	AH	Asteraceae
<i>Malacothrix incana</i>	Dunedelion	PH	Asteraceae
<b><i>Malacothrix similis</i> - VR</b>	<b>Mexican Cliff-aster</b>	AH	Asteraceae
<i>Malosma laurina</i>	Laurelleaf Sumac	S	Anacardiaceae
<i>Malva parviflora</i> *	Cheeseweed	AH	Malvaceae
<b><i>Malvella leprosa</i> - VU</b>	<b>Alkali-mallow</b>	PH	Malvaceae



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<i>Marrubium vulgare</i> *	White Horehound	PH	Lamiaceae
<i>Medicago polymorpha</i> *	Common Burclover	AH	Fabaceae
<i>Medicago sativa</i> *	Alfalfa	PH	Fabaceae
<i>Melaleuca densa?</i> *	Bottlebrush Melaleuca	S	Myrtaceae
<i>Melilotus alba</i> *	White Sweetclover	AH	Fabaceae
<i>Melilotus indica</i> *	Yellow Sweetclover	AH	Fabaceae
<i>Melilotus officinalis</i> *	Yellow Sweetclover	AH	Fabaceae
<i>Mesembryanthemum crystallinum</i> *	Crystalline Ice Plant	AH	Aizoaceae
<i>Mesembryanthemum nodiflorum</i> *	Slender-leaf Ice Plant	AH	Aizoaceae
<i>Mimulus aurantiacus</i> var. <i>australis</i>	Southern Bush Monkeyflower	S	Phrymaceae
<i>Mimulus longiflorus</i> ssp. <i>longiflorus</i>	Sticky Bush Monkeyflower	S	Phrymaceae
<b><i>Monanthochloe littoralis</i> - VR</b>	<b>Shoregrass</b>	PG	Poaceae
<i>Muhlenbergia microsperma</i>	Littleseed Muhly	PG	Poaceae
<i>Myoporum laetum</i> *	Ngaio Tree	S/T	Myoporaceae
<i>Myriophyllum brasiliense</i>	Brasil Milfoil	AH	Haloragaceae
<i>Narcissus 'King Alpert'</i> *	King Alpert Daffodil	PH	Liliaceae
<i>Nassella cernua</i>	Foothill Needlegrass	PG	Poaceae
<i>Nassella pulchra</i>	Purple Needlegrass	PG	Poaceae
<i>Nasturtium officinale</i> [ <i>Rorippa nasturtium-aquaticum</i> ]	Water Cress	AH	Brassicaceae
<i>Nicotiana glauca</i> *	Tree Tobacco	S	Solanaceae
<i>Oenothera elata</i> ssp. <i>hirsutissima</i>	Hooker Primrose	AH	Onagraceae
<b><i>Oenothera elata</i> ssp. <i>hookeri</i> - VR</b>	<b>Showy Evening Primrose</b>	AH	Onagraceae
<b><i>Oligomeris linifolia</i> - VU</b>	<b>Narrowleaf Oligomeris</b>	AH	Resedaceae
<i>Opuntia littoralis</i>	Coastal Prickly Pear	S	Cactaceae
<b><i>Opuntia oricola</i> - VU</b>	<b>Tall Prickly Pear</b>	S	Cactaceae
<b><i>Opuntia parryi</i> - VR</b>	<b>Valley Cholla</b>	S	Cactaceae
<b><i>Opuntia prolifera</i> - VR</b>	<b>Coast Cholla</b>	S	Cactaceae
<i>Orobanche ramosa</i> *	Branched Broomrape	PH	Orobanchaceae
<i>Osteospermum ecklonis</i> *+	Trailing African Daisy	PH	Asteraceae
<i>Osteospermum fruticosum</i> *+	Trailing African Daisy	PH	Asteraceae
<i>Oxalis corniculata</i> *	Creeping Wood Sorrel	PH	Oxalidaceae
<i>Oxalis latifolia</i> *	Broadleaf Woodsorrel	PH	Oxalidaceae
<i>Oxalis pes-caprae</i> *	Bermuda Buttercup	PH	Oxalidaceae
<i>Oxalis wrightii</i> *	Buttercup	PH	Oxalidaceae
<i>Panicum capillare</i> ssp. <i>capillare</i> *	Witchgrass	PG	Poaceae
<i>Parapholis incurva</i> *	Sickle Grass	AG	Poaceae
<i>Paspalum dilatatum</i> *	Dallisgrass	PG	Poaceae
<i>Pennisetum clandestinum</i> *	Kikuyu Grass	PG	Poaceae
<i>Pennisetum setaceum</i> *	Tender Fountaingrass	PG	Poaceae
<i>Pennisetum villosum</i> *	Fountaingrass	PG	Poaceae
<i>Petunia parviflora</i> *	Petunia	AH	Solanaceae
<i>Phacelia distans</i>	Wild Heliotrope	PH	Boraginaceae
<i>Phacelia parryi</i>	Parry Phacelia	AH	Boraginaceae
<b><i>Phacelia ramosissima</i> var. <i>australittoralis</i> - CNPS 4</b>	<b>South Coast Branching Phacelia</b>	PH	Boraginaceae



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<b><i>Phacelia ramosissima</i> var. <i>latifolia</i> - VU</b>	<b>Branching Phacelia</b>	PH	Boraginaceae
<i>Phacelia ramosissima</i> var. <i>ramosissima</i>	Branching Phacelia	PH	Boraginaceae
<i>Phacelia tanacetifolia</i>	Tansy Phacelia	AH	Boraginaceae
<i>Phacelia viscida</i> var. <i>viscida</i>	Sticky Phacelia	AH	Boraginaceae
<i>Phalaris minor</i> *	Lesser Canarygrass	AG	Poaceae
<i>Physalis philadelphica</i> *	Tomatillo	AH	Solanaceae
<i>Picris echioides</i> *	Bristly Ox-tounge	AH	Asteraceae
<i>Pinus canariensis</i> *	Canary Island Pine	T	Araceae
<i>Piptatherum miliaceum</i> *	Smilo Grass	PG	Poaceae
<i>Plantago erecta</i>	California Plantain	AH	Plantaginaceae
<i>Plantago lanceolata</i> *	Narrowleaf Plantain	PH	Plantaginaceae
<i>Plantago major</i> *	Broadleaf or Common Plantain	PH	Plantaginaceae
<i>Plantago pusilla</i> *	Atlantic Plantain	AH	Plantaginaceae
<b><i>Pluchea odorata</i> - VU</b>	<b>Saltmarsh Fleabane</b>	S	Asteraceae
<i>Polygonum amphiliium</i>	Water Smartweed	PH	Polygonaceae
<i>Polygonum arenastrum</i>	Common Knotweed	AH	Polygonaceae
<i>Polygonum aviculare</i> ssp. <i>aviculare</i> *	Common Knotweed	AH	Polygonaceae
<i>Polygonum aviculare</i> ssp. <i>depressum</i> *	Common Knotweed	AH	Polygonaceae
<b><i>Polygonum lapathifolium</i> - VU</b>	<b>Willow Weed</b>	AH	Polygonaceae
<b><i>Polygonum punctatum</i> var. <i>punctatum</i> - VU</b>	<b>Dotted Smartweed</b>	AH	Polygonaceae
<i>Polypogon australis</i> *	Chilean Beardgrass	AG	Poaceae
<i>Polypogon monspeliensis</i> *	Rabbitsfoot Beardgrass	AG	Poaceae
<i>Polypogon viridis</i> *	Water Beardgrass	AG	Poaceae
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	Black Cottonwood	T	Salicaceae
<i>Potamogeton foliosus</i>	Leafy Pondweed	AH	Potamogetonaceae
<b><i>Potentilla anserina</i> ssp. <i>pacifica</i> - VR</b>	<b>Pacific Cinquifol</b>	PH	Rosaceae
<i>Potentilla egedei</i> var. <i>grandis</i>	Silver Beachweed	PH	Rosaceae
<i>Pseudognaphalium biolettii</i>	Bicolored Everlasting	BH	Asteraceae
<i>Pseudognaphalium californicum</i>	Green Everlasting	BH	Asteraceae
<b><i>Pseudognaphalium leucocephalum</i> - CNPS 2</b>	<b>Whiteleaf Everlasting</b>	BH	Asteraceae
<i>Pseudognaphalium luteoalbum</i> *	Everlasting Cudweed	AH	Asteraceae
<i>Pseudognaphalium microcephalum</i>	White Everlasting	B/PH	Asteraceae
<i>Pseudognaphalium ramosissimum</i>	Pink Everlasting	BH	Asteraceae
<i>Pseudognaphalium roseum</i> *	Rosy Rabbit-tobacco	BH	Asteraceae
<i>Pseudognaphalium stramineum</i> *	Cotton-batting Cudweed	BH	Asteraceae
<i>Raphanus sativus</i> *	Wild Radish	AH	Brassicaceae
<i>Reseda alba</i> *	White Mignonette	S	Resedaceae
<i>Rhus integrifolia</i>	Lemonade Berry	S	Anacardiaceae
<i>Ricinus communis</i> *	Castor Bean	S	Euphorbiaceae
<i>Rosa californica</i>	California Wild Rose	S	Rosaceae
<i>Rubus ursinus</i>	Pacific Blackberry	PV	Rosaceae
<i>Rumex crispus</i> *	Curly Dock	PH	Polygonaceae
<b><i>Rumex fueginus</i> var. <i>ovato-cordatus</i> - VR</b>	<b>Oxnard Dock</b>	PH	Polygonaceae
<b><i>Rumex hymenosepalus</i> - VR</b>	<b>Wild Rhubarb</b>	PH	Polygonaceae



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<i>Rumex kernerii</i> *	Kerner's Dock	PH	Polygonaceae
<b><i>Rumex maritimus</i> - VR</b>	<b>Golden Dock</b>	PH	Polygonaceae
<b><i>Ruppia maritima</i> - VR</b>	<b>Wigeon-grass, Ditch-grass</b>	PH	Zosteraceae
<b><i>Salicornia bigelovii</i> - VR</b>	<b>Bigelow Pickleweed</b>	AH	Chenopodiaceae
<b><i>Salicornia depressa</i> - VR</b>	<b>Pickleweed</b>	AH	Chenopodiaceae
<i>Salix exigua</i>	Narrowleaf Willow	S	Salicaceae
<i>Salix hindsiana</i>	Sandbar Willow	S	Salicaceae
<i>Salix laevigata</i>	Red Willow	T	Salicaceae
<i>Salix lasiolepis</i> var. <i>lasiolepis</i>	Arroyo Willow	S	Salicaceae
<i>Salsola australis</i> *	Russian Thistle	AH	Chenopodiaceae
<i>Salsola paulsenii</i> *	Barbwire Thistle	AH	Chenopodiaceae
<i>Salsola tragus</i> *	Russian Thistle	AH	Chenopodiaceae
<i>Salvia leucophylla</i>	Purple Sage	S	Lamiaceae
<i>Salvia mellifera</i>	Black Sage	S	Lamiaceae
<i>Sambucus mexicana</i>	Blue Elderberry	S	Caprifoliaceae
<b><i>Sarcocornia pacifica</i> [<i>Salicornia virginica</i>] - VU</b>	<b>Virginia Glasswort</b>	S	Chenopodiaceae
<i>Schinus molle</i> *	Peruvian Pepper	T	Anacardiaceae
<i>Schismus arabicus</i> *	Arabian Grass	AG	Poaceae
<i>Schismus barbatus</i> *	Arabian Grass	AG	Poaceae
<b><i>Schoenoplectus acutus</i> var. <i>occidentalis</i> - VR</b>	<b>Viscid or Common Tule</b>	PG	Cyperaceae
<i>Schoenoplectus</i> [ <i>Scirpus</i> ] <i>americanus</i>	American Bulrush	PG	Cyperaceae
<b><i>Schoenoplectus californicus</i> - VR</b>	<b>California Bulrush</b>	PH	Cyperaceae
<i>Scirpus maritimus</i>	Saltmarsh Bulrush	PH	Cyperaceae
<i>Scirpus pungens</i>	Common Threesquare	PH	Cyperaceae
<i>Scirpus robustus</i>	Bulrush	PH	Cyperaceae
<i>Scrophularia californica</i> var. <i>californica</i>	California Figwort	PH	Scrophulariaceae
<i>Senecio flaccidus</i> var. <i>douglasii</i>	Douglas Butterweed	S	Asteraceae
<i>Senecio vulgaris</i> *	Common Groundsel	AH	Asteraceae
<b><i>Sidalcea malviflora</i> ssp. <i>californica</i> - VU</b>	<b>California Globemallow</b>	PH	Malvaceae
<i>Silene laniniata</i> ssp. <i>major</i>	Mexican Pink	PH	Caryophyllaceae
<i>Silybum marianum</i> *	Milk Thistle	AH	Asteraceae
<i>Sinapis arvensis</i> *	Charlock	AH	Brassicaceae
<i>Sisymbrium altissimum</i> *	Tumble Mustard	AH	Brassicaceae
<i>Sisymbrium irio</i> *	London Rocket	AH	Brassicaceae
<i>Sisymbrium orientale</i> *	Eastern Mustard	AH	Brassicaceae
<i>Solanum americanum</i> *	White Nightshade	PH	Solanaceae
<i>Solanum douglasii</i>	Douglas Nightshade	PH	Solanaceae
<i>Solanum elaeagnifolium</i> *	Silverleaf Horse-nettle	PH	Solanaceae
<i>Solanum nigrum</i> *	Black Nightshade	AH	Solanaceae
<i>Solanum physalifolium</i> *	Nightshade	PH	Solanaceae
<i>Solanum xanti</i> var. <i>xanti</i>	Purple Nightshade	S	Solanaceae
<i>Solidago californica</i>	California Goldenrod	PH	Asteraceae
<i>Sonchus asper</i> ssp. <i>asper</i> *	Prickly Sowthistle	AH	Asteraceae
<i>Sonchus oleraceus</i> *	Common Sow-thistle	AH	Asteraceae





Scientific Name & Rarity Status	Common Name	Habit	Family
<i>Sorghum halepense</i>	Johnson Grass	PG	Poaceae
<i>Spartina foliosa</i>	California Cordgrass	PG	Poaceae
<i>Spergularia bocconei</i>	Sand Spurry	AH	Caryophyllaceae
<b><i>Spergularia macrotheca</i> var. <i>macrotheca</i></b>	<b>Large-flowered Sandspurry</b>	PH	Caryophyllaceae
<b><i>Spergularia marina</i> - VR</b>	<b>Saltmarsh Sandspurry</b>	AH	Caryophyllaceae
<i>Stachys bullata</i>	Pink Hedge Nettle	PH	Lamiaceae
<i>Stellaria pallida</i>	Pallid Chickweed	AH	Caryophyllaceae
<i>Stenotaphrum secundatum</i> *	St. Augustine Grass	PG	Poaceae
<b><i>Stephanomeria virgata</i> ssp. <i>pleurocarpa</i> - VR</b>	<b>Wand Chicory</b>	AH	Asteraceae
<b><i>Stillingia spinulosa</i> - VR</b>	<b>Broad-leaved Stillingia</b>	PV	Euphorbiaceae
<b><i>Suaeda calceoliformis</i> - VR</b>	<b>Horned Seablite</b>	AH	Chenopodiaceae
<b><i>Suaeda californica</i> var. <i>pubescens</i> - CNPS 1B</b>	<b>Hairy California Seablite</b>	S	Chenopodiaceae
<b><i>Suaeda esteroa</i> - CNPS 1B</b>	<b>Estuary Seablite</b>	PH	Chenopodiaceae
<b><i>Suaeda nigra</i> [<i>S. moquinii</i>] - VR</b>	<b>Bush Seepweed</b>	S	Chenopodiaceae
<b><i>Suaeda taxifolia</i> - CNPS 4</b>	<b>California Seablite</b>	S	Chenopodiaceae
<b><i>Symphyotrichum</i> [<i>Aster</i>] <i>ascendens</i> - VR</b>	<b>Long-leaved Aster</b>	PH	Asteraceae
<i>Tamarix ramosissima</i> *	Saltcedar	S/T	Tamaricaceae
<i>Tauschia arguta</i>	Southern Tauschia	PH	Apiaceae
<i>Tetragonia tetragonioides</i> *	New Zealand Spinach	AH	Aizoaceae
<i>Toxicodendron diversilobum</i>	Western Poison Oak	PV	Anacardiaceae
<i>Tribulus terrestris</i> *	Puncture Vine	AH	Zygophyllaceae
<b><i>Triglochin concinna</i> - VR</b>	<b>Utah Arrow-grass</b>	PH	Scheuchzeriaceae
<b><i>Triglochin maritima</i> - VR</b>	<b>Seaside Arrow-grass</b>	PH	Scheuchzeriaceae
<b><i>Triglochin striata</i> - VR</b>	<b>Three-ribbed Arrow-grass</b>	PG	Scheuchzeriaceae
<i>Tropaeolum majus</i> *	Garden Nasturtium	AH	Tropaolaceae
<i>Typha domingensis</i>	Narrow-leaved Cattail	PH	Typhaceae
<b><i>Typha latifolia</i> - VU</b>	<b>Broadleaf Cattail</b>	PG	Typhaceae
<i>Urtica dioica</i> ssp. <i>gracilis</i> var. <i>holosericea</i>	Giant Creek Nettle	PH	Urticaceae
<i>Urtica urens</i> *	Dwarf Nettle	AH	Urticaceae
<i>Verbena lasiostachys</i> var. <i>lasiostachys</i>	Western Verbena	BH	Verbenaceae
<i>Verbena tenuisecta</i> *	Paraguay Verbena	AH	Verbenaceae
<i>Verbesina encelioides</i> ssp. <i>encelioides</i> *	Golden Crownbeard	PH	Asteraceae
<i>Verbesina encelioides</i> ssp. <i>exauriculata</i> *	Golden Crownbeard	PH	Asteraceae
<i>Veronica americana</i>	American Brookline	PH	Veronicaceae
<i>Veronica anagallis-aquatica</i>	Water Speedwell	AH	Veronicaceae
<i>Vicia villosa</i> *	Hairy Vetch	AV	Fabaceae
<i>Washingtonia robusta</i> *+	Mexican Fan Palm	T	Arecaceae
<i>Xanthium spinosum</i> *	Spiny Cocklebur	AH	Asteraceae
<i>Xanthium strumarium</i> var. <i>canadense</i>	Cocklebur	AH	Asteraceae
<i>Yucca baccata</i> *	Spanish Bayonet	S/T	Agavaceae
<i>Zantedeschia aethiopica</i> *	Calla Lily	PG	Arecaceae
<b><i>Zostera marina</i> - VR</b>	<b>Eel-grass</b>	PG	Zosteraceae

Notes: Scientific nomenclature follows Flora of North America Committee (1993-2007 - *Flora of North America*) or Hickman (1993 - *The Jepson Manual: Higher Plants of California*).



Scientific Name & Rarity Status	Common Name	Habit	Family										
<p>Common names follow Abrams and Ferris (1960), Neihaus and Ripper (1976), and DeGarmo (1980).</p> <p><b>Bold</b> typeface indicates special-status species, LE = listed endangered; VR = locally rare; VU - locally uncommon.</p> <p>An "*" indicates non-native species that have become naturalized or persist without cultivation.</p> <p>An "+" indicates non-native species that were cultivated and/or persist without active cultivation after planting.</p> <p>Habit definitions:</p> <table border="0" data-bbox="201 464 1117 632"> <tr> <td>AF = annual fern or fern ally.</td> <td>PG = perennial grass or graminoid.</td> </tr> <tr> <td>AG = annual grass or graminoid.</td> <td>PH = perennial herb.</td> </tr> <tr> <td>AH = annual herb.</td> <td>PV = perennial vine.</td> </tr> <tr> <td>BH = biennial herb.</td> <td>S = shrub.</td> </tr> <tr> <td>PF = perennial fern or fern ally.</td> <td>T = tree.</td> </tr> </table>				AF = annual fern or fern ally.	PG = perennial grass or graminoid.	AG = annual grass or graminoid.	PH = perennial herb.	AH = annual herb.	PV = perennial vine.	BH = biennial herb.	S = shrub.	PF = perennial fern or fern ally.	T = tree.
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