

# California Native Plant Society

**East Bay Chapter**  
P O Box 5597, Elmwood Station  
Berkeley, CA 94705

August 20, 2006

Victor Carniglia, Deputy Director  
Community Development Department  
City of Antioch  
Post Office Box 5007  
Antioch, CA 94531-5007

## **Re: Comments on Draft Environmental Impact Report and Statement for the Roddy Ranch Reorganization Area**

Dear Victor Carniglia:

The California Native Plant Society thanks the City of Antioch for the opportunity to comment upon the DEIR on the Roddy Ranch Reorganization Area (RRRA). CNPS is a statewide organization of some 10,000 members whose mission is to conserve and protect the native plant species and native plant communities in California. The Society's mission is to increase the understanding and appreciation of California's native plants and to preserve them in their natural habitat through scientific activities, education, and conservation.

The following letter lists some preliminary concerns of the East Bay Chapter of the California Native Plant Society regarding the RRRA Project. Pursuant to the mission of protecting California's native flora and vegetation, CNPS submits the following comments for the DEIR:

I. Horse Valley is an extremely rich biological area. Members of EBCNPS and biologists throughout the state recognize its importance as a regionally significant environment which, since owned privately, has not received the due biological attention from a botanist's perspective. Please note that the survey for native plant species does not meet the guidelines and standards set forth in the California Native Plant Society's *Botanical Survey Guidelines*<sup>1</sup>, California Department of Fish and Game's *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*<sup>2</sup>, and U.S. Fish and Wildlife's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*<sup>3</sup>.

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<sup>1</sup> California Native Plant Society (CNPS). 2001a. *Inventory of Rare and Endangered Plants of California*. 6th Edition. Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. Sacramento, California. 388 pp.

<sup>2</sup> CDFG. 2000. *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities*. May 8.

<sup>3</sup> USFWS. 2000. *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*. January.



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Survey dates, botanist names, and botanist hours need to be reported in order to assess whether an appropriate assessment for this 850 acre parcel has been conducted.

II. The most critical factor in the scoping process is ensuring that the EIR will satisfy state requirements regarding Threatened and Endangered plant species as well as species of concern. In this case, the developer has produced a development footprint based on little and poor biological knowledge of the area. EBCNPS recognizes that Appendix B – Table 2: Special Status Vegetation at Roddy Ranch represents a fairly long list of plant species for consideration, but it has not considered all of the plants listed possibly occurring on the project site. Many plants once considered extirpated have been relocated (e.g. the Mount Diablo Buckwheat). For instance, *for letter A*, a comprehensive Appendix list needs to include (BUT DID NOT INCLUDE):

- *Allenrolfea occidentalis*
- *Allium peninsulare* var. *peninsulare*
- *Allophylum gilioides* ssp. *violaceum*
- *Amaranthus powellii*
- *Amsinckia douglasiana*
- *Amsinckia tessellata* var. *gloriosa*
- *Argemone munita*
- *Astragalus didymocarpus* var. *didymocarpus*
- *Astragalus oxyphysus*
- *Atriplex argentea* var. *mohavensis*
- **ATRIPLEX CORONATA VAR. CORONATA** (Statewide rare plant)
- *Atriplex serenana* var. *serenana*.

We are including a CEQA-Protected Rare and Unusual Plants of the Dbk and Vml Regions (Appendix 1) and a CEQA-protected list specifically for Horse Valley (Appendix 2), and based on their listing status must be addressed in the EIR in order for it to be comprehensive. This request is in accordance with CDFG Habitat Conservation Planning Branch recommendations for "...protection of plants which are regionally significant, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4."<sup>4</sup> Legal protection for the above-mentioned species is based on CEQA guidelines 15380 and 15125(a).

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<sup>4</sup> Department of Fish and Game Habitat Conservation Branch.  
[http://www.dfg.ca.gov/hcpb/species/t\\_e\\_spp/nat\\_plnt\\_consv.shtml](http://www.dfg.ca.gov/hcpb/species/t_e_spp/nat_plnt_consv.shtml). Accessed on December 9, 2004



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III. Although the DEIR overlooks the need for rigorous survey of low lying alkali environments (and other such ecosystems like vernal pools, swales, and riparian corridors *outside of the development area*) and include them in the analysis, these low lying ecosystems **must** be included due to the **direct** effects of developing upland drainage areas that feed these meadows. The distribution of these communities is directly and necessarily linked up via overland and subterranean water flow from higher, saline rock and soils, to lower areas. Therefore, with “up-drainage” development, these communities and plants (e.g. *Atriplex spp.*) **WILL BE IMPACTED**, and this impact need to be considered in an adequate EIR. Without this information, the “Biological Impacts” section of the EIR is inadequate.

IV. EBCNPS is concerned with the biological and botanical rigor of the CEQA document presented. We are not sure if the consultants are capable of correctly assessing ecosystems and plants to the standard required. We would recommend that a consulting firm with expertise in the hydrology of alkali ecosystems and in California grasslands be employed for this task, as per comment III. We highlight the following **errors and incorrect statements** in the DEIR:

- “The native grasses, which are generally extirpated throughout most of California now... are typically perennials that stay relatively green throughout the year.” [4.3-3] In fact, remnant stands of native grasses do exist throughout California. These stands and areas need to be recognized, protected, and enlarged. Additionally, all native bunch grasses in xeric sites exhibit some form of dormancy in which the majority of the leaves turn brown for a significant period of time.
- The plant list on 4.3-5 includes at least three errors including incorrect capitalization of ssp. (e.g. *Dichelostemma capitatum* ssp. *Capitatum*) and use of archaic (Munz) species names that have not been used for over a decade (e.g. *Cerastium viscosum*).
- Map symbology is important for correctly reading figures. Figure 4.3-1:Vegetation Map and its symbology are unreadable, thus not allowing for any analysis.

V. A previous EBCNPS comment from the NOP for this project was ignored and will be reiterated here: “Plant alliances and associations recognized as “rare and worthy of consideration” by CDFG<sup>5</sup> should be included and surveyed for when individual plant surveys are being conducted. It is important to understand that other alliances and associations that as yet lack designation by CDFG may occur on this site and need to be considered during this process.” Appendix 3 is included to aid in the recognition of these sites, and it is expected this will be used as guidance for a development footprint, if that course is chosen.

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<sup>5</sup> California Natural Diversity Database (CNDDDB) 2003. List of California Terrestrial Communities Recognized by the Department of Fish and Game. California Department of Fish and Game, Wildlife Habitat Data Analysis Branch.



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VI. The East Contra Costa Habitat Conservation Plan (ECC-HCP) designates all of the Roddy Ranch property as an area of high preservation value in East Contra Costa County<sup>5</sup>. Since the City of Antioch did not participate in the HCP process, the City is not bound by the policies created. Yet, the City will be required to obtain incidental take permits for this project, to be issued by the CDFG, which may not look favorably upon Antioch's non-participation status. Resolution of non-participant status in the ECC-HCP and how this will affect success acquisition of incidental take permits needs to be considered in the planning and feasibility of this project. CNPS recommends that the City of Antioch comment on how they will continue to uphold conservation ethics and goals for the entire Eastern Contra Costa County while not participating in the ECC-HCP. We recommend that Antioch be required to buy into this "good-will" agreement, otherwise CDFG permits will require special scrutiny in the light of Antioch's non-participation status, especially when considering **CUMULATIVE IMPACTS**:

- Diablo helianthella (*Helianthella castanea*) habitat is potentially and actually endangered by a number of development projects including, but not limited to: City of Concord General Plan 2030, Pittsburg's Faria South Annexation, Pittsburg's Montreux annexation, East Contra Costa County HCP, Los Vaqueros Reservoir Expansion, and the Concord Naval Weapons Station. Taking of this species must be considered in light of dwindling habitat in the above mentioned projects. Although the Diablo helianthella is not directly within the development boundaries, effects of weed invasion, soil disturbance, and pollinator disturbance should be considered as potential impacts on this population.
- Big Tarplant (*Blepharizonia plumosa*) habitat is potentially and actually endangered by a number of development projects including, but not limited to: City of Concord General Plan 2030, Pittsburg's Faria South Annexation, Pittsburg's Montreux annexation, East Contra Costa County HCP, Los Vaqueros Reservoir Expansion, and the Concord Naval Weapons Station. Taking of this species must be considered in light of dwindling habitat in the above mentioned projects.
- San Joaquin saltbrush (*Atriplex joaquiniana*) has been observed in the vicinity, and as explained in Comment III, there is a concern its habitat will be significantly altered. Development of alkali soils is occurring throughout Eastern Contra Costa County in a number of development projects including, but not limited to: East Contra Costa County HCP, East Cypress Corridor, Livermore Seven Vines Project, and Springtown Alkali Sink.
- Increased needs for water will affect this development and all other local developments that anticipate extra water from an expanded Los Vaqueros Reservoir. These projects include, but are not limited to: City of Concord General Plan 2030, Pittsburg's Faria South Annexation, Pittsburg's Montreux annexation, East Contra Costa County HCP, East Cypress Corridor, and the Concord Naval Weapons Station. Increased demand on water must be considered in light of all of these developments.

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<sup>6</sup> California Natural Diversity Database (CNDDDB). 2003. List of Natural Communities Recognized by the California Natural Diversity Database. California Department of Fish and Game, Wildlife Habitat Analysis Branch.



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VII. CNPS again requests that a no development alternative be investigated and reported in the DEIR. Since the RRAA project lies within important conservation areas 2f and 2g, as defined by the ECC-HCP, it would exemplify the City's commitment to environmental conservation to list an alternative that would designate the entire area for open space conservation. Given the outstanding characteristics of this landscape, and cumulative impacts on protected species, we recommend that Alternative 1, NO PROJECT, be endorsed, while in return, the City of Antioch may be allowed to enter into the ECC-HCP agreement. We think that there must be some positive way of redressing Antioch's non-participation status in the 3+ year HCP meetings, and we believe that a formal designation of the 850 acre project site would be show a great commitment to this important process.

CNPS looks forward to submitting further comments through the EIS/EIR process. Questions and concerns can be addressed to the Conservation Analyst. We look forward to working with you on this process.

Sincerely,

Lech Naumovich  
East Bay Conservation Analyst  
California Native Plant Society  
(510) 734 - 0335

CC: Seth Adams, Save Mount Diablo  
David Reid, Greenbelt Alliance  
Robert Doyle, EBRPD  
John Kopchik, Contra Costa County  
Sheila Larsen, USFWS  
Carl Wilcox, CDFG  
Laura Baker, CNPS



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**APPENDIX 1: CEQA-Protected Rare and Unusual Plants  
of The Dbk and Vml Regions  
(Covering the Black Diamond/South Antioch and Lone Tree Valley-to-Marsh Creek Areas)  
2006  
(Statewide Rare Plants in Upper Case)**

<b>Rank in East Bay</b>	<b>Species</b>	<b>Common Name</b>	<b>Habitat</b>
A2	<i>Allenrolfea occidentalis</i>	iodine bush	Alkali areas
A1x	<i>Allium peninsulare</i> var. <i>peninsulare</i> (historical-1954)	peninsular onion	Dry Open Slopes; Misc. habitats
A1	<i>Allophylllum gilioides</i> ssp. <i>violaceum</i> (ssp. <i>gilioides</i> is more common)	stragglng gilia	Grassland; Sand or Sandstone; Misc. habitats
A1	<i>Amaranthus powellii</i>	Powell's amaranth	Misc. habitats
A1x	<i>Amsinckia douglasiana</i> (historical- 1938)	Douglas' fiddleneck	Dry Open Slopes; Rock, Tallus or Scree
*A1	AMSINCKIA GRANDIFLORA	large-flowered fiddleneck	Grassland; Sand or Sandstone; Misc. habitats
A1x	<i>Amsinckia tessellata</i> var. <i>gloriosa</i> (historical-1954)	tessellate fiddleneck	Sand or Sandstone; Misc. habitats
*A2	ARCTOSTAPHYLOS AURICULATA	Mt. Diablo manzanita	Chaparral; Sand or Sandstone
A2	<i>Arctostaphylos glandulosa</i> ssp. <i>glandulosa</i>	Eastwood manzanita	Chaparral
*A2	ARCTOSTAPHYLOS MANZANITA SSP. LAEVIGATA	Contra Costa manzanita	Chaparral; Sand or Sandstone
A1	<i>Argemone munita</i>	prickly poppy	Burns; Misc. habitats
A1	<i>Astragalus didymocarpus</i> var. <i>didymocarpus</i> ( <i>A. gambelianus</i> is more common)	two-seeded milkvetch	Grassland
A1?	<i>Astragalus oxyphysus</i> (?) ( <i>A. asymmetricus</i> is more common)	Diablo locoweed	Grassland; Scrub
A2	<i>Atriplex argentea</i> var. <i>mohavensis</i>	silverscale	Alkali areas
*A2	ATRIPLEX CORONATA VAR. CORONATA	crownscale	Alkali areas; Grassland; Vernal Pools
*A2	ATRIPLEX DEPRESSA	brittlescale	Alkali areas; Grassland; Misc. Wetlands
*A2	ATRIPLEX JOAQUINIANA	San Joaquin saltbush	Alkali areas; Grassland; Misc. Wetlands
A1	<i>Atriplex serenana</i> var. <i>serenana</i>	bractscale	Alkali areas; Coastal Bluff
A2	<i>Balsamorhiza deltoidea</i>	deltoid balsamroot	Forest; Grassland; Scrub; Sand or Sandstone; Woodland
A2	<i>Blepharizonia laxa</i> ( <i>B. plumosa</i> ssp <i>viscida</i> in Jepson Manual)	Big tarplant	Chaparral; Grassland; Scrub; Woodland
*A2	BLEPHARIZONIA PLUMOSA	Big tarplant	Grassland; Scrub
*A2	CALANDRINIA BREWERI	Brewer's calandrinia	Burns; Chaparral; Scrub
*A2	CALOCHORTUS PULCHELLUS	Mt. Diablo fairy-lantern	Chaparral; Serpentine; Woodland
A1	<i>Calycadenia multiglandulosa</i>	sticky calycadenia	Rock, Tallus or Scree; Scrub
A1x	<i>Camissonia campestris</i> ssp. <i>campestris</i> (historical-1940)	Mohave suncup	Grassland; Scrub; Sand or Sandstone

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*Dedicated to the preservation of California native flora*

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A2	<i>Camissonia graciliflora</i>	hill sun cup	Dry Open Slopes; Grassland; Scrub; Woodland
A2	<i>Camissonia intermedia</i>	small primrose	Burns; Scrub
A1	<i>Camissonia strigulosa</i>	contorted primrose	Grassland; Sand or Sandstone
A1	<i>Chaenactis glabriuscula</i> var. <i>megacephala</i>	yellow pincushion	Dry Open Slopes; Sand or Sandstone
A2	<i>Chamaesyce ocellata</i> ssp. <i>ocellata</i>	valley spurge	Sand or Sandstone
A2	<i>Chorizanthe membranacea</i>	pink spineflower	Chaparral; Dry Open Slopes; Grassland; Woodland; Misc. habitats
A2	<i>Clarkia modesta</i>	modest clarkia	Woodlands
A1	<i>Collinsia bartsiiifolia</i> var. <i>bartsiiifolia</i>	white Chinese houses	Sand or Sandstone
*A1	CONVOLVULUS SIMULANS	small-flowered morning-glory	Grassland; Serpentine; Misc. habitats
A1	<i>Conyza coulteri</i>	Coulter's conyza	Misc. habitats
A2	<i>Croton californicus</i>	California croton	Sand or Sandstone
*A1x	CRYPTANTHA HOOVERI (historical-1908)	Hoover's cryptantha	Grassland; Sand or Sandstone
A2	<i>Cryptantha microstachys</i>	Tejon cryptantha	Chaparral; Woodland
A2	<i>Cyperus erythrorhizos</i>	red-rooted cyperus	Riparian
A1	<i>Delphinium hansenii</i>	Hansen's larkspur	Chaparral; Woodland
A1	<i>Delphinium parryi</i> ssp. <i>parryi</i>	Parry's larkspur	Chaparral; Woodland
A2	<i>Dendromecon rigida</i>	bush poppy	Burns; Chaparral; Scrub
A1	<i>Descurainia pinnata</i> ssp. <i>menziesii</i>	tansy mustard	Chaparral; Rock, Tallus or Scree
A2	<i>Dicentra chrysantha</i>	golden ear-drops	Burns; Dry open Slopes; Misc. habitats
A2	<i>Downingia insignis</i>	cupped downingia	Vernal Pools
A1x	<i>Downingia ornatissima</i> var. <i>eximia</i> (historical-1956)	Solano downingia	Vernal Pools; Misc. Wetlands
A2	<i>Elymus elymoides</i> ssp. <i>elymoides</i>	squirreltail	Grassland
A1x	<i>Epilobium cleistogamum</i> (historical-1907)	cleistogamous boisduvalia	Vernal Pools
A1	<i>Eriastrum abramsii</i>	Abram's eriastrum	Dry Open Slopes
A1	<i>Eriastrum pluriflorum</i>	many-flowered eriastrum	Chaparral; Forest; Woodland
A2	<i>Ericameria arborescens</i>	golden-fleece	Chaparral; Forest; Woodland
A2	<i>Eriogonum angulosum</i>	angle-stemmed eriogonum	Sand or Sandstone; Misc. habitats
A2	<i>Eriogonum luteolum</i> var. <i>luteolum</i>	golden carpet	Gravel; Sand or Sandstone; Serpentine
A1	<i>Eriogonum nudum</i> var. <i>pubiflorum</i>	naked-stemmed buckwheat	Dry Open Slopes; Misc. habitats
*A1	ERIOGONUM TRUNCATUM	Mt. Diablo buckwheat	Chaparral; Grassland; Sand or Sandstone; Misc. habitats
*A2	ERIOPHYLLUM JEPSONII	Jepson's woolly sunflower	Chaparral; Serpentine; Woodland
*A2	ERODIUM MACROPHYLLUM	round-leaved filaree	Grassland; Scrub
A2	<i>Eryngium vaseyi</i>	Vasey's coyote-thistle	Alkali areas; Vernal Pools
A2	<i>Eschscholzia caespitosa</i>	tufted poppy	Chaparral
*A1	ESCHSCHOLZIA RHOMBIPETALA	diamond-petaled California poppy	Dry Open Slopes; Grassland
A2	<i>Forestiera pubescens</i>	desert olive	Riparian
A2	<i>Fraxinus dipetala</i>	flowering ash	Chaparral; Woodland; Misc. habitats
*A2	FRITILLARIA AGRESTIS	stinkbells	Alkali areas; Grassland
*A2	GALIUM ANDREWSII SSP. GATENSE	serpentine bedstraw	Chaparral; Serpentine; Woodland



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A2	Githopsis diffusa ssp. robusta	southern bluecup	Burns; Misc. habitats
A1	Glyceria leptostachya	Davy's mannagrass	Freshwater Marsh; Riparian
A2	Gnaphalium bicolor	Bioletti's cudweed	Dry Open Slopes; Sand or Sandstone
A1	Guillenia flavescens	yellow-flowered thelypodium	Serpentine
*A2	HELIANTHELLA CASTANEA	Diablo helianthella	Chaparral; Grassland; Woodland
A2	Hesperevax acaulis var. ambusticola (H. sparsiflora is more common)	fire evax	Burns; Dry open Slopes; Misc. habitats
*A2	HESPEREVAX CAULESCENS (H. sparsiflora is more common)	hogwallow starfish	Vernal Pools
*A2	HESPEROLINON BREWERI	Brewer's western flax	Grassland; Serpentine
A1	Hesperolinon micranthum	small-flowered dwarf flax	Serpentine; Woodland; Misc. habitats
A1	Heterodraba unilateralis	heterodraba	Grassland
A2	Hutchinsia procumbens	prostrate hutchinsia	Alkali areas
A2	Isoetes howellii	Howell's quillwort	Misc. Wetlands
*A2	JUGLANS CALIFORNICA VAR. HINDSII	Northern California black walnut	Riparian
A1x	Juncus bufonius var. occidentalis (historical-1895) (vars. bufonius and congestus are more common)	toad rush	Riparian areas; Vernal Pools; Misc. Wetlands
A1	Lastarriaea coriacea	lastarriaea	Chaparral; Gravel; Sand or Sandstone; Scrub
*A1	LASTHENIA CONJUGENS	Contra Costa goldfields	Alkali areas; Vernal Pools; Misc. Wetlands
A2	Lasthenia minor	woolly goldfields	Grassland
A2	Layia chrysanthemoides	smooth layia	Grassland
A1x	Layia glandulosa (historical-1983 but not seen since)	white layia	Sand or Sandstone
A2	Lepidium dictyotum var. acutidens	sharp-toothed pepper-grass	Alkali areas
A1	Lepidium nitidum var. oreganum (var. nitidum is more common)	shining pepper-grass	Alkali areas; Vernal Pools; Misc. habitats
A2	Lessingia glandulifera var. glandulifera	valley lessingia	Forest; Sand or Sandstone
A1	Lessingia nemaclada	slender-stemmed lessignia	Dry Open Slopes; Rock, Tallus or Scree; Woodland; Misc. habitats
A1	Linanthus pygmaeus ssp. continentalis	pigmy linanthus	Misc. habitats
A2	Lithophragma bolanderi	Bolander starflower	Misc. habitats
A1x	Lithophragma cymbalaria (historical-1895)	mission star	Forest; Riparian; Woodland
A2	Lomatium caruifolium var. caruifolium	caraway-leaved lomatium	Grassland; Vernal Pool; Misc. habitats
A2	Lotus strigosus	strigose trefoil	Chaparral; Scrub
A1	Lupinus affinis	lupine	Misc. habitats
A1	Lupinus bicolor var. tridentatus (var. umbellatus is more common)	miniature lupine	Misc. habitats
A1	Lupinus concinnus	Bajada lupine	Burns; Gravel; Sand and Sandstone
*A1x	MADIA RADIATA (historical-1941)	showy madia	Alkali areas; Grassland
*A1	MALACOTHAMNUS HALLII (M. fasciculatus in Jepson Manual)	Hall's bush mallow	Chaparral
A1x	Malacothrix californica (historical-	California malacothrix	Grassland; Scrub; Sand or



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	1895)		Sandstone; Misc. habitats
A1	Malacothrix clevelandii	Cleveland's malacothrix	Burns; Chaparral
A1	Malacothrix coulteri	snake's-head	Grassland; Scrub; Sand or Sandstone
A2	Malacothrix floccifera	woolly malacothrix	Burns; Chaparral; Woodland; Misc. habitats
A1x	Meconella linearis (historical-1983 but not seen since)	narrow-leaved meconella	Dry Washes; Grassland; Sand or Sandstone
A2	Mentzelia affinis	Hydra stick-leaf	Grassland; Sand or Sandstone; Woodland
A1	Mentzelia dispersa	Nada stick-leaf	Rock, Tallus or Scree; Sand or Sandstone areas
A1x	Micropus californicus var. subvestitus (historical-1930) (var. californicus is more common)	slender cottonweed	Dry Open Slopes; Misc. habitats
A2	Microseris campestris	San Joaquin microseris	Grassland; Vernal Pools
A2	Microseris elegans	elegant microseris	Grassland; Vernal Pools
*A1	MICROSERIS SYLVATICA	sylvan microseris	Grassland; Woodland
A1	Mimulus latidens	broad-toothed monkeyflower	Vernal Pools; Misc. Wetlands
*A1	MYOSURUS MINIMUS SSP. APUS	little mousetail	Alkali areas; Freshwater Marsh; Vernal Pool
A2	Myosurus minimus ssp. minimus	common mouse-tail	Freshwater Marsh; Vernal Pools
A2	Myosurus sessilis	sessile mouse-tail	Grassland; Vernal Pools
A2	Navarretia atractyloides	holly-leaved navarretia	Rock, Tallus or Scree; Sand or Sandstone areas
*A1	NAVARRETIA COTULIFOLIA	cotula navarretia	Misc. Wetlands
A2	Navarretia nigelliformis ssp. nigelliformis	adobe navarretia	Vernal Pools
A1	Navarretia viscidula	sticky navarretia	Freshwater Marsh; Grassland; Sand or Sandstone; Vernal Pools
A2	Orobanche bulbosa	bulbous broom-rape	Chaparral
A1	Orobanche californica ssp. jepsonii	Jepson broom-rape	Rock, Tallus or Scree; Sand or Sandstone areas
A2	Orobanche vallicola	California broom-rape	Forest; Woodland
A1	Parietaria hespera var. californica	California pellitory	Chaparral; Rock, Tallus or Scree; Sand or Sandstone; Woodland
A1	Pectocarya penicillata	winged pectocarya	Misc. habitats
A1	Pediomelum californicum	Indian breadroot	Chaparral; Woodland
A2	Penstemon centranthifolius	scarlet bugler	Chaparral; Sand or Sandstone; Woodland
A2	Penstemon heterophyllus var. purdyi	foothill penstemon	Chaparral; Forest; Grassland
A1	Pentachaeta alsinoides	tiny pentachaeta	Grassland
A1	Pentachaeta exilis ssp. exilis	meager pentachaeta	Grassland
A2	Phacelia breweri	Brewer's phacelia	Chaparral; Rock, Tallus or Scree; Woodland
A2	Phacelia divaricata	divaricate phacelia	Chaparral; Grassland; Woodland
A1	Phacelia douglasii	Douglas' phacelia	Sand or Sandstone
A2	Phacelia tanacetifolia	tansy phacelia	Gravel; Sand or Sandstone
A2	Pilularia Americana	pillwort	Vernal Pools; Misc. Wetlands
A2	Pinus coulteri	Coulter pine	Chaparral; Forest
A1	Plagiobothrys infectivus	dye popcornflower	Misc. habitats
A2	Plagiobothrys leptocladus	alkali plagiobothrys	Alkali areas
A2	Plagiobothrys tenellus	slender popcornflower	Misc. habitats



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A2	<i>Plectritis ciliosa</i> ssp. <i>insignis</i>	long-spurred plectritis	Grassland; Woodland
A1	<i>Pogogyne zizyphoroides</i>	Sacramento pogogyne	Vernal Pools
A1	<i>Quercus agrifolia</i> X <i>wislizeni</i>	coast live oak X interior live oak	Scrub; Woodland
A1	<i>Quercus</i> X <i>joloensis</i>	blue oak X valley oak	Forest; Woodland
A2	<i>Ranunculus occidentalis</i>	western buttercup	Grassland; Woodland
A1	<i>Sagittaria latifolia</i>	arrowhead	Freshwater Marsh
A2	<i>Salicornia subterminalis</i>	Parish's glasswort	Alkali areas; Salt Marsh
A1x	<i>Salvia carduacea</i> (historical-1946)	thistle sage	Gravel; Sand or Sandstone
A1	<i>Scirpus fluviatilis</i>	river bulrush	Misc. Wetlands
A1	<i>Scribneria bolanderi</i>	Scribner's grass	Misc. habitats
*A1	SENECIO APHANACTIS	rayless ragwort	Alkali areas; Grassland
A2	<i>Senecio flaccidus</i> var. <i>douglasii</i>	shrubby butterweed	Dry Washes; Rock, Tallus or Scree; Sand or Sandstone
A1	<i>Stylocline gnaphaloides</i>	nest-straw	Sand or Sandstone; Misc. habitats
A2	<i>Thysanocarpus radians</i>	ribbed fringe pod	Misc. habitats
A1	<i>Trifolium gambelii</i> (Included within <i>T. fucatum</i> in Jepson Manual)	bull clover	Alkali areas; Grassland; Serpentine; Misc. Wetlands
A2	<i>Tropidocarpum gracile</i>	slender tropidocarpum	Alkali areas; Grassland
A2	<i>Vicia hassei</i>	slender vetch	Grassland; Scrub
A2	<i>Vulpia microstachys</i> var. <i>confusa</i> (var. <i>pauciflora</i> is more common)	hairy-leaved fescue	Dry Open Slopes; Grassland; Sand or Sandstone; Scrub
A2	<i>Vulpia microstachys</i> var. <i>microstachys</i> (var. <i>pauciflora</i> is more common)	Nuttall's fescue	Dry Open Slopes; Rock, Tallus or Scree; Sand or Sandstone; Serpentine; Woodland
A2	<i>Vulpia octoflora</i> var. <i>hirtella</i>	slender fescue	Burns; Sand or Sandstone; Misc. habitats

**NOTE:** Some of these plant species are only known from the area historically and have not been reported for quite some time. It should not necessarily be assumed, however, that they no longer exist here as they may be on private land or hard-to-reach areas where surveys have not been done for a long time, if ever. In recent years, several plant species have been rediscovered in the East Bay that had not been reported in the area since the late 1800's or early 1900's.

Dates indicated for historical species refer to the last known record in the Alameda-Contra Costa Counties area, not necessarily the area described in the title.

## **Explanation of Ranks**

**\*A1 or \*A2:** Species in Alameda and Contra Costa counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

**A1x:** Species previously known from Alameda or Contra Costa Counties, but now presumed extirpated here.

**A1:** Species currently known from 2 or less regions in Alameda and Contra Costa Counties.

**A2:** Species currently known from 3 to 5 regions in the two counties, or, if more, meeting other important criteria such as small populations, stressed or declining populations, small geographical range, limited or threatened habitat, etc.

**A1?:** Species with taxonomic or distribution problems that make it unclear if they actually occur here.



# California Native Plant Society

## APPENDIX 2: CEQA-Protected Rare and Unusual Plants of Horse Valley 2006 (Statewide Rare Plants in Upper Case)

Rank in East Bay	Species	Common Name	Habitat
A2	<i>Atriplex argentea</i> var. <i>mohavensis</i>	silverscale	Alkali areas
*A2	ATRIPLEX CORONATA VAR. CORONATA	crownscale	Alkali areas; Grassland; Vernal Pools
*A2	BLEPHARIZONIA PLUMOSA	Big tarplant	Grassland; Scrub
A1	<i>Calycadenia multiglandulosa</i>	sticky calycadenia	Rock, Tallus or Scree; Scrub
A2	<i>Downingia insignis</i>	cupped downingia	Vernal Pools
A2	<i>Eschscholzia caespitosa</i>	tufted poppy	Chaparral
A2	<i>Navarretia atractyloides</i>	holly-leaved navarretia	Rock, Tallus or Scree; Sand or Sandstone areas
A2	<i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i>	adobe navarretia	Vernal Pools
A1	<i>Plagiobothrys infectivus</i>	dye popcornflower	Misc. habitats
A2	<i>Plectritis ciliosa</i> ssp. <i>insignis</i>	long-spurred plectritis	Grassland; Woodland

### Explanation of Ranks

**\*A1 or \*A2:** Species in Alameda and Contra Costa counties listed as rare, threatened or endangered statewide by federal or state agencies or by the state level of CNPS.

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# California Native Plant Society

## APPENDIX 3: Plant Community Associations Recognized by CNDDDB (2003)<sup>6</sup> with Potential to Occur in the Proposed Roddy Ranch Annexation\*

### Scrub and Chaparral

- Great Valley Seepweed Scrub
- Great Valley Iodine Scrub
- Chamise-Black Sage

### Herbaceous

- Creeping Ryegrass Grassland
- Foothill Needlegrass
- Nodding Needlegrass
- Purple Needlegrass
- One-sided Bluegrass
- Saltgrass-Iodinebush
- Baltic Rush-Saltgrass
- Alkali Saltgrass
- Wildflower Field (various associations)
- Coyote Thistle-Alkali Heath [Claypan Vernal] Pools
- Fremont Goldfields-Saltgrass [Claypan Vernal] Pools
- Spikerush-Water Pygmy
- Pickleweed Wetland (various associations)
- Ditch-grass Wetland

### Riparian

- Fremont Cottonwood Forests and Woodlands (various associations)
- Black Willow Riparian Forests and Woodlands (various associations)
- Arroyo Willow Riparian Forests and Woodlands (various associations)
- Red Willow Riparian Forests (various associations)
- Mixed Willow Riparian Forests and Woodlands
- Desert Olive
- Mulefat Scrub

### Woodlands and Forests

- Blue Oak-Valley Oak-Coast Live Oak/Grass
- Valley Oak Forests and Woodlands (associations)

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\* Other plant associations on the list (CNDDDB 2003) may also occur at the project area. In addition, other associations in the project area may be worthy of protection based on rarity and/or endangerment and/or for habitat value and biodiversity. Finally, many additional associations have not been described and recognized and may be worthy of protection.

