Appendix E.

Vascular Plant List for City of Banning, Liberty XXIII Renewable Energy Power Plant Project

Vascular Plant List for City of Banning, Liberty XXIII Renewable Energy Power Plant Project

A = Smith Creek wash scrub and terraces
B = California buckwheat succession
C = Catclaw alluvial fan scrub
D = disturbed open areas
E = east of ponds and misc. peripheral areas
F = burn scrub succession on slopes to east

Scientific names mostly follow: The Jepson Manual, (Hickman, 1993), Flora of Southern CA (Munz, 1974)
* - exotic plant taxon,
+ - incidental or peripheral plant sp.

Scientific Name	Common Name	Comments	A	B	C	D	E	F
AMARANTHACEAE	Amaranth Family							
*Amaranthus sp.**	amaranth	exotic, annual, likely *A. albus*, scattered living plants throughout the site	X			X	X	
ASTERACEAE	Composite Family							
Ambrosia acanthicarpa	Annual bur-sage	native, weedy annual, living plants throughout the site	X	X	X	X	X	X
Chaenactis glabriscula	Yellow pincushion	native, annual, scattered throughout the site	X	X	X	X		
Chaenactis sp. (ca. *xantiana*)	Xantus pincushion	native, annual, uncommon in the NE corner	X					
Cnicus benedictus	Blessed thistle	exotic, annual, rare along Smith creek	X					
Corethrogyne (Lessingia) filaginifolia	Cudweed aster	native, perennial		X	X			
Encelia actoni	Acton encelia	native, shrub, uncommon at NE corner of site	X					
Ericameria cf. pinifolia+	Pine-leaved goldenbush	native, shrub						X
Filago californica	Herba impia	native, annual, frequent throughout the site	X	X	X	X	X	
Filago depressa	Herba impia	native, annual, occasional in sandy, stony or flat areas	X		X	X		
Filago gallica	Herba impia	exotic, annual, uncommon in the dump and pit areas				X	X	
Gutierrezia cf. sarothrae/californica	Snakeweed	native, subshrub, uncommon, scattered throughout site, most common along wash	X		X		X	X
Helianthus annuus	Sunflower	native, annual, frequent in 2008				X	X	
Heterotheca grandiflora	Telegraph weed	native, biennial					X	
Hypochaeris glabrata	Cat's ears	exotic, annual, uncommon					X	
Lasthenia californica	Goldfields	native, annual, uncommon in the north edge of the parcel		X	X	X	X	
Lasthenia coronaria	Goldfields	native, annual, uncommon throughout the parcel	X		X	X		
Lepidospartum squamatum	Scalebroom	native, shrub, flowering plants common to dominant along Smith Creek, rare elsewhere	X	X			X	

Scientific Name	Common Name	Comments	A	B	C	D	E	F
Matricaria (Chamomilla) sauveolens	Pineapple weed	exotic, annual, occasional throughout the site	X	X		X	X	
Psuedognaphalium (Gnaphalium) canescens cf. var. beneolens	Cudweed	native, perennial, rare			X			
Senecio vulgaris	Groundsel	exotic, annual, occasional				X	X	
Soliva sessilis	Soliva	exotic, annual, occasional				X	X	
Sonchus oleraceus	Sow-thistle	exotic, annual, occasional				X	X	
Stephanomeria exigua	Wire-lettuce	native, annual, occasional	X	X	X	X		
Stephanomeria pauciflora	Wire-lettuce	native, perennial or subshrub, frequent in 2008	X	X	X	X	X	X
Stylocline gnaphalioides	Nest straw	native, annual, occasional	X	X	X	X		
Taraxacum officinale	Dandelion	exotic, annual				X		
Uropappus lindleyi	Silver puffs	native, annual, occasional	X	X	X			
BIGNONIACEAE	Bignonia Family							
Chilopsis linearis	Desert willow	native, tall shrub or small tree, common to dominant along Smith Creek	X					
BORAGINACEAE	Borage Family							
Amsinckia intermedia	Common fiddleneck	native, annual, – abundant in 2008 throughout the site.	X	X	X		X	X
Cryptantha intermedia	Common cryptantha	native, annual, – abundant in 2008 throughout the site.	X	X	X	X	X	
Pectocarya linearis	Comb-bur	native, annual, common throughout the site	X	X	X	X	X	
Pectocarya penicillata	Comb-bur	native, annual, occasional			X	X		
Plagiobothrys arizonicus	Arizona popcorn flower	native, annual, – occasional in 2008 throughout the site.	X			X		
Plagiobothrys canescens	Valley popcorn flower	native, annual, frequent in 2008 throughout the site.	X	X	X	X		
BRASSICACEAE	Composite Family							
*Brassica tournefortii**	Sahara mustard	exotic, annual, occasional to frequent	X		X	X	X	X
*Capsella bursa-pastoris**	Shepard's purse	exotic, annual, uncommon,				X		
Lepidium sp.(cf. *strictum)*	pepper grass	exotic, annual, uncommon				X		
Hirschfeldia incana	Hoary mustard	exotic, biennial, widespread throughout the site, but not dense	X	X	X	X	X	
Sisymbrium altissimum	Tumble mustard	exotic, annual, occasional to frequent	X			X		
Sisymbrium irio	London rocket	exotic, annual, occasional	X			X	X	
Sisymbrium orientale	Oriental rocket	exotic, annual, occasional	X	X		X		

Scientific Name	Common Name	Comments	A	B	C	D	E	F
CACTACEAE	Cactus Family							
Opuntia basilaris var. basilaris	Beavertail	native, succulent subshrub, occasional in central to NE part of site	X	X	X			
Opuntia phaecantha	Common prickly pear	native, succulent subshrub, uncommon along Smith Creek, rare elsewhere	X		X			
Trichocereus sp.	Cereus cactus	exotic, columnar succulent, cluster of plants, apparently naturalized, at N edge of old borrow pit		X				
CARYOPHYLLACEAE	Pink Family							
Spergularia marina	Sand spurry	native, annual/perennial, uncommon				X		
Stellaria media	Chickweed	exotic, annual, uncommon				X		
CAPRIFOLIACEAE	Honeysuckle Family							
Sambucus mexicana	Blue elderberry	native, tall shrub or small tree, occasional along Smith Creek, especially at SW edge of site	X	X			X	
CHENOPODIACEAE	Goosefoot Family							
Atriplex canescens ssp. canescens	Four-wing saltbush	native, shrub, occasional, plants grazed down to woody trunks	X				X	
Chenopodium album	goosefoot	exotic, annual, occasional						
Salsola tragus	Russian thistle	exotic?, annual, occasional living plants scattered throughout site		X	X	X	X	
CUCURBITACEAE	Cucumber Family							
Cucurbita foetidissima	Calabazilla	native, perennial/vine, uncommon, a few plants in old borrow pit				X		
Cucurbita palmata	Coyote melon	native, perennial/vine, uncommon, in disturbed areas or along Smith Creek	X			X	X	
EPHEDRACEAE	Ephedra Family							
Ephedra californica	California ephedra	native, shrub, occasional along Smith Creek, especially at SW edge of site	X				X	
EUPHORBIACEAE	Spurge Family							
Croton californicus	California croton	native, perennial or subshrub, common in disturbed or sandy areas throughout the site	X	X	X	X	X	X
Eremocarpus setigerus	Turkey mullein	native, annual, common in disturbed or sandy areas throughout the site	X	X	X	X	X	X
FABACEAE	Legume Family							
Acacia greggii	Catclaw	native, shrub, common in central to NE part of site and along Smith Creek	X	X	X		X	
Astragalus pomonensis/ or douglasii	Pomona milk-vetch	native, perennial, need fls, spring leaves for ID, uncommon, mostly along Smith Creek and in disturbed areas, rare in 2008	X				X	
Lotus scoparius var. scoparius	California broom	native, subshrub, occasional, plants heavily grazed, mostly dead, scattered	X	X	X		X	X

Scientific Name	Common Name	Comments	A	B	C	D	E	F
		throughout the site, occasional in 2008						
Lotus strigosus	Sand lotus	native, annual, occasional throughout the site	X	X	X	X		
Lupinus bicolor	Bicolored lupine	native, annual, – abundant in 2008 throughout the site.	X	X	X	X	X	
Lupinus concinnus var. orcuttii	Bajada lupine	native, annual, uncommon	X					
Lupinus sparsiflorus	Coulter lupine	native, annual, locally dense along Smith Creek	X					
Medicago	Bur-clover	exotic, annual, occasional				X	X	
Melilotus sp.	Sour clover	exotic, annual, occasional	X			X	X	
*Parkinsonia aculeata**	Mexican palo verde	exotic, tree, occasional, plants scattered throughout site, frequent along Smith Creek	X	X	X	X	X	
GERANIACEAE	Geranium Family							
*Erodium botrys**	Long-beaked filaree	exotic, low annual, uncommon, a few skeletons in upland areas, abundant in disturbed and rocky areas in 2008		X	X	X	X	
*Erodium brachycarpum**	filaree	exotic, annual, frequent in disturbed areas and flats		X	X	X	X	
*Erodium cicutarium**	Red-stemmed filaree	exotic, low annual, abundant, skeletons common, especially in disturbed areas of site, most numerous living annual of 2007 at site, abundant throughout the site, but lower annual cover rank in 2008	X	X	X	X	X	X
*Erodium moschatum**	filaree	exotic, annual, uncommon					X	
HYDROPHYLLACEAE	Waterleaf Family							
Eriodictyon crassifolium	Thickleaf yerba santa	native, tall shrub, plants appear intermediate between *var. crassifolium* and *var. nigrescens*, occasional along Smith Creek, common succession plant of burned slopes to S and E	X					X
Eucrypta chrysanthemifolia var. chrysanthemifolia	Eucrypta	native, annual, rare	X					
Phacelia ca. brachyloba	Phacelia	native, annual, occasional	X			X		
Phacelia distans	Blue phacelia	native, annual, occasional		X	X			
Phacelia ramosissima+	Phacelia	native, perennial, uncommon on burn slopes among boulders						X
LAMIACEAE	Mint Family							
Lamium amplexicaule	Henbit	native, annual-biennial, uncommon				X	X	
Salvia apiana+	White sage	native, annual, common on burn slopes						X
Salvia columbariae	Chia	native, annual, uncommon except at NE edge of parcel	X	X	X	X		

Scientific Name	Common Name	Comments	A	B	C	D	E	F
LILIACEAE	Lily Family							
Dichelostemma capitatum	Blue dicks	native, geophyte perennial, frequent but not numerous	X	X	X	X	X	
MALVACEAE	Mallow Family							
Malva parviflora	Field mallow	exotic, annual, occasional				X	X	
MARTYNIACEAE	Unicorn-plant Family							
Proboscidea althaeifolia	Desert Unicorn Plant	native, summer annual/perennial, uncommon along Smith Creek, no living plants – not detected in 2008	X					
ONAGRACEAE	Evening Primrose Family							
Camissonia pallida ssp. pallida	Evening primrose	native, annual, a few living biennial sterile plants at NE of site, along Smith Creek in 2007 – abundant in 2008 throughout the site.	X					
Camissonia sp. (ca. *intermedia*)	Evening primrose	native, annual, rare				X	X	
Camissonia strigulosa	Evening primrose	native, annual, – abundant in 2008 throughout the site.	X					
PLANTAGINACEAE	Plantain Family							
Plantago ovata "coastal form"	Wooly plantain	native ecotype or exotic?, annual, uncommon	X		X			
POACEAE	Grass Family							
Avena barbata	Wild oat	exotic, annual, uncommon				X	X	
Bromus sp. ca. *arenarius* or *trinii**	chess	exotic, annual, – rare					X	
*Bromus diandrus**	Ripgut	exotic, annual, skeletons frequent throughout site, – abundant in 2008 throughout the site, abundant on burn slopes	X	X	X	X	X	X
*Bromus madritensis ssp. rubens**	Foxtail chess	exotic, annual, – common in 2008 throughout the site.	X	X	X	X	X	X
*Bromus tectorum**	Downy chess	exotic, annual, – occasional in 2008 throughout the site.	X	X	X	X	X	
Hordeum murinum ssp. leporinum	Wild barley	exotic, annual, abundant throughout the site	X	X	X	X	X	
Lamarkia aurea	Goldentop	exotic, annual, – occasional				X	X	
*Schismus barbatus**	Split grass	exotic, annual, skeletons frequent throughout site	X	X	X	X	X	X
Poa annua	Annual bluegrass	native, annual, skeletons occasional, mostly in NE part of site	X	X	X		X	
Vulpia octoflora	Six-weeks fescue	exotic, annual, – uncommon in 2008					X	

Scientific Name	Common Name	Comments	A	B	C	D	E	F
POLEMONIACEAE	Phlox Family							
Eriastrum densifolium ssp.. austromontanum	Woolly-star	native, perennial, plants uncommon on sandy banks of Smith Creek, herbage semi-glabrous, fls < 25mm -not var. *sanctorum*	X	X		X		X
Eriastrum sp.(ca. sapphirinum ssp. dasyanthum)	Sapphire woolly-star	native, annual, occasional throughout site, seems like *E. sapphirinum*	X	X		X	X	
Gilia angelensis	Angeles gilia	native, annual, occasional throughout the site in sandy areas	X	X	X	X	X	
Gilia diegensis	San Diego gilia	native, annual, NE edge of the parcel	X					
POLYGONACEAE	Buckwheat Family							
Eriogonum fasciculatum var. foliolosum	California buckwheat	native, low shrub, abundant in upland areas throughout site, dense pure stands on stabilized terraces	X	X	X	X	X	X
Eriogonum gracile var. gracile	Slender buckwheat	native, annual, – common in 2008 throughout the site.	X	X	X	X	X	
Eriogonum gracile var. incultum	Slender buckwheat	native, annual, – uncommon in 2008 NE end of parcel	X					
Eriogonum sp.	Buckwheat	native, annual, perhaps same as *gracile-but leaves round*, needs ID work	X	X		X		
Rumex hymenosepalus	Desert wild rhubarb	native, perennial, plants uncommon				X		
Polygonum ca. arenastrum	Knotweed	native, annual, perhaps same as *gracile*, needs ID work		X	X	X	X	
PORTULACEAE	Purslane Family							
Calandrinia ciliata	Red maids	native, annual, – uncommon, in Smith Creek	X					
Calyptridium monandrum	Sand cress	native, annual, – uncommon, in Smith Creek	X					
RHAMNACEAE	Buckthorn Family							
Ziziphus parryi+	Lotebush	native, shrub, occasional on burn slope to E						X
ROSACEAE	Rose Family							
Adenostoma fasciculatum+	Chamise	native, tall shrub, common on burn slope to E						X
Prunus ilicifolia+	Holly-leaf cherry	native, tall shrub/tree, frequent on burn slope to E						X
SALICACEAE	Willow Family							
Populus fremontii+	Fremont cottonwood	native, tree, rare, a single tree in Smith Creek at SW edge of site	X					
Salix goodingii+	Gooding's black willow	native, tree, rare, a single tree in Smith Creek at SW edge of site	X					
SCROPHULARIACEAE	Figwort Family							
Scrophularia californica+	California bee plant	native, perennial, frequent on burn slope to E, among boulders						X

Scientific Name	Common Name	Comments	A	B	C	D	E	F
SIMAROUBACEAE	Quassia Family							
*Ailanthus altissima**	Tree of Heaven	exotic, tree, uncommon, scattered in Smith Creek	X					
SOLANACEAE	Nightshade Family							
Datura wrightii	Sacred datura	native, herbaceous perennial, occasional along Smith Creek and in disturbed areas throughout site	X	X	X	X	X	X
*Nicotiana glauca**	Tree tobacco	exotic, tall shrub, uncommon along Smith Creek and in disturbed areas throughout site	X			X	X	