

ATTACHMENT F2

Characterization of Habitats
Chatsworth Reservoir Mitigation Planning Area

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Re: Site Visit – Chatsworth Reservoir Wetland/Riparian Restoration Plan

This memorandum serves as an addendum as part of the Chatsworth Reservoir Wetland/Riparian Restoration Plan. A site survey was done on 9 February 2006 of the dominant vegetation and flora in support of this Concept Plan.

The information below detailed in this preliminary site survey report: (1) characterizes the vegetation and flora of existing wetland/riparian habitats, (2) characterizes the vegetation and flora of associated wetland and contiguous upland sites that could serve as prime areas for enhancement or creation of wetland/riparian habitats, (3) notes other surrounding natural habitats that could be maintained or enhanced to provide native plants and animals to thrive and act as buffer zones for wetland/riparian habitats, and (4) provides some recommendation in furtherance of the Concept Plan.

Habitats and vegetation were characterized by walking boundaries using a one-foot interval topographic map downloaded into a handheld Trimble GPS module. Species identification of dominant and common plants within each of the habitats was done following the nomenclature in the *Jepson Manual: Higher Plants of California* (UC Press, Los Angeles, CA., 1993). It should be noted that not all taxa could be identified to species because of the earliness of the flowering season; however, determinations were made on many seedlings and necrotic plants when abundant and diagnostic material was available. No voucher specimens were made for this survey.

Based on the site survey and using topography, soils, and hydrology, five principal habitats were circumscribed at the site, and two other noteworthy habitats are noted below that occur in the surrounding environs.

The principal habitats are:

1. Riparian wetland
2. Willow/Mulefat wetland
3. Seasonal wetland
4. Upland habitat
5. Valley Grassland habitat

The secondary habitats are:

1. Oak savanna and woodland
2. Coastal sage scrub

RIPARIAN WETLAND

This habitat is characterized by a channel-like streambed with dense, more or less continuous, stands of streambank indicator species of willows (*Salix* spp.), cottonwoods (*Populus fremontii*), sycamore (*Platanus racemosa*), and mugwort (*Artemisia douglasiana*). The riparian wetland occurs along Woolsey Canyon Creek, Box Canyon Creek, and the artificial channel that courses west-northwest immediately west of the reservoir berm.

WILLOW/MULEFAT WETLAND

This habitat is characterized by low-lying, soggy, alluvial flats that are seasonally wet, with dense to scattered stands of willows (*Salix* spp.), mulefat (*Baccharis salicifolia*), and tall flatsedge (*Cyperus eragrostis*). Some scattered individuals of cottonwoods (*P. fremontii*), salt cedar (*Tamarix ramosissima*), and cattails (*Typha* sp.) also occur here. The willow/mulefat wetland occurs principally in the central, low-lying area designated as Wetland 2.

SEASONAL WETLAND

This habitat is characterized by low-lying, seasonally saturated, but intermittently dry, alluvial, alkaline flats as evidenced by thick salt accretions on its surface. There is a dense to patchy distribution of low annual and perennial herbaceous facultative wetland and upland species such as saltgrass (*Distichlis spicata*), spikeweed (*Centromadia* sp.), brass buttons (*Cotula coronopifolia*), saltbush (*Atriplex* sp.), tall flatsedge (*C. eragrostis*), cocklebur (*Xanthium strumarium*), and curly dock (*Rumex crispus*). The seasonal wetland occurs in the area immediately surrounding the willow/mulefat wetland and forms a mosaic-like distributional pattern at its interface.

UPLAND HABITAT

This habitat is characterized by a subtle one to two foot uplift that has relatively dry, clay loam soils, but occasionally may be inundated during heavy precipitation. The upland habitat contains a number of annual introduced grass species (e.g. *Bromus hordaceus*, *B. madritensis* ssp. *rubens*, *Vulpia octoflora*, *Hordeum* sp.), and other non-native species such as tocalote (*Centaurea* aff. *melitensis*), cranesbill (*Erodium cicutarium*), sow thistle (*Sonchus oleraceus*), mustard (*Hirschfeldia incana*), and yellow sweetclover (*Melilotus officinalis*). Two native species were characteristic of this habitat; namely, coyote brush (*Baccharis pilularis* ssp. *consanguinea*) and ragweed (*Ambrosia psilostachya*). The occurrence of ragweed often indicated a clear demarcation between this habitat and its interface with the seasonal wetland habitat that it surrounds. Its outer edge extends variably into the valley grassland habitat.

VALLEY GRASSLAND

This habitat is characterized by dense clay soils that are extensively distributed away from the various wetland and upland sites. Its primary indicator species are annual, non-native grasses dominated by wild oat (*Avena fatua*) and barley (*Hordeum* sp.), among others, but there are scattered patches of herbaceous annuals and perennials such as the sunflower (*Helianthus annuus*), deerweed (*Lotus scoparius*), and telegraph weed (*Heterotheca grandiflora*). This area was not closely surveyed, but is a significant areal portion of the site that, in part, could contribute to expansion of the existing wetland habitats through gentle grading and species introduction (see below).

SECONDARY HABITATS AND THE POTENTIAL SIGNIFICANCE FOR RESTORATION AND ENHANCEMENT.

Although the secondary habitats were not surveyed during this site visit, they are important to consider as part of the restoration plan as they contribute to the species, vegetation, and habitat diversity of the site for both plants and animals.

The oak savanna and woodland habitats have at least two species of oaks. These are the coast live oak (*Quercus agrifolia*) and valley oak (*Q. lobata*). It would not be surprising to find scrub and Engelmann oaks onsite or in the vicinity, particularly in the rocky upland outcrops. Introduction of these latter species, if deemed appropriate, would enhance the diversity of species in this area greatly.

The rocky outcrops that occur in several nearby uplifted areas also provide habitat for coastal sgaie scrub species (e.g. *Salvia* shrubs and coyote brush) and associated animals. These areas are potential habitat for rare and endangered species that are known to occur in the vicinity. These are the Santa Susana tarplant (*Deinandra minthornii*), the many-stemmed dudleya (*Dudleya multicaulis*), and the San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*).

RECOMMENDATIONS FOR ENHANCEMENT OF EXISTING HABITATS.

WOOLSEY CANYON CREEK

Woolsey Canyon Creek exhibits an excellent example of riparian woodland vegetation. It has dense, venerable stands of willows, cottonwoods, sycamores, and understory plants (e.g. mugwort, phacelias and *Eucrypta chrysanthemifolia*) that would thrive and expand if the northwestern edge that abuts the grassland community were to be grade and introduced species (e.g. poison hemlock, milk thistle, and sow thistle) were removed.

BOX CANYON CREEK

Box Canyon Creek also has excellent examples of riparian vegetation, particularly where it intersects with Woolsey Canyon Creek. There is an opportunity to expand the riparian woodland on both sides of the creek through modification of the surrounding grassland community.

CONFLUENCE OF WOOLSEY CANYON AND BOX CANYON CREEKS

As these two creeks become confluent and course southwesterly toward Channel 1, they encounter the large berm on the western edge and flow is directed into an artificial channel (Plate 1). Removal of the berm at its northwestern end, the removal of some concrete in Channel 1, and engineered grading could direct flow toward, and into, the existing willow/mulefat wetland. It could be anticipated that the consequences of these actions would allow a natural succession of riparian woodland into the willow/mulefat wetland. These actions, coupled with modifications in the surrounding grassland, upland habitat, and seasonal wetland, would result in a dramatic expansion of the willow/mulefat wetland farther southward and increase its breadth throughout the site.

CONCLUSIONS

The Chatsworth Reservoir site provides a remarkable opportunity to restore and enhance wetlands and surrounding vegetation. The ability to effectively augment existing riparian and wetlands, and increase the environmental resources within this area, provides a unique benefit for the entire community.