

## Memorandum

TO: Mr. John L. Allday  
FROM: PCR Services Corporation  
RE: RESULTS OF A GENERAL BIOLOGICAL ASSESSMENT AND SENSITIVE PLANT SURVEYS FOR THE APPROXIMATELY 290-ACRE BOUQUET CANYON PROJECT SITE, UNINCORPORATED LOS ANGELES COUNTY, CALIFORNIA

DATE: August 15, 2006

This memo presents the findings of a general biological assessment and sensitive plant surveys for the Bouquet Canyon Project Site (the "Site") (APNs 3206-003-001, -007, and -008) in unincorporated Los Angeles County, California. PCR Services Corporation (PCR) biologists conducted surveys within the approximately 290-acre Site to assess the biological resources present and identify any potential constraints to the proposed project. The general biological assessment consists of a literature review, a field investigation, and included sensitive plant surveys to determine the presence or absence of sensitive plant species within the Site.

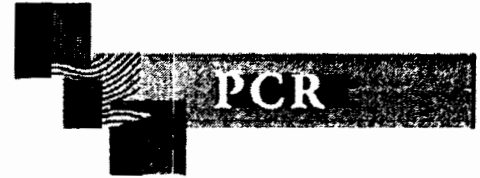
### PROJECT SITE

The Site is located west of State Highway 14 and the City of Palmdale in unincorporated Los Angeles County, California (Figure 1, *Regional Map*, attached). Specifically, the Site is located south of Elizabeth Lake Road and west of Bouquet Canyon Road. Topography within the Site is hilly, and the elevation ranges from approximately 3,100 feet above mean sea level (MSL) in the northeastern portion of the Site to approximately 3,640 feet above MSL in the southwestern portion of the Site. The Site can be found on the U.S. Geological Survey (USGS) 7.5-minute Sleepy Valley topographic quadrangle map, <sup>1</sup> Section 20, T. 6 N., R. 13 W. (Figure 2, *Vicinity Map*, attached). The majority of the approximately 290-acre Site consists of undisturbed open space with several large trails crossing through the Site and Bouquet Canyon Road running along the eastern portion of the Site. Surrounding land uses include a rural residential area to the north and open space to the east, south, and west with a few scattered rural residences to the south and west of the Site.

### METHODOLOGY

PCR reviewed all available relevant data on sensitive habitats and species distribution to determine which sensitive species have the potential for occurrence on site. Sources reviewed included the California Natural Diversity Database (CNDDB)<sup>2</sup>, the California Department of Fish and Game (CDFG)<sup>3,4</sup>, and the California Native Plant Society (CNPS).<sup>5</sup>

<sup>1</sup> United States Geological Survey. 1958. *Sleepy Valley, California 7.5-minute Topographical Quadrangle*. Photo revised 1974.  
<sup>2</sup> California Department of Fish and Game (CDFG). 2006. *California Natural Diversity Data Base Inventory for USGS 7.5-minute quadrangles for Sleepy Valley*. June.  
<sup>3</sup> CDFG. May 2006. *Department of Fish and Game. Natural Heritage Division. State and Federally Listed Endangered, Threatened, and Rare Plants and California*. Sacramento. 14 pgs.



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The general biological assessment and sensitive plant surveys were conducted by PCR biologists Robert Freese and Maile Tanaka on May 17, June 7, and June 30, 2006. Sensitive plant surveys encompassed the flowering periods of all endangered, threatened, and sensitive plants potentially occurring on site. Plant communities were mapped directly onto a 1" = 400' scale aerial photograph while in the field. An investigation of the extent and distribution of U.S. Army Corps of Engineers (ACOE) jurisdictional "waters of the U.S.," Regional Water Quality Control Board (RWQCB) jurisdictional "waters of the State," and CDFG jurisdictional streambed and associated riparian habitat was conducted on July 10 through 12, 2006 by PCR biologists Richard Haywood and Linda Robb.

### EXISTING CONDITIONS

#### Vegetation

A brief summary of each vegetation community observed on site is discussed below. Vegetation community names and hierarchical structure follows the CDFG *List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base*.<sup>6</sup> Vegetation community descriptions are based on PCR findings and descriptions contained in Sawyer and Keeler-Wolfe's *A Manual of California Vegetation* and Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California*.<sup>7,8</sup> Plant species nomenclature follows that of Hickman's *The Jepson Manual: Higher Plants of California*.<sup>9</sup> Scientific names are employed upon initial mention of each species; common names are employed thereafter. All plant communities mapped on site are included in Figure 3, *Plant Communities*, attached. Representative photographs of the Site are included in Figure 4, *Site Photographs I* and Figure 5, *Site Photographs II*, attached.

**Chamise chaparral** consists of a low growing chaparral dominated by chamise (*Adenostoma fasciculatum*). This community often occurs on xeric slopes and ridges and is adapted to frequent fires by crown sprouting. Other plant species observed included California buckwheat (*Eriogonum fasciculatum*), stephanomeria (*Stephanomeria* sp.), chia (*Salvia columbariae*), keckiella (*Keckiella* sp.), and

<sup>4</sup> CDFG. May 2006. Department of Fish and Game. *Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List. Biannual publication. 97 pgs.*

<sup>5</sup> CNPS. 2004. *Inventory of Rare and Endangered Plants for USGS 7.5-minute quadrangles for Sleepy Valley and Ritter Ridge. December*

<sup>6</sup> State of California Resources Agency. Department of Fish and Game. September 2003. *List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database. Wildlife and Habitat Data Analysis Branch. The Vegetation Classification and Mapping Program. Sacramento.*

<sup>7</sup> Sawyer, J. O. and T. Keeler-Wolf. 1995. *A Manual of California Vegetation. Sacramento: California Native Plant Society.*

<sup>8</sup> Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California Resources Agency. Department of Fish and Game. Non-Game Heritage Program. Sacramento, California.*

<sup>9</sup> Hickman, J. C. 1993. *The Jepson Manual: Higher Plants of California. Berkeley: University of California Press.*

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yerba santa (*Eriodictyon crassifolium*). Approximately 100.4 acres of chamise chaparral occur along the ridgelines of the Site.

**Mixed chaparral** consists of broad-leaved shrubs forming a vegetation canopy with little or no understory vegetation. This plant community occurs on dry, rocky, steep slopes with little soil and is adapted to repeated fires. A dense cover of annual herbs may appear during the first growing season after a fire before the original shrub species become re-established. The dominant plant species observed within this community was birch-leaf mountain mahogany (*Cercocarpus betuloides*). Other species characteristic of this community that were observed on site include purple nightshade (*Solanum xanti*), spiny redberry (*Rhamnus crocea*), holly-leaved cherry (*Prunus ilicifolia*), holly-leaf redberry (*Rhamnus ilicifolia*), bitter cherry (*Prunus emarginata*), Tucker's oak (*Quercus john-tuckeri*), bleeding heart (*Dicentra* sp.), and popcorn flower (*Plagiobothrys* sp.). Approximately 16.5 acres of mixed chaparral occurs in the southwest portion of the Site on the north-facing slopes.

**Big sagebrush scrub** consists of mostly soft-woody shrubs, with bare ground underneath and between shrubs. The dominant species in this community was big sagebrush (*Artemisia tridentata*). Other plant species observed included California buckwheat, chamise, and California suncup (*Camissonia bistorta*). Approximately 3.2 acres of big sagebrush scrub occur in a few small patches within the Site.

**Buckwheat/deerweed scrub** is a mixed community dominated by California buckwheat and deerweed (*Lotus scoparius*). The subdominant species golden yarrow (*Eriophyllum confertiflorum*) and wild oat (*Avena* sp.) were also prevalent throughout this community. Other plant species observed included prickly poppy (*Argemone corymbosa*), Indian paintbrush (*Castilleja* sp.), soft chess (*Bromus hordeaceus*), foxtail chess (*Bromus madritensis*), California bells (*Phacelia minor*), big sagebrush, Mexican elderberry (*Sambucus mexicana*), yerba santa, California buckwheat, black mustard (*Brassica nigra*), purple nightshade, bush poppy (*Dendromecon rigida*), jimson weed (*Datura discolor*), bushmallow (*Malacothamnus* sp.), redstem filaree (*Erodium cicutarium*), ripgut grass (*Bromus diandrus*), bindweed (*Calystegia* sp.), silver puffs (*Uropappus lindleyi*), nodding needlegrass (*Nassella cernua*), deerweed, Sandberg's bluegrass (*Poa secunda*), desert needlegrass (*Achnatherum speciosum*), beavertail cactus (*Opuntia basilaris*), annual bluegrass (*Poa annua*), caterpillar scorpionweed (*Phacelia cicutaria*), penstemon (*Penstemon* sp.), goldfields (*Lasthenia* sp.), prickly lettuce (*Lactuca serriola*), vinegarweed (*Trichostema lanceolatum*), rattlesnake weed (*Chamaesyce albomarginata*), poodle-dog bush (*Turricula parryi*), our Lord's candle (*Yucca whipplei*), goldenbush (*Ericameria* sp.), rubber rabbitbrush (*Chrysothamnus nauseosus*), grape (*Vitis* sp.), dove weed (*Eremocarpus setigerus*), cheatgrass (*Bromus tectorum*), curly dock (*Rumex crispus*), salt heliotrope (*Heliotropium curassavicum*), and annual sunflower (*Helianthus annuus*). Approximately 54.8 acres of buckwheat/deerweed scrub occur in patches on hillsides within the Site.

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**Mule fat scrub** is a plant community dominated by mule fat (*Baccharis salicifolia*) with stinging nettle (*Urtica dioica*) as a subdominant species. Other plant species observed included common lambsquarters (*Chenopodium album*), woolly mullein (*Verbascum thapsus*), common monkeyflower (*Mimulus guttatus*), spiny cocklebur (*Xanthium spinosum*), annual bur-sage (*Ambrosia acanthicarpa*), red willow (*Salix laevigata*), horehound (*Marrubium vulgare*), rabbit's foot grass (*Polypogon monspeliensis*), sandbur (*Cenchrus* sp.), Fremont's cottonwood (*Populus fremontii* ssp. *fremontii*), lupine (*Lupinus* sp.), annual sunflower, Mexican elderberry, and rippgut grass. Approximately 5.2 acres of mule fat scrub occur along the drainages.

**Disturbed riparian scrub** is dominated by stinging nettle. Other plant species found within this community included mule fat, black mustard, yerba santa, Mexican elderberry, rubber rabbitbrush, and rippgut grass. Approximately 5.9 acres of disturbed riparian scrub occurs along the drainages.

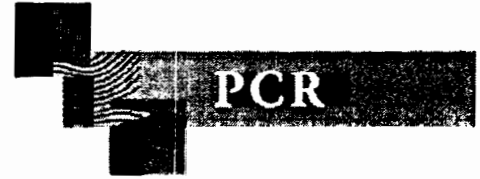
**Non-native grasslands** consist of annual grasses that germinate, grow, and flower through winter and die during the dry summer through fall, persisting as seeds. The dominant species in this community was wild oat. Other species observed included California poppy (*Eschscholzia californica*), nodding needlegrass, Sandberg's bluegrass, barley (*Hordeum murinum*), foxtail barley (*Hordeum jubatum*), lupine, red maids (*Calandrinia ciliata*), and California everlasting (*Gnaphalium californicum*). Several isolated patches of the native Sandberg's bluegrass were observed on steep slopes within the northern portion of the Site. The majority of the approximately 92.4 acres of non-native grasslands occur in the northeastern portion of the Site.

**Ruderal areas**, which typically have few native species and generally low habitat value, are characterized by a predominance of non-native, weedy species that readily colonize disturbed ground, such as black mustard, rippgut grass, and prickly lettuce. The Site has a history of disturbance from agricultural activities. Approximately 10.8 acres of ruderal habitat occur throughout the Site.

**Disturbed areas** consist of regularly maintained areas that lack vegetation, such as roads and large trails. Approximately 3.3 acres of disturbed areas occur throughout the Site.

## Wildlife

Wildlife species observed within the Site during the assessment included side-blotched lizard (*Uta stansburiana*), western scrub jay (*Aphelocoma californica*), California quail (*Callipepla californica*), American crow (*Corvus brachyrhynchos*), black-headed grosbeak (*Pheucticus melanocephalus*), northern mockingbird (*Mimus polyglottos*), California towhee (*Pipilo crissalis*), red-tailed hawk (*Buteo jamaicensis*), and California ground squirrel (*Spermophilus beecheyi*).



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### Jurisdictional Features

Two drainages subject to the jurisdiction of the ACOE, RWQCB, and CDFG were found on the Site. Details of the jurisdictional delineation can be found in *Investigation of Jurisdictional Wetlands and Waters of the U.S.*<sup>10</sup> under a separate cover. Permits must be obtained from the appropriate resource agencies before any impacts to these drainages occur.

### SENSITIVE HABITATS/SPECIES

The presence of protected, regulated, or otherwise sensitive plant and wildlife species occurring or potentially occurring within the Site is based on: 1) the known presence of the species in the region and 2) an evaluation of the habitat found within the Site. No plant communities that are considered sensitive by Federal and State resource agencies or the CNDDDB were observed within the Site.

Several sensitive plant species within the vicinity were reported in the CNDDDB. Based on the habitat present on site and the known sensitive species distribution, sensitive plant surveys were conducted for Great's aster (*Aster greatae*), Mason's neststraw (*Stylocline masonii*), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), Lancaster milk-vetch (*Astragalus preussii* var. *laxiflorus*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), slender-horned spineflower (*Dodecahema leptoceras*), Mt. Gleason Indian paintbrush (*Castilleja gleasonii*), slender mariposa lily (*Calochortus clavatus* var. *gracilis*), and alkali mariposa lily (*Calochortus striatus*). Several beavertail cactus were observed within the Site, however the species observed is not the subspecies that is considered sensitive. No sensitive plant species were observed on site.

Several sensitive wildlife species within the vicinity of the Site were reported in the CNDDDB. The Site is within the critical habitat area for the California red-legged frog (*Rana aurora draytonii*), however, suitable habitat for this species does not occur within the Site. Based on the habitat present on site and the known sensitive species distribution, the following sensitive species may potentially occur on site:

- Cooper's hawk (*Accipiter cooperi*) – CDFG Species of Special Concern
- sharp-shinned hawk (*Accipiter striatus*) – CDFG Species of Special Concern
- southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) – CDFG Species of Special Concern

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<sup>10</sup> PCR Services Corporation. August 2006. *Investigation of Jurisdictional Wetlands and Waters of the U.S.* Prepared for Lauren Development, Inc.

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- Bell's sage sparrow (*Amphispiza belli belli*) – CDFG Species of Special Concern
- silvery legless lizard (*Anniella pulchra pulchra*) – CDFG Species of Special Concern
- golden eagle (*Aquila chrysaetos*) – CDFG Species of Special Concern, State Fully Protected Species
- ferruginous hawk (*Buteo regalis*) – CDFG Species of Special Concern
- northern harrier (*Circus cyaneus*) – CDFG Species of Special Concern
- northern red diamond rattlesnake (*Crotalus ruber ruber*) – CDFG Species of Special Concern
- white-tailed kite (*Elanus leucurus*) – State Fully Protected Species
- prairie falcon (*Falco mexicanus*) – CDFG Species of Special Concern
- coast patch-nosed snake (*Salvadora hexalepis virgulata*) – CDFG Species of Special Concern

No sensitive wildlife species were observed on site. Although the Site supports suitable habitat for several sensitive wildlife species, the majority of these species are Species of Special Concern but are not listed by Federal and State resource agencies. Non-listed wildlife species generally represent CEQA-related issues requiring adequate documentation, analysis, or possibly mitigation. No focused surveys are recommended for these species.

**Nesting Raptors and Songbirds**

The Site has the potential to support both raptor and songbird nests due to the presence of trees, shrubs, and other ground cover. However, no active nests were observed during the field assessment. Nesting activity typically occurs from mid-February to mid-August. Disturbing or destroying active nests is a violation of the Federal Migratory Bird Treaty Act. In addition, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation during the breeding season is considered a potentially significant impact of the proposed project. A mitigating action typically includes conducting any vegetation removal between August 16 and February 14, which is outside the nesting season, to avoid potential impacts to nesting birds. If initial vegetation removal occurs during the nesting season, all suitable habitats will be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected, a buffer of at least 100 feet (300 feet

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for raptors) will be delineated, flagged, and avoided until the nesting cycle is complete, as determined by the biological monitor, to minimize impacts.

**CONSTRAINTS AND RECOMMENDATIONS**

Based on the results of the literature review and recent field observations conducted by PCR biologists, nesting raptors and songbirds were identified as a potential constraint to development. The following action is recommended:

- Vegetation clearing prior to February 15 or after August 15 to avoid impacting nesting birds

Please feel free to contact Robert Freese or Maile Tanaka at (949) 753-7001 should you have any questions regarding this analysis.

Sincerely,  
**PCR SERVICES CORPORATION**

*Robert C. Freese*

Robert Freese  
Senior Restoration Ecologist

*Maile Tanaka*

Maile Tanaka  
Associate Biologist

Attachments

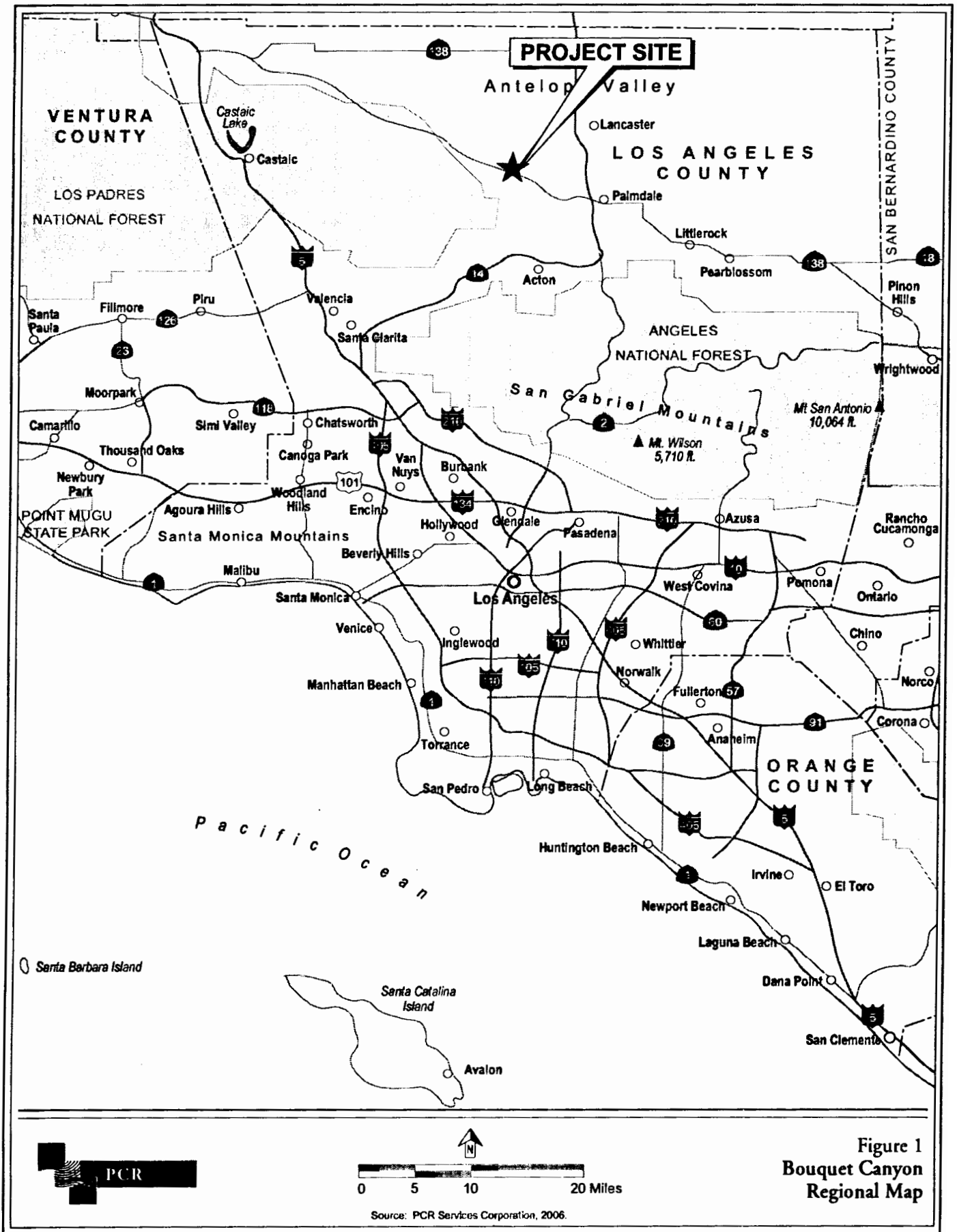
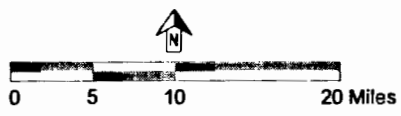
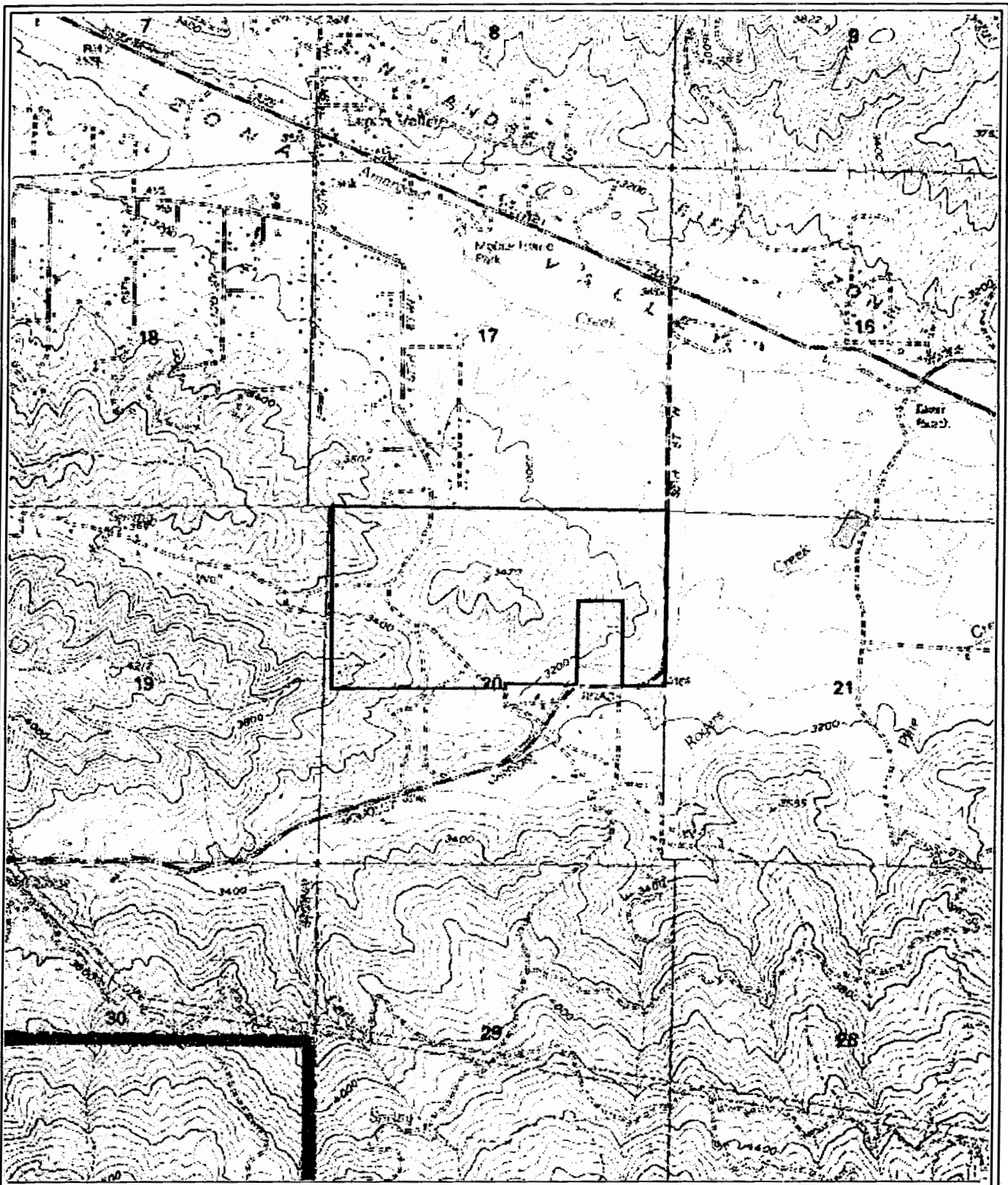


Figure 1  
Bouquet Canyon  
Regional Map



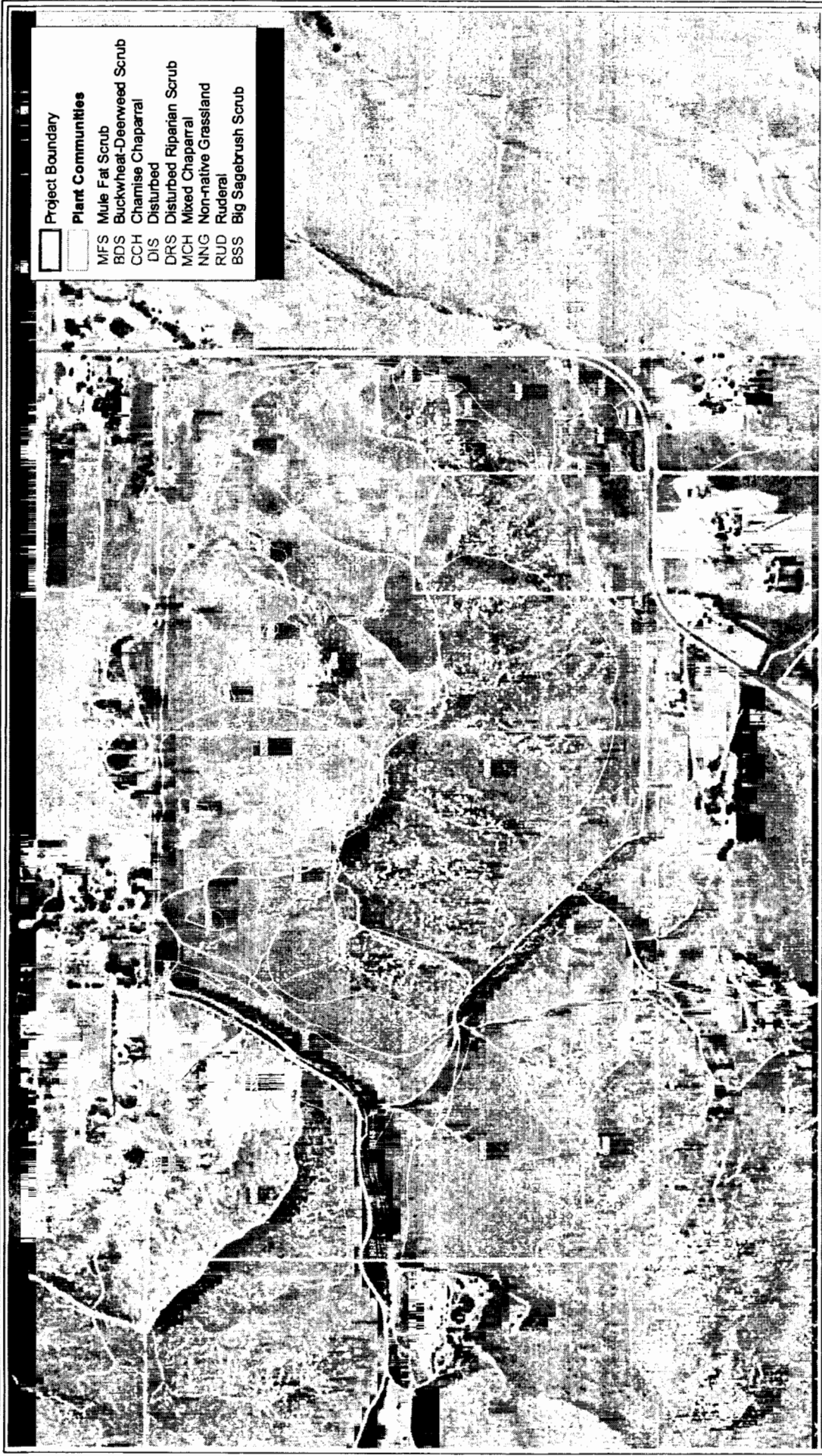
Source: PCR Services Corporation, 2006.





Source: USGS Topographic Series (Sleepy Valley, CA);  
 PCR Services Corporation, 2006.

**Figure 2**  
**Bouquet Canyon**  
**Vicinity Map**



- Project Boundary**
- Plant Communities**
- MFS Mule Fat Scrub
  - BDS Buckwheat-Deerweed Scrub
  - CCH Chamise Chaparral
  - DIS Disturbed
  - DRS Disturbed Riparian Scrub
  - MCH Mixed Chaparral
  - NNG Non-native Grassland
  - RUD Ruderal
  - BSS Big Sagebrush Scrub

**Figure 3**  
**Bouquet Canyon**  
**Plant Communities**

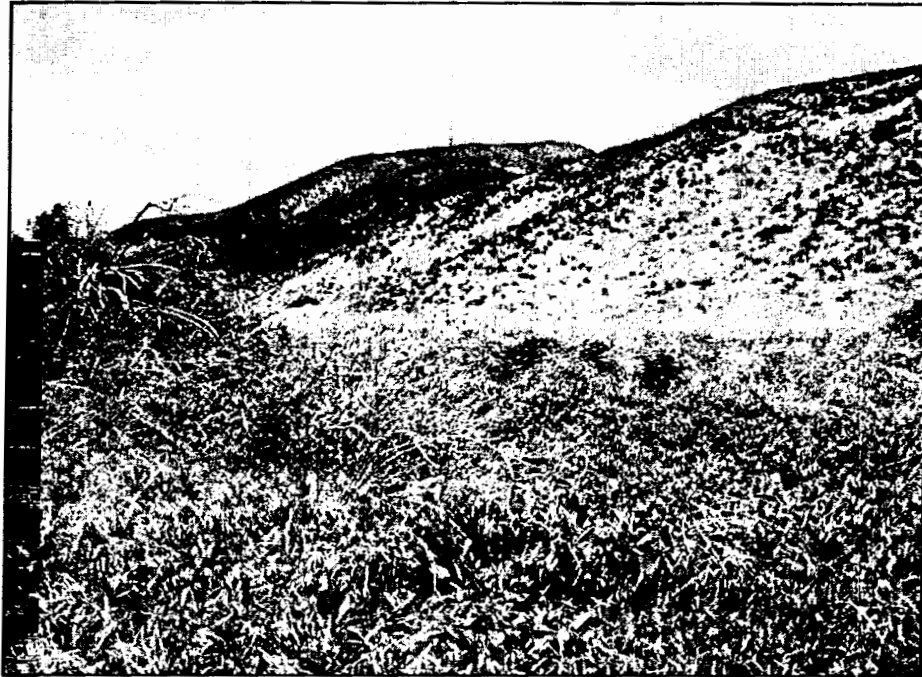
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Source: USGS DOQQ, 1994; PCR Services Corporation, 2006.





Photograph 3: View of a non-native grassland community in the northeastern portion of the Site.



Photograph 4: Disturbed riparian scrub community with a background of buckwheat scrub along the hillsides in the southeastern portion of the Site.



Figure 5  
Bouquet Canyon  
Site Photographs II