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SPECIAL-STATUS PLANT SPECIES INVESTIGATION

CONDUCTED FOR THE

PROPOSED CLOVER VALLEY SUBDIVISION

PROJECT # SD-98-05 SCH # 93122077

ROCKLIN, PLACER COUNTY, CALIFORNIA

T12N, R7E, portion of sections 31 and 32; T11N, R7E, portion of Sections 5,6,7,8 of the Rocklin USGS 7.5' Quadrangle

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SPECIAL-STATUS PLANT SPECIES INVESTIGATION CONDUCTED FOR THE PROPOSED CLOVER VALLEY SUBDIVISION ROCKLIN, PLACER COUNTY, CALIFORNIA PROJECT # SD-98-05; SCH # 93122077

I. Executive Summary

A survey for Special-Status vascular plant species was conducted within the approximately 622-acre Clover Valley Subdivision project area, in Rocklin, Placer County, California (Refer to **Figure 1** for project vicinity and property boundary). No Special-Status Plant Species were encountered during these 2006-season surveys. As currently planned, implementation of the proposed Clover Valley Subdivision project will not result in direct or indirect impacts to any Special-Status plant species.

II. Introduction

At the request of Peter Balfour (ECORP Consulting, Inc.), a survey for Special-Status vascular plant species was conducted within the proposed Clover Valley Subdivision project area (Figure 1) during the 2006 field season. The purpose of the survey was to ascertain the presence of any Special-Status plant species that may be present, and to provide suggestions for appropriate mitigation measures if any are discovered. A Biological Impact Evaluation for the proposed Clover Valley Subdivision, prepared by ECORP (2005), notes that the "past botanical work is somewhat dated" (Acorn Environmental Consulting 1991, Holland 1992, Davis Consulting 2001) and follow-up targeted surveys may be warranted. This investigation provides a follow-up to these previous surveys and is intended to bring the botanical resource information up-to-date. No Special-Status plant species were encountered during previous surveys.

III. Methods

A prefield investigation was performed that included a query of the California Department of Fish and Game Natural Diversity Database (CNDDB; CDFG 2005) for Special-Status plant species from the Rocklin and surrounding eight USGS 7.5' Topographic Quadrangles (Lincoln, Gold Hill, Auburn, Pilot Hill, Clarksville, Folsom, Citrus Heights, and Roseville). A query of the CNDDB was also made for the entire area of Placer County. In addition, a review was also made of the California Native Plant Society's Inventory of Rare and Endangered Plants of California for Placer County (CNPS 2001).

In the sixth edition of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California, 43 plant species are listed as sensitive in Placer County (CNPS 2001). Some of these taxa are currently listed, or are candidates for inclusion on state and federal lists. Based on information in the CNPS Inventory, on a query of the CNDDB (CDFG 2005), and on known geographical distributions, elevation ranges and habitat associations, the following three CNPS List 1B species were determined to have a likelihood of occurring in the vicinity of the project area: Brandegee's Clarkia (Clarkia biloba ssp. brandigeae), Big-Scale Balsamroot (Balsamorhiza macrolepis var. macrolepis), and Sanford's Arrowhead (Sagittaria sanfordii).

One additional CNPS List 4 Species, "Stinkbells" (Fritillaria agrestis), was previously mentioned as a target species for the Clover Valley Project Area (ECORP 2005). However, after a review of its distribution and soil associations, and a conversation with a knowledgeable local botanist, it was determined that this species is not likely to occur here (V. Dains pers. comm.).

Since the time of the previous surveys, there have been no new additions to the CNPS List, nor to the CNDDB that affect the list of target Special-Status plant species for the area.

Field surveys were conducted on June 8, 12, and July 13, 2006 by botanists John Dittes (lead botanist), Josephine Guardino, John Hale and Paul Kirk. A total of eight person-days were spent on the property (~72 field-survey hours). The July survey was of the Clover Creek corridor for Sanford's Arrowhead (*Sagittaria sanfordii*). Surveys were performed with the aid of color aerial photographs, an enlarged USGS topo-map, and Garmin-12 handheld GPS units used in 3-D mode [estimated position error (EPE) of 15-25 feet]. Both intuitive-controlled and complete surveys were performed. Mostly parallel transects were walked with survey intensity varying by habitat type. Transects were spaced so that the majority of suitable habitat area present was examined. In addition, the entire reach of Clover Creek was surveyed from within the channel for the Sanford's Arrowhead. The property boundary and GPS-Mapped Survey Routes are illustrated in Figure 2.

A complete floristic inventory was conducted so that all plant species (even already dried plants) were identified to the taxonomic level necessary to determine legal status and scientific significance. Plants not identifiable in the field were brought back to the laboratory/herbarium for identification. GPS data were downloaded and maps made with Maptech Terrain Navigator Professional software Version 6.0.1. Projections given are in WGS84.

The 2005-2006 growing season was above average in the amount of precipitation received regionally, so the vegetation of the season likely expressed all species present in the project area. Surveys were timed so that the vast majority of the flora and all targeted Special-Status species were identifiable. One species mentioned in the Biological Impact Assessment as potentially occurring in the area (Stinkbells; *Fritillaria agrestis*) was long-past flowering at the time of the 2006 field surveys. However, based on known geographic distribution, recorded soil associations, and communication with a local expert botanist, it was determined that the project area lies outside of the geographic and edaphic range of the species, and it very unlikely to be present in Clover Valley (Virginia Dains pers. comm.). Even though this is the case, dried *Fritillaria* fruit were also searched for.

IV. Setting, Habitats and Plant Species Encountered

The environmental setting of the proposed Clover Valley Subdivision project area, including soils and plant community descriptions, has been provided in previous reports (Acorn Environmental Consulting 1991, Holland 1992, DAVIS Consulting Earth Scientists 2001), and is summarized in the Re-circulated Draft Environmental Impact Report, Volume 1 of 2 (Raney Planning and Management 2006). In general, the results of these 2006 surveys agree with these previous reports regarding the physical and botanical setting. Since this present investigation represents a follow-up survey for Special-Status plant species, the description of the physical and biological setting will not be replicated in detail in this report.

The approximately 622-acre Clover Valley Subdivision project area is located in the northeast portion of Rocklin in Placer County, CA. This project is situated within the Sierra Nevada Foothills Subregion of the Sierra Nevada Region of the California Floristic Province (Hickman 1994). The property encompasses an approximately 2 and 1/4-mile linear reach of Clover Valley (a perennial creek) as well as its adjacent alluvial plain and surrounding east and west-facing slopes. Elevations in the project area range from approximately 485 feet to 620 feet. The following major habitats were encountered: Oak Savannah and Woodland, Valley and Foothill Annual Grassland, Riparian Woodland and Scrub, Riparian Wetlands, Irrigation Ditch/Groundwater Seep, and Seasonal Wetlands. For a complete list of all plant species encountered during the field surveys, refer to Appendix 1.

V. Special-Status Plant Species

None of the three targeted CNPS List 1B species were encountered within the Clover Valley Project Area during the 2006 field surveys; no other rare, threatened or endangered plant species were encountered. Timing of the surveys was favorable for the identification of all three CNPS List 1B Species, as well as for the vast majority of flowering plant species.

VI. Potential Impacts:

No Special-Status plant species are previously known, nor were they encountered in the 2006 surveys of the proposed Clover Valley Subdivision project area. There will be no impacts to Special-Status plant species as a result of implementation of the project.

VII. Mitigation Recommendations:

No Special-Status plant species are previously known, nor were they encountered in the 2006 surveys of the proposed Clover Valley Subdivision project area. There will be no mitigation requirements for impacts to Special-Status plant species as a result of implementation of the project.

VIII. Personal Communication:

Virginia Dains, Local Consulting Botanist: telephone conversation regarding timing of surveys for "Brandegee's Clarkia" (*Clarkia biloba* ssp. *brandigeae*) and the potential for presence of "Stinkbells" (*Fritillaria agrestis*).

IX. References:

Acorn Environmental Consulting 1991. Clover Valley Ranch Botanic Survey. Georgetown, CA

California Department of Fish and Game 2005. California Natural Diversity Database (CNDDB)

California Native Plant Society 2001. California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society. Sacramento, CA

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Oswald, V. 2002. Selected Plants of Northern California and Adjacent Nevada. Studies from the Herbarium Number 11, California State University, Chico, CA

Raney Planning & Management 2006. Recirculated Draft Environmental Impact Report for the Clover Valley Large and Small Lot Tentative Subdivision Maps (Project #SD-98-05; SCH# 93122077, West Sacramento, CA

X. Signature of Report Preparer:

This Botany Investigation and Report were prepared by John Dittes of *Dittes & Guardino Consulting*.

Signed: _		Date:
	John Dittes, Consulting Biologist	