Eco Synthesis

SCIENTIFIC & REGULATORY SERVICES, INC.

September 8, 2008

Rob Wood SCO Planning & Engineering 140 Litton Drive, Suite 240 Grass Valley, CA 95945

Subject: Special-status Plant Survey for Berriman Ranch Project (APN 22-140-03 and 22-160-03)

Dear Rob,

This letter report documents the results of a special-status plant survey that I carried out on the project site referenced above. The survey covered areas of habitat that are suitable for Scadden Flat checkerbloom (*Sidalcea stipularis*) and brownish beaked-rush (*Rhynchospora capitellata*), and are within 50 feet of the limits of proposed development as presently conceived. I did not survey in areas that were either outside the proposed development project by more than 50-100 feet, or in areas (namely, upland areas) that did not afford suitable habitat for the species noted above.

Summary

I carried out a floristic plant survey according to standard methodologies that are applicable to finding occurrences of rare plants and are accepted by regulatory agencies. Eighty-seven plants were identified from the survey areas, but I did not find either of the target species, or any other special-status plants, within any area that I studied. Therefore, it is reasonable to conclude that the proposed project will not have any impact upon any rare, threatened, endangered, or other special-status plant species.

Plant Survey Methodology

The plant survey followed the methods and guidelines that are accepted by the California Department of Fish and Game and California Native Plant Society (CNPS), as discussed in the CNPS Inventory of Rare and Endangered Plants of California, Sixth Edition (2001). In brief, special-status plant surveys should be

- · carried out by qualified survey personnel;
- · accomplished at a time of the year that the plants are evident and identifiable;
- · conducted using systematic field techniques in all suitable habitat within impact areas;
- · floristic in nature (every plant species encountered should be identified and listed);
- · conducted in a manner consistent with conservation ethics; and
- · well documented.

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Botanical expertise. Over the course of over 30 years of education and field experience in plant systematics, I have completed floristic surveys on over 20,000 acres, mostly in central and northern California. In the Sierra Nevada foothills, I have sight-identification ability for over 350 species.

Timing. The survey work occurred on July 28, 2008. This is within the time period during Sidalcea stipularis flowers; in the project region (northern Sierra Nevada foothills), this species is also unequivocally identifiable on the basis of vegetative material alone.

Field techniques. The survey areas were examined by means of irregular transects spaced roughly 10-20 feet apart, which is sufficiently close together that any plant as large as the target species would be seen. Transect orientation and lines were necessarily very irregular, as dense thorny non-native blackberry plants preclude walking in a straight line in most areas; however, where these plants were dense, there was also no herbaceous understory, therefore no possibility of special-status plants occurring.

Floristic Survey. All plants observed were identified at least to the taxonomic level necessary to ascertain whether they were special-status species. The complete list for the rare plant study areas is attached to this letter as Appendix A.

Conservation Ethics. Nearly all plant species were identified by sight. Fragments (no complete plants) of a few were collected to make species identifications.

The botanical survey area included all areas where proposed project elements, as shown on the June 2008 version of the tentative map, overlap with suitable habitat for S. stipularis or R. capitellata (namely, any type of wetlands). The survey was also extended outward a distance of at least 50 feet from the limits of proposed development.

Target Species

The present plant survey was targeted specifically at two special-status species that are known from the region. Several other special-status species (e.g., Stebbins morning glory, Pine Hill flannelbush, and Follett's monardella) were not specifically targeted, because the specialized soils which these species require do not occur on the Berriman Ranch study site. Similarly, Brandegee's clarkia was not specifically targeted, because no development is proposed on the steep slopes that it requires. Finally, Butte County fritillary, which is recorded from some quadrangles in the project region, is a rather large and obvious lily, which was not observed despite the relatively intensive level of survey effort that was expended during the general biological inventory.

Accordingly, the survey was specifically targeted at the following two wetland plants:

Scientific Name	Common Name	Status
Rhynchospora capitellata	brownish beaked-rush	-/-/2
Sidalcea stipularis	Scadden Flat checkerbloom	SC/E/1B

Status definitions (Federal status/State status/California Native Plant Society [CNPS] list):

E or T, listed as endangered or threatened under state or federal Endangered Species Act;

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SC, federal species of concern or California DFG species of special concern;

List 1B, considered by CNPS to be rare, threatened or endangered in California and elsewhere and normally regarded by DFG as meriting consideration under CEQA Guideline 15380.

List 2, considered by CNPS to be rare, threatened or endangered in California, but more common elsewhere; normally regarded by DFG as meriting consideration under CEQA Guideline 15380.

Although I was specifically targeting the species listed above, the field survey was floristic, so that any special-status species other than those listed would be detected.

Results

The attached list includes all 87 plant species that were found within the Berriman Ranch project site. A few species identifications of common species were corrected from the original biological inventory carried out before the blooming season (e.g., the plant that appeared to be *Lotus purshianus* turned out to be *L. humistratus*; they have nearly identical looking leaves but different flower colors).

No special-status plant species were found on the site either during the general biological inventory or during the present rare plant survey. One California Native Plant Society (CNPS) List 4 plant was found (*Perideridia bacigalupii*). List 4 plants are those that are not regarded as uncommon or threatened in any way, but have restricted geographic distributions. CNPS explicitly notes that List 4 plants do not merit consideration under CEQA guidelines pertaining to threatened or endangered species (CNPS, Inventory of Rare and Endangered Plants of California, 2001).

In particular, no species that are in the same genus as either of the two special-status species that were particularly targeted were found (no members of the genera *Sidalcea* and *Rhynchospora*).

These findings support a conclusion that the proposed project will not have any impact on rare, threatened, endangered, or otherwise special-status plant species. Please contact me (or urge County staff to do so) if there are any questions or if any additional information is needed.

Sincerely,

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Adrian Juncosa, Ph.D. Senior Ecologist