

Usal Redwood Forest Company 2014 Botanical Resources Summary

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Introduction

The primary focus of the Campbell Global, LLC (CG) botanical program is to perform quality floristic surveys and to provide a concise assessment detailing the survey results. The information collected is helping foresters and reviewers make sound management decisions concerning botanical resources.

The Usal Redwood Forest Company ownership is home to many species of vascular plants, non-vascular plants, and lichens. The roughly 50,000-acre ownership is mainly comprised of North Coast Coniferous Forest habitat community as described by Holland's *Preliminary Descriptions of the Terrestrial Plant Communities of California* (Holland 1986). Dominant tree species include coast redwood and Douglas-fir with a scattering of Western hemlock and grand fir. Common components of conifer stands on xeric, more inland sites are tanoak and Pacific madrone. Riparian areas provide habitat for red alder, willow, big-leaf maple, California bay, and California nutmeg. A wide range of shrubs occur on the ownership such as huckleberry, rhododendron, thimbleberry, manzanita, coyote brush, ceanothus, salal and poison oak

Methods

Scoping strategies, survey methods, and impact assessments/mitigations were consistent with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (DFG 2009), *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities* (DFG 2000), *Mitigation Guidelines Regarding Impacts to Rare, Threatened, and Endangered Plants* (CNPS 1998), *California Forest Practice Rules* (CAL FIRE 2014) and the *California Environmental Quality Act* (State of California revised 2001).

The project area was scoped with the current inventories of the California Natural Diversity Database (CNDDB), (CDFW 2014) and *Rare Plant Inventory* (CNPS 2014) using a property-wide search method. This was accomplished by scoping the USGS 7.5 minute quadrangles managed by CG, and all contiguous quadrangles. Because the aforementioned inventories reflect the sensitive taxa and communities historically occurring in the specified quadrangles, the scoping list was combined with plant lists from local experts (Golec 2002; Sholars 2002) to generate a "Long List of Sensitive Taxa and Communities" that have historically occurred or could possibly occur within the quadrangles scoped. This list was shortened by assessing potential habitats identified through examining aerial photographs, evaluating habitat descriptions, and consulting with the RPF. For example, species occurring only in coastal bluff scrub habitats were

removed because the proposed project area does not contain coastal bluff scrub habitat. The result was the Target Species and Communities List found below. Plant communities were classified using *Preliminary Descriptions of the Terrestrial Plant Communities of California* (Holland 1986), as these are used by California Native Plant Society (CNPS) inventory and best describe the communities present. CNDDDB inventory quadrangle data includes only California Rare Plant Rank (CRPR) 1-3 plants. Therefore, plant listings considered were California Rare Plant Rank 1-3, and state and federal rare, threatened, and/or endangered. California Rare Plant Rank 4 plants were considered if they were also state or federally listed as Rare, Threatened, or Endangered. Occurrences were defined as: Those populations separated by at least one-quarter air mile.

Floristic field surveys were conducted during sensitive plant blooming windows unless species were readily identifiable by vegetative characteristics, or reference sites were visited and sensitive plants were found blooming outside the expected windows. Floristic surveys were conducted using intuitively-controlled, habitat-focused techniques, with the majority of survey effort in potential sensitive plant habitat. Habitats within the project site were surveyed to inventory the plants present. All vascular plants observed were identified, as classified in *The Jepson Manual: vascular plants of California* (Baldwin, et al. 2012), to the taxonomic level necessary to exclude Target Species.

Findings and Discussion

In 2014, CG floristically surveyed 2,513 acres, about 5% of the ownership. The surveys covered seven proposed Timber Harvesting Plans (See Table 1). Surveys in 2014 revealed two new occurrence of a sensitive plant (See Table 2).

Table 1

Project Name	Project Acres Surveyed
Lower Hollow Tree	216
Piercy Crossing	292
Water Gulch	218
Soldier	417
Little Bear Creek	914
Mule Creek	157
Upper SF Usal	299
Total	2513

Table 2

Element Name	Common Name	Listing			Rank		# of new occurrences
		CRPR	Federal	State	Global	State	
<i>Piperia candida</i>	White-flowered rein orchid	1B.2	None	None	G3?	S2	2

Listing and Rank Codes:

CRPR - **1A** = Presumed extinct in CA, **1B** = Rare in CA and elsewhere, **2** = Rare in CA but more common elsewhere, **3** = More info needed, **4** = Watchlist. **.1** - Seriously endangered in California. **.2** - Fairly endangered in California. **.3** - Not very endangered in California. **GLOBAL RANKING** - **G1** = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres. **G2** = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres. **G3** = 21-100 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres. **G4** = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat. **G5** = Population or stand demonstrably secure to ineradicable due to being commonly found in the world. **GX** = All sites are extirpated; this element is extinct in the wild. **GXC** = Extinct in the wild; exists in cultivation. **G1Q** = The element is very rare, but there is a taxonomic question associated. **T-rank** = Subspecies receive a T-rank attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. **GH** = All sites are historical; the element has not been seen for at least 20 years, but suitable habitat still exists. **STATE RANKING** - **S1** = Less than 6 element occurrences (Eos) OR less than 1,000 individuals OR less than 2,000 acres. S1.1 = very threatened. S1.2 = threatened. S1.3 = no current threats known. **S2** = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres. S2.1 = very threatened. S2.2 = threatened. S2.3 = no current threats known. **S3** = 21-100 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres. S3.1 = very threatened. S3.2 = threatened. S3.3 = no current threats known. **S4** = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. **NO THREAT RANK**. **S5** = Demonstrably secure to ineradicable in California. **NO THREAT RANK**. **SH** = All California sites are historical (not observed in at least 20 years, but suitable habitat still exists). **SX** = All California sites are extirpated.

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