

Appendix B
BOTANICAL REPORT
WESTERN BOTANICAL SERVICES

**THREATENED, ENDANGERED, SENSITIVE PLANT SPECIES, AND
NOXIOUS WEEDS SURVEY**

TAHOE VISTA RECREATION AREA/NEU PARCEL

PLACER COUNTY, CA



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1.0 INTRODUCTION

A Threatened, Endangered and Sensitive (TES) botanical and noxious weed survey was conducted on June 28 at the proposed Tahoe Vista Recreation Area, on the northwest corner of National Avenue and SR 28. The surveys were conducted on approximately 3.6 acres.

The survey included the identification of special-status vascular species and noxious weeds that occur in the project area. Prior to performing the field survey, a literature review was conducted with the State of California Department of Fish and Game Natural Diversity Data Base. In addition to performing the plant survey, a floristic inventory of the project area was developed for plant species that could be positively identified.

2.0 ENVIRONMENTAL SETTING

The project area is mountainous with a semi-arid climate. Annual precipitation occurs mostly in the form of winter snow and/or spring rain. Summers typically are dry and warm, with average daytime temperatures in the 80-degree (F) range. This site is close to Lake Tahoe and is relatively flat. Low-income housing occurs to the west and north of the project site.

The native overstory plant community is conifer-dominated as shown on the cover photo. The understory is dominated by montane chaparral species, including shrubs, forbs, and groundcovers. Some introduced species occur within the project site, particularly along National Avenue where erosion control grasses have been seeded.

3.0 METHODOLOGY

3.1 Pre-field Research

Prior to the field survey, a pre-field literature search was conducted to obtain information on the sensitive plant species potentially occurring within the vicinity of the project area. The California Department of Fish and Game Natural Diversity Data Base was consulted. Previous references from the Forest Service, California Native Plant Society, and the Tahoe Regional Planning Agency are included. The results are listed in Table 1, below. The phenology of each rare plant was reviewed to ensure the survey would be conducted at the appropriate time of year to allow positive species identification.

The California Department of Food and Agriculture was consulted for the current list of Noxious Weeds. The Noxious Weed Index was obtained and reviewed.

Table 1. Potential special interest, proposed, endangered, threatened, and sensitive plant species

BOTANICAL NAME	COMMON NAME	POTENTIAL HABITAT	STATUS*
<i>Potamogeton filiformis</i>	Slender-leaved pondweed	Not present	2, S1S2
<i>Rorippa subumbellata</i>	Tahoe yellow cress	Not present	C, S, SI, 1B, S1.1

- *S USFS LTBMU Sensitive Species, Regional Forester's Sensitive Species List
 SI TRPA Special Interest Species: Regional Plan for the Lake Tahoe Basin: Code Of Ordinances, 1987
 C USFWS Candidate Species
 2, 1B CNPS List
 S1S2, S1.1 State of California List

Tahoe yellow cress – USFS sensitive species, TRPA Species of Special Concern, USFWS candidate species, State S1.1, CNPS 1B.

Tahoe yellow cress is restricted to growing on beaches and backshore depressional areas along the shores of Lake Tahoe. The plant is usually found in moist, sandy backshore areas behind wave-action barrier beaches. The species is not limited to moist habitats and has been located in micro-sites that were quite dry. Blooms May-September. The CNDDDB reported two occurrences in the vicinity but not within the project area itself. Occurrence No. 20 (marsh between Sandy beach and Agate Bay) was last seen in 1949, while occurrence No. 31 (Dollar Point) was last seen in 1994. No. 20 has been searched several times between 1979 and 2000 but no plants have been found, while No. 31 was not seen during surveys conducted between 1995 and 2000.

Slender-leaved pondweed - CNPS List 2, State S1S2

Habitat includes marsh and swamps as well as shallow clear waters and drainage ditches, 900 to 6,500 feet.

Plants were mapped in the vicinity of Crystal Bay and were last seen in 1931.

3.2 Field Surveys

On June 28, a senior botanist performed a field survey of the project area. The survey began at the southeastern corner of the project area and continued west and north. The site was not potential habitat for plants listed in Table 1. However, the entire site was thoroughly surveyed in order to locate noxious weeds. The site was traversed along transects located approximately 10 feet apart.

4.0 RESULTS

4.1 Plant Communities

The site is relatively undisturbed, and native plants dominate the site. Due to cool and wet spring conditions, the vegetation was unusually diverse and vigorous, with a high percentage of forbs.

The site does not neatly correspond to any plant series as described in *A Manual of California Vegetation* (Sawyer, J.O. and T. Keeler-Wolf, 1995), and components of several series occur on site as described below.

Huckleberry oak/Tobaccobrush Series. Conifers are dominated by Jeffrey pines (*Pinus jeffreyi*) with fewer white fir (*Abies concolor*). Dominant shrubs included bitterbrush (*Purshia tridentata*), huckleberry oak (*Quercus vaccinifolia*), tobaccobrush (*Ceanothus velutinus*), mountain whitethorn (*Ceanothus cordulatus*), Greenleaf manzanita (*Arctostaphylos patula*), serviceberry (*Amelanchier alnifolia*), and squaw carpet (*Ceanothus prostratus*). A dense groundcover of creeping snowberry (*Symphoricarpos mollis*) occurs in some areas

Jeffrey pine-Ponderosa pine Series. As described above, the dominant overstory species is Jeffrey pine. Bitterbrush, creeping snowberry, and Mule's ears (*Wyethia mollis*) and dominant species of the site and are major components of this series.

These plant communities (shrub dominated with mixed conifer overstory) correspond with plant communities described in Calveg (Montane Mixed Chaparral for the shrubs, Mixed Conifer-Fir and Mixed Conifer-Pine for the conifers). *A Manual of California of Vegetation* was used for this analysis since it is a more current document.

2.4.1.2. Erosion control/revegetation. Along National Avenue revegetation species dominated, including Big bluegrass (*Poa ampla*) and intermediate wheatgrass (*Elytrigia intermedia*). These erosion control species was widely used in Lake Tahoe Basin during the 1970's and early 80's. They are excellent for erosion control but slow to yield to native shrubs.

4.2 Special Interest, Proposed, Endangered, Threatened, and Sensitive Plant Species

No special status, sensitive species, or species of special interest were encountered.

4.3 Noxious Weeds

No Noxious Weeds were located.

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APPENDIX 1

Project Area Species List

Slide order

1. photo of speech cover
2. overview photo of mainline
3. partnering / org chart
4. cover girl shot of flowers
5. Julie plants
6. Julie plants
7. Julie plants
8. soil pic. J.e.
9. soil pic j.e.
10. soil pic j.e.
11. soil salvaging phase 2 scan of 90% dwg.
12. boulder placement

Julie talking about

13. freeway fill
14. straw waddle
15. straw waddle
16. straw waddle
17. bfm installation
18. brm installation
19. bfm installation
20. bfm installaion
21. bfm installation
22. miko rize
23. blank on materials possibly
24. results
25. results
26. results

Kreg: lessons learned

27. sims
28. transition between phase one and two
29. details of treatment models
30. detail of treatment model
31. detail of treatment model
32. detail of treatment model
33. detail of treatment model
34. detail of treatment model
35. detail of treatment model
36. repeat of opening slide

Closing statement: tie into the ndot master plan document

FAMILY	SCIENTIFIC NAME	COMMON NAME
Apocynaceae	<i>Apocynum androsaemifolium</i>	Bitter dogbane
Asteraceae	<i>Achillea millefolium</i>	Yarrow
	<i>Agoseris glauca</i>	False dandelion
	<i>Chyrsothamnus nauseosus</i>	Rabbitbrush
	<i>Cirsium anhdersonii</i>	Anderson's thistle
	<i>Senecio integerrimus</i>	Butterweed
	<i>Eriophyllum lanatum</i> var <i>integrifolium</i>	Wooly sunflower
	<i>Solidago canadensis</i>	Canada goldenrod
	<i>Taraxacum officinale</i>	Dandelion
	<i>Wyethia mollis</i>	Mule's ears
Boraginaceae	<i>Cryptantha intermedia</i>	Common cryptantha
Brassicaceae	<i>Erysimum perrene</i>	Western wallflower
Caprifoliaceae	<i>Symphoricarpos mollis</i>	Creeping snowberry
Chenopodiaceae	<i>Chenopodium</i> spp.	Pigweed, lamb's quarters
Cyperaceae	<i>Carex douglasii</i>	Douglas' sedge
	<i>Carex</i> spp.	Sedges
Cupressaceae	<i>Calocedrus decurrens</i>	Incense cedar
Dennstaedtiaceae	<i>Pteridium aquilinum</i>	Braken fern
Ericaceae	<i>Arctostaphylos patula</i>	Greenleaf manzanita
	<i>Pterospora andromedea</i>	Pine drops
Fabaceae	<i>Astragalus cicer</i>	Cicer milkvetch
	<i>Lotus purshianus</i>	Spanish clover
	<i>Lupinus lepidus</i> var. <i>ramosus</i>	Dwarf lupine
	<i>Lupinus argenteus</i>	Silver lupine
	<i>Melilotus alba</i>	White-blossom sweet clover
	<i>Trifolium longipes</i>	Long-stalked clover
Fagaceae	<i>Quercus vaccinifolia</i>	Huckleberry oak
Grossulariaceae	<i>Ribes aureum</i>	Golden current
Hydrophyllaceae	<i>Phacelia hastata</i>	Phacelia
Juncaceae	<i>Juncus balticus</i>	Wiregrass
	<i>Juncus nevadensis</i>	Nevada rush
		Iris-leaf rush
		Marsh mint
Lamiaceae	<i>Monardella odoratissima</i>	Coyote mint
Liliaceae	<i>Allium campanulatum</i>	Sierra onion
Linaceae	<i>Linum lewisii</i>	Lewis flax
Onagraceae	<i>Epilobium</i> sp	Willow herb
	<i>Gayophytum diffusum</i>	Ground smoke
Polemoniaceae	<i>Collomia grandiflora</i>	Grand collomia
Pinaceae	<i>Abies concolor</i>	White fir
	<i>Pinus jeffreyi</i>	Jeffrey pine
Poaceae	<i>Achnatherum occidentale</i>	Western needlegrass
	<i>Bromus tectorum</i>	Cheatgrass
	<i>Bromus carinatus</i>	California or Mountain brome
	<i>Bromus inermis</i>	Smooth brome

	<i>Elym. elymoides</i> var. <i>elymoides</i>	Squirreltail
	<i>Elytrigia intermedia</i> var. <i>intermedia</i>	Intermediate wheatgrass
	<i>Poa ampla</i>	'Sherman' big bluegrass
	<i>Poa bulbosa</i>	Bulbous bluegrass
	<i>Poa pratensis</i>	Kentucky bluegrass
Polemoniaceae	<i>Gilia</i> sp	Gilia
	<i>Phlox diffusa</i>	Spreading phlox
	<i>Phlox gracilis</i>	Annual phlox
Polygonaceae	<i>Eriogonum nudum</i>	Naked buckwheat
Portulacaceae	<i>Calyptidium umbellatum</i>	Pussy paws
	<i>Claytonia perfoliata</i>	Miner's lettuce
Ranunculaceae	<i>Delphinium depauperatum</i>	Dwarf larkspur
Rhamnaceae	<i>Ceanothus cordulatus</i>	White thorn
	<i>Ceanothus prostratus</i>	Squaw carpet
	<i>Ceanothus velutinus</i>	California-lilac
Rosaceae	<i>Amelanchier utahensis</i>	Serviceberry
	<i>Horkelia fusca</i>	Dusky horkelia
	<i>Potentilla glandulosa</i> ssp. <i>reflexa</i>	Cinquefoil
	<i>Purshia tridentata</i>	Bitterbrush
	<i>Rosa woodsii</i> var. <i>ultramontana</i>	Wood's rose
Rubiaceae	<i>Gallium triflorum</i>	Bedstraw
Salicaceae	<i>Salix scouleriana</i>	Scouler's willow
Scrophulariaceae	<i>Castilleja applegatei</i>	Indian paintbrush
	<i>Collinsia parviflora</i>	Blue-eyed Mary
	<i>Pedicularis semibarbata</i>	Lousewort
	<i>Penstemon rydbergii</i>	Whorled penstemon