

Biological Study

Round Mountain Telecom Site



Prepared for:

Indian Springs Telecom LLC
477-01

August 2009

Prepared by:



ENPLAN
Environmental Scientists and Planners
www.enplan.com

Table of Contents

	<u>Page</u>
Records Review	1
Field Reconnaissance	1
Plant Communities/Wildlife Habitats.....	2
Special-Status Species	2
<i>Special-Status Plant Species</i>	2
Table 1. Rarefind (CNDDDB) Report Summary.....	3
Table 2. Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)	4
<i>Special-Status Wildlife Species</i>	3
Sensitive Natural Communities	10
Soils	10
Wetlands and Other Waters of the State/United States	10
Resource-Agency Permit Requirements	10
Woodlands/Timberlands.....	11
Nesting Migratory Birds	12
Figures	end of text
Checklist of Vascular Plant Species Observed	end of text

ENPLAN has completed a biological study addressing the proposed construction of a cell tower atop Round Mountain. The Round Mountain site (Figures 1b and 2b) is located near Backbone Road and Fenders Ferry Road, approximately one mile southeast of Round Mountain, as shown on the Montgomery Creek USGS 7.5-minute quad (1990). The project site is located on Shasta County APNs 029-610-007 and -003. With the exception of an existing antennae field, the area around the site is undeveloped, and consists primarily of timberlands. The site is privately owned. The site is zoned as "TP (Timber Production)" and "TL (Timberland)" and is designated by the Shasta County General Plan as "Timberland."

Construction will consist of a 50- by 50-foot fenced area (6-foot-tall, chain link with barbed wire), with a ± 32 - by 32-foot concrete pad (or $\pm 8'$ x $8'$ individual concrete footings) for the four-legged steel tower. The tower will be approximately 150 feet tall, and will be within an existing antennae field. In addition, construction will include a new ± 20 -foot-wide native soil access road from the existing access road, around the western slope of Round Mountain, connecting to the existing site (± 1 , 249 feet long). A new ± 20 -foot-wide corridor will be trenched for the proposed electrical line, parallel to the existing AT&T powerline, between the project site and the existing access road (± 0.5 miles long), to the existing PG&E line (600 Kvh) located north of Round Mountain Road. This corridor has been previously disturbed, during the installation of the AT&T powerline.

The new ± 20 -foot-wide corridor to be trenched for the proposed electrical line between the project site and the existing access road (± 0.5 miles long), to the existing PG&E line located north of Round Mountain Road will traverse property owned by two entities (including the owner of the Round Mountain site). Preliminary arrangements have been made with the second property owner to allow electrical line right-of-way across their property

Records Review

Records reviewed for this evaluation consisted of California Natural Diversity Data Base records (CNDDDB), in-house biological records, soils records maintained by the U.S. Department of Agriculture's Natural Resources Conservation Service, and National Wetlands Inventory (NWI) maps (U.S. Fish and Wildlife Service, no date). The CNDDDB records search covered a 10-mile radius around the study area (consisting of portions of the Bella Vista, Goose Gap, Roaring Creek, Chalk Mountain, Devils Rock, Minnesota Mountain, Montgomery Creek, Hatchet Mountain Pass, Oak Run, Whitmore, and Miller Mountain quadrangles. Soil records maintained by the Natural Resources Conservation Service were reviewed to determine the soil types in the study area and their potential to support wetlands. The NWI map for the Montgomery Creek quadrangle was reviewed to determine if wetlands features have been previously mapped in the study area or surrounding vicinity.

Field Reconnaissance

ENPLAN conducted a field evaluation of the study area on June 16 and July 16, 2009. Most of the special-status species potentially occurring in the study area would have

been evident at the time the fieldwork was conducted. The potential presence of species not readily identifiable during the field studies was determined on the basis of observed habitat characteristics.

Plant Communities/Wildlife Habitats

The project site occurs in a mixed coniferous forest. The canopy layer consists of California black oak, canyon live oak, big-leaf maple, incense cedar, white fir, ponderosa pine, and Douglas-fir. The shrub layer includes deerbrush, California buckeye, green-leaved manzanita, white-leaved manzanita, poison oak, and hoary coffeberry. The herbaceous layer is composed of bracken fern, sword fern, Klamathweed, and an assortment of other wildflowers and grasses.

Special-Status Species

Special-Status Plant Species

Review of CNDDDB records showed that no special-status plant species have been previously reported on the project site. As shown in Table 1, nine special-status plant species are known to occur in the project vicinity: Butte County fritillary, Butte County morning glory, Callahan's mariposa lily, English Peak greenbriar, northern clarkia, rattlesnake fern, Shasta ageratina, Shasta clarkia, and Shasta snow-wreath. The potential for these species to utilize the tower, access road, and/or powerline sites is discussed in Table 2. A checklist of vascular plant species observed during the botanical surveys is enclosed.

Botanical surveys found three special-status plant species within the study area: northern clarkia, Butte County morning glory, and silvery false lupine (Figure 3b). Potentially suitable habitat occurs on the site for Butte County fritillary, Callahan's mariposa lily, and Shasta clarkia. Dried remains of a fritillary (two plants) were observed in the proposed powerline corridor. The plants could not be identified to the species level, and could potentially be the special-status fritillary. However, given its listing status, the Department of Fish and Game is not currently requesting mitigation for the loss of Butte County fritillary populations. Callahan's mariposa lily and Shasta clarkia would have been identifiable at the time the field surveys were conducted, but were not observed and are not expected to be present.

Northern clarkia is widespread on the project site, occurring at the proposed cell tower site and in the proposed powerline and access road corridors. Roughly 3,000 individuals were observed in and adjacent to the study area. Butte County morning glory is present along the powerline corridor, with an estimated 500 plants observed. A small population of silvery false lupine is present within the proposed cell tower site, and the plant is much more abundant along the proposed powerline corridor; an estimated 5,000 plants were observed. These special-status plant species are not state or federally listed, but are monitored by the California Native Plant Society (CNPS). Northern clarkia is on the CNPS List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), while Butte County morning glory and slender false lupine are on CNPS List 4 (Plants of Limited Distribution).

Table 1. Rarefind (CNDDB) Report Summary (Round Mountain)

Rarefind (CNDDB) Report Summary (August 2009 Data)

Listed Element	Quadrangle ¹										Status ²
	GG	RC	CM	DR	MC	MM	HM	OR	WH	MI	
Animals											
American peregrine falcon				•		•					FD, SE
Bald eagle				•							FD, SE
California wolverine			•								ST, SFP
Cascades frog										•	SSC
Foothill yellow-legged frog				•		•				•	SSC
Northern goshawk		•			•		•				SSC
Northwestern pond turtle				•	•	•		•	•		SSC
Oregon shoulderband	•			•		•					None
Osprey		•									SSC
Pacific fisher				•							FC, SSC
Purple martin				•							SSC
Shasta hesperian				•							None
Shasta salamander	•			•	•	•					ST
Shasta sideband				•							None
Silver-haired bat				•	•		•			•	SSC
Spotted bat	•										SSC
Townsend's big-eared bat				•		•					SSC
Western tailed frog							•				SSC
Plants											
Butte County fritillary	•			•	•				•	•	3.2
Butte County morning-glory		•	•		•		•				4.2
Callahan's mariposa lily		•							•		1B.1
English Peak greenbriar		•					•				1B.3
Northern clarkia	•	•	•	•	•						1B.3
Rattlesnake fern									•	•	2.2
Shasta ageratina				•							1B.2
Shasta clarkia				•				•			1B.1
Shasta snow-wreath	•			•							1B.2
Natural Communities											
Alkali seep									•		NA
Lower Pit River/Canyon River (hardhead/tule perch river)		•		•	•						NA
Northern interior cypress forest					•						NA

4.2 = Plants of Limited Distribution – A Watch List; Fairly Threatened in California

Highlighting denotes the quadrangle in which the project site is located. No occurrences were reported inside the study radius in the Bella Vista quadrangle.

¹Quadrangle Code

GG = Goose Gap

RC = Roaring Creek

CM = Chalk Mountain

DR = Devils Rock

MM = Minnesota Mountain

MC = Montgomery Creek

HM = Hatchet Mountain Pass

OR = Oak Run

WH = Whitmore

MI = Miller Mountain

²Status Codes

Federal/State

FE = Federally Listed – Endangered

FT = Federally Listed – Threatened

FSC = Federal Species of Concern

California Native Plant Society

1B.1 = Plants Rare, Threatened or Endangered in California and Elsewhere; Seriously Threatened in California

1B.2 = Plants Rare, Threatened or Endangered in California and Elsewhere; Fairly Threatened in California

1B.3 = Plants Rare, Threatened, or Endangered in California and Elsewhere; Not Very Endangered in California

2.2 = Plants Rare, Threatened or Endangered in California Only; Fairly Threatened in California

3.2 = More Information is Needed; Fairly Threatened in California

FC = Federal Candidate Species

FD = Federally Delisted

SE = State Listed – Endangered

ST = State Listed – Threatened

SSC = State Species of Concern (CDFG)

Table 2.
Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)

	Habitat Requirements	Potential to Occur on the Project Site
Wildlife		
American peregrine falcon <i>Falco peregrinus anatum</i>	American peregrine falcons frequent water bodies in open areas with cliffs and canyons nearby for nesting. This falcon feeds and breeds near water. In Shasta County, this raptor is reported in forested areas to the east and north of Lake Shasta.	No large water bodies occur on or adjacent to the project site. No American peregrine falcons or their nests were observed during the wildlife surveys, nor is the species expected to nest on or adjacent to the project site.
Bald eagle <i>Haliaeetus leucocephalus</i>	The bald eagle requires large, old-growth trees or snags in mixed stands near open bodies of water. Adults tend to use the same breeding areas year after year and often use the same nest, though a breeding area may include one or more alternate nests. Bald eagles usually do not begin nesting if human disturbance is evident.	No large, permanent, fish-bearing water bodies occur in or adjacent to the project site. No bald eagles or their nests were observed during the wildlife surveys, nor are bald eagles expected to nest on or adjacent to the project site.
California wolverine <i>Gulo gulo luteus</i>	California wolverines occur in a variety of forest habitat types above 1,600 in elevation. Wolverines den in caves, cliffs, hollow logs, cavities underground or in snow, or in beaver lodges.	No suitable den sites occur on the project site for California wolverines. California wolverines were not observed during the wildlife surveys and are not expected to den on the site.
Cascades frog <i>Rana cascadae</i>	In the Klamath Mountains and southern Cascades of Northern California, the Cascades frog is typically found above 5,000 feet in elevation. Cascades frogs inhabit alpine lakes, inlet and outlet streams to mountain lakes, ponds, and meadows.	The project site lacks aquatic habitat. The Cascades frog would thus not be present.
Foothill yellow-legged frog <i>Rana boylei</i>	Foothill yellow-legged frogs are typically found in partly-shaded, shallow streams and riffles with a rocky substrate in a variety of aquatic habitats. This frog needs at least some cobble-sized substrate for egg-laying. Foothill yellow-legged frogs generally prefer low to moderate gradient streams, especially for breeding and egg-laying, although juvenile and adult frogs may utilize moderate- to steep-gradient streams during summer and early fall.	The project site lacks aquatic habitat. The foothill yellow-legged frog would thus not be present.

Table 2.
Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)

	Habitat Requirements	Potential to Occur on the Project Site
Northern goshawk <i>Accipiter gentilis</i>	Northern goshawks nest generally nest on north-facing slopes near water in old-growth coniferous and deciduous forests. Goshawks use old nests and maintain alternate nest sites.	A mixed coniferous forest is present on the project site. However, no northern goshawks or their nests were observed on the site during the wildlife surveys and no suitable water bodies are located in the site vicinity. The goshawk would thus not be present.
Northwestern pond turtle <i>Actinemys marmorata marmorata</i>	The northwestern pond turtle associates with permanent or nearly permanent water in a variety of habitats. This turtle is typically found in quiet water environments. Pond turtles require basking sites such as partially submerged logs, rocks, or open mud banks, and suitable (sandy banks or grassy open fields) upland habitat for egg-laying. In cold weather, pond turtles hibernate underwater in bottom mud.	The project site lacks aquatic habitat. The northwestern pond turtle would thus not be present.
Oregon shoulderband <i>Helminthoglypta hertleini</i>	The Oregon shoulderband inhabits basaltic talus slopes in riparian areas.	The project site lacks riparian habitat. The Oregon shoulderband would thus not be present.
Osprey <i>Pandion haliaetus</i>	Ospreys require large bodies of permanent water and suitable nest sites. Nesting occurs on large decadent trees or structures such as powerline towers, buildings, and bridges. Ospreys are primarily associated with pine and mixed-conifer habitats, although urban or suburban nests are not unusual.	No large, permanent, fish-bearing water bodies occur in or adjacent to the project site. No ospreys or their nests were observed during the wildlife surveys, nor are ospreys expected to nest on or near the project site.
Pacific fisher <i>Martes pennanti pacificus</i>	In California, Pacific fishers primarily inhabit mixed conifer forests composed of Douglas-fir and associated conifers, although they also are encountered frequently in higher elevation fir and pine forests, and mixed evergreen/broadleaf forests. Suitable habitat for Pacific fishers consists of large areas of mature, dense forest stands with snags and greater than 50 percent canopy closure.	The project site occurs within a young mixed coniferous forest and has suitable foraging habitat for Pacific fishers. However, no fishers or dens were observed on the project site, nor is the species expected to den on the site.

Table 2.
Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)

	Habitat Requirements	Potential to Occur on the Project Site
Purple martin <i>Progne subis</i>	Purple martins inhabit woodlands and low elevation coniferous forests of Douglas-fir, ponderosa pine, and Monterey pine. Purple martins nest in old woodpecker cavities or in man-made structures such as culverts, bridges, or nest boxes.	Woodlands and an adjacent telecommunication facility provide suitable nesting habitat for the purple martin. However, no purple martins, or their nests were observed during the wildlife surveys. The purple martin is thus not expected to nest in the study site.
Shasta hesperian <i>Vespericola shasta</i>	The Shasta hesperian, an aquatic snail, is found beneath woody debris and rocks in perennial tributaries of the upper Sacramento River.	The project site lacks aquatic habitat. The Shasta hesperian would thus not be present.
Shasta salamander <i>Hydromantes shastae</i>	The Shasta salamander is primarily restricted to limestone outcrops near Lake Shasta. Habitat consists of moist limestone fissures and caves, in volcanic or other rock outcroppings, and under woody debris on the surface during wet weather. Shasta salamanders may be found in all successional stages of valley foothill hardwood-conifer, ponderosa pine, and mixed conifer habitats.	Limestone-derived soils do not occur on the project site. The Shasta salamander would thus not be present.
Shasta sideband <i>Monadenia troglodytes troglodytes</i>	The Shasta sideband inhabits limestone-derived soils in Shasta County.	Limestone-derived soils do not occur on the project site. The Shasta sideband would thus not be present.
Silver-haired bat <i>Lasionycteris noctivagans</i>	Silver-haired bats occur in coastal and montane forests. Silver-haired bats roost in hollow trees, snags, rock crevices, caves, and under bark.	Although the silver-haired bat was not observed during the wildlife surveys, trees and shrubs on the project site may provide suitable roosting habitat for the bat.
Spotted bat <i>Euderma maculatum</i>	Spotted bats inhabit grasslands, mixed coniferous forests, and deserts. Spotted bats roost in caves, rock crevices, and buildings.	Although the spotted bat was not observed during the wildlife surveys, an adjacent telecommunication facility may provide suitable roosting habitat for the bat.

Table 2.
Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)

	Habitat Requirements	Potential to Occur on the Project Site
Townsend's big-eared bat <i>Corynorhinus townsendii pallescens</i>	Townsend's big-eared bat is found throughout California except in subalpine and alpine habitats, and may be found at any season throughout its range. The species is most abundant in mesic habitats. The bat requires caves, mines, tunnels, buildings, or other human-made structures for roosting.	The project site lacks suitable roosting habitat for Townsend's big-eared bat. However, an adjacent telecommunication facility may provide suitable roosting habitat for the bat.
Western tailed frog <i>Ascaphus truei</i>	Western tailed frogs inhabit perennial streams of low temperature. Western tailed frogs are reported in forested assemblages dominated by Douglas fir, redwood, Sitka spruce, ponderosa pine, and western hemlock. In California, tailed frogs are largely restricted to coastal forests with 100 cm annual precipitation.	The project site lacks aquatic habitat. The western tailed frog would thus not be present.
Plants		
Butte County fritillary <i>Fritillaria eastwoodiae</i>	Butte County fritillary occurs on dry slopes or in wet areas in chaparral, cismontane woodland, or lower montane coniferous forest. Butte County fritillary occurs on serpentine, red clay, or sandy loam soils between 150 and 4,500 feet in elevation above sea level.	The project site has suitable habitat for Butte County fritillary. The botanical surveys were conducted too late in the season to identify Butte County fritillary. However, two dried stems of a fritillary were observed; they could represent Butte County fritillary or a more common species.
Butte County morning glory <i>Calystegia atriplicifolia</i> ssp. <i>buttensis</i>	Butte County morning glory occurs in dry, open areas within lower montane coniferous forest. The morning glory is primarily found in Shasta, Tehama, and Butte counties, between 2,000 and 4,000 feet in elevation. Smaller populations are reported in Del Norte and Mendocino counties.	Butte County morning glory was observed on the project site during the botanical surveys.
Callahan's mariposa lily <i>Calochortus syntrophus</i>	Callahan's mariposa lily occurs on rocky substrates in cismontane woodlands and grasslands between 1,700 and 2,800 feet in elevation.	The project site is two hundred feet above the known elevation range of Callahan's mariposa lily. Although suitable habitat is present for Callahan's mariposa lily, the species was not observed during the botanical surveys and is not expected to be present.

Table 2.
Evaluation of the Potential for Special-Status Species and Other Species Identified by the CNDDDB to Occur on the Project Site (Round Mountain)

	Habitat Requirements	Potential to Occur on the Project Site
English Peak greenbriar <i>Smilax jamesii</i>	English Peak greenbriar occurs along streams and lake margins.	The project site lacks streams and lakes. English Peak greenbriar was not observed during the botanical surveys and is not expected to be present.
Northern clarkia <i>Clarkia borealis</i> ssp. <i>borealis</i>	Northern clarkia inhabits chaparral, cis-montane woodland, and coniferous forests between 1,200 and 2,400 feet in elevation. The species often occurs in dry, rocky substrates along roads.	Northern clarkia was observed on the project site during the botanical surveys.
Rattlesnake fern <i>Botrychium virginianum</i>	Rattlesnake fern occurs in bogs and fens.	Bogs and fens do not occur on the project site. Rattlesnake fern was not observed during the botanical surveys and is not expected to be present.
Shasta ageratina (Shasta eupatory) <i>Ageratina shastensis</i>	Shasta ageratina (Shasta eupatory) occurs on limestone outcrops within chaparral or lower montane coniferous forest around Shasta Lake.	Limestone outcrops do not occur on the project site. The Shasta ageratina was not observed during the botanical surveys and is not expected to be present.
Shasta clarkia <i>Clarkia borealis</i> spp. <i>arida</i>	Shasta clarkia occurs in openings in gray pine and black oak woodlands on south and west-facing slopes in Shasta and Tehama counties, at elevations between 1,600 and 1,700 feet.	The project site has suitable habitat for Shasta clarkia. However, Shasta clarkia was not observed during the botanical surveys and is not expected to be present.
Shasta snow-wreath <i>Neviusia cliftonii</i>	The Shasta snow-wreath is generally limited to limestone-derived soils in shady stream canyons.	Limestone-derived soils do not occur on the project site. Shasta snow-wreath was not observed during the botanical surveys and is not expected to be present.

The DFG recognizes that Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for state listing, and the Department recommends they be addressed in CEQA projects. However, a plant need not be in this Inventory to be considered a rare, threatened, or endangered species under CEQA. The DFG recommends, and local governments may require, protection of regionally significant plants, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 and 4.

Project implementation would result in the loss of populations of northern clarkia, Butte County morning glory, and silvery false lupine, and could potentially result in the loss of a small population of Butte County fritillary. DFG typically recommends mitigation for the loss of northern clarkia plants. Although avoidance of Butte County morning glory, slender false lupine, and Butte County fritillary (if present) is encouraged by DFG, mitigation for the loss of these plants is not currently required. Given the abundance of northern clarkia in and adjacent to the road and powerline corridors, full avoidance is not possible. However, measures can be implemented to minimize construction disturbance within populations of northern clarkia as well as the other special-status plants.

Loss of northern clarkia shall be minimized through implementation of the following measures:

- A qualified botanist shall flag and map the extent of northern clarkia populations in and adjacent to the study area; such work shall be conducted during the plant's blooming period (late June-July) and prior to initiation of construction.
- Under supervision of the qualified botanist, and in consultation with the construction project manager, temporary construction fencing shall be installed to protect the northern clarkia to the maximum extent feasible. The fencing shall be maintained throughout the duration of project construction.
- Stockpiling of materials and equipment shall not be allowed within the population boundary.
- Minor adjustments to the proposed powerline route shall be made to minimize disturbance of northern clarkia; where full avoidance is not feasible, the width of construction disturbance shall be minimized .

Special-Status Wildlife Species.

Review of CNDDDB records showed that no special-status animal species have been previously reported on the project site. As shown in Table 1, fifteen special-status wildlife species are known to occur in the project vicinity: American peregrine falcon, bald eagle, California wolverine, Cascades frog, foothill yellow-legged frog, northern goshawk, northwestern pond turtle, osprey, Pacific fisher, purple martin, Shasta salamander, silver-haired bat, spotted bat, Townsend's big-eared bat, and western tailed frog. The CNDDDB records search also identified three non-status wildlife species within the search radius: Oregon shoulderband, Shasta hesperian, and Shasta

sideband. The potential for each of these species to utilize the project site is addressed in Table 2.

No special-status wildlife species were observed during the wildlife field surveys. However, based on habitat evaluation, three special-status bat species could roost on or adjacent to the site. These species are silver-haired bat, spotted bat, and Townsend's big-eared bat.

Silver-haired bats primarily roost in hollow trees, snags, rock crevices, caves, and under bark. Spotted bats and Townsend's big-eared bats often roost in man-made structures, but also utilize caves and rock crevices. Tree removal could result in the minor loss of roosting habitat for silver-haired bats; no structures are proposed to be removed. Because of the vast amount of suitable roosting habitat for bats elsewhere in the immediate vicinity, this minor loss of bat habitat associated with project implementation would have a minimal impact on bats.

Indirect impacts to special-status species which utilize aquatic habitats could occur if substantial quantities of sediment were to wash into downslope drainages. Implementation of Best Management Practices for erosion control and spill prevention would be required during project construction. Such measures may include limiting construction to the dry season; use of straw wattles, sediment fencing, and/or gravel berms to prevent sediments from entering downslope drainages; and revegetating disturbed sites upon completion of construction. Periodic monitoring of the erosion controls is required, and they must be maintained as needed. Given these existing requirements for erosion control, no indirect impacts on special-status species which utilize aquatic habitats are expected.

Sensitive Natural Communities

CNDDDB records show that three sensitive natural communities have been reported in the study vicinity: Northern Interior Cypress Forest, Alkali Seep, and Lower Pit River/Canyon River (Hardhead/Tule Perch River). As a result of the biological field surveys, it was determined that these communities, as well as aquatic habitats and riparian habitats, do not occur on the subject site and would not be impacted by project implementation.

Soils

According to the U.S. Department of Agriculture, Natural Resources Conservation Service, one soil unit, Lyonsville-Jiggs soils, 50-70% slopes, is present at the proposed cell tower site and powerline corridor¹. This soil unit is not hydric, nor does it contain inclusions of hydric soils².

Wetlands and Other Waters of the State/United States

Review of the NWI map for the Montgomery Creek quadrangle found that no wetlands or other waters of the State/United States have been mapped on the project site.

¹ 2007. Natural Resources Conservation Service, Web Soil Survey. <http://www.websoilsurvey.nrcs.usda.gov/app/>

² 2007. Natural Resources Conservation Service, Hydric Soil List. <http://www.soils.usda.gov/use/hydric/>

ENPLAN inspected the site to document the presence of wetlands or other waters of the subject to the jurisdiction of the State/United States. The field inspection found no wetlands or other waters on the project site. Project implementation would have no adverse effects on federally protected wetlands.

Resource-Agency Permit Requirements

As the project site does not have wetlands or other waters subject to the jurisdiction of the State/United States, a Department of the Army permit from the Corps of Engineers, Water Quality Certification and/or a waiver of Waste Discharge Requirements from the Central Valley Regional Water Quality Control Board, and a Streambed Alteration Agreement from the California Department of Fish and Game are not required. As for all projects resulting in disturbance of more than one acre, a Notice of Intent/General Construction Activity Storm Water Permit (and Storm Water Pollution Prevention Plan) will be required prior to construction. Various other permits and approvals may also be required by other agencies.

Woodlands/Timberlands

Project implementation would include removal of oaks and conifers. Potentially applicable regulations pertinent to this activity include the California Forest Practice Act and the Oak Woodland Conservation Act.

The proposed project is subject to the Forest Practice Act because the site is within a “timberland” and conifers would be removed during project implementation. Accordingly, a Timber Harvest Plan (or exemption) must be prepared by a Registered Professional Forester, and must be reviewed by and accepted by the California Department of Forestry and Fire Protection. The Oak Woodland Conservation Act addresses removal of oaks with a diameter of five inches at breast height (dbh) or larger. Oak woodlands are generally defined as lands supporting native oaks, with the oaks providing at least ten percent canopy closure. Based on aerial photograph review and field inspection, the project site does not meet this canopy coverage threshold. Most of the oaks in the study area are Brewer oaks, which are small oaks generally less than 20 feet in height and with diameters less than 5 inches dbh. Although a few black oaks and live oaks in the study area have diameters of five inches dbh or greater, they do not provide ten percent of the total canopy cover.

Removal of trees greater than 5 inches dbh should be avoided where feasible. The loss of native oaks and conifers with a diameter at breast height (dbh) of five inches or greater shall be avoided to the extent feasible, as determined by a qualified botanist in consultation with the construction project manager. Measures may include minimizing the width of the construction corridor to avoid mature trees, installing temporary construction fencing to protect trees, limiting staging areas to lands that do not support mature trees, and other actions deemed appropriate during pre-construction field evaluation. Given the small number of mature trees to be removed, the limited extent of permanent impacts, the requirements of the Forest Practice Act, and implementation of mitigation measures for the loss of trees, the residual impact on native oaks and conifers would be minimal.

Nesting Migratory Birds

The project site has a moderate potential to support nesting by raptors and migratory birds. Potential nesting habitat for these birds occurs in trees and shrubs, which are abundant in the study area. If present, active nests could be lost during vegetation removal or could be disturbed by on-site construction activities, potentially resulting in nest abandonment and mortality of chicks and eggs. While no nests were observed during the field survey, they could be present in the future. To ensure that active nests of raptors and migratory birds are not disturbed, vegetation removal shall be avoided during the nesting season (generally March 1 to July 31), to the extent possible. If vegetation removal must occur during the nesting season, a focused survey shall be conducted by a qualified biologist to identify active nests in and adjacent to the project site. The survey shall be conducted no more than 30 days prior to the beginning of construction or tree removal. If nesting birds are found during the focused survey, the nest tree(s) shall not be removed until after the young have fledged. Further, to prevent nest abandonment and mortality of chicks and eggs, no construction shall occur within 500 feet of an active nest, unless a smaller buffer zone is authorized by the Department of Fish and Game (the size of the construction buffer zone may vary depending on the species of nesting birds present).

Figures

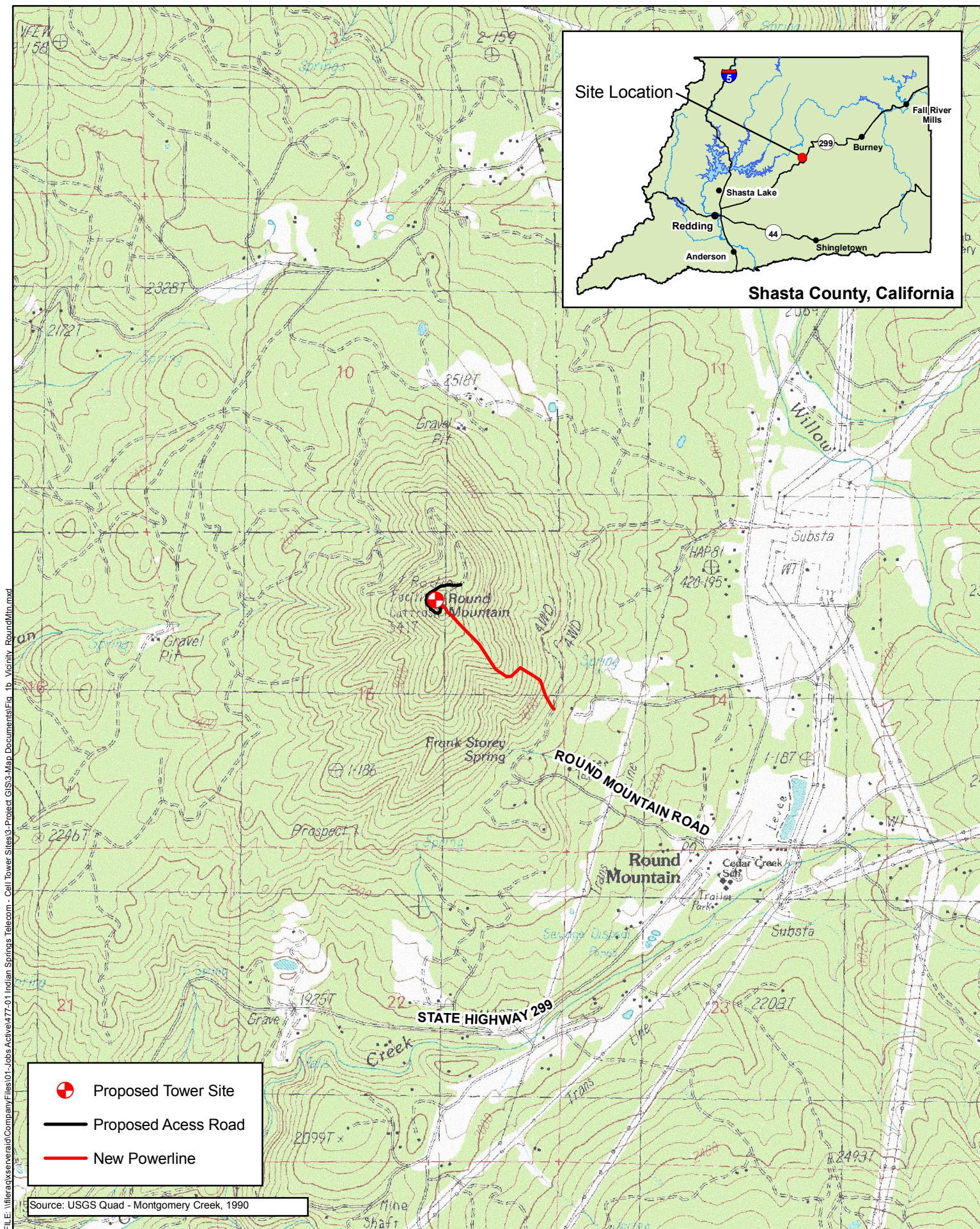
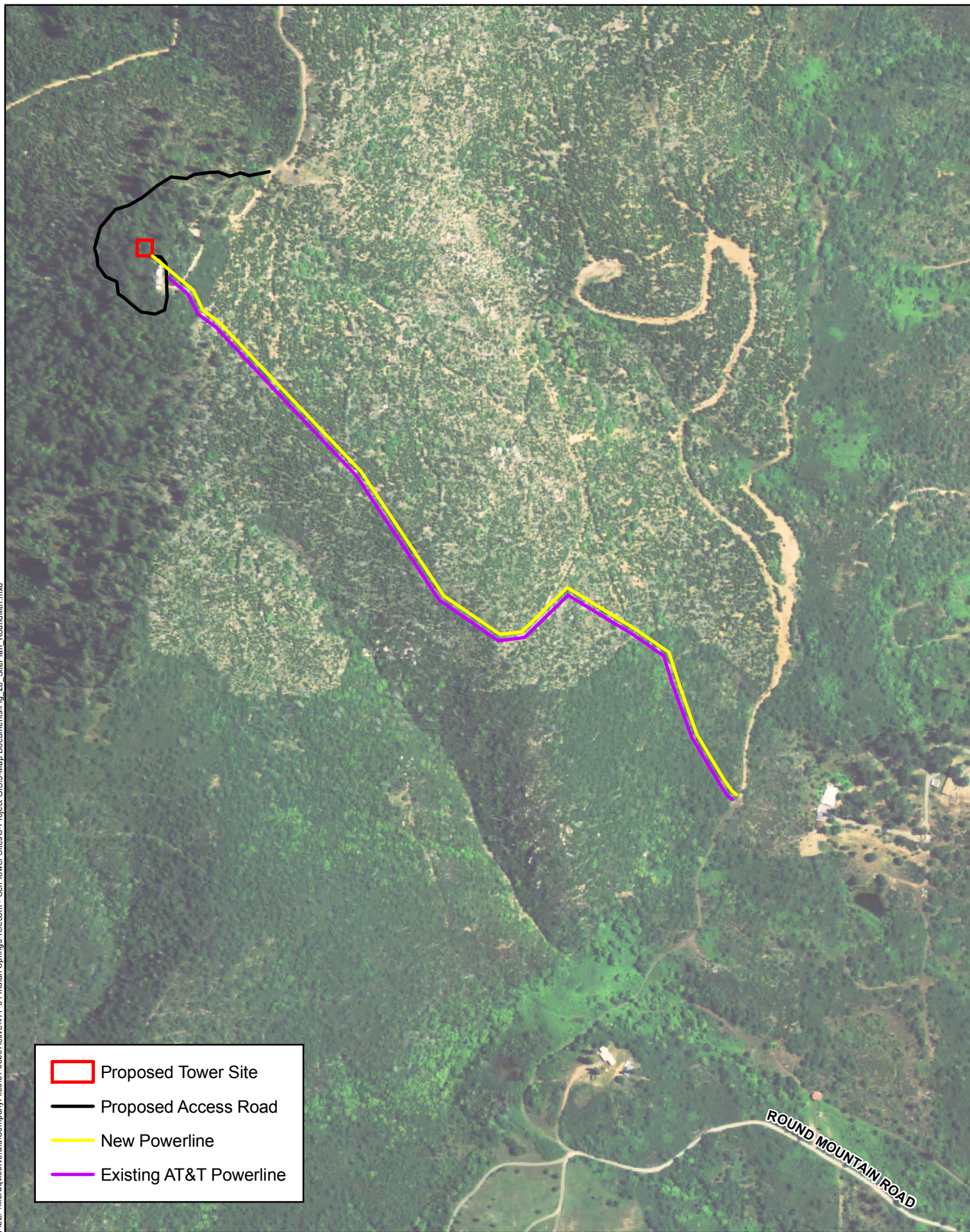


Figure 1b

Vicinity Map - Round Mountain



Feature and boundary locations depicted are approximate only. 08.11.09



Figure 2b
Site Plan - Round Mountain

08.03.09



Special Status Species - Round Mountain



Checklist of Vascular Plant Species Observed

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

Round Mountain
June 26 and July 16, 2009

Aceraceae

Acer macrophyllum

Anacardiaceae

Toxicodendron diversilobum

Apiaceae

Ligusticum californicum

Lomatium sp.

Lomatium californicum

Osmorhiza chilensis

Torilis arvensis

Aristolochiaceae

Asarum hartwegii

Asclepiadaceae

Asclepias speciosa

Asteraceae

Agoseris grandiflora

Agoseris retrorsa

Centaurea solstitialis

Erigeron inornatus var. *inornatus*

Eriophyllum lanatum

Helianthella californica

Hieraceum albiflorum

Lactuca sp.

Madia sp.

Solidago californica

Tragopogon dubius

Brassicaceae

Erysimum capitatum var. *capitatum*

Streptanthus sp. (*tortuosus*?)

Campanulaceae

Campanula prenanthoides

Caryophyllaceae

Stene sp.

Convolvulaceae

Calystegia atripliciflora ssp. *buttensis*

Calystegia occidentalis

Cupressaceae

Calocedrus decurrens

Cyperaceae

Carex multicaulis

Dennstaedtiaceae

Pteridium aquilinum var. *pubescens*

Dryopteridaceae

Polystichum imbricans ssp. *imbricans*

Maple Family

Big-leaved maple

Sumac Family

Poison-oak

Carrot Family

California licorice-root

Lomatium

California lomatium

Mountain sweet-cicely

Field hedge-parsley

Birthwort Family

Hartweg's wild ginger

Milkweed Family

Showy milkweed

Sunflower Family

Large-flowered Agoseris

Spear-leaved agoseris

Yellow star thistle

California rayless daisy

Woolly sunflower

California helianthella

White-flowered hawkweed

Prickly lettuce

Madia

California goldenrod

Goat's beard

Mustard Family

Sandune capitatum

Jewelflower

Bluebell Family

California harebell

Pink Family

Catchfly

Morning Glory Family

Butte County morning-glory

Western morning-glory

Cypress Family

Incense cedar

Sedge Family

Many-stemmed sedge

Bracken Family

Bracken fern

Wood Fern Family

Sword fern

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

Round Mountain

Ericaceae

Arctostaphylos patula
Arctostaphylos viscida
Pterospora andromedea

Euphorbiaceae

Eremocarpus setigerus

Fabaceae

Lotus purshianus var. *purshianus*
Melilotus alba
Thermopsis macrophylla var. *argentata*
Trifolium hirtum

Fagaceae

Quercus chrysolepis
Quercus kelloggii

Grossulariaceae

Ribes roezlii var. *roezlii*

Hippocastanaceae

Aesculus californica

Hydrophyllaceae

Phacelia sp. (*ramosissima*?)

Hypericaceae

Hypericum perforatum

Juncaceae

Juncus patens

Lamiaceae

Monardella sheltonii

Liliaceae

Chlorogalum pomeridianum var. *pomeridianum*
Dichelostemma capitatum ssp. *capitatum*
Fritillaria sp.

Onagraceae

Clarkia borealis ssp. *borealis*
Clarkia rhomboidea

Pinaceae

Abies concolor
Pinus ponderosa
Pseudotsuga menziesii var. *menziesii*

Plantaginaceae

Plantago lanceolata

Heath Family

Green-leaved manzanita
 White-leaf manzanita
 Pinedrops

Spurge Family

Dove weed

Legume Family

Spanish lotus
 White sweetclover
 Silvery goldenbanner
 Rose clover

Oak Family

Canyon live oak
 California black oak

Gooseberry Family

Sierra gooseberry

Buckeye Family

California buckeye

Waterleaf Family

Phacelia

St. John's-wort Family

Klamath weed

Rush Family

Spreading rush

Mint Family

Shelton's monardella

Lily Family

Wavy-leaved soap plant
 Blue dicks
 Fritillary

Evening-Primrose Family

Northern clarkia
 Diamond clarkia

Pine Family

White fir
 Ponderosa pine
 Douglas-fir

Plantain Family

English plantain

CHECKLIST OF VASCULAR PLANT SPECIES OBSERVED

Round Mountain

Poaceae

Avena sp.
Bromus sp.
Bromus carinatus var. *carinatus*
Bromus tectorum
Calamagrostis sp.
Cynosurus echinatus
Elymus glaucus ssp. *glaucus*
Elytrigia intermedia
Melica harfordii
Phleum pratense
Poa bulbosa
Secale cereale
Vulpia microstachys var. *microstachys*
Vulpia microstachys var. *pauciflora*

Polemoniaceae

Gilia capitata

Polygalaceae

Polygala californica

Polygonaceae

Eriogonum nudum
Rumex acetosella

Primulaceae

Trientalis latifolia

Ranunculaceae

Delphinium sp.

Rhamnaceae

Ceanothus integerrimus
Ceanothus prostratus
Rhamnus rubra
Rhamnus tomentella ssp. *tomentella*

Rosaceae

Potentilla glandulosa
Rubus discolor
Rubus parviflorus

Rubiaceae

Galium aparine
Galium porrigens var. *tenue*

Scrophulariaceae

Castilleja applegatei ssp. *pinetorum*
Collinsia tinctoria
Verbascum blattaria
Verbascum thapsus

Verbenaceae

Verbena lasiostachys var. *scabrida*

Violaceae

Viola sp.

Grass Family

Wild oats
 Brome
 California brome
 Downy brome
 Reedgrass
 Hedgehog dogtail
 Blue wild rye
 Intermediate wheatgrass
 Harford's melic
 Cultivated timothy
 Bulbous bluegrass
 Rye
 Small fescue
 Few-flowered fescue

Phlox Family

Blue-headed gilia

Milkwort Family

California milkwort

Buckwheat Family

Buckwheat
 Sheep sorrel

Primrose Family

Pacific starflower

Buttercup Family

Blue larkspur

Buckthorn Family

Deer brush
 Squaw carpet
 Sierra coffeeberry
 Hoary coffeeberry

Rose Family

Sticky cinquefoil
 Himalayan blackberry
 Thimbleberry

Madder Family

Cleavers
 Climbing bedstraw

Snapdragon Family

Applegate's paintbrush
 Sticky Chinese-houses
 Moth mullein
 Woolly mullein

Vervain Family

Western verbena

Violet Family

Violet