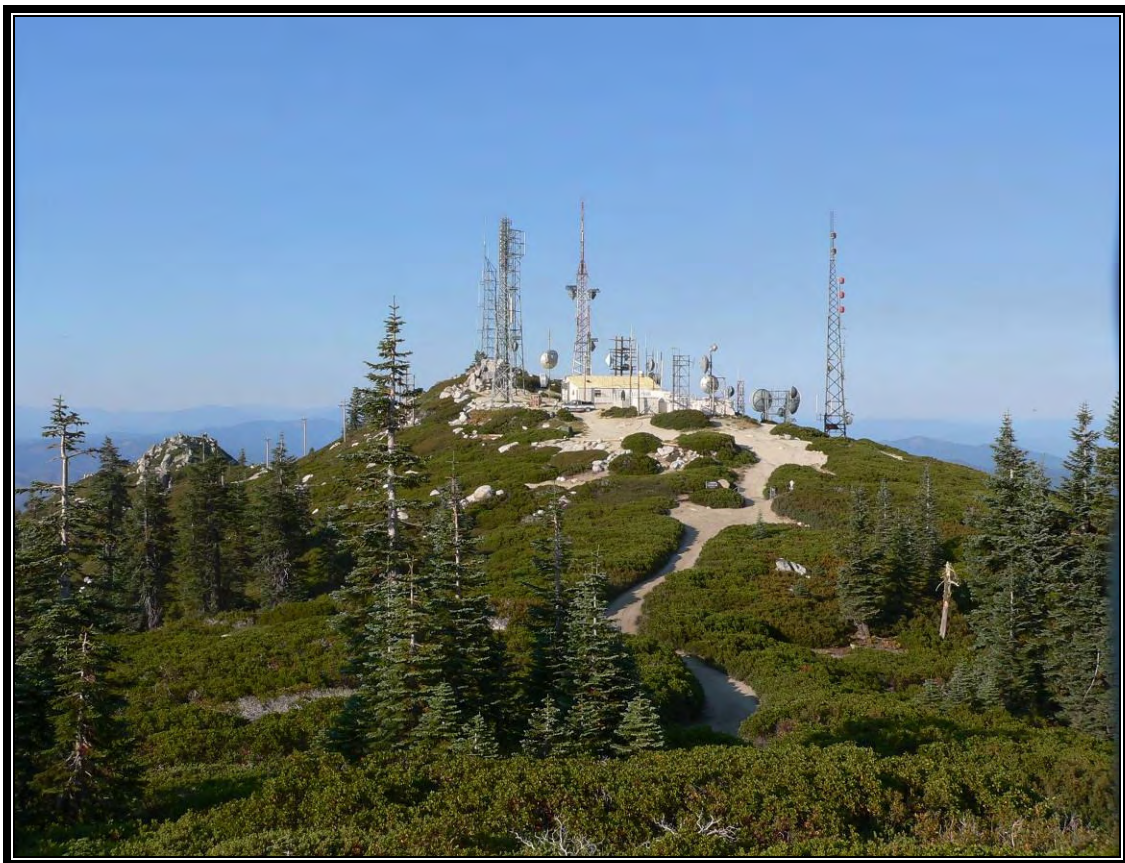




Shasta Bally Summit Communication Facilities Environmental Assessment

July 2009





MISSION STATEMENT

The National Park Service preserves the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

To achieve this mission, the National Park Service adheres to the following guiding principles:

Excellent Service: Providing the best possible service to park visitors and partners.

Productive Partnerships: Collaborating with federal, state, tribal, and local governments, private organizations, and businesses to work toward common goals.

Citizen Involvement: Providing opportunities for citizens to participate in the decisions and actions of the National Park Service.

Heritage Education: Educating park visitors and the general public about their history and common heritage.

Outstanding Employees: Empowering a diverse workforce committed to excellence, integrity, and quality work.

Employee Development: Providing developmental opportunities and training so employees have the "tools to do the job" safely and efficiently.

Wise Decisions: Integrating social, economic, environmental, and ethical considerations into the decision-making process.

Effective Management: Instilling a performance management philosophy that fosters creativity, focuses on results, and requires accountability at all levels.

Research and Technology: Incorporating research findings and new technologies to improve work practices, products, and services.

Shared Capabilities: Sharing technical information and expertise with public and private land managers.

Environmental Assessment Shasta Bally Summit Communication Facilities

Prepared for:
National Park Service
US Department of the Interior



Shasta Bally Summit Communication Facilities Environmental Assessment

Whiskeytown National Recreation Area Whiskeytown, California

ABSTRACT

Summary

Whiskeytown National Recreation Area (park) will continue with active management of the telecommunication site including issuance of right-of-way (ROW) Permits at the summit of Shasta Bally in September 2009. Shasta Bally summit has been used as a telecommunication site for over fifty years. Shasta Bally is well-recognized as a dominant geographic feature in the Redding, California area. This peak rises up from the Sacramento foothills to 6,199 feet above mean sea level (MSL) and provides sweeping views of the Klamath Mountains, Cascade Range and the Sacramento Valley. Over time, the elevation and unobstructed aspect of the summit has made it an important spiritual site for Native Americans, a highly desirable location for a telecommunications site, and a spectacular feature of a national park.

This Environmental Assessment (EA) will evaluate five alternatives: a No Action Alternative and four action alternatives. The No Action alternative describes the current condition of the project site and would continue telecommunications operations with the existing disturbed area (site) without significant changes and without issuance of ROW Permits by the National Park Service (NPS). However, existing tenants could not continue to operate without a permit from the National Park Service (NPS) (36 CFR Section Part 14). The action alternatives consist of Alternative B where all existing permit applicants will continue to use the site, Alternative C would allow all existing permit applicants to continue to use the site in the short-term but the site would be phased out over a set time period (e.g. 20 – 30 years), Alternative D would let all existing permit applicants to continue to use the site and allow new permittees to co-locate on existing infrastructure. Alternative F, the preferred alternative, would allow all existing permit applicants to continue to use the site, new permittees would be able to co-locate on existing infrastructure, and installation of new infrastructure would be allowed within the existing site in recently disturbed areas not currently being utilized.

This EA has been prepared in compliance with the National Environmental Policy Act (NEPA) to provide the decision-making framework that 1) analyzes a reasonable range of alternatives to meet objectives of the proposal, 2) evaluates potential issues and impacts to the park's resources and values, and 3) identifies mitigation measures to lessen the degree or extent of these impacts. This document analyzes effects to resources that were identified as potentially present and affected by the proposed actions. These resources include soils, vegetation, wildlife, special status species, water resources, ecologically critical areas, ethnographic resources, air quality, environmental justice, soundscape, visual resources, visitor use and experience, and park operations. All other resource topics have been dismissed because the project would result in negligible or minor effects to those resources. No major effects are anticipated as a result of this project.

Public Comment

There are two ways the public can comment on the EA: 1) post comments online at <http://parkplanning.nps.gov/> or 2) mail comments to Superintendent; Whiskeytown National Recreation

Area; P.O. Box 188; Whiskeytown, California 96095. This EA will be available for public review for 30 days. It is the practice of the NPS to make all comments, including names and addresses of respondents who provide that information, available for public review following the conclusion of the EA process. Individuals may request that the NPS withhold their name and/or address from public disclosure. **If you wish to have your name and/or address withheld, you must state this prominently at the beginning of your comment.** NPS will honor such requests to the extent allowable by law, but you should be aware that NPS may still be required to disclose your name and address pursuant to the Freedom of Information Act. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

This page intentionally left blank

TABLE OF CONTENTS

1	PURPOSE AND NEED	1
	Introduction	1
	Purpose and Need.....	1
	Description of Project Area.....	9
	Shasta Bally Communications Site	9
	Shasta Bally Road.....	9
	Power Supply	9
	Settlement Agreement	27
	Public Scoping	27
	SHPO Consultation	28
	Guiding Principles	28
	Relationship to Other Plans and Policies.....	29
2	ALTERNATIVES CONSIDERED	33
	Alternative A (No Action).....	33
	Actions Common to All Action Alternatives	33
	Alternative B – Existing Permittees Remain (Environmentally Preferred).....	33
	Alternative C – Long-Term Phase-Out	33
	Alternative D – Existing and New Permittees on Existing Infrastructure	34
	Alternative F – Expansion (Preferred Alternative).....	34
	Environmentally Preferred Alternative	34
	Alternatives Considered but Dismissed	35
	Mitigation Measures and Best Management Practices	35
	Mitigation Measures for Structures and Facilities—Existing	35
	Mitigation Measures and BMPs—Maintenance and Construction	36
	Mitigation Measures and Requirements—New Structures or Facilities.....	38
3	AFFECTED ENVIRONMENT	43
	Whiskeytown National Recreation Area Setting	43
	Resources Not Present	43
	Resources Present but Not Affected.....	43
	Resources Present and Brought Forward for Analysis.....	43
	Resource Assessment.....	44
	Physical Resources.....	44
	Biological Resources.....	45
	Cultural Resources.....	54
	Human Environment	55
	Socioeconomic Considerations.....	57
4	ENVIRONMENTAL CONSEQUENCES.....	59
	Physical Resources	62
	Air Quality.....	62

	Soils and Geologic Resources	65
	Water Quality	68
	Biological Resources.....	70
	Ecologically Critical Areas.....	70
	Special Status Species	73
	Vegetation	75
	Wildlife.....	78
	Cultural Resources	80
	Ethnographic Resources.....	80
	Human Environment.....	82
	Park Operations	82
	Visitor Use and Experience.....	84
	Soundscape	87
	Visual Resources	90
	Socioeconomic Considerations	93
	Environmental Justice	93
5	CONSULTATION AND COORDINATION	101
	SHPO Consultation	101
	Internal and External Scoping	101
	Environmental Assessment Review	101
	List of Preparers.....	101
	List of Contributors.....	102
6	REFERENCES.....	103

LIST OF TABLES

Table 1 – Alternative Summary and Extent to Which Each Alternative Meets Project Objectives	41
Table 2 – Extent to Which Each Alternative Meets Project Objectives	42
Table 3 – CNPS and Park Status of Potential Rare Plant Species	50
Table 4 – Comparative Summary of Environmental Impacts	97

LIST OF FIGURES

Figure 1 – Site Location Map	3
Figure 2 – Shasta Bally Road and Power Line Corridor	5
Figure 3 – Summit Site Plan	7
Figure 4 – Communication Facility Site Plan	11
Figure 5 – Photographs.....	13
Figure 6 – Photographs.....	15
Figure 7 – Photographs.....	17
Figure 8 – Photographs.....	19
Figure 9 – Photographs.....	21
Figure 10 – Photographs.....	23
Figure 11 – Photographs.....	25

LIST OF APPENDICES

Appendix A – News Releases, Public Comments, and Consultation Letters
Appendix B – Mitigation Measures and Best Management Practices

1 PURPOSE AND NEED

Introduction

The Whiskeytown National Recreation Area (park) is a unit of the National Park Service (NPS) located within the Whiskeytown-Shasta-Trinity National Recreation Area (NRA). The park is located in northern California within Shasta County, approximately eight miles west of Redding, California (Figure 1). Whiskeytown was established by the Act of November 8, 1965 to “*provide for the public outdoor recreation use and enjoyment of the Whiskeytown . . . reservoir [] and surrounding lands in the State of California by present and future generations and the conservation of scenic, scientific, historic, and other values contributing to public enjoyment of such lands and waters.*” The United States purchased the summit of Shasta Bally in 1970 subject to a lease that the prior owner had entered into with Sacramento Valley Television Inc. for telecommunications purposes (SVTI Lease). The summit of Shasta Bally is located within the park at an elevation of 6,199 feet above MSL. Due to its elevation, the summit at Shasta Bally provided an attractive location for telecommunication towers and related facilities prior to the United States’ purchase of the summit in 1970. Additionally, the views of the summit from spiritual sites in the area are important to Native Americans.

The NPS has prepared this document to assist in evaluating the issuance of NPS right-of-way (ROW) Permits to allow the operation of wireless communication facilities (WCF) by non-NPS entities on the summit of Shasta Bally in the park. Three areas within the park will be examined in this Environmental Assessment (EA) and include the Shasta Bally Summit and Communications Site, Shasta Bally road from Sheep Camp to the Summit, and the Pacific Gas and Electric (PG&E) power line that runs from the Crystal Creek Conservation Camp to the summit. Figure 2 illustrates the location of the project area and Figure 3 shows the general location of the WCF, public parking, hiking trail, and Shasta Bally road on the summit. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council on Environmental Quality (CEQ) (40 CFR 1508.9), and the National Park Service Director’s Order (DO)-12 (*Conservation Planning, Environmental Impact Analysis, and Decision-making*).

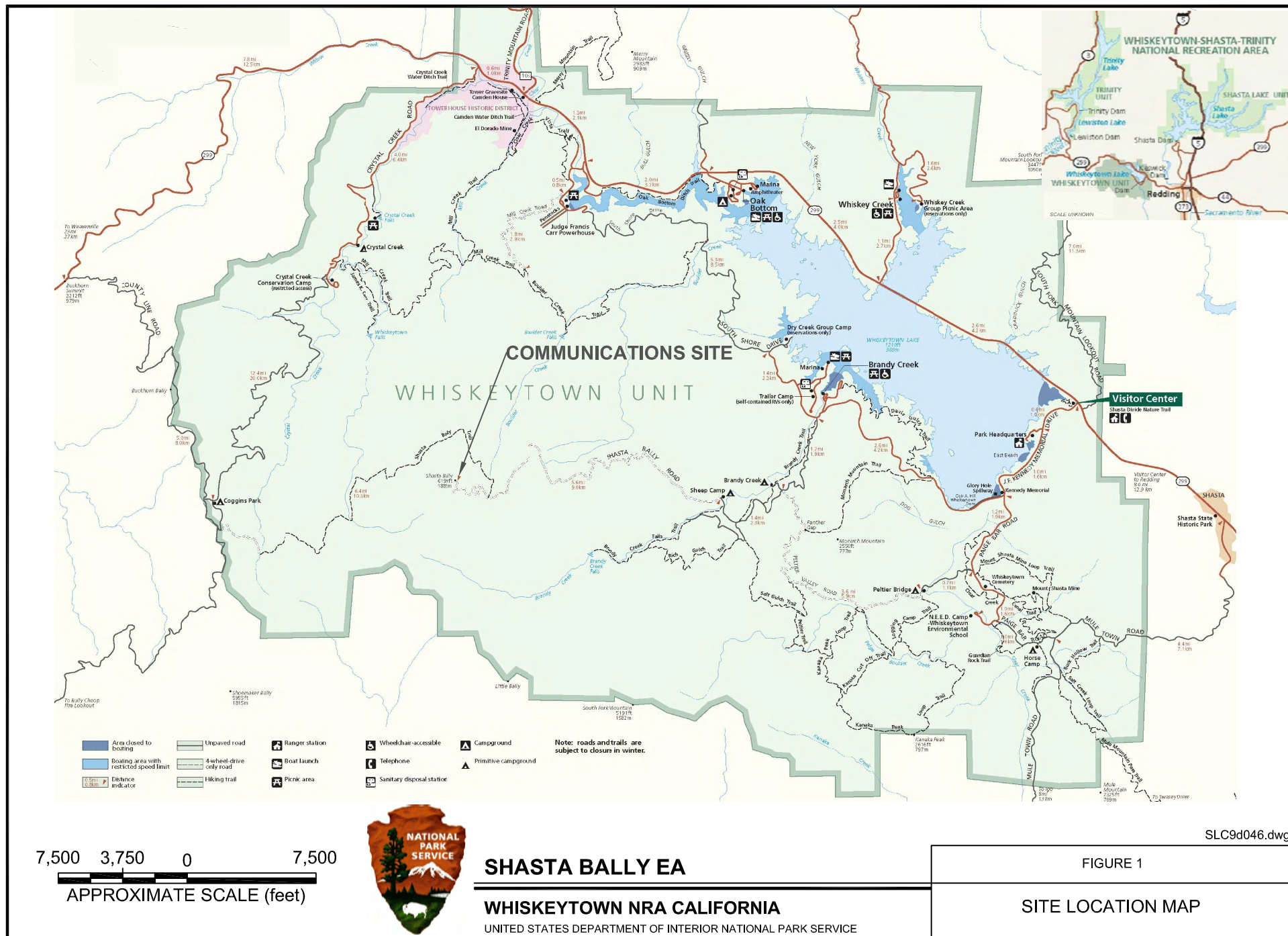
Purpose and Need

The purpose of the project is to:

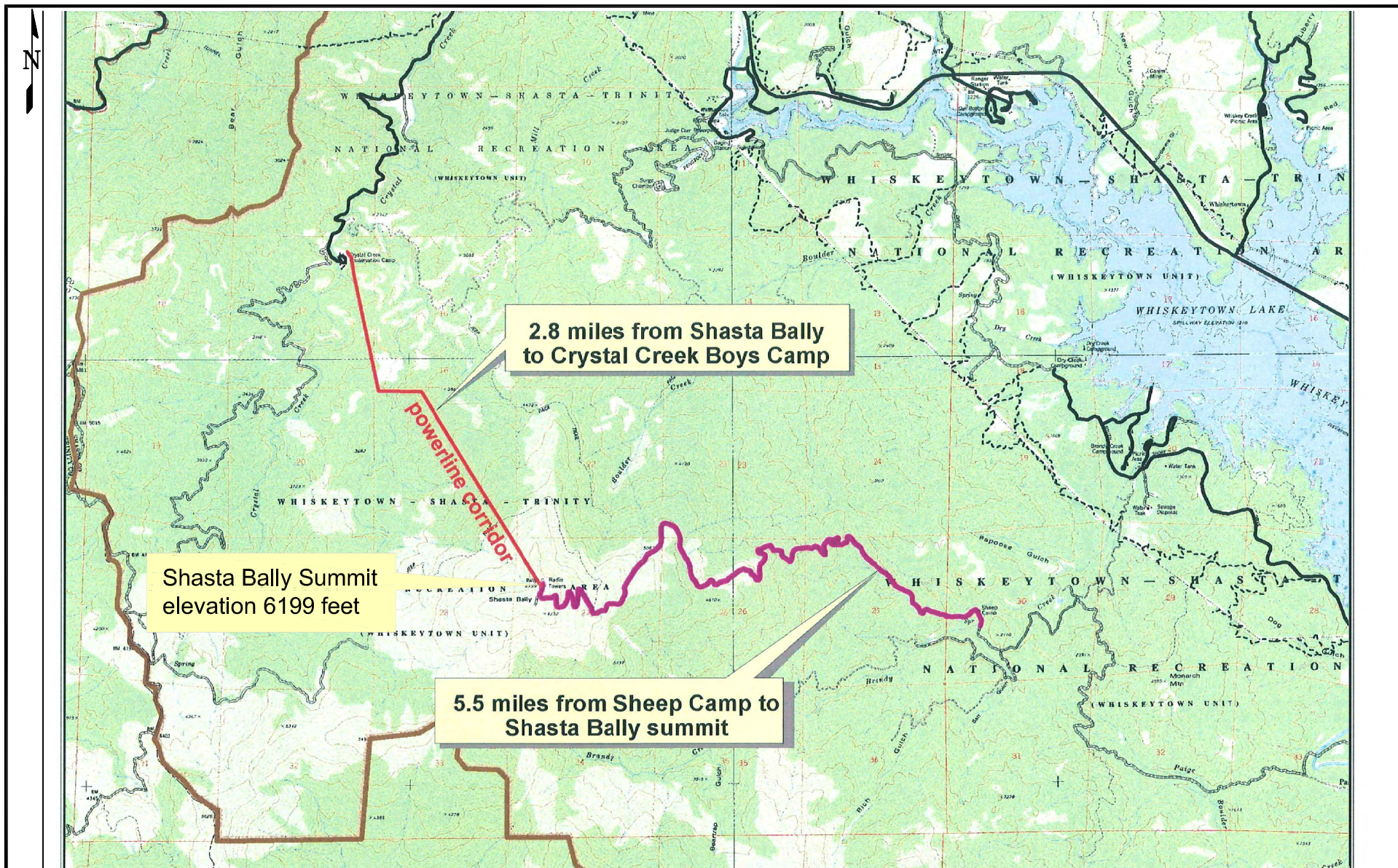
- Evaluate issuance of WCF ROW Permits;
- Protect sensitive ecosystems, natural, and cultural resources on Shasta Bally
- Maintain Shasta Bally road; and
- Clarify visitor use and access on Shasta Bally summit

The action is needed due to the expiration of the SVTI Lease and the resulting Settlement Agreement (COBi June 25, 2008) that ultimately concluded the litigation regarding the lease on Shasta Bally Summit. Under the terms of the Settlement Agreement, a “Wind-down Period” is running from the date of the Settlement Agreement to and including August 31, 2009. The NPS is examining the issuance of ROW Permits at the conclusion of the Wind-down Period. Maintaining access to the Shasta Bally Summit is an element of the project. Shasta Bally road from Sheep Camp to the summit is susceptible to erosion and is difficult to maintain. Additionally, visitors travel to the summit during the summer and fall months to hike and experience the views from the top of Shasta Bally. Delineation of the visitor parking area and clarification of the trail system at Shasta Bally Summit with one main trail leading to geologic features or other areas of interest to park visitors is needed. Wayside exhibits are also needed at the summit to orient visitors to the surrounding peaks and landmarks and explain the natural and cultural significant of the summit area.

This page intentionally left blank



This page intentionally left blank



5,000 2,500 0 5,000
 APPROXIMATE SCALE (feet)



SHASTA BALLY EA

WHISKEYTOWN NRA CALIFORNIA

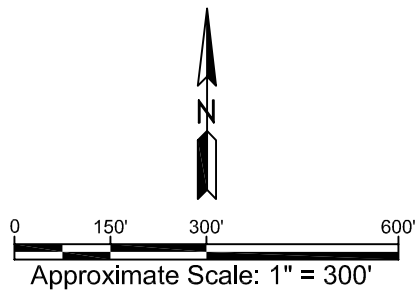
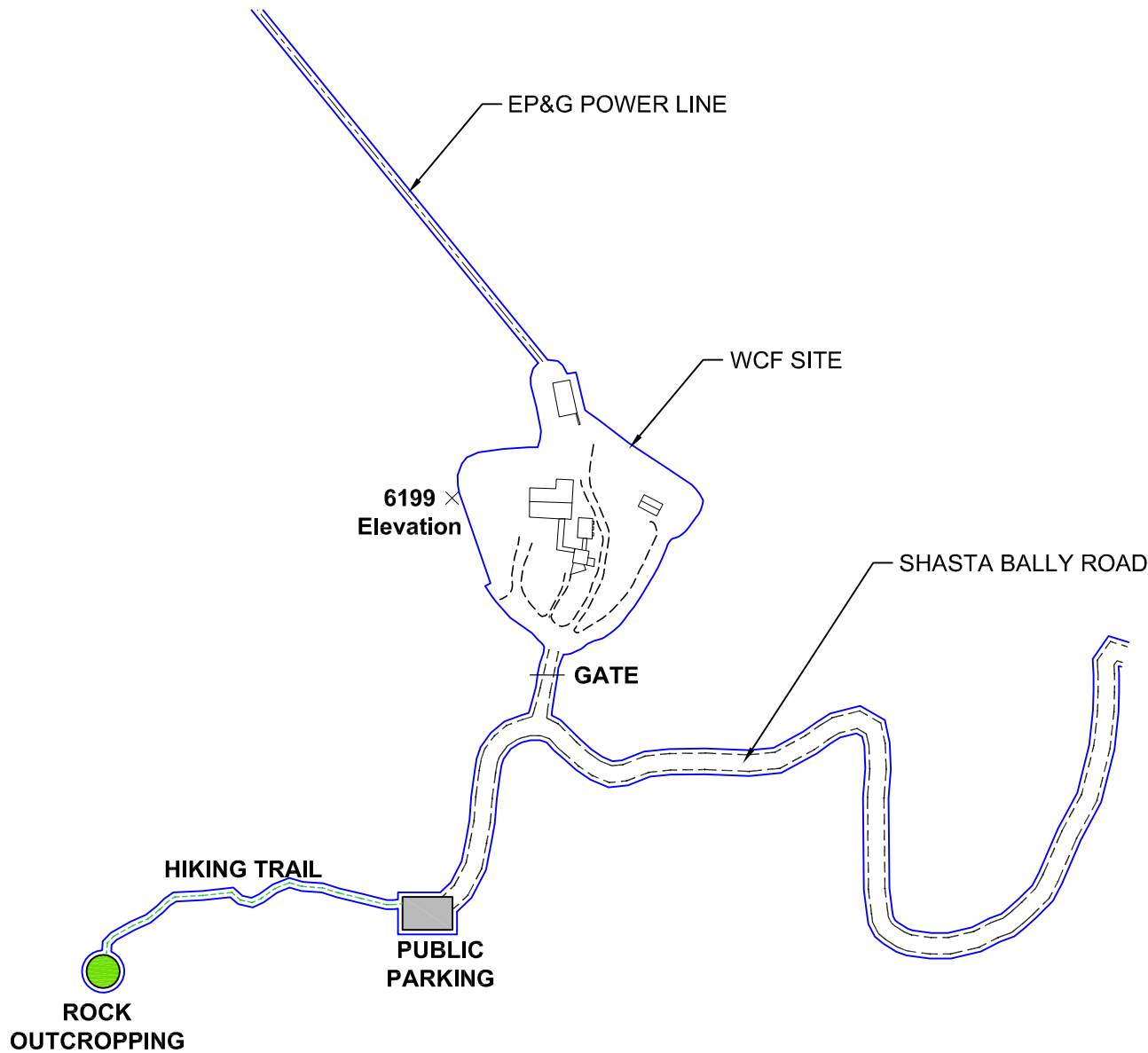
UNITED STATES DEPARTMENT OF INTERIOR NATIONAL PARK SERVICE

SLC9d047.dwg

FIGURE 2

SHASTA BALLY ROAD AND
 POWERLINE CORRIDOR

This page intentionally left blank



EXPLANATION

— (APE) Area of Potential Effect



SHASTA BALLY EA

WHISKEYTOWN NRA CALIFORNIA

UNITED STATES DEPARTMENT OF INTERIOR NATIONAL PARK SERVICE

SLC9d045.dwg

FIGURE 3

SUMMIT SITE PLAN

This page intentionally left blank

Description of Project Area

Shasta Bally Communications Site

Due to its height and unobstructed aspect, Shasta Bally Summit has been used as a communications site since the mid-1950s. Over time the site has expanded to at least 7 transmission towers providing service to television (including the new digital capabilities), microwave communication, FM, 2-way and shortwave radio (Figure 4). A variety of tower designs and materials are present on Shasta Bally Summit. The towers are constructed of wood pole, single pole metal or lattice-metal and either guyed or self-supporting. Some of the transmitting towers have microwave dishes attached. For the purposes of this document, the “site” refers to the recently disturbed area on the summit where towers, buildings, and other infrastructures are located as depicted in Figure 4.

The site has six low-profile buildings used to house electronic equipment and a site caretaker. Each of the buildings has a fan-based ventilation system, circulating air for cooling, which is necessary because of the heat generated by the electrical equipment. PG& E Company supplies power to the site through a 2.8-mile distribution powerline that originates from the Crystal Creek Conservation Camp. Because of the need to maintain the equipment in an operating condition, emergency on-site generation in the form of both diesel and propane generators are present. Storage tanks for both fuels require regular deliveries. The 5,000-gallon diesel fuel storage tank has a concrete containment basin. Fuel, water and powerlines connecting to the site facilities are buried beneath the surface.

Water is pumped to 3 tanks located on the east side of the summit from an underground spring. The pipeline is above ground and is subject to freezing. A wet tank-based septic system that supports the on-site caretaker consists of an underground tank with a leachfield located parallel to the north side of building B-1.

Shasta Bally Road

The access road to the site is unpaved, maintained and graded for 5.5 miles from Sheep Camp to the summit. The road is highly erodible and is difficult to maintain with an annual road maintenance cost of \$17,500. The road varies in width from approximately 15 to 25 feet wide and allows for two standard passenger vehicles to pass simultaneously in many places along the road. The road has been constructed with culverts that allow for seasonal runoff and stormwater to pass beneath the road at specific locations. Many of the culverts (a minimum of 17 based upon a recent inspection by the NPS Staff) are in need of repair due to crushing and crimping by vehicles. Regular maintenance is required to unclog culvert openings that have become blocked by debris. Additional maintenance includes blading, which has resulted in channelizing the road at locations, increased side-cast sediment at the road edges and exposure of culverts. Trees also periodically fall on the road blocking passage, requiring removal.

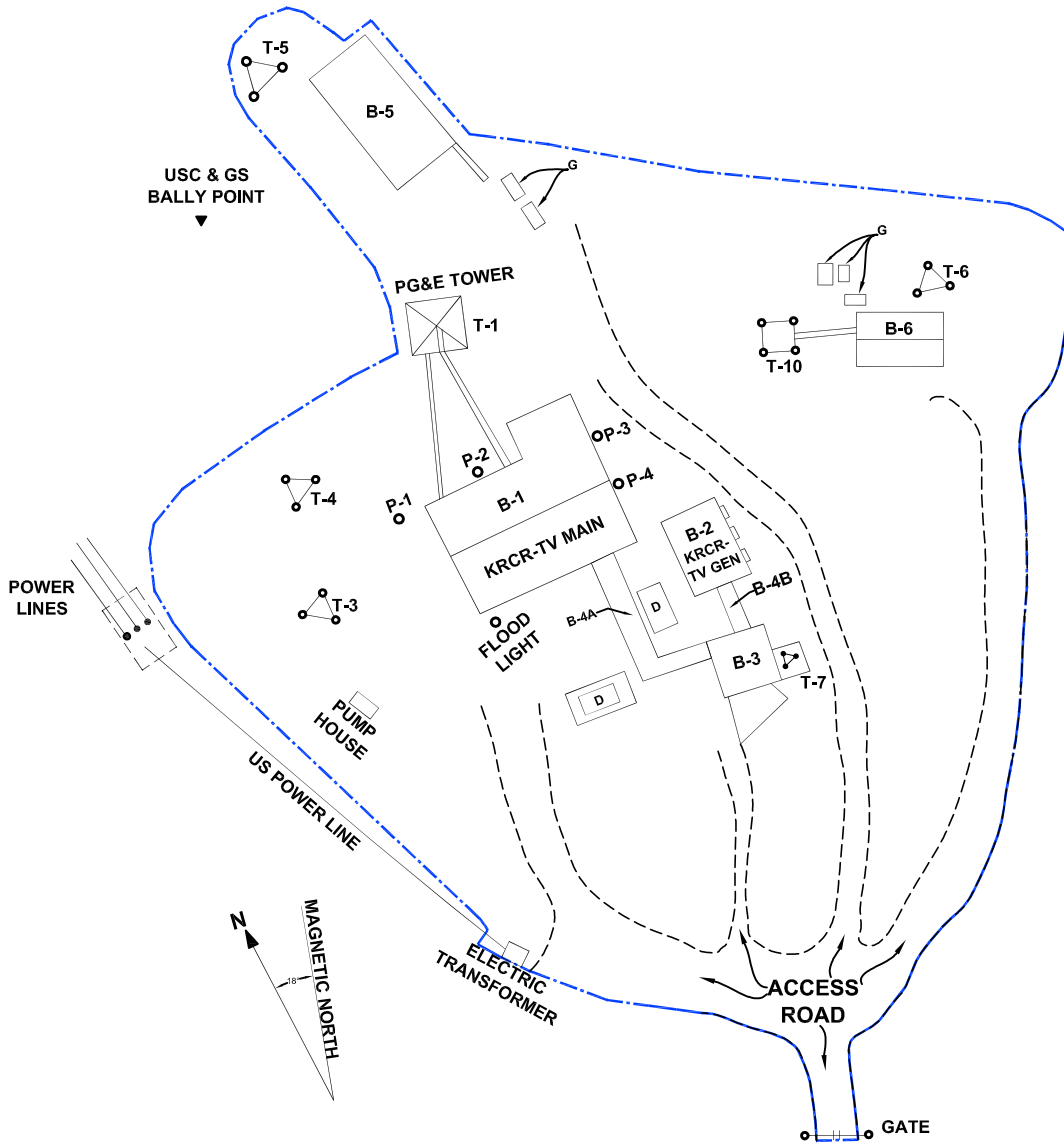
Power Supply

Primary power to the site is supplied from a 2.8-mile wood pole electric distribution line comprised of metal brackets or a braced metal cross-arms and porcelain insulators in a triangular configuration. Angle structures are guyed. Below the summit, the distribution line passes through mixed conifer forest and bisects two old-growth forests. Tree trimming is performed by PG&E contractors around the conductors and at the edges of the powerline to reduce fire danger and to protect the powerline from hazard trees that may fall into the line. Vegetation is cut and cleared from the around the powerline and scattered as is reasonable. Vegetation at the communication site consists mostly of shrubs, grasses and herbaceous material, and as such, there are no trees at the upper elevation that would require trimming activity. Powerline debris from past maintenance and pole replacement activity is evident along the powerline. An oil-cooled pad-mounted transformer steps down the power to a useable voltage. The transformer is located at the southwestern edge of the telecommunications site. Two forms of emergency backup power

are present at the site. One building uses a series of three diesel generators (housed inside a building) with fuel supplied from an aboveground storage tank that sits within a concrete containment tank. Fuel lines run underground. The emergency power supply for the two other buildings is propane-powered generators. Each building has two propane tanks with underground supply lines to the buildings.

Photographs in Figures 5 through 11 illustrate some features of Shasta Bally road, Shasta Bally summit, the wireless telecommunication facilities, and the EP&G powerline.

60 30 0 60
APPROXIMATE SCALE (feet)



STRUCTURE ID'S:

P - VARIOUS WOOD/METAL POLES

G - PROPANE TANKS

D - DIESEL FUEL TANKS (ABOVE GROUND)

B-1 KRCR-TV MAIN BUILDING
B-2 KRCR-TV GENERATOR BUILDING
B-3 COBi (P.T.I. BUILDING)
B-4 A&B COBi TUNNEL STRUCTURE
B-5 COBi COMM. MOBIL RADIO SERV. (PINNACLE BLDG)
B-6 COBi (F-M BUILDING)

--- SITE BOUNDARY
--- ACCESS ROAD
T-1 PG&E TOWER (KRCR-TV) (120-FT)
T-3 KIXE-TV TOWER (100-FT)
T-4 KRCR-DT (DIGITAL) TOWER (80-FT)
T-5 COBi (PINNACLE TOWER) (80-FT)
T-6 COBi (FM TOWER) (174-FT)
T-7 TED SPICTOF (AMATEUR RADIO) (50-FT)
T-10 SISKI YOU TELEPHONE (65-FT)

*NOTE: ALL STRUCTURES APPROXIMATE TO SIZE & LOCATION

SLC9d045.dwg



SHASTA BALLY EA

WHISKEYTOWN NRA CALIFORNIA

UNITED STATES DEPARTMENT OF INTERIOR NATIONAL PARK SERVICE

FIGURE 4

SITE PLAN COMMUNICATIONS SITE