

Death Valley National Park  
California

US Department of the Interior  
National Park Service



# Death Valley National Park

## Rogers Peak Multi-Use Instrumentation and Communication Facility Environmental Assessment



**December 2018**



**United States Department of the Interior National Park Service  
National Park Service  
Death Valley National Park**

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and Communication Facility  
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The National Park Service is considering right-of-way permit applications from federal and state agencies and private corporations regarding telecommunications infrastructure on Rogers Peak in the Panamint Mountains of Death Valley National Park (the park). The US Navy proposes to establish an instrumentation site for the Naval Air Warfare Center Weapons Division, China Lake Range. The California Department of Transportation (Caltrans) proposes to replace its existing telecommunications tower, and AT&T and GX2 Technology have submitted applications to develop telecommunications infrastructure on Rogers Peak. In addition, the US Geological Survey has applied for a right-of-way permit to add data communication equipment that would be co-located on existing structures.

The National Park Service prepared an environmental assessment to evaluate one action alternative, describe the environment that would be affected by the alternative, and assess the environmental consequences of implementing the alternative. The National Park Service also evaluated the impacts of a no action alternative, which would not allow for additional right-of-way permits and would not alter the infrastructure atop Rogers Peak. This environmental assessment examines potential impacts on visitor experience and safety, visual resources, and wilderness character.

This document has been prepared in accordance with the National Environmental Policy Act of 1969, as amended; Section 106 of the National Historic Preservation Act; regulations of the Council on Environmental Quality (40 Code of Federal Regulations 1500–1508); and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2011) and accompanying *NPS NEPA Handbook* (2015).

**Note to Reviewers and Respondents:**

If you wish to comment on this environmental assessment, you may mail comments within 30 days to the address below or you may post them electronically at <http://parkplanning.nps.gov/deva>. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment, including your personal identifying information, might be made publicly available at any time. While you can ask in your comment to withhold your personal identifying information from public review, the National Park Service cannot guarantee that it will be able to do so.

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# CHAPTER 1: PURPOSE OF AND NEED FOR ACTION

## INTRODUCTION

The National Park Service (NPS) is considering right-of-way permit applications from federal and state agencies and private corporations for telecommunications infrastructure on Rogers Peak in the Panamint Mountains of Death Valley National Park (the park). A right-of-way is a permit issued by the National Park Service that allows a utility to pass over, under, or through NPS-owned lands. The US Navy proposes to establish an instrumentation site for the Naval Air Warfare Center Weapons Division, China Lake Range. The California Department of Transportation (Caltrans) proposes to replace its existing telecommunications tower, and AT&T and GX2 Technology have submitted applications to develop telecommunications infrastructure on Rogers Peak. In addition, the US Geological Survey has applied for a right-of-way permit to add data communication equipment that would be co-located on existing structures.

Several entities currently have infrastructure on Rogers Peak, including the National Park Service, US Air Force, the Bureau of Land Management, the Federal Bureau of Investigation, the National Oceanic and Atmospheric Administration, Caltrans, the California Office of Emergency Services, the California Highway Patrol, Inyo County, and Southern California Edison. The issuance of right-of-way permits to applicants would comply with Director's Order 53: *Special Park Uses* (NPS 2010).

This environmental assessment (EA) is one required step in the NPS right-of-way permitting process. The park evaluates right-of-way permit applications to determine if the proposed activity could have impacts on natural resources, cultural resources, and the visitor experience. Right-of-way permit applications may be approved if the activity does not conflict with the purpose of the park; the location of the activity is not in a designated wilderness area; there is no practicable alternative to the use of NPS lands; and the impacts of the activity can be mitigated.

## PURPOSE OF AND NEED FOR ACTION

The purpose of taking action is to evaluate site planning and infrastructure consolidation on Rogers Peak that would allow for additional infrastructure, while minimizing the overall footprint of the project site.

The environmental assessment is needed because multiple applicants have requested space to place new infrastructure on Rogers Peak and have filed right-of-way permit applications, in accordance with NPS authorities and the Telecommunications Act of 1996. Under the NPS *Management Policies 2006*, the National Park Service must determine if the additional infrastructure would cause unavoidable conflicts with the park's mission, in which case the right-of-way permit(s) would be denied. The evaluation of an efficient and consolidated site plan is part of the right-of-way application review process and is needed to minimize impacts on park resources if these applications are to be approved.

## BACKGROUND

The park is part of the greater Basin and Range Province, a vast physiographic region covering much of the western United States, which is characterized by alternating mostly north-south trending valleys and mountain ranges. This results in a long line-of-sight for transmitting signals between communication systems in some directions and relative short distances in others. High points on mountain ridges are particularly exceptional locations for sending and receiving these signals

because there are few obstructions. Rogers Peak (9,990 feet), located in the Panamint Mountains between Telescope Peak and the Mahogany Flat Campground, is one of these locations.

The first telecommunications installations on Rogers Peak were developed in 1959. The installations included repeaters, radio buildings, and an 80-foot-tall tower for Inyo County and Death Valley National Monument. By 1964, the California State Highway Department and AT&T had also installed repeaters on the peak. The original tower used by Inyo County and Death Valley National Monument was replaced in 1965 with a 60-foot tower. Little of the original infrastructure from the 1959–1965 era remains on Rogers Peak. The original repeaters were crushed multiple times by heavy snow and winds during the first few years of operation.

Most of the park is in the R-2508 military airspace, which is used and managed by the Naval Air Warfare Center Weapons Division, the National Training Center at Fort Irwin, and the US Air Force Test Center at Edwards Air Force Base. The airspace is used to perform a variety of flight tests, such as sensor testing, radar testing, and ground proximity-warning systems testing. Therefore, the existing US Air Force telecommunications infrastructure on Rogers Peak is critical to the mission of regional military operations.

Mormon Peak, located approximately 14 miles south of Rogers Peak in the Panamint Mountains, has permanent commercial telecommunications infrastructure. AT&T owns this infrastructure, and it is currently the only equipment in the park that provides telephone service and most internet into Death Valley. Because Mormon Peak has been a designated wilderness area since 1994, existing infrastructure on the mountain is considered a nonconforming use under the Wilderness Act of 1964. Rogers Peak has been suggested as an alternate location for the telecommunications infrastructure on Mormon Peak. However, because of design requirements and the potential for adverse impacts on park resources under the proposal, the National Park Service and AT&T are considering other options to provide phone and internet service into Death Valley.

## **RELATIONSHIP TO OTHER PLANS**

### **Death Valley National Park General Management Plan (2002)**

According to the general management plan, an important management goal for the park is to protect and maintain the visual quality of the landscape and the built environment. The park has implemented the following objectives in accordance with the general management plan for telecommunications infrastructure (NPS 2002):

- All aboveground communication equipment should not significantly distract from the visual quality of the scenery.
- Each new proposal for radio or cellular antennas or towers must demonstrate that the equipment will provide a critical service for visitors and NPS staff and is not duplicative.
- The installation of new equipment outside the park or on existing communication towers or at defined sites should be considered before the construction of new sites in the park is considered.
- New locations will be reviewed through the EA process, which must consider impacts on the visual quality of the scenery.

All of the action alternatives selected for detailed analysis in this environmental assessment must meet these objectives and support the purpose of, and need for, action. However, proposals for new radio or cellular equipment do not preclude the National Park Service from considering future right-of-way permit applications for mobile network operators, including applications for co-location on existing telecommunications infrastructure.

## **PROJECT AREA**

The project area is a 2.75-acre parcel at the summit of Rogers Peak and includes a 10-foot wide service road (figure 1). The entire parcel and service road, including 50 feet from the center of the road, are located outside designated wilderness. Existing infrastructure in the project area consists of two telecommunication towers, three buildings, two large ground-mounted solar photovoltaic arrays, concrete pads, propane tanks, and an unpaved graded road.

## **ISSUES AND IMPACT TOPICS**

Impact topics are resources or values analyzed for each of the alternatives and are discussed because issues have been identified. During internal, agency, and public scoping, NPS staff identified potential issues that could result from implementation of the action alternatives. Resources or values that could be affected include visitor experience and safety, visual resources, and wilderness character. The impact topics identified during scoping are discussed in detail in “Chapter 3: Affected Environment” and are analyzed in “Chapter 4: Environmental Consequences.”

## **IMPACT TOPICS RETAINED FOR DETAILED ANALYSIS**

### **Visitor Experience and Safety**

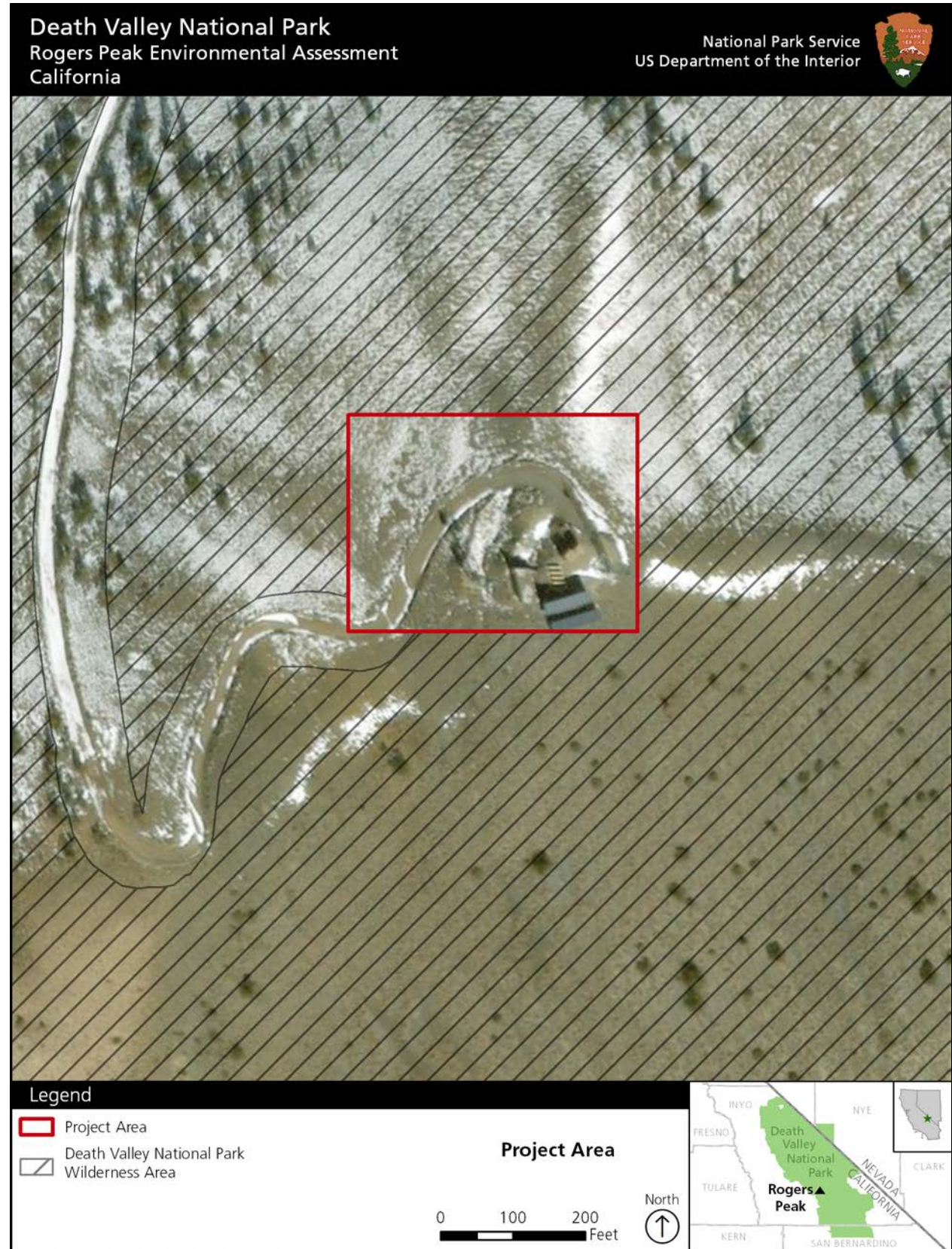
Impacts on visitor experience and safety could occur as a result of taking action. Increased cellular service could affect the visitor experience and improve safety in the park by providing additional communication access or reducing the time for emergency response to accidents or emergencies in remote areas that presently do not have cellular service. In addition, some visitors would have access to park information on their cellular phones and may pursue activities in areas of the park they otherwise would not visit. However, increased cellular service could affect visitor safety because some visitors may engage in risky behavior if they perceive rescue operations are available to them. Visitor experience and safety is therefore retained for detailed analysis.

### **Visual Resources**

Taking action would result in the construction of additional multi-use instrumentation and telecommunications infrastructure on Rogers Peak and would alter the existing viewshed within the park. Taking action would also affect the viewshed for visitors on adjacent trails. As a result, this impact topic is retained for detailed analysis.

### **Wilderness Character**

The project does not involve construction in designated wilderness areas. However, during the construction period, noise from construction equipment would be audible in designated wilderness. For some visitors, cellular service in wilderness could detract from their solitude and primitive experience by providing communication access in a natural setting. Because of the potential impact on wilderness, this impact topic is retained for detailed analysis.



**FIGURE 1. PROJECT AREA**

## **IMPACT TOPICS CONSIDERED BUT DISMISSED FROM DETAILED ANALYSIS**

### **Cultural Resources**

Section 106 of the National Historic Preservation Act of 1966, as amended (16 United State Code 470 et seq.), and its implementing regulations under 36 CFR Part 800, require all federal agencies to consider effects of federal actions on historic structures eligible for or listed in the National Register of Historic Places, historic districts, cultural landscapes, and archeological resources. The National Park Service is currently in consultation with the California Office of Historic Preservation. However, it is anticipated that taking action would not affect cultural resources. Therefore, this impact topic was dismissed from detailed analysis.

### **Dark Night Skies**

In accordance with *NPS Management Policies 2006*, the National Park Service strives to preserve dark night skies, which are natural resources and values that exist in the absence of human-caused light. The park has been designated an International Dark Sky Park because of the superb quality of its night sky resources. Construction and operations in the project area would not increase nighttime lighting or degrade the park's dark night skies because these activities would take place during daylight hours. Furthermore, obstruction lighting would not be required on any existing or new infrastructure. Therefore, dark night skies were dismissed from detailed analysis.

### **Designated Critical Habitat, Wild and Scenic Rivers, Other Unique Natural Areas**

No areas within the project area are designated as critical habitat or ecologically critical, nor are there any existing or potential wild and scenic rivers within the project area that receive runoff from the project site. Death Valley is an important natural area, and taking action would not threaten the associated qualities and resources that make the park unique. Therefore, these impact topics were dismissed from detailed analysis.

### **Geology, Soils, and Vegetation**

*NPS Management Policies 2006* state: the "Service will actively seek to understand and preserve the soil resources of parks, and to prevent, to the extent possible, the unnatural erosion, physical removal, or contamination of the soil or its contamination of other resources" (NPS 2006). Taking action would involve site preparation activities for the installation of additional telecommunications infrastructure. However, the proposed location of additional infrastructure has been previously disturbed. Minimal soil disturbance or earth moving would be required, including staging equipment during construction. Furthermore, the project area is within a developed area that includes little vegetation. Vegetation disturbed or removed as a result of taking action would be revegetated upon project completion. Therefore, impacts on geology, soils, and vegetation was dismissed from detailed analysis.

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## CHAPTER 2: ALTERNATIVES

The alternatives analyzed in this document are a result of internal scoping, agency scoping, public scoping, and tribal consultation. Alternatives and actions that were dismissed from detailed analysis include those considered not technically or economically feasible and those that do not meet the purpose of, and need for, the project. Other dismissed alternatives include those that would create unnecessary or excessive adverse impacts on resources or conflict with the overall management of the park or its resources. These alternatives or alternative elements and their reasons for dismissal are discussed at the end of this chapter.

The National Park Service explored and objectively evaluated two alternatives in this environmental assessment:

- Alternative 1: No Action
- Alternative 2: Preferred Alternative

### ALTERNATIVE 1: NO ACTION ALTERNATIVE

Under the alternative 1, the multi-use instrumentation and telecommunications infrastructure currently on Rogers Peak would remain. No additional structures would be constructed. The US Navy would not establish a new instrumentation site; Caltrans would not replace its existing telecommunications tower; AT&T and GX2 Technology would not install new telecommunications infrastructure; and the US Geological Survey would not add data communication equipment to Rogers Peak. The hairpin turn, located approximately 1.75-miles northeast of Rogers Peak along the service road, would not be expanded to accommodate larger construction vehicles. Figures 2 and 3 provide aerial and ground views of existing infrastructure on Rogers Peak.

#### Existing Infrastructure

**US Air Force Tower.** The US Air Force owns and operates one telecommunications tower that is 62.5 feet tall. The US Air Force, National Park Service, and Bureau of Land Management have antennas on the tower. Antenna mounting space remains for governmental agencies.

**Caltrans Tower.** Caltrans owns and operates one telecommunications tower that is 50 feet tall. The tower was originally designed to accommodate four 8-foot microwave dishes. However, the California Office of Emergency Services built 10-foot-wide dishes on the Caltrans tower. The tower was not designed to handle those heavier dishes, so the tower's legs were galvanized and welded to support the dishes, and the tower currently lacks structural integrity. In addition to Caltrans and California Office of Emergency Services equipment, Inyo County, the Federal Bureau of Investigation, and Southern California Edison have antennas on the tower. The tower is currently at capacity and therefore cannot hold additional equipment, such as antennas or microwave dishes.

**Solar Photovoltaic Arrays.** The two solar arrays present on the site generate power for existing infrastructure. The US Air Force owns the upper solar array, and Southern California Edison owns the lower solar array. The US Air Force solar array provides power to US Air Force infrastructure and National Park Service and Bureau of Land Management equipment, which is connected to a battery system. The Southern California Edison solar array provides power to the Caltrans tower, which is connected to two battery systems.

**Fuel Depot.** The fuel depot is located aboveground in the middle of the site on the flattest part of Rogers Peak. Five 1,000-gallon propane tanks fuel the Southern California Edison generator. An

underground storage tank, which historically held diesel fuel, has been abandoned in place on the site.

**Caltrans Communications Building.** Caltrans owns a 561-square-foot building, which is commonly referred to as the vault. The building contains Caltrans and California Office of Emergency Services' equipment, the Southern California Edison battery system and generator, and equipment racks. The building is equipped with small floorboard heating but is not cooled.

**NPS Communications Building.** The National Park Service owns a 63-square-foot building that contains both NPS and Bureau of Land Management communications equipment. The building contains a small cooling system and equipment racks. A communications circuit exists between this building and the Caltrans communications building. The circuit is connected through a fiber-optic cable.

**US Air Force Communications Building.** The US Air Force owns a 162-square-foot building that contains a solar array battery system and communications equipment. Access to this building is limited by security clearance.

**Remote Automated Weather Station.** The National Oceanographic and Atmospheric Administration operates a Remote Automatic Weather Station on Rogers Peak to collect weather and atmospheric data. The station also includes equipment that collects accurate snowfall measurements. The station is located on a concrete base that measures 2 x 2 feet.





FROM LEFT TO RIGHT: US AIR FORCE TOWER, NPS COMMUNICATIONS BUILDING, US AIR FORCE COMMUNICATIONS BUILDING, FUEL DEPOT, SOLAR PHOTOVOLTAIC ARRAYS, CALTRANS COMMUNICATIONS BUILDING, CALTRANS TOWER. REMOTE AUTOMATED WEATHER STATION NOT SHOWN.

**FIGURE 2. AERIAL VIEW OF ROGERS PEAK FROM THE NORTH—EXISTING INFRASTRUCTURE**



FROM LEFT TO RIGHT: CALTRANS TOWER, CALTRANS COMMUNICATIONS BUILDING, US AIR FORCE SOLAR PHOTOVOLTAIC ARRAY, US AIR FORCE TOWER, SOUTHERN CALIFORNIA EDISON SOLAR PHOTOVOLTAIC ARRAY

**FIGURE 3. GROUND VIEW OF ROGERS PEAK FROM THE SOUTHWESTERN SLOPE—EXISTING INFRASTRUCTURE**

## ALTERNATIVE 2: PREFERRED ALTERNATIVE

Alternative 2 is the NPS proposed action and has been identified as the preferred alternative. Under alternative 2, new infrastructure would be constructed on Rogers Peak, and some infrastructure would be removed. The infrastructure proposed under this alternative is described below. Photographic simulations of the proposed infrastructure can be found in figures 4–7. The placement and design of the proposed infrastructure is provided for the purpose of the analyses in this environmental assessment and is not considered final.

### Existing Infrastructure

**US Air Force Tower.** The US Air Force tower would not be changed under this alternative.

**Caltrans Communications Building.** The Caltrans building would not change under this alternative.

**Remote Automated Weather Station.** The Remote Automated Weather Station would not change under this alternative.

### Renovated Infrastructure

**Caltrans Tower.** The current 50-foot-tall Caltrans tower would be removed from the site after a new Caltrans tower is operational. The new tower would be up to 99 feet tall and would be constructed north of the existing tower. The Caltrans tower would not require obstruction lighting.

**Solar Photovoltaic Arrays.** The existing US Air Force solar array would be expanded or replaced with 400-watt panels to generate and store more electrical power. The US Navy would consolidate its power infrastructure with the US Air Force.

Additional solar panels would be installed in accordance with one of two different designs:

1. Solar panels would be arranged in one long array along the edge of the site with a footprint of approximately 120 x 55 feet.
2. The positioning and length of the current solar panels would be left in place, and a new solar array would be built beside the existing US Air Force solar array.

**Fuel Depot.** The propane tanks would be moved to a new location on Rogers Peak to open up the flat, top area for the proposed development. The new location of the tanks on the northeast side of the site would be at a lower elevation on Rogers Peak. The proposed location for the propane tanks is relatively flat and would not require much backfill or grading. Five new propane tanks would be added, bringing the total number of propane tanks on the site to 10. Additionally, a 40- x 80-foot concrete pad would be developed on the location for the propane tanks.

**NPS and US Air Force Communication Buildings.** The two communication buildings would be demolished. The NPS, Bureau of Land Management, and US Air Force storage space would be consolidated in the new US Navy radome support structure, as described below.

### New Infrastructure

**US Navy Radome.** The US Navy would build a 28-foot-diameter radome containing a telemetry antenna. The radome would be mounted on a support structure located on the eastern side of Rogers Peak. The combined height of the radome and support structure would be no higher than 60 feet. The support structure would store a generator, batteries, and communications equipment for the US Navy, US Air Force, Bureau of Land Management, and NPS.

**AT&T Tower.** An AT&T tower would be constructed on the north side of Rogers Peak. It would be up to 99 feet tall and would not require obstruction lighting. A 12 x 25-foot communications building, a solar array, generator, and two propane tanks would also be installed near the tower. The site would tie into the First Responder Network Authority (FirstNet) system.

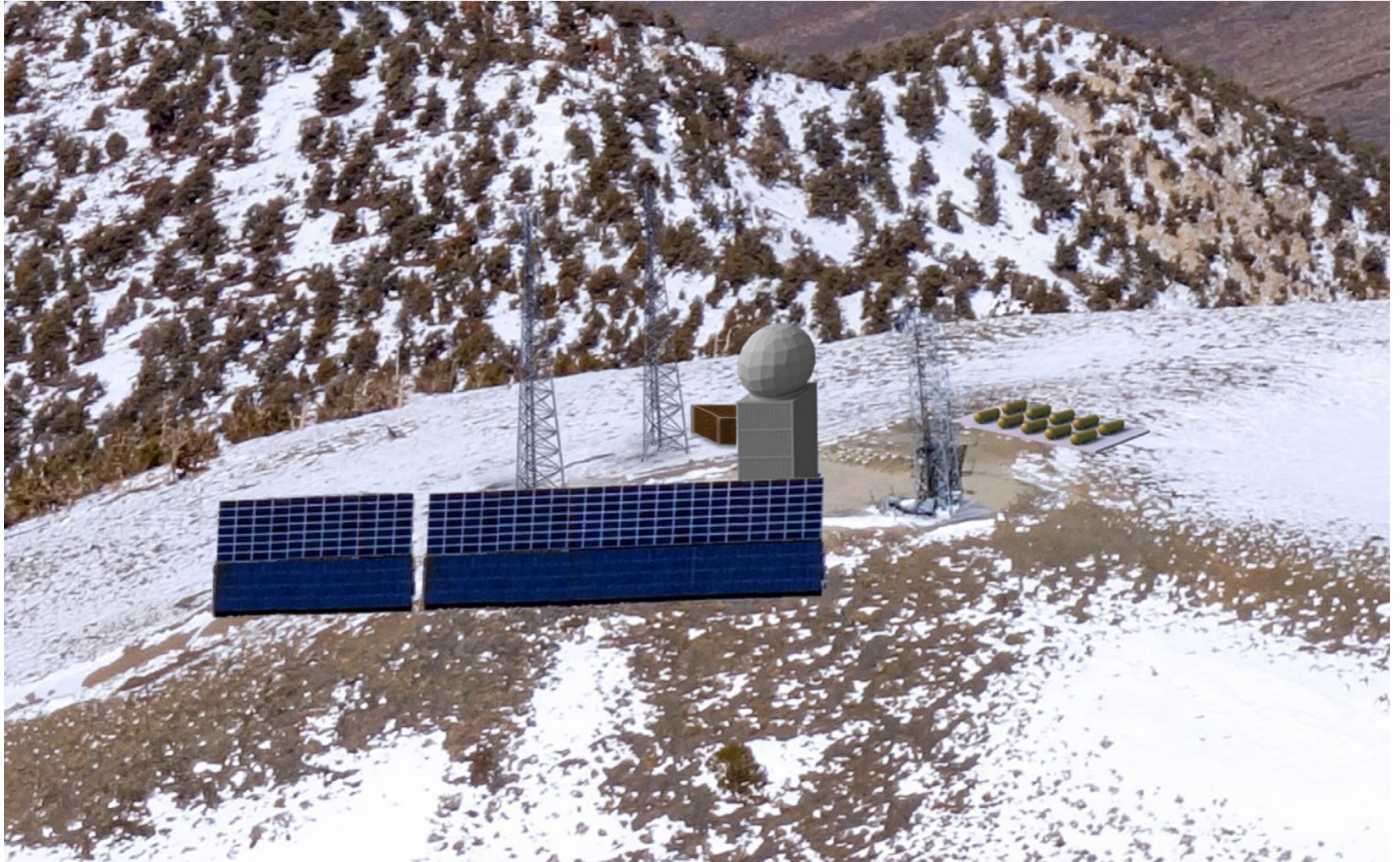
**GX2 Technology Infrastructure.** GX2 Technology, a private connectivity services company, has filed an application for a right-of-way permit. The company currently provides internet service to the Oasis at Death Valley, a privately owned resort in Furnace Creek, California. GX2 Technology would collocate a microwave dish on AT&T's tower to increase its bandwidth across its communication systems at the resort.

### **Construction and Staging Requirements**

**Construction.** An 80 x 80-foot construction pad would be developed and used as a laydown area. After construction is complete for the US Navy radome, the construction pad would be removed, and the area would be used for AT&T's infrastructure.

**Staging.** Staging areas for construction vehicles, equipment, and materials may be needed and could be located near Wildrose Campground, Thorndike Campground, and Mahogany Flat Campground in previously disturbed areas.

**Hairpin Turn.** The hairpin turn, located along the Rogers Peak service road, would be widened by 25-feet to accommodate larger construction vehicles.



FROM LEFT TO RIGHT: PROPOSED SOLAR PHOTOVOLTAIC ARRAYS, CALTRANS TOWER, AT&T TOWER, AT&T COMMUNICATIONS BUILDING, US NAVY RADOME, US AIR FORCE TOWER, FUEL DEPOT

**FIGURE 4. ALTERNATIVE 2—PHOTOGRAPHIC SIMULATION 1**



FROM LEFT TO RIGHT: PROPOSED AT&T COMMUNICATIONS BUILDING, AT&T TOWER, CALTRANS TOWER, CALTRANS COMMUNICATION BUILDING, US NAVY RADOME, SOLAR PHOTOVOLTAIC ARRAYS, US AIR FORCE TOWER

**FIGURE 5. ALTERNATIVE 2—PHOTOGRAPHIC SIMULATION 2**



FROM LEFT TO RIGHT: PROPOSED AT&T COMMUNICATIONS BUILDING, AT&T TOWER, US NAVY RADOME, US AIR FORCE TOWER, CALTRANS TOWER, CALTRANS COMMUNICATIONS BUILDING, SOLAR PHOTOVOLTAIC ARRAYS

**FIGURE 6. ALTERNATIVE 2—PHOTOGRAPHIC SIMULATION 3**



FROM LEFT TO RIGHT: PROPOSED AT&T COMMUNICATIONS BUILDING, US AIR FORCE TOWER, US NAVY RADOME, AT&T TOWER, SOLAR PHOTOVOLTAIC ARRAYS, CALTRANS COMMUNICATIONS BUILDING, CALTRANS TOWER

**FIGURE 7. ALTERNATIVE 2—PHOTOGRAPHIC SIMULATION 4**



## **MITIGATION MEASURES**

The National Park Service places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources and the quality of the visitor experience, the following protection measures would be implemented as part of alternative 2.

### **General Considerations**

- Incorporate all resource protection measures listed below in the construction specifications and instruct workers to avoid conducting activities outside the project area.
- Ensure vehicle engines in use by contractors do not idle for extended periods.
- Remove all tools, equipment, barricades, signs, and surplus materials from the project area upon completion of the project.
- Conduct all construction activities during daylight hours to avoid light pollution at night.
- Inspect construction equipment for invasive, nonnative plant seeds before they enter the project area and remove any that are found.
- Salvage topsoil, store according to soil conservation guidelines, and replace once construction is complete.
- Implement erosion control measures that provide for soil stability and prevent movement of soils during adverse weather conditions (i.e., silt fences and tarps).
- Use a stormwater pollution prevention plan and project specifications for dust control measures in construction areas, including active haul roads.

### **Visitor Experience and Safety**

- Inform visitors in advance of construction activities via a number of outlets, including the park's website, various signs, the Furnace Creek Visitor Center, and contact stations.
- Schedule work to avoid construction activity and construction-related delays during peak visitation, to the extent practical.
- Locate staging sites in areas that would minimize impacts on visitor experience and clearly identify staging sites in advance of construction.

### **Visual Resources**

- Select neutral colors (e.g., matte finish, light gray) for the towers and radome to better blend into the natural background of the park.
- Minimize the height of constructed infrastructure to reduce its visibility in the park.

### **Wilderness Character**

- Site staging and storage areas for construction vehicles, equipment, materials, and soils in previously disturbed areas outside wilderness areas.
- Require contractors to maintain construction equipment properly to minimize noise in adjacent wilderness areas.
- Ensure no permanent improvements are made in designated wilderness.

## **ALTERNATIVES CONSIDERED BUT DISMISSED FROM DETAILED ANALYSIS**

A number of alternatives, or alternative elements, were identified during internal scoping, agency scoping, public scoping, and tribal consultation. During scoping, these options did not meet the purpose of and need for action, were deemed not feasible, were out of scope of the current planning process, or had impacts on resources that could not be mitigated and were not retained for detailed analysis in this environmental assessment. They are described below.

### **Other Locations in or near Death Valley**

The right-of-way permit applicants examined other locations—both inside and outside the park—for suitability of siting telecommunications infrastructure. However, locations outside the park did not provide the applicants with the optimal height and geography needed to meet engineering requirements for the proposed infrastructure. Furthermore, the majority of the mountain peaks in the park are in designated wilderness areas, limiting the options for siting the infrastructure. Therefore, this alternative was dismissed from detailed analysis.

### **Maximum Build AT&T Tower on Rogers Peak to Replace Mormon Peak Infrastructure**

AT&T's telecommunications link from Furnace Creek to Slate Mountain is located on Mormon Peak. If AT&T were to replace this link with telecommunications infrastructure on Rogers Peak, it would need to be approximately 300 feet tall to have a line-of-sight over a ridge to Slate Mountain. The Federal Aviation Administration requires obstruction lighting on all towers 200-feet or taller. This alternative was dismissed from detailed analysis because it would adversely affect dark night skies and the daytime viewshed.

## CHAPTER 3: AFFECTED ENVIRONMENT

This chapter describes existing conditions for those elements of the human environment that would be affected by the implementation of the alternatives considered in this environmental assessment. The components addressed include visitor experience and safety, visual resources, and wilderness character. Impacts for each of these topics are analyzed in “Chapter 4: Environmental Consequences.”

### VISITOR EXPERIENCE AND SAFETY

#### Visitor Experience

In recent years, more than 1 million people have visited the park annually, with 1,294,827 visitors in 2017 (NPS 2018a). Common recreational opportunities in the park include camping, hiking, sightseeing, and stargazing. During the spring, visitors come to the park to observe the annual wildflower bloom.

During their visit, some visitors enjoy cellular service because it allows them to stay in communication with others and access the internet for information about the park, wayfinding, and the ability to work remotely. Other visitors appreciate visiting areas of the park where cellular service is unavailable. The cellular towers at Furnace Creek and Stovepipe Wells provide cellular service to some nearby areas of the park (e.g., there is a cellular signal at Mesquite Flat Sand Dunes, but not at Badwater Basin).

Only authorized users are able to drive to Rogers Peak via the unpaved service road from Mahogany Flat Campground. However, visitors frequently hike on this road to the Rogers Peak summit. Additionally, some hikers on the Telescope Peak Trail detour 0.3-mile off-trail to visit Rogers Peak.

#### Visitor Safety

The park’s safety issues include single-car accidents, conflicts with animals, flash floods, mine hazards, and extreme heat (NPS 2018b). At 3.4 million acres, the park is the largest US national park outside Alaska, with 91% of the park designated as wilderness. Daytime temperatures may exceed 120 degrees Fahrenheit and nights may not drop below 90 degrees (NPS 2018c). Currently, cellular service in the park is not always reliable and may not be available during emergencies. The emergency response time is enhanced where cellular service is available in the park. However, access to mobile networks could provide visitors with a false sense of security when traveling in remote areas. Limited cellular service can also lead to inaccuracies in the reported location of an emergency and thus slower emergency response times.

### VISUAL RESOURCES

Rogers Peak is at an elevation of 9,990 feet above sea level. Landscape character within the project area is generally open with human-made structures at the summit. The terrain is predominantly flat at the peak with steep slopes down the surrounding mountainsides. The landscape is composed primarily of bare ground and shrubs, with trees beginning approximately 650 feet below the peak. The Rogers Peak hiking route leads up the southwest side of the peak to the project site, while a dirt road wraps around the northern side of the peak from the west, leading up from the Wildrose Charcoal Kilns and Mahogany Flat Campground. Prominent vertical features include existing towers, solar arrays, a fuel depot, and communications buildings. The two towers on the site are 62.5 feet and 50 feet tall. Designated wilderness surrounds the project site.

Key observation points are located around the park that provide scenic views of the park's natural landscapes. Infrastructure on Rogers Peak can also be viewed with the unaided eye from several locations, including the Telescope Peak Trail, Telescope Peak, Wildrose Peak, and Wildrose Campground. This infrastructure can also be viewed with magnification from Badwater Road, Westside Road, Panamint Valley, Zabriskie Point, Dantes View, and the Oasis at Death Valley.

## **WILDERNESS CHARACTER**

### **The Wilderness Act of 1964**

The purpose of the Wilderness Act is “to secure for the American people of present and future generations the benefits of an enduring resource of wilderness.” The primary management mandate of the Wilderness Act for the federal agencies administering wilderness is to preserve the wilderness character of the area (Use of Wilderness Areas, section 4(b)). To ensure an enduring resource of wilderness, the Wilderness Act (section 4(c)) prohibits certain uses within wilderness: “there shall be no temporary road, no use of motor vehicles, motorized equipment, or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within such area.” The exceptions to these prohibited uses is only if they are “necessary to meet minimum requirements for the administration of the area.”

NPS *Management Policies 2006* require all management decisions affecting wilderness to be consistent with the minimum requirement concept. This concept is a documented two-step process to determine if administrative actions, projects, or programs proposed by the park with the potential to affect wilderness character, resources, or the visitor experience are necessary for administering the area as wilderness, and if necessary, how to minimize impacts related to implementation of the proposal (NPS 2006).

The 1994 California Desert Protection Act designated 91% of the park as wilderness, totaling 3,102,456 acres. The 2012 *Death Valley National Park Wilderness and Backcountry Stewardship Plan* guides the management of designated wilderness within the park. The plan also provides a framework to preserve and improve wilderness character.

### **The Five Qualities of Wilderness Character**

There are five qualities of wilderness character: untrammeled, natural, undeveloped, solitude or primitive and unconfined recreation, and other features of value. Other features of value would not be affected by the alternatives retained in this EA and is therefore not discussed further. The four applicable qualities of wilderness character are described below (Landres et al. 2015).

**Untrammeled.** An untrammeled wilderness is unhindered and free from the intentional actions of modern human control or manipulation. The untrammeled quality is preserved or sustained when actions to intentionally control or manipulate the components or processes of ecological systems inside wilderness (e.g., suppressing fire, stocking lakes with fish) are not taken. The untrammeled quality is degraded by actions that intentionally manipulate the biophysical environment.

The Death Valley National Park Wilderness remains largely untrammeled, with few intentional manipulations of the park's biophysical resources. Where such trammels do occur, they are generally very localized and small in scale. The most frequent form of trammeling that has occurred in the park is the control of exotic plants in desert springs and removal of burros. The most pervasive form of trammeling within the park is the indirect influence of numerous paved and unpaved roads that alter water flows and alluvial processes through their alignment, ditches, culverts, and other engineered features (NPS 2012).

**Natural.** A natural wilderness is one where ecological systems are substantially free from the effects of modern civilization. The natural quality is preserved when there are only native species and natural ecological conditions and processes. The natural quality may be improved by controlling or removing non-indigenous species or by restoring ecological conditions.

Pervasive evidence of past mining activities and pre-existing roads, use of springs by past human actions and modern park visitors, the presence of artificial water sources (e.g. guzzlers), and the presence of exotic plants and animals have localized effects on the natural quality of wilderness character in the park. Past grazing impacts and currently permitted livestock grazing in some areas of the wilderness also degrade the natural quality. In a broader context, the natural quality is also degraded by air pollution and light pollution mostly originating from distant urban centers, particularly on the south end of the park (NPS 2012).

**Undeveloped.** An undeveloped wilderness is one without permanent improvements or the sights and sounds of modern human occupation. The undeveloped quality is preserved or sustained when modern structures, installations, habitations, motor vehicles, motorized equipment, or other mechanical transport are not used in wilderness. It is improved when these prohibited uses are removed or reduced.

Given the size of the park, modern facilities are few, and modern facilities within the wilderness are even less common. There are a few communication installations in the park, a handful of signs in wilderness, and some mine closure installations for public safety, but otherwise the millions of acres of desert wilderness are free from modern development. The presence of grazing infrastructure, fences, utility corridors, artificial water sources for wildlife, and research installations affect the undeveloped quality of wilderness character in the park. Numerous debris piles (i.e., modern trash dumps, crashed aircraft, and abandoned vehicles) and off-road vehicle trespass incidents affect this quality. On rare occasions, authorized use of motorized equipment (e.g., helicopters) occurs in the park during emergency incidents or for other authorized purposes to meet the minimum requirements of a planned activity (NPS 2012).

**Solitude or Primitive and Unconfined Recreation.** Wilderness provides outstanding opportunities for recreation in an environment that is relatively free from the encumbrances of modern society, and the benefits and inspiration derived from self-reliance, self-discovery, physical and mental challenge, and freedom from societal obligations. The solitude or primitive and unconfined recreation quality is preserved or improved by management activities that reduce visitor encounters, reduce signs of modern civilization inside wilderness, remove agency-provided recreation facilities, or reduce management restrictions on visitor behavior. The solitude or primitive and unconfined recreation quality is degraded by sights and sounds of human activity (solitude), and by facilities that decrease self-reliant recreation and management restrictions on human behavior (primitive and unconfined).

The vastness of the park's landscape and the harshness of the environment give rise to an abundance of solitude. In many areas of the park, a backpacker can go for days without encountering another person and this is especially true in the Cottonwood Mountains, Grapevine Mountains, and Tucki Mountain. Furthermore, access to mobile networks is limited park-wide. The rugged topography and lack of water provides a backcountry experience in the desert with abundant opportunities for challenge and self-reliance. The presence of military overflights at some locations, as well as an abundant network of backcountry roads that provide vehicular access in the park, are visible and audible for long distances and have affected some opportunities for solitude or primitive and unconfined recreation (NPS 2012).

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## **CHAPTER 4: ENVIRONMENTAL CONSEQUENCES**

### **GENERAL METHODOLOGY FOR ESTABLISHING IMPACTS**

In accordance with Council on Environmental Quality regulations, direct, indirect, and cumulative impacts are described (40 CFR 1502.16) and the impacts are assessed in terms of context and intensity (40 CFR 1508.27). Where appropriate, mitigating measures for adverse impacts are also described and incorporated into the evaluation of impacts. A full list of mitigation measures can be found in “Chapter 2: Alternatives.”

### **CUMULATIVE IMPACTS ANALYSIS METHODOLOGY**

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7/8).

Cumulative impacts are determined for each impact topic by combining the impacts of the alternative being analyzed and other past, present, and reasonably foreseeable actions that would also result in beneficial or adverse impacts. These actions were identified through the internal, agency, and public scoping processes. Not all actions listed below apply to every impact topic.

#### **Mormon Peak**

Pacific Bell constructed a tower and microwave repeater on Mormon Peak in 1982 under a 30-year right-of-way permit issued by the Bureau of Land Management. AT&T currently owns this tower and repeater. This infrastructure currently serves as the primary telephone and internet service to public and private users in the Furnace Creek, Cow Creek, Ryan Camp, Stovepipe Wells, Grapevine, and Scotty’s Castle areas of the park. Furthermore, the infrastructure remains integral to the administration of the entire park, including its wilderness areas. With current technology constraints, the Mormon Peak repeater has been determined a minimum requirement for administration of wilderness in the park (NPS 2012).

#### **Grapevine Peak and Dry Mountain Radio Repeaters**

The park owns and operates a radio repeater on Grapevine Peak and another near Dry Mountain, located north and northwest of Stovepipe Wells, California, respectively. These repeaters are located on 20-foot poles and connect to small communications buildings. They are part of a network of radio repeaters that provide a means of emergency communications for the National Park Service, law enforcement, and other land management agencies. Though the repeaters are located in designated wilderness, they have been determined to be minimum requirements for administration of the park’s extensive wilderness areas (NPS 2012).

#### **Cellular Service in Furnace Creek**

Commnet of Nevada, LLC (Commnet) constructed a 60-foot self-supporting tower in 2011 at the Oasis at Death Valley resort in Furnace Creek, California. The tower supports three antennas and is contained within a 20 x 20-foot fence. The tower was installed on private land and is therefore not located in designated wilderness. The antennas provide cellular service to residents and visitors in the Furnace Creek area.

### **Cellular Service in Stovepipe Wells**

Commnet constructed a 60-foot, self-supporting tower in 2016 at Stovepipe Wells, California. The tower supports a dish approximately 4 to 6-feet in diameter and is contained within a 20 x 30-foot fence. The tower is not located in designated wilderness and provides cellular service to residents and visitors in the Stovepipe Wells area.

### **Microwave Relays on Valley Floor**

AT&T owns telecommunications equipment in non-wilderness locations at Grapevine, Stovepipe Wells, Hill 254 (east of Stovepipe Wells), and Cow Creek. These towers are generally 40-foot tall or shorter, and most are visible from roads or other public areas.

### **Grapevine Ranger Station Cellular Booster**

The park approved the future installation of a 20-foot booster facility approximately 40 miles northwest of Stovepipe Wells near the Grapevine Ranger Station. The station is located in a “dead spot,” an area where staff and visitors are unable to make or receive wireless phone calls. The booster facility will not be located in designated wilderness.

### **Microwave Relay on Chloride Cliff**

Commnet may submit a request for a right-of-way permit to build a 30-foot tower on Chloride Cliff—located approximately 26 miles northeast of Stovepipe Wells. The tower would support a microwave relay that would be capable of backhauling data to other Commnet-operated towers within the park, greatly increasing the linkage to the core communications network. The tower would not be located in designated wilderness.

### **Pay Phone Removal**

A private company that owned pay phones at Scotty's Castle, Grapevine, and Cow Creek has removed these public telephones. It is anticipated that the pay phones at Ryan Junction, Emigrant Road, Stovepipe Wells, and Furnace Creek will be removed in the future.

### **Co-Location on Rogers Peak**

It is anticipated that other entities will submit applications for right-of-way permits for infrastructure on Rogers Peak. The National Park Service encourages new infrastructure to be designed to accept co-location by other entities whenever possible. For example, constructing a 99-foot tower for a permittee and their current co-locators under alternative 2 would provide additional capacity for future right-of-way permit requests.

## **VISITOR EXPERIENCE AND SAFETY**

### **Methodology and Assumptions**

Impacts on visitor experience and safety were determined by considering the effect the alternatives could have on the existing conditions, including visitor access, enjoyment, and emergency response operations.



## Analysis Area

The analysis area for visitor experience and safety includes the project area and where cellular service is limited within the park.

### Alternative 1: No Action Alternative

#### Analysis.

*Visitor Experience* — Under alternative 1, no right-of-way permits would be issued, and there would be no changes to the existing infrastructure on Rogers Peak. The peak is already a developed area, and the existing infrastructure does not introduce a new built element or alter the existing visitor experience. Though vehicular access to Rogers Peak via the service road is limited to authorized personnel, hiking access on the service road would remain open to visitors.

Access to mobile networks would remain limited park-wide. For those visitors who feel cellular service detracts from their park experience, limited access to mobile networks would continue to have beneficial impacts on their park experience. However, for visitors who feel cellular service enhances their experience, impacts would remain adverse, and visitors may limit where they visit within the park.

*Visitor Safety* — Under alternative 1, no additional infrastructure would be built on Rogers Peak, and adverse impacts from slow emergency response times would continue because of limited access to mobile networks and inaccurate location reporting. Some visitors may continue to depend on satellite phones for reliable communication, particularly in remote areas.

**Cumulative Impacts.** Because the impacts on visitor experience and safety would not change under alternative 1, there would be no cumulative impacts.

**Conclusion.** Impacts on visitor experience and safety would not change under alternative 1 because the existing infrastructure on Rogers Peak would remain, hiking access along the service road to Rogers Peak would continue, and limited access to mobile networks would persist. Emergency response times would be unaltered. Because the impacts on visitor experience and safety would remain the same under alternative 1, there would be no cumulative impacts.

### Alternative 2: Preferred Alternative

#### Analysis.

*Visitor Experience* — Under alternative 2, right-of-way permits would be issued, and infrastructure would be renovated or constructed on Rogers Peak. Adverse impacts on visitor experience would be minimized because the peak is already a developed area and altering the infrastructure would not introduce a new built element to the existing visitor experience. However, construction of the new infrastructure would require the temporary closure of Rogers Peak to visitors, resulting in minimal adverse impacts. During construction, staging areas could be located near Wildrose Campground, Thorndike Campground, and Mahogany Flat Campground. The use of construction vehicles on Rogers Peak and at these staging areas would temporarily increase dust and noise levels in the area. Because these impacts would cease once construction is complete, the associated adverse impacts would be small.

Access to mobile networks would increase cellular service near Rogers Peak and in other areas of the park. For those visitors who feel cellular service detracts from their park experience, increased cellular service would have adverse impacts during their visit. However, for visitors who feel cellular service enhances their park experience, including the perceived ability to visit more remote locations

due to reliable cellular service, impacts would be beneficial. In addition, some visitors would have access to park information on their cellular phones and may pursue activities in areas of the park they otherwise would not visit, resulting in beneficial impacts.

*Visitor Safety* — Under alternative 2, increased cellular services would tie into the FirstNet system and would improve visitor safety in the park by providing additional communication access and potentially reducing emergency response times, particularly in remote areas. Increased communication capabilities would enable accurate location reporting of emergencies and faster dispatching of emergency response operations, resulting in beneficial impacts on visitor safety. However, increased cellular service could adversely affect visitor safety because some visitors may engage in risky behavior if they perceive rescue operations are available to them. Furthermore, visitors may call for assistance in situations where self-rescue is a feasible option. This could detract from overall visitor safety by unnecessary use of park search-and-rescue resources, which could make them unavailable during true emergencies.

### **Cumulative Impacts.**

Existing infrastructure on Mormon Peak serves as the primary telephone communication system throughout the park and results in beneficial impacts on visitor experience and safety. The cellular towers at Furnace Creek and Stovepipe Wells, the valley floor microwave relays, the approved cellular booster near Grapevine Ranger Station, and the proposed microwave relay on Chloride Cliff would have both adverse and beneficial impacts on visitor experience because these facilities currently increase, or would increase, communications capabilities within the park. For some visitors, these communication capabilities detract or enhance their park experience. However, these facilities are, or would be, beneficial to visitor safety because they would allow visitors to more easily contact emergency services. The removal of operational pay phones throughout the park would not adversely affect the visitor experience but may adversely affect the ability of visitors to contact emergency services if they do not have a cellular phone or are in an area without cellular service.

Overall, impacts on visitor experience and safety from past, present, and reasonably foreseeable projects would be both adverse and beneficial from increased cellular service. Alternative 2 would contribute an increment to the beneficial impacts on visitor safety by increasing communication capabilities within the park.

**Conclusion.** Under alternative 2, the temporary closure of Rogers Peak, the dust and noise generated from construction and staging areas, and increased cellular service would adversely affect the experience of some visitors in the park. However, increased cellular service would improve the park experience for other visitors. There would be beneficial impacts on visitor safety from increased cellular services and the access to FirstNet, which would allow faster and more accurate emergency vehicle response times. However, increased cellular service could adversely affect visitor safety because some visitors may engage in risky behavior if they perceive rescue operations are available to them and may call for assistance in situations where self-rescue is a feasible option. Alternative 2 would contribute a beneficial increment to the cumulative impacts on visitor experience and safety by increasing communication capabilities within the park.

## **VISUAL RESOURCES**

### **Methodology and Assumptions**

Impacts on visual resources were determined by considering the effect of the existing conditions and the alternatives on the overall visual experience of visitors who use the areas where Rogers Peak is visible with the unaided eye.

## Analysis Area

The analysis area for visual resources includes the project area and the areas where the peak is visible around the park, including designated key observation points.

### Alternative 1: No Action Alternative

#### Analysis.

Under alternative 1, no right-of-way permits would be approved, and there would be no changes to the existing infrastructure on Rogers Peak. The views of Rogers Peak from around the park and from key observation points such as the Telescope Peak Trail, Wildrose Peak, and Wildrose Campground would remain the same. Rogers Peak is a developed area and the existing infrastructure would not introduce a new built element within the viewshed. Therefore, no new impacts would occur on existing visual resources.

**Cumulative Impacts.** Because the visual character of Rogers Peak from around the park and from key observation points would not change under alternative 1, there would be no cumulative impacts.

**Conclusion.** Visual resources under alternative 1 would not change from existing conditions. Because there would be no impacts on visual resources, there would be no cumulative impacts.

### Alternative 2: Preferred Alternative

#### Analysis.

Under alternative 2 infrastructure would be renovated or constructed on Rogers Peak. The infrastructure would continue to be visible from multiple viewpoints around the park and would introduce similar, but more noticeable, elements to the existing viewshed. The renovated Caltrans tower would be the tallest structure on Rogers Peak at a maximum of 99 feet. The new AT&T tower would also be a maximum of 99 feet tall, but offset slightly by the topography because it would be constructed approximately 15-feet below the peak.

To determine the potential impacts on visual resources, photographic simulations were completed using the proposed infrastructure, heights, and layout under alternative 2. Figures 8 through 19 show various visitor viewpoints within the park and their distances from Rogers Peak.

The infrastructure under alternative 2 would be most visible from key observation points, such as the Telescope Peak Trail (figures 8 and 9), Wildrose Peak (figures 10 and 11), and Wildrose Campground (figures 18 and 19). However, Rogers Peak is already a developed area, and the renovated or constructed infrastructure would not considerably alter the existing views from these locations.

At longer distances, including Emigrant Road (figures 12 and 13), the intersection at Badwater Road and Westside Road (figures 14 and 15), and the intersection of Panamint Valley Road and Trona Wildrose Road (figures 16 and 17), the infrastructure would be difficult to distinguish from the mountain top and would look similar to the existing development. Visitors at these locations would have difficulty viewing the infrastructure atop the peak with the unaided eye.

The adverse impacts under alternative 2 would be minimal and would be most noticeable from the key observation points near Rogers Peak. The visual impact of the radome is expected to be mitigated by painting the structure a neutral-color that blends into the surrounding environment. Impacts on visual resources would continue to be adverse but localized. The adverse impacts would also persist for the life of the telecommunication infrastructure.

The presence of construction equipment or staging areas would temporarily change the visual character of Wildrose Campground, Thorndike Campground, and Mahogany Flat Campground. Throughout the construction period, observers would notice an increase in construction equipment and their associated disturbances. Overall, adverse impacts on visual resources during the construction period would be minimal and localized.

**Cumulative Impacts.**

The existing infrastructure at Grapevine Peak is a visual intrusion in natural areas. The proposed microwave relay on Chloride Cliff would have adverse impacts on visual resources because it would be a visible human-made structure in a natural area. However, the visual impacts would be localized to the sections of the park in which the tower is visible. The cellular towers at Furnace Creek and Stovepipe Wells do not add adverse cumulative impacts to visual resources because they are located in a developed area of the park.

Overall, impacts on visual resources from cumulative actions would be adverse from an increase of infrastructure in natural areas. When the adverse impacts of alternative 2 are combined with the adverse impacts of viewing other communications equipment in the area, overall cumulative impacts on visual resources would be adverse. Alternative 2 would contribute minimally to overall adverse cumulative visual impacts park-wide, because although there would be new visible infrastructure on Rogers Peak, the site already contains visible infrastructure, and the distance between Rogers Peak and other sites is too great to be in the same viewshed with the unaided eye.

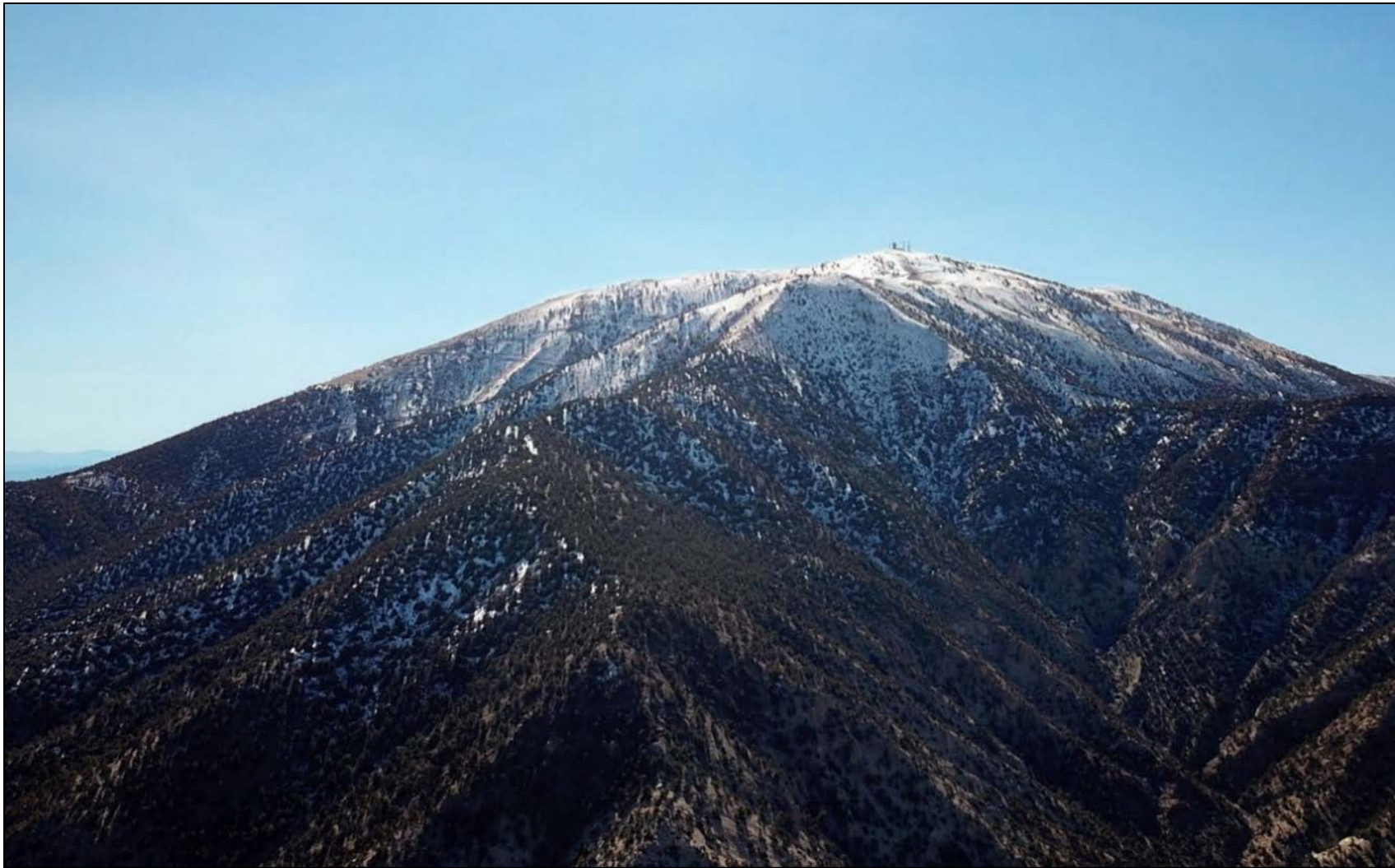
**Conclusion.** Alternative 2 would result in adverse impacts on visual resources from additional infrastructure on Rogers Peak during the life of the infrastructure. Impacts would be minimal because infrastructure already exists on the peak and viewing the infrastructure unaided from around the park is difficult or not possible from most viewpoints. Impacts from increased construction equipment would be adverse and localized. Overall, cumulative impacts would be adverse. Alternative 2 would contribute minimally to overall adverse cumulative visual impacts in the park, because although there would be new visible infrastructure on Rogers Peak, the site already contains visible infrastructure, and the distance between Rogers Peak and other sites is too great to be in the same viewshed with the unaided eye.



**FIGURE 8. UNAIDED VIEW FROM THE TELESCOPE PEAK TRAIL**



**FIGURE 9. TELESCOPE PEAK TRAIL—VIEWING ANGLE AND DISTANCE**



**FIGURE 10. UNAIDED VIEW FROM WILDROSE PEAK**

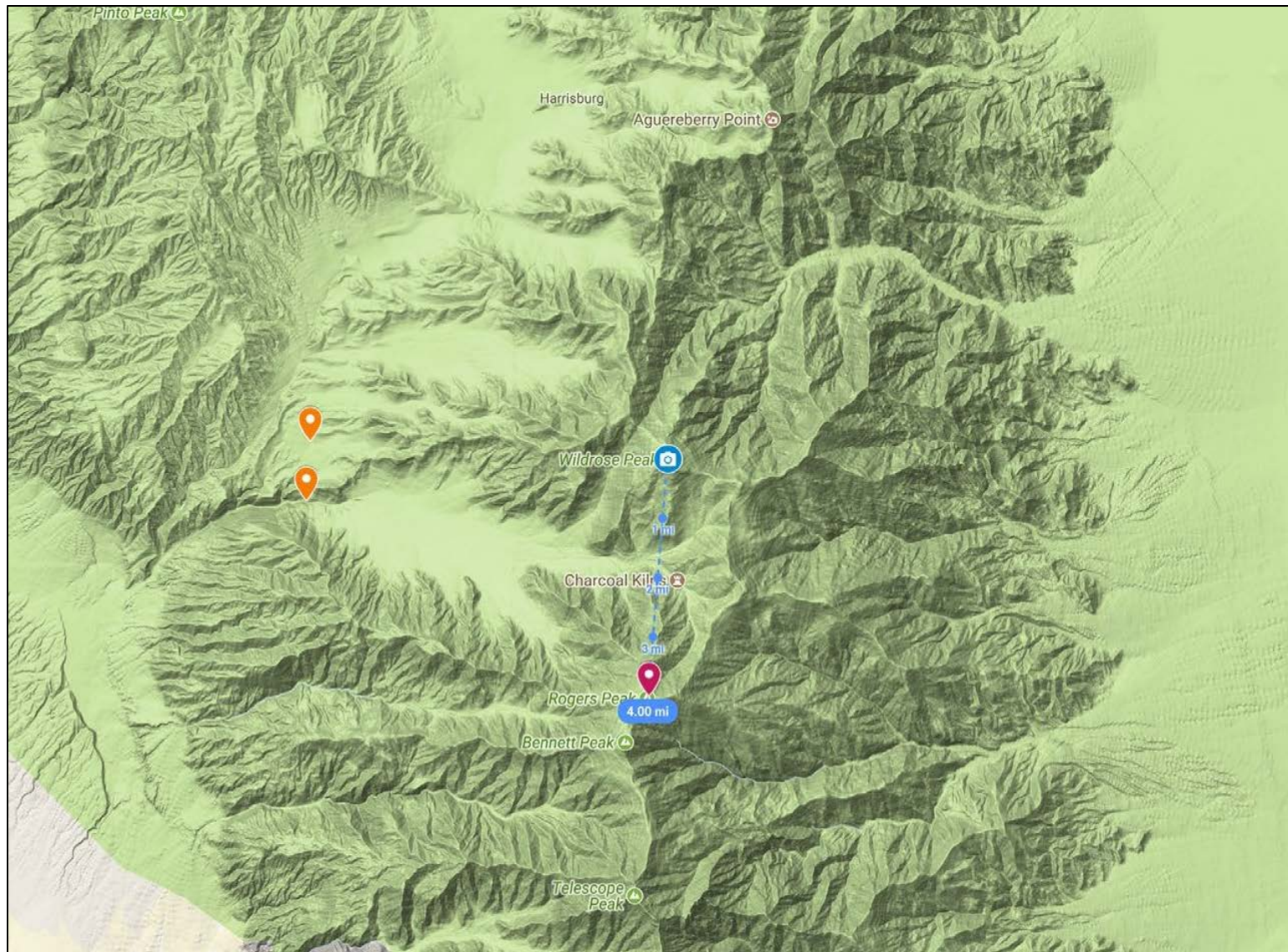
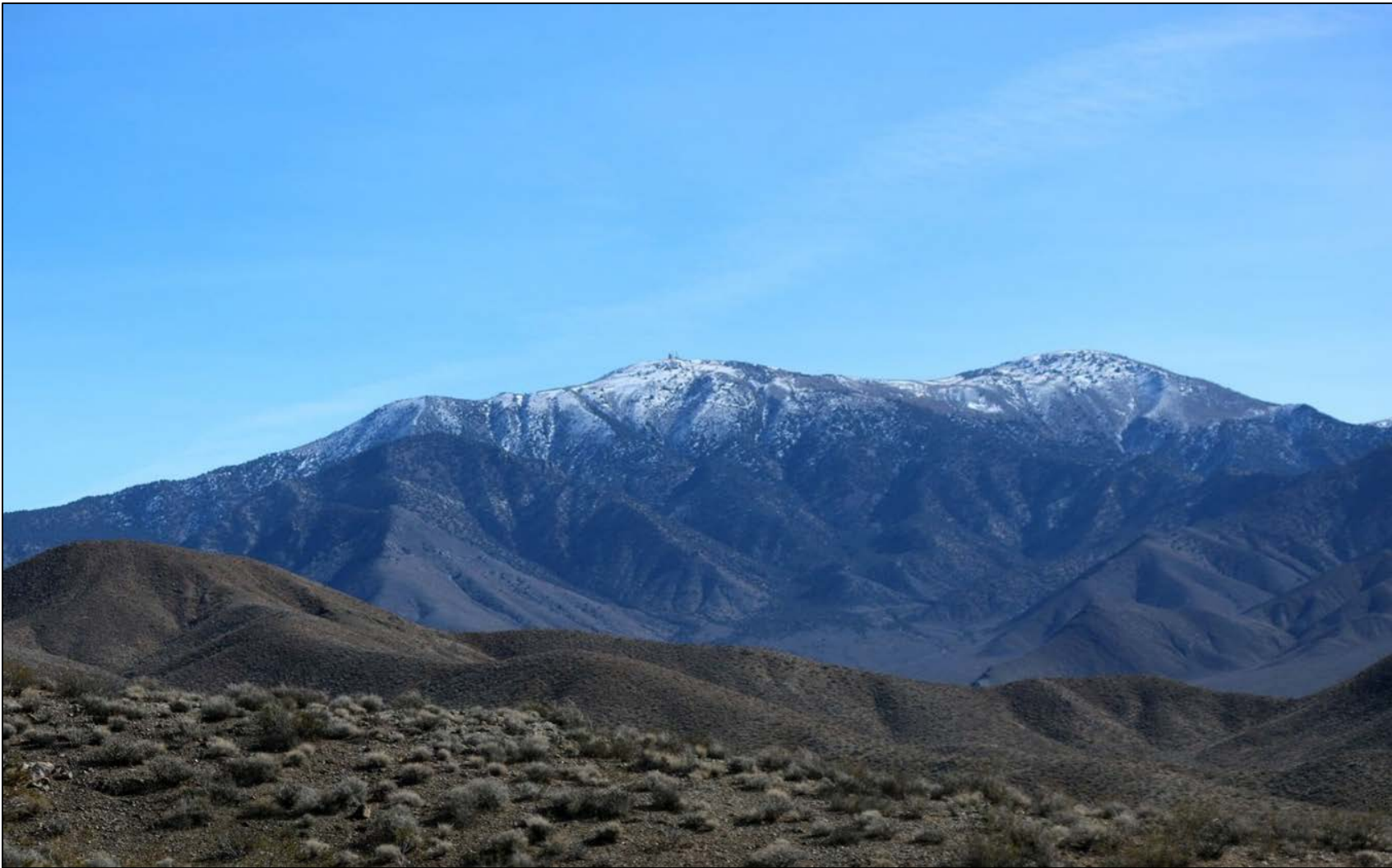


FIGURE 11. WILDROSE PEAK—VIEWING ANGLE AND DISTANCE





**FIGURE 12. UNAIDED VIEW FROM EMIGRANT ROAD**

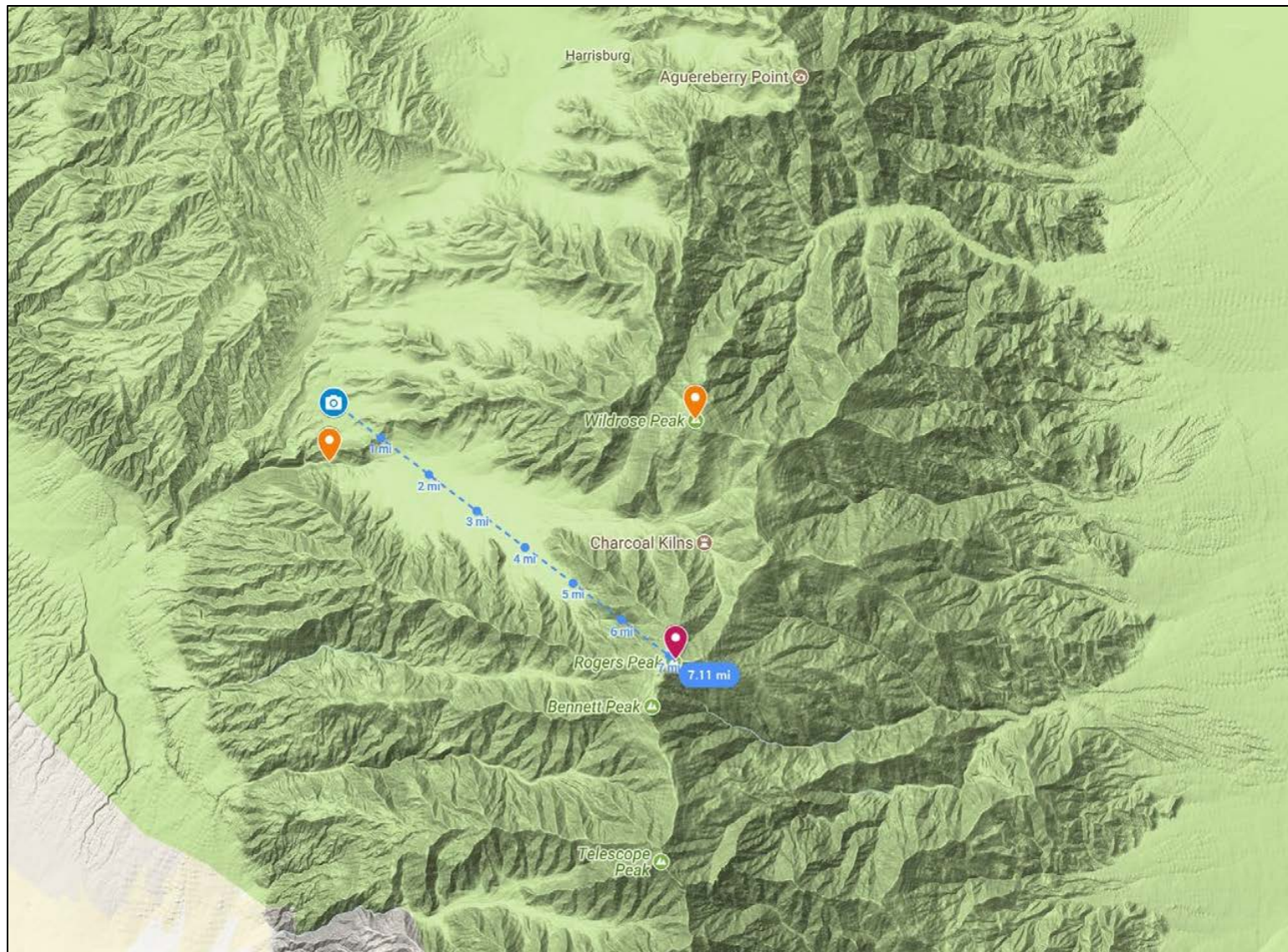
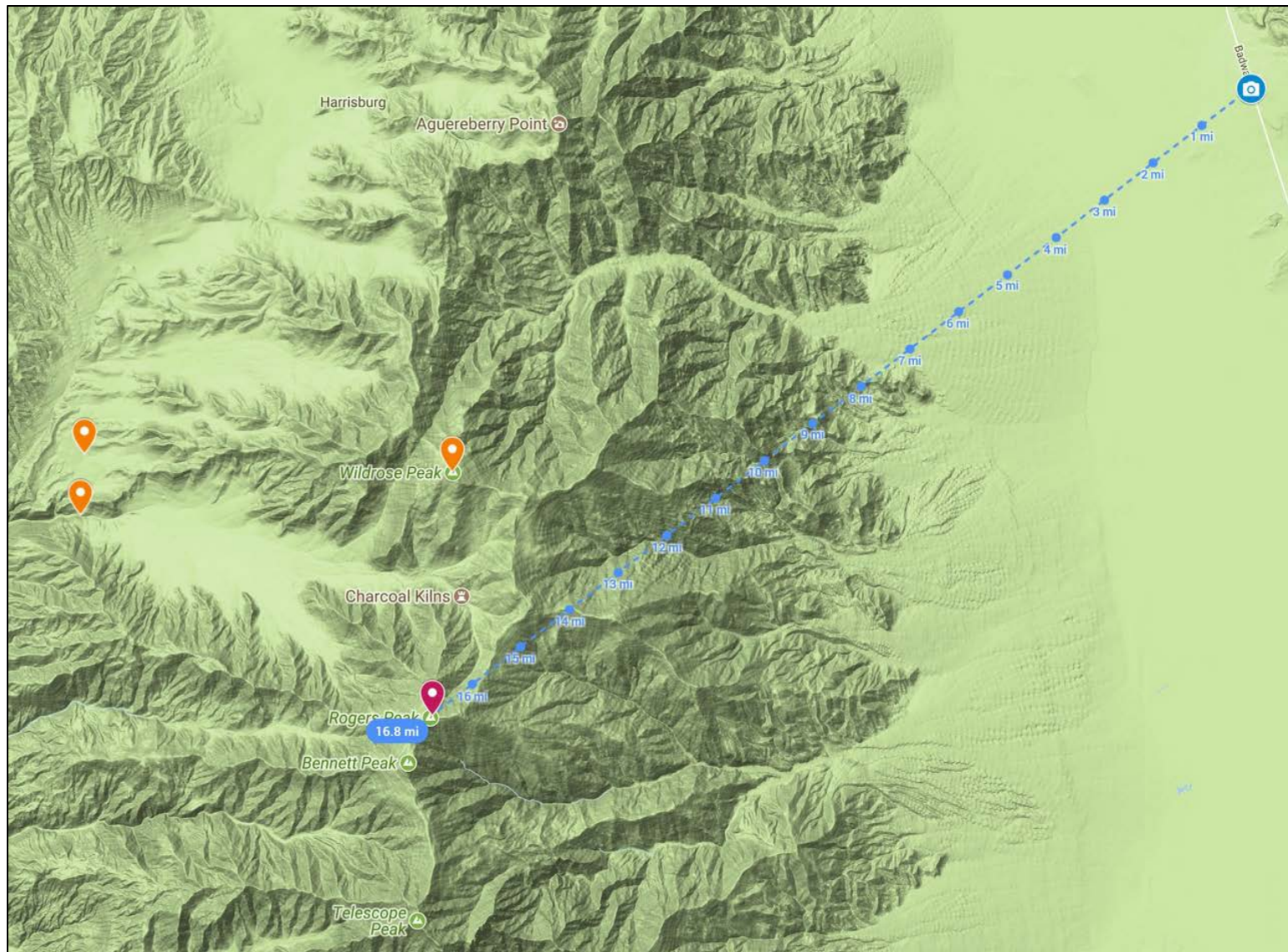


FIGURE 13. EMIGRANT ROAD—VIEWING ANGLE AND DISTANCE



**FIGURE 14. INTERSECTION AT BADWATER ROAD AND WESTSIDE ROAD**



**FIGURE 15. INTERSECTION AT BADWATER ROAD AND WESTSIDE ROAD—VIEWING ANGLE AND DISTANCE**



**FIGURE 16. INTERSECTION AT PANAMINT VALLEY ROAD AND TRONA WILDROSE ROAD**

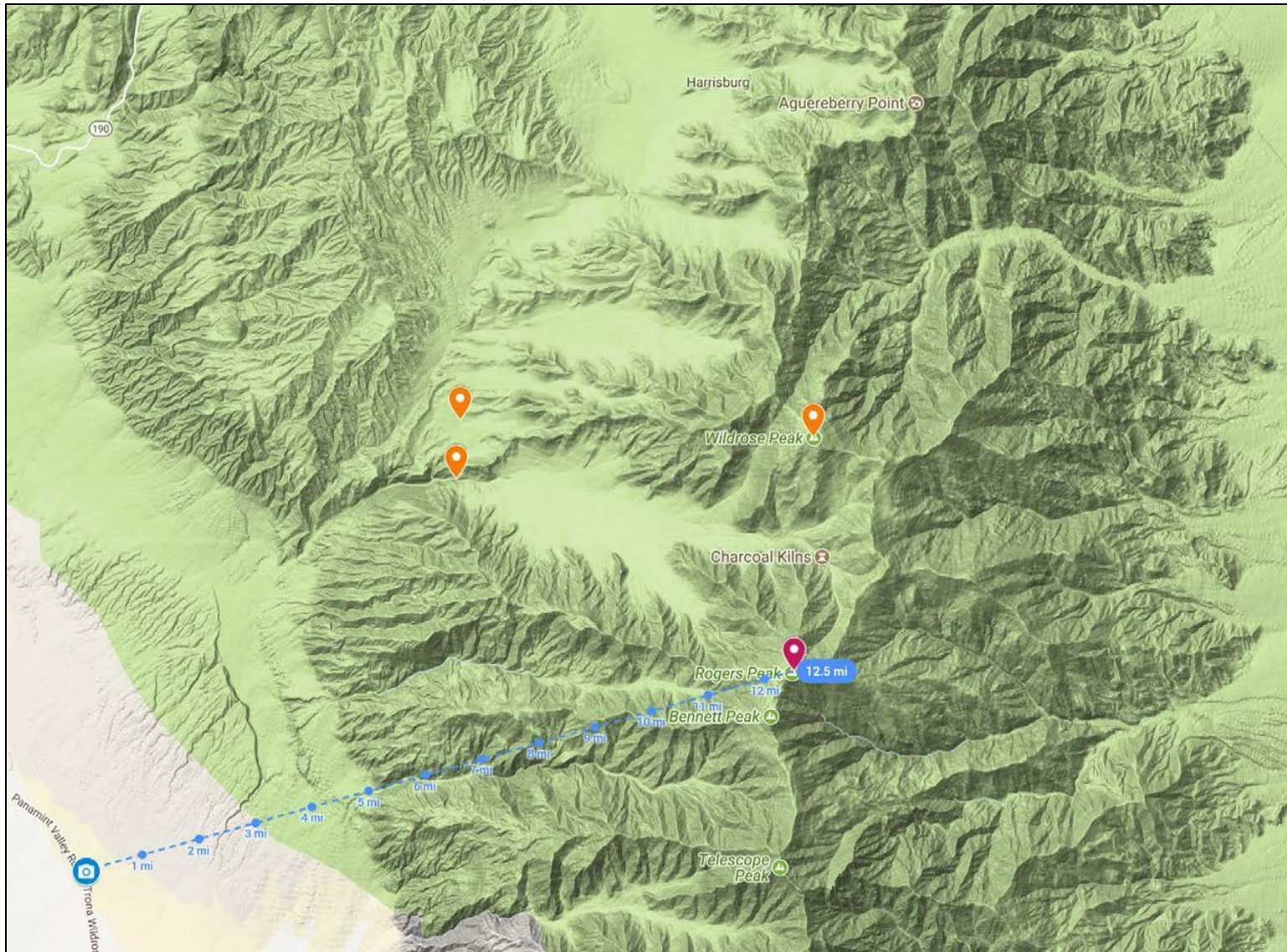


FIGURE 17. INTERSECTION AT PANAMINT VALLEY ROAD AND TRONA WILDROSE ROAD—VIEWING ANGLE AND DISTANCE



**FIGURE 18. UNAIDED VIEW FROM WILDROSE CAMPGROUND**

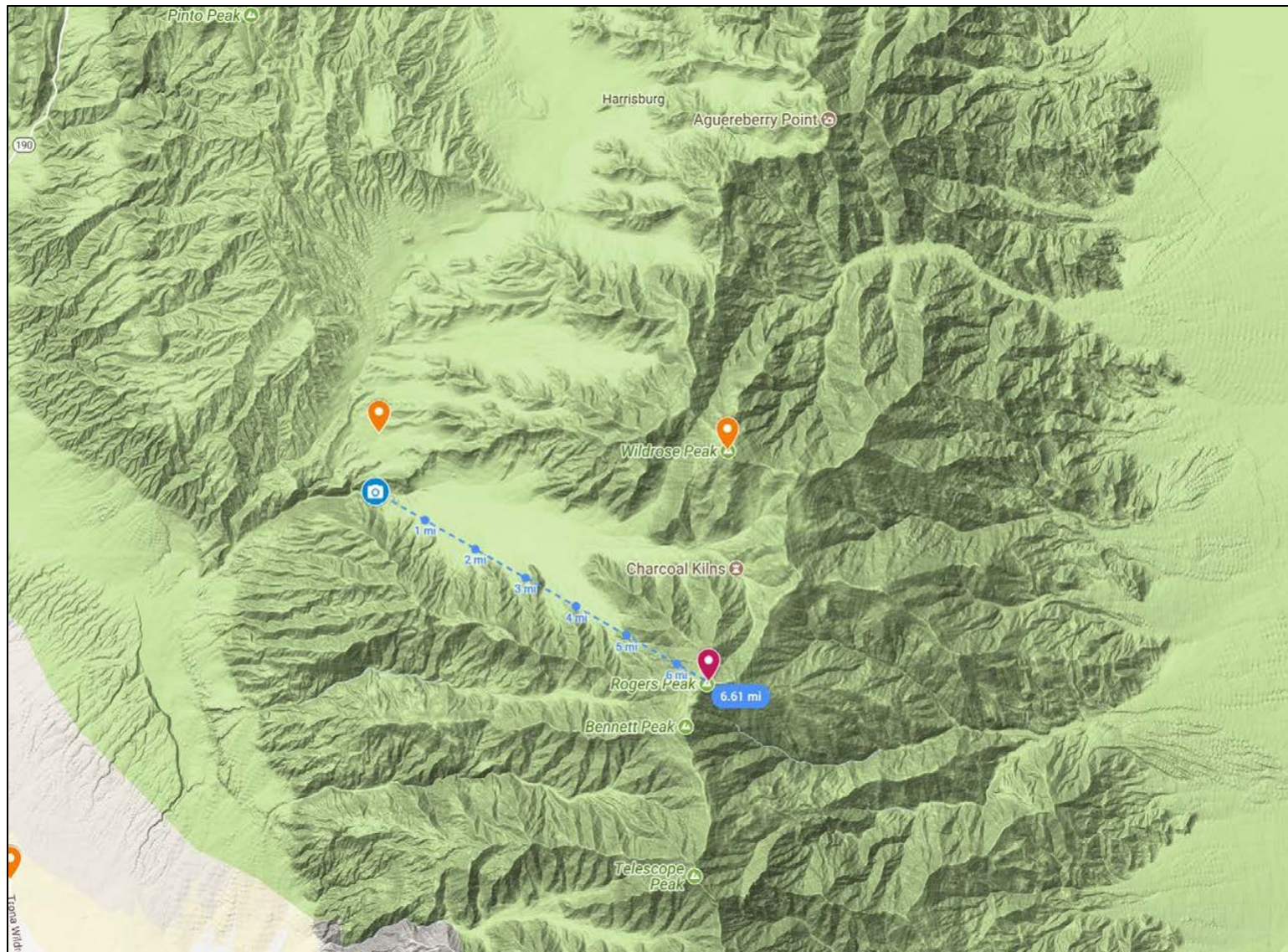


FIGURE 19. WILDROSE CAMPGROUND—VIEWING ANGLE AND DISTANCE



## **WILDERNESS CHARACTER**

### **Methodology and Assumptions**

Impacts on wilderness character are evaluated based on the four qualities of wilderness character described in chapter 3. The analysis for each alternative also considers the preservation of wilderness in an unimpaired condition.

### **Analysis Area**

The area of analysis for impacts of the alternatives on wilderness character includes federally designated wilderness areas within the park.

### **Alternative 1: No Action Alternative**

#### **Analysis.**

Under alternative 1, the existing infrastructure on Rogers Peak would not be altered, resulting in no new impacts on the untrammeled, natural, and undeveloped qualities of wilderness character. Wilderness areas adjacent to the service road and peak would remain unhindered and free from the intentional actions of modern human control or manipulation; indigenous species and the natural ecological conditions or processes present would remain preserved; and motor vehicles using the service road would not enter adjacent wilderness areas. However, a helicopter must occasionally fly over wilderness areas to allow personnel to maintain existing infrastructure and equipment on the peak after heavy snowfalls. To reduce adverse impacts on these areas, the helicopter does not land in designated wilderness. This practice would continue under alternative 1.

The occasional administrative use of motor vehicles and helicopters to access Rogers Peak would adversely affect opportunities for solitude. While the occasional use of a helicopter during winter months when the road is impassable would continue to create noise above the ambient sound level at distances over a half mile, the noise would be intermittent and temporary as the helicopter crosses the landscape—lasting seconds to minutes. Furthermore, topography and vegetation would continue to influence the level and distance at which noise would be audible to visitors.

There would be no impacts on primitive and unconfined recreation because there would be no restrictions for visitors accessing Rogers Peak. Furthermore, access to mobile networks would remain limited park-wide, ensuring that the self-reliance skills necessary for wilderness travel would be maintained.

**Cumulative Impacts.** Because the impacts on wilderness character would not change under alternative 1, there would be no cumulative impacts.

**Conclusion.** Occasional adverse impacts from motor vehicle and helicopter noise would continue to affect the qualities of wilderness character related to its undeveloped nature and opportunities for solitude but would not represent a change from existing conditions. There would be no cumulative impacts.

## Alternative 2: Preferred Alternative

### Analysis.

Under alternative 2, existing infrastructure would be renovated, and new infrastructure would be constructed on Rogers Peak. However, there would be no impacts on the untrammeled, natural, or undeveloped qualities of wilderness character because no construction would occur—and no infrastructure would be located—in adjacent designated wilderness areas. These areas would remain unhindered and free from the intentional actions of modern human control or manipulation, indigenous species and the natural ecological conditions or processes present would remain preserved, and motor vehicles using the service road would not enter wilderness. However, a helicopter would still be required to fly over wilderness areas to allow personnel to maintain existing infrastructure and equipment after heavy snowfalls, resulting in minimal adverse impacts. To reduce adverse impacts on these areas further, the helicopter would not land in designated wilderness.

The development of new infrastructure on Rogers Peak that would provide cellular service in wilderness areas could detract from the opportunities for solitude by providing access to mobile networks and introducing noise in an otherwise quiet setting. As noted under alternative 1, the administrative use of motor vehicles and helicopters to access Rogers Peak would minimally and adversely affect opportunities for solitude.

There would be minimal adverse impacts on primitive and unconfined recreation because visitors would be restricted or prohibited from accessing the peak during the construction phase to protect visitor safety. However, visitors would be informed in advance of construction activities via a number of outlets, as listed under “Mitigation Measures” in chapter 2. Because primitive recreation requires self-reliance skills, opportunities for such experiences may be degraded by the availability of mobile networks in wilderness areas. Therefore, minimal adverse impacts are anticipated under alternative 2.

**Cumulative Impacts.** The existing infrastructure on Mormon Peak, Grapevine Peak, and Dry Mountain adversely affects the undeveloped quality of wilderness character because this infrastructure is not native to the wilderness landscape. The administrative use of motorized vehicles to access the infrastructure in these locations also adversely affects the undeveloped nature and the opportunities for solitude by maintaining the sights and sounds of modern human activity in a designated wilderness area. The infrastructure on Mormon Peak, Grapevine Peak, and Dry Mountain also results in adverse impacts on the undeveloped and opportunities for solitude qualities of wilderness character.

When the adverse impacts of alternative 2 are combined with the adverse impacts of cumulative actions, overall cumulative impacts on wilderness character would be adverse. Alternative 2 would incrementally contribute minimal adverse impacts.

**Conclusion.** Occasional adverse impacts from cellular, motor vehicle, and helicopter noise would continue to affect the undeveloped, opportunities for solitude, and primitive or unconfined recreation qualities of wilderness character. The impacts of alternative 2 would be greater than alternative 1 because of the increase in cellular services within the park. Adverse impacts would be intermittent and localized but would occur for the life of the infrastructure. When the adverse impacts of alternative 2 are combined with the adverse impacts of cumulative actions, overall cumulative impacts on wilderness character would be adverse. Alternative 2 would incrementally contribute minimal adverse impacts.

## **CHAPTER 5: CONSULTATION AND COORDINATION**

This chapter describes the public involvement and agency consultation during the preparation of the environmental assessment. A combination of these activities, including internal scoping, has guided the National Park Service in developing the content of this document.

### **PLANNING AND PUBLIC INVOLVEMENT**

#### **Internal Scoping**

The internal scoping process for the environmental assessment began on August 29, 2017. Representatives from the park, NPS Denver Service Center, the US Navy, and project consultants met to discuss the purpose of and need for the project, potential alternatives that could meet these needs, issues and impact topics, applications for right-of-way permits, and cumulative actions that could affect the project. The group also initiated plans for public scoping activities. Throughout the development of this environmental assessment, the project team coordinated regularly to review relevant issues, discuss the development of alternatives and impact analysis, and include input from other agencies and the public in the planning process.

Two workshops were held with public and private stakeholders involved with the project, including the National Park Service, the US Navy, US Air Force, Caltrans, Southern California Edison, Inyo County, the California Office of Emergency Services, AT&T, GX2 Technology, Xanterra Corporation, and the project consultants. These workshops were held on October 6, 2017 and January 9, 2018, and facilitated the development of conceptual site plans and phasing options for the demolition and construction of infrastructure on Rogers Peak.

#### **Public Involvement**

Public scoping for this environmental assessment began on August 16, 2017, with the issuance of a scoping notice. The scoping notice contained information on the proposed project and solicited comments from the public. The notice was posted on the NPS Planning, Environment, and Public Comment (PEPC) website, and the public comment period closed on September 15, 2017.

During the public scoping comment period, the National Park Service received 21 comments. The majority of these comments concerned the benefits to visitor safety by having cellular service in wilderness areas, as well as suggestions for new alternative elements. These new alternative elements include, but are not limited to, limiting the height of any new towers on Rogers Peak, ensuring no obstruction lighting would be required for these towers, adding cell phone service to the equipment on Rogers Peak, and relocating the existing infrastructure from Mormon Peak. Commenters also expressed concern regarding the potential for cellular use in the backcountry and the potential increase in park visitation.

### **AGENCY CONSULTATION**

The National Park Service initiated consultation with relevant agencies during the preparation of this environmental assessment, as discussed in more detail below.

#### **Section 7 of the Endangered Species Act**

Section 7 of the Endangered Species Act requires federal agencies to consult with the US Fish and Wildlife Service to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize

the continued existence of listed species or result in the destruction or adverse modification of critical habitat. There are no confirmed federally listed threatened, endangered, or candidate species in the immediate project area. In a letter dated August 30, 2017, the US Fish and Wildlife Service stated that it does not have any concerns regarding the proposed action and that the low height of the proposed towers and antennas should not pose a threat to migratory birds.

### **California Office of Historic Preservation**

Section 106 of the National Historic Preservation Act requires federal agencies to consider the impacts of their undertakings on historic properties. Compliance with section 106 of the National Historic Preservation Act was carried out separately, but concurrently, with the planning process. The National Park Service sent a letter to the California Office of Historic Preservation on August 18, 2017, initiating consultation for the project. The National Park Service wrote to the California Office of Historic Preservation, describing the area of potential effects for the project and identifying the service road to Rogers Peak and the 2.75-acre parcel of non-wilderness at the peak. The National Park Service also submitted an assessment of effect, which stated that the project would have no adverse effect on these areas. The National Park Service is currently waiting for a determination from the California Office of Historic Preservation.

### **TRIBAL CONSULTATION**

The National Park Service sent letters on August 24, 2017, to the Big Pine Paiutes, Bishop Paiutes, Independence Paiutes, Lone Pine Paiutes, and the Timbisha Shoshone tribes describing the proposed project and initiating consultation under the National Historic Preservation Act.

## CHAPTER 6: LIST OF PREPARERS

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## **CHAPTER 7: ACRONYMS AND ABBREVIATIONS**

<b>Caltrans</b>	California Department of Transportation
<b>CFR</b>	Code of Federal Regulations
<b>Commnet</b>	Commnet of Nevada, LLC
<b>EA</b>	environmental assessment
<b>NEPA</b>	National Environmental Policy Act of 1969, as amended
<b>NPS</b>	National Park Service
<b>park</b>	Death Valley National Park
<b>PEPC</b>	Planning, Environment, and Public Comment

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## CHAPTER 8: REFERENCES

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historic places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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